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Creativity, Community, and Growth: A Social Geography of Urban Craft Beer

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Abstract. To better understand the non-economic drivers of growth in emerging industries, this paper examines the craft beer industry. Specifically, the paper will review two examples – the Black Cloister Brewing Company in Toledo, OH and Louisville's 3rd Turn Brewery – to understand how the values of entrepreneurs and local firms that are situated at the nexus of work, place, and creativity promote growth. Further, the paper will consider the socio-cultural meaning of creativity relative to the craft beer industry and the many ways in which the concept of innovation traditionally used by economic geographers to understand growth can be better understood within the context of creativity in select niche industries. In doing so, the paper represents a conceptual shift away from the linear process of innovation towards the more holistic notions of creativity, as well as community.

1 Introduction

Creativity is thinking up new things. Innovation is doing new things. Theodore Levitt

The American craft beer industry has experienced significant growth in recent years. In November 2015, the number of craft breweries in the United States reached 4,144 eclipsing the previous high of 4,131 in 1873 (Brewers Association 2015d). This growth is particularly impressive considering that as recently as 2011 there were only 2,004 craft breweries in the United States (Brewers Association 2015b). Based on recent data, the growth is showing no signs of slowing down. Indeed, new breweries are opening at a rate of more than two per day and there are over 1,500 new breweries currently in the planning stages (Brewers Association 2015a). As a result, craft breweries now command a 12.2% share of the U.S beer market by volume and 21% by sales (Brewers Association 2015a, 2016a). Growth of the industry has been driven by consumer demand for alternatives to the beer that is produced by America's two mega-brewers – Anheuser-Busch and Miller Coors¹. Yet, as we will explore, the growth of the craft beer industry – particularly at the local scale – may not simply be a desire for something different – or niche markets – but an industry intentionally embedded within a complex collection of non-economic

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¹ On October 10 2016, a merger between Anheuser-Busch InBev and SABMiller was finalized. To comply with U.S. anti-trust regulations the combined company agreed to sell its stake in MillerCoors. MolsonCoors, who already had a 42% ownership stake in MillerCoors, purchased the remaining 58%. The purchase makes MolsonCoors the world's third largest brewing company (Nurin 2016, Svaldi 2016).

values and drivers – specifically creativity and a sense of community – that coincides with a passion for beer.

2 The US Beer Industry: From Macro to Micro

In order to appreciate the scale and scope of the disruptive force of craft beer on the broader U.S. brewing industry, it is essential to understand the historical context – specifically insofar as the sector has long been dominated by a few large macro-brewers with a narrow, or thin, collection of analogous beers. For example, the product line portfolio of Anheuser-Busch and Miller Coors is dominated by the American pale lagers (think Budweiser, Bud Light, Miller Lite, Coors) whose taste profiles are bland, undifferentiated, and unimaginative (Choi, Stack 2005). Anheuser Busch readily admits that over the years they have tinkered with the recipe of their signature Budweiser in order to make it less bitter and pungent, thereby making it more palatable to a larger and larger segment of the American population (Ellison 2006). The emergence of American beer as a bland homogeneous product is the result of the interplay of a number of events and trends that occurred in American society during the 20th century. These include Prohibition, the emergence and widespread adoption of refrigeration and packaging technologies, the utilization of television as a medium for mass marketing, the creation of national brands, consumer demand for homogenous products, brewery consolidation, and the emergent dominance of the mass production system that allowed brewers to realize economies of scale (Choi, Stack 2005, Tremblay, Tremblay 2009). For the large brewers, as their product became increasingly homogeneous, creativity was primarily restricted to the branding and marketing of their product lines (Imarenezor 2016, Monloss 2016).

While homogenous product lines produced by macro-brewers dominated the market throughout the 21st century, the seeds of disruption were sown in February 1978 with the legalization of home brewing and the subsequent state by state legalization of microbreweries and brewpubs. California and Washington were the first states to legalize brewpubs in 1982, with Oregon following the next year, 1983 (Fallows 2010). By 1995, brewpubs were legal in 45 states and the District of Columbia (Acitelli 2015). Today, they are legal in all 50 states. Home brewing is critical to the growth and success of the American craft beer industry. An estimated 1.2 million Americans brew beer at home. The two million barrels of beer that they produce on an annual basis represents approximately 1% of all the beer brewed in the United States. (American Homebrewers Association 2016). An estimated 90% of commercial craft brewer started out as home brewers. The websites of craft breweries are replete with stories of their founders starting off as home brewers (brewing beer in their basement, garage, or kitchen) and at some point making the decision to commercialize their hobby (Alonso 2011, Calagione 2011, Grossman 2013, Magee 2014). The home garage, kitchen, or basement is to the craft beer industry what the business incubator is for a high-tech start-up company.

The emergence and growth of the American craft beer industry is a clear indicator that increasing numbers of Americans are demanding more diversity in terms of their beer choices. They are no longer satisfied with drinking beers such as Budweiser or Miller Lite. The Brewers Association recognizes over 150 different styles of beer (Brewers Association 2015a), many of which are now produced commercially by American craft breweries. The result is that the American consumer now has an amazing variety of beers to choose from. This demand for craft beer is driven by a number of factors. One of these is neo-localism - the "deliberate seeking out of regional lore and local attachment by residents (new and old) as a delayed reaction to the destruction in modern America of traditional bonds to community and family" (Shortridge 1996, p. 10). As a result, there is a growing demand in the United States for products that have a strong connection with the community or region within which consumers reside. In concrete terms, neo-localism is manifested in the increasing numbers of farmers markets (Cone 2012), community supported agriculture initiatives (Galt et al. 2012), and community gardens (National Gardening Association 2014) across the United States. Craft beer, it has been argued, is yet another indicator of the strength of the American neo-localism movement. Schnell, Reese (2003, p. 66) suggest that "the explosive growth of microbreweries indicates a desire on the part of an increasing number of Americans, brewers and consumers alike, to reconnect with the cities or the towns in which they live, to resurrect a feeling of community tied to a specific landscape". Indeed there is evidence that "successful microbreweries are geographically focused, often producing specialized products with a strong local flavor" (Wesson, Nieva de Figueiredo 2001, p. 400). These are inherently local niche markets with limited range².

Based on market research, demand for craft beer appears to be driven primarily by the millennial cohort – young Americans between the ages of 21 and 34 (Crowell 2013, Duva 2014). Millennials have been characterized as "confident, liberal, upbeat, and open to change" (Pew Research Center 2010, p. 1). Millennials have higher levels of educational attainment than previous generations, prefer experimentation over brand loyalty, and are willing to pay more for a product that they perceive to be of higher quality (Pew Research Center 2010, Gilman 2014, Rotunno 2014). In making purchasing decisions an overwhelming majority of millennials (>80%) prefer to buy from companies that support solutions to specific social issues, while feeling that there is too much power concentrated in the hands of a few big companies (Winograd, Hais 2014). These values suggest a good match with craft brewers. Craft beer costs, on average, twice as much as macro-beer yet this does not seem to be squelching demand. Higher quality inputs are a significant contributor to the higher price point enjoyed by craft beer (Satran 2014). While large brewers engage in extensive philanthropy (e.g., see Anheuser-Busch 2016) craft breweries, because of their small size, are able to connect with their local communities in very customized and intimate ways. These include not only supporting local charities but also by making their brewery space available for community events and activities (Kirchenbauer 2014, The Beer Professor 2015). Craft breweries donate an average of \$3.25 for every barrel of beer that they brew; the corresponding figure for Anheuser-Busch is only 35 cents per barrel (Herz 2014, Shilton 2016). Many craft breweries are also aggressively engaged in environmental initiatives designed to minimize their impact on the environment (McWilliams 2014, Schultz 2015, Ceres 2016). Environmental sustainability efforts include investing in renewable energy, waste recapture, recycling, and sustainable sourcing. As a result of these, and other, differences between craft and macro-brewers, we examine how the emergence of commercial craft brewing represents a departure from prior economic geographies and reflects a new social geography that is embedded with an emerging discourse on creativity, place, and values.

3 Theoretical Framework: Towards Creativity

Innovation has long been of interest to economic geographers. Indeed, geographies of high tech innovation, the spatial dynamics of innovation, and accounts of innovative places conceptually fueled much of the literature throughout the late-1980s and 1990s (Scott 1988, Storper, Walker 1989, Florida, Kenney 1990, Malecki 1991, Saxenian 1994, Lyons 1995, Audretsch, Feldman 1996, MacPherson 1997). Researchers focused on proximity and knowledge production, high tech corridors, and the diffusion of products and processes across space. This initial emphasis on innovation and technology gave rise to an explicit interest in science and technology inputs (such as engineering degrees) and the role of higher education in the development and deepening of the spatial division of labor.

Concomitantly, geographers sought to investigate sectors, including the service sector, which supported high-tech growth. These studies examined metropolitan regions and specific specialized industries (like so-called producer services) to understand the scale and scope of spatial interactions that define innovative communities, industries, and sectors (O hUallachain, Reid 1991, 1993, Markusen 1996). Eventually, geographies of innovation went micro and began to seek an understanding of the relationship between firm growth, knowledge production, and production systems on the ground and across space. In all of these studies, the research clearly demonstrated that the spatial division of labor and associated hierarchies, as well as "specialization", were well articulated, deepening, and that the cleavage between core and periphery was expanding.

 $^{^2}$ There are a small number of craft breweries ($\sim 135)$ that have expanded beyond local markets and have a regional footprint of several dozen states (Reid, Gatrell 2015). These breweries represent $\sim 4\%$ of the total brewery count.

Over time, geographies of innovation and the narratives of high tech growth came to dominate more applied economic development research, as well as the practice of economic development. As a result, communities across the U.S. and world sought to become the next "Silicon Valley", "Silicon Alley", or the "Silicon Forest". The emergence and expansion of science and technology driven growth was supported in large part by the popularity of Porter's Competitive Advantage of Nations (Porter 1990) and the so-called cluster approach. While Porter noted the existence of non-technological clusters – and Hayter (2000) has identified commodities-based clusters – the policy emphasis was almost exclusively on high tech growth and industries as communities struggled to revitalize local economies (i.e. Porter 1990, Scott 1993, Kaufman et al. 1994). Yet, the question of place always seemed to complicate innovation on the ground not only in peripheral regions with limited and often under-skilled labor markets, but also in larger metropolitan areas. In short, the 1990s and early 2000s illustrated that innovation couldn't be engineered in a global economy driven by the pernicious forces of uneven development per se – hence something else may have been driving the success of communities and differentiating places.

3.1 $\,$ Beyond Linear Innovation Systems: Place & The Creative Class

Given the shortcomings of Porterian economic development, the spatial dynamics of neoclassical innovation models proffered by economists, and the explosion of research into the importance of the service sector, economic geography needed a new concept that reflected the intangible often-place based uncertainties that promote growth. Enter the abstract notion of "creativity" – innovation's non-linear socio-cultural and squishy partner and the creative class. Unlike innovation systems that could arguably be relocated or reengineered, creativity as a concept and practice is inherently embedded in place and reflects a more holistic collection of socio-spatial relationships that are more cultural and historical – than a simple economic model. And these unique social-cultural relationships serve to define the creative class across space. The core of the creative class comprised elites, consumers, and leaders who shared progressive values and who drove urban revitalization in "hip" cities, established and emerging, across America.

According to Florida (2012), it is the creative class that drives and maintains the economic engine of cities vis-à-vis not only economic production; but the "squishy" concept of values. Like Supreme Court Justice Potter, Florida's new explanation for high growth regions boiled down to "I know it when I see it". The basic thesis asserted that urban growth and labor markets reinforce one another and highly articulated urban centers are anchored by a collection of elites that foster progressive values and an openness to new ideas and social change that attracts and retains talent. Florida's "creative class" was simultaneously a factor which explained production, consumption, and social change. Like any good economist, Florida and his colleagues asserted that the creative class could be modeled and as such quasi-quantitative indices such as the "bohemian index", "gay index", and "diversity index" proliferated the literature – and the popular media. Like the cluster before it, the "creative class" became a recipe that could be used to understand the comparative dynamics of economic development across space and gave rise to a full range of public policy initiatives – and associated progressive values.

Borrowing from Florida, we believe that emerging research on the "creative class" and progressive values has the potential to be an interesting and important conceptual development. That is, values can be used to explain economic development – and specifically a consumption driven model of development which deviates considerably from prior production centered frameworks like clusters. Moreover, the notion of the creative class is an attractive one, resonates with public discourses, and doesn't correspond to a single industry (i.e., specialization no longer dominates the discussion) and indeed economic diversification, entrepreneurism across multiple sectors, and niche industries were now as important as identifiable agglomerations such as "gun belt". In short, the new narrative could be used to revitalize the Rust Belt as well as explain the robust economies of tourist communities from Key West to Jackson Hole. Yet, the creative class doesn't explain creativity per se – it simply suggests you'll know it when you see it.

The purpose of this paper is to expand on the concept of creativity within a specific

defined industrial niche. In contrast to work which emphasizes places, creativity as a concept can be examined by exploring a single industry – craft beer – that is closely associated with local markets, neighborhoods, and neo-localism (Flack 1997, Wesson, Nieva de Figueiredo 2001, Schnell, Reese 2003). Further, we assert that creativity is not synonymous with innovation or necessarily a process. Rather, creativity reflects a shared collection of socio-cultural relationships that might reside in place – or across a common industry, such as craft beer. For that reason, creativity is a highly contextualized set of values, interactions, and practices³.

3.2 Space v. Place: Towards a Theory of Creativity & Community

As we have argued elsewhere, the everyday geographies of communities, culture, and politics of place are important to understanding the waxing and waning economics of localities (Gatrell, Reid 2002). To that end, we believe creativity – as a value – can be a useful framework which emphasizes niche local markets and entrepreneurism.

So what is the relationship between creativity and economic development from the perspective of geographers and regional scientists? Simply put – discussions of creativity and development extend from the Marxist concept of "creative destruction" as embodied in the classic work of Schumpeter (1942) (see also Scott 2006). In concrete terms, "creative destruction" asserts that the process of innovation in product and process is an ongoing regime that serves to eclipse the relevance of existing processes and products in the market place and can be used to explain capitalism's inherent spatial contradiction – uneven development (Smith 1984). While rooted in a Marxian reading of economics, "creative destruction" is not creativity per se. For that reason, we believe researchers have struggled to identify proxies, like patents, trademarks, industrial research, university research dollars and so on, to understand creativity in place.

More recently though, Törnqvist's The Geography of Creativity (Törnqvist 2011) provided researchers with a hybrid account of technological innovation that models the diffusion of technology across space and time, as well as the unique role 'special places' have played in fostering the innovation and creativity. Törnqvist's work echoes Scott (2006) insofar as creativity is a broader phenomenon embedded within social networks that are productive, consumption oriented, and symbolic. Yet, we would argue both Scott and Törnqvist are bound by the limited conceptualization of creativity as synonymous with technological innovation.

Unlike innovation, "creativity", as a spatial practice, gives meaning to place, production, and consumption – and the resulting "cultural" politics of local economic development (McCann 2002, Gatrell, Reid 2002, 2005). In the process, as Scott (2006) recognized – but framed differently - the practices associated with creativity serve to structure a "creative field" comprised of specific locational attributes and "geographically-differentiated webs of interaction" (Scott 2006, p. 3) that promote entrepreneurial activities – and enable entrepreneurs and creators to thrive. The classic example of so-called webs of interaction would be the growth, expansion, and sustained innovation observed in Silicon Valley. In the case of craft beer though, we are interested in understanding the values driven nature of the sector that resides at the nexus between creativity, community, and growth. Indeed, the local craft beer industry exists within a framework, or creative field, informed by shared experiences that drive economic development, transform neighborhoods, and may signal the potential to develop a new socio-cultural explanation for economic growth.

4 Craft Beer: Creativity as a Value

While the long-term viability of any business depends upon generating a profit there are some business owners for which non-financial returns enter into the calculus of their business model (Walker, Brown 2004). Such firms engage in what is termed satisficing behavior; in other words they are not driven by the maximization of profits. In contrast to a purely economic framework, satisficing behavior appeals to and obtains personal

³ Hence, the notion that a "Creative Class" exists may within and between places be a misnomer. Rather, the discussions surrounding the creative class may reflect geography of progressive politics as it has become embedded within the U.S. urban hierarchy.

"value" from Maslow's hierarchy of needs (Maslow 1954). Specifically, Maslow (1954) proposes that other factors (such as physiological, safety, belonging, esteem, and self-actualization) influence behavior, motivate individuals, and inform decisions. In the business context, satisficing behavior occurs "when a firm's profit equals the managers' minimum acceptable or 'satisfactory' level and they then knowingly sacrifice additional profit in the pursuit of these higher order needs" (Kaufman 1990, p. 42). In the case of the craft beer industry, "belonging", "esteem", and/or achieving a firm's full creative potential (i.e., self-actualization) may take precedent over simple ROI. As these higher-order needs are non-monetary in nature they have been referred to as "psychic income" (Thurow 1978).

The idea that craft brewers engage in satisficing economic behavior has been hinted at by a number of researchers and writers. Wesson, Nieva de Figueiredo (2001, p. 392) observed that craft brewers are "often motivated by a love of brewing as by profits" while Day (2015) has described them as "astonishingly un-businesslike". A study of nascent craft brewers in Alabama concluded that "while the ultimate goal of brewers may be running a profitable operation, lifestyle or personal factors also appear to be important" Alonso (2011). Thurnell-Read (2014) examined the higher-order needs that seem to be valued by craft brewers in England. Among the brewers interviewed by Thurnell-Read there was "a sense of reward and satisfaction found in the production of what is perceived to be a product distinguished by the skills, passion and care deployed in its production." The brewers spoke of enjoying the creative process of making beer, the satisfaction they derived for being responsible for the final product, and the respect they felt from seeing customers drinking and clearly enjoying beer that they had brewed. These feelings were in sharp contrast to the boring, stressful, repetitive, and unfulfilling work that they had experienced in their previous jobs - descriptions that call to mind Marx's use of the adjectives alienation and estrangement to describe the worker's "relationship to the products of his labor" (Marx 1959, p. 30). In the documentary, Beer Wars (2010), Greg Koch, CEO of Stone Brewing Company, states that "I do not care how much beer we make. I only care how we make it". For the British, the selection of ingredients that go into their beer is driven by a desire to maximize product quality. Keeping down production costs is not part of the calculus.

Craft brewers also have a strong attachment to place. The ownership of craft breweries is ordinarily "local" - and entrepreneurial home brewers who decide to commercialize their hobby almost always do so in the place in which they live. The place often becomes a critical part in the identity of the brewery. The name of the brewery and the name of the beers that they produce often reflect local landmarks, historical figures, landscapes, historical events etc. (Flack 1997, Schnell, Reese 2003, Fletchall 2016). While most of the ingredients used by the breweries, with the exception of the water, are imported there is a growing interest in using more locally-grown ingredients. While three states (Idaho, Oregon, and Washington) grow 96% of the hops harvested in the U.S. there has, in recent years, been an expansion of hop growing outside of this core region. Driven by demand from craft brewers for local hops the plants are now grown in over 25 states (George 2016). While it is still the exception this has resulted in a small number of breweries producing beer made with all local ingredients. For example, in 2016 Boiler Brewing Company in Lincoln, Nebraska brewed a beer, appropriately named Nebraska Native, using all Nebraska ingredients (Matteson 2017). Examples such as this have been the catalyst for discussions around whether the concept of terroir has a place in the world of craft beer (Draft Magazine 2011, Bolden 2015). The connection that craft beer has with local places can be connected with the broader desire among growing numbers of people for food products that are locally-produced. As noted by Trubek, Bowen (2008, p. 24) "there is a growing movement that counters our placeless relationship to food and responds to increasing consumer demand for products that incorporate new dimensions of quality." Craft beer, made with high quality ingredients, by a brewer that lives locally,

⁴As craft beer has become a big business, global beer makers have sought to access craft and local markets through the strategic acquisition of micro-brewers, as well as larger regional craft brewers. Consequently, it could be argued that the current explosion of craft breweries – and the firm lifecycle – may be akin to the technology start-ups of the mid-1990s that enable small scale organizations to leverage modest novelty into sizable financial gains.

and with whom you can in all probability have a conversation with when you visit a local brewery is attractive to growing numbers of Americans.

Craft brewers are not only intimately connected to the product they make but also to the customers who drink their beer. These drinkers tend to be primarily millennials. A recent study by Mintel (2013) showed that 50% of older millennials (aged 25-34) drink craft beer compared with only 36% for the general population. Mike Stevens and Dave Engbers who founded Founders Brewing Company in Grand Rapids, Michigan note that "we don't brew beer for the masses. Instead, our beers are crafted for a chosen few, a small cadre of renegades and rebels who enjoy a beer that pushes the limits of what is commonly accepted as taste. In short, we make beer for people like us" (Founders Brewing Company 2016). The idea that craft brewers make beer for people like themselves should come as no surprise. People who make craft beer also drink craft beer.

The opportunity to be creative is valued by many craft brewers and is manifest in a number of different ways. Water, hops, barley, and yeast are the four basic ingredients that go into making beer. While the macro-brewers have a standard recipe upon which their beers are brewed craft brewers have creatively experimented with different types and combinations of these basic ingredients. Take hops for example. There are over one hundred different varieties of hops (Hopunion 2016). Different hops have different characteristics and the types and combinations used will influence both the flavor and aroma of the beer. In addition to different hop varieties craft breweries also use different hopping regimes that impact the flavor/aroma profile of their beer. Thus by adding hops at different stages of the brewing process (dry-hopping versus late-hopping) quite distinctive flavor/aroma profiles can be obtained (Schönberger, Kostelecky 2011). A number of craft brewers also engage in the practice known as wet-hopping which involves adding fresh hops (as opposed to say pelletized hops) that are delivered to the brewery within 48 hours of being picked (Vandenengel 2014). The plethora of hop varieties and the choice of different hopping regimes has been the catalyst for considerable creativity among craft brewers and have been credited with promoting new scientific research related to hops (Schönberger, Kostelecky 2011).

Beyond the four basic ingredients craft brewers are using their creativity to incorporate other ingredients into their beers. The list of these additional ingredients is almost endless and includes cacao, mango, cucumbers, tea and even bull testicles (All About Beer Magazine 2013, 2015a,b,d,e). Brewers are also working creatively to brew beers that no longer exist. Dogfish Head Brewery in Milton, Delaware have worked with Dr. Patrick McGovern an archaeologist at of the University of Pennsylvania Museum in Philadelphia to recreate a number of what they term ancient ales. These are ales whose recipes have been found in ancient tombs or derived from chemical analysis of ancient pottery (Dogfish Head 2016).

With so many craft breweries producing so many different styles of beer a major challenge facing many brewers is getting the consumer to notice and purchase their particular beers rather than all the others that are available. One way some craft brewers have addressed this challenge is to have creatively designed eye-catching packaging and labeling. A number of craft breweries hire brand consultants to assist them with the design of customized packaging and labels (American Craft Beer 2015). Brooklyn Brewery's iconic logo was designed by the celebrated New York graphic designer Milton Glaser (Agger 2013). In 2015 Arcadia Brewing Company of Kalamazoo, Michigan held a contest in which they invited local artists to submit label designs for their aptly named Art Hops brew (Mah 2016). On the other hand, some breweries opt for in-house design teams. In 2015 Ninkasi Brewing Co. of Eugene, Oregon announced the establishment of an artist-in-residence program whereby selected artists work with the brewery's in-house design and marketing team in the development of designs for new packaging and labeling (All About Beer Magazine 2015c).

5 Creativity, Passion, and Growth: Two Examples

As suggested above, economic geography's understanding of place, growth, and creativity have evolved over the past twenty years. As part of this evolution, the research suggests

the scale of the analysis increasingly focuses on micro-level socio-economic contexts with special attention being paid to non-economic drivers of local growth. In an effort to understand the rescaling of local economic development, we believe the explosion of craft beer, as an industry, and the perspective of entrepreneurs active in this space are emblematic. For that reason, we examine two cases: The Black Cloister Brewing Company and 3rd Turn Brewing. The breweries were chosen because they are located in the cities in which the authors reside. This gave the authors easy access to the owners and staff for interview purposes and also allows them, through frequent visits as customers – a.k.a. participant-observation, to attain a feel for the atmosphere of the respective breweries. Likewise, the authors' insider knowledge as residents provide access to more local information resources and an understanding of the broader craft beer sector as it exists today and has developed over time in Toledo and Louisville. Additionally, both case studies are decidedly local insofar as the owners were homebrewers, intentionally invested in their home communities, and explicitly seek to create business that reflect a sense of place combined with business practices that are community centered.

5.1 The Black Cloister Brewing Company

The Black Cloister Brewing Company (BCBC) opened its doors in Toledo, Ohio in March 2015. The brewery is located in an 1874 structure that had been vacant since the 1970s in the heart of downtown Toledo (Cunningham 2015a). The brewery has the capacity to brew 1,000 barrels of beer per year which places it within the largest 1,000 craft breweries in the United States in terms of production volume. The CEO and Founder of Black Cloister is Tom Schaeffer. Schaeffer has an interesting background in that he is an ordained and practicing Lutheran Pastor. His Church, Threshold has its Sunday worship at the Black Cloister. Like many craft brewery owners Tom started out as a home brewer and was the founder of the local homebrew club, the Glass City Mashers (Brewers Association 2015c). Tom is also a certified Cicerone (the beer industry's equivalent of a wine sommelier).

Schaeffer (2016, personal interview, February 29) talked about the role that creativity plays at the Black Cloister, although he did so in quite different and distinctive ways. Schaffer began by talking about the role that creativity can play in helping old industrial cities like Toledo recover from the vagaries of the Great Recession of 2007-09. Toledo was particularly hard hit by the economic downturn and has since struggled to recover (Treanor, Costello 2015). In Schaeffer's opinion the retention and nurturing of creative workers is essential to Toledo's economic recovery and growth. Schaeffer notes that the Black Cloister has supported local creative businesses. The huge 50 foot mural that adorns the back wall of the brewery's tap room was designed by a local design and build studio, Graphite Design + Build, while the beer mugs that are given to members of the brewery's Mug Club are manufactured by a local glass blowing studio, Gathered Glassblowing studio. Both businesses are a few minutes' walk from the brewery. Schaeffer's mention of the importance of creative workers and industries resonates with the work of Richard Florida and his colleagues on the role of the creative class in economic development (Florida 2012. Lee et al. 2010). Additionally, in a highly informative paper on the economic history of Boston between 1630 and 2003, Glasser (2006) emphasizes the importance of maintaining skilled workers during times of economic adversity. Boston was able to do that throughout its history whereas in cities like Detroit better educated, skilled, and creative workers abandoned the city. The most creative cities in the country, Schaefer noted, have a flourishing craft beer scene. This assertion is supported by Fallows (2016) who suggests that the existence of craft breweries in an indicator of a healthy and successful community. Other key characteristics of a healthy and successful community according to Fallows (2016) include a focus, by local residents, on working together, often in public-private partnerships to address local challenges, the existence of an identifiable civic champion, a compelling civic story, a vibrant downtown, the existence of a research university, a community college that is valued by and which serves the local community, elementary and secondary schools that have an element of experimentation about them, openness to outsiders, and a longer-term vision of what the community will look like in the future.

To Schaeffer creativity and brewing are linked. Brewing is very much a creative

process. He makes a distinction between producing and creating beer. Producing beer is a process that Anheuser-Busch and Miller-Coors engage in. He recalled a conversation that he had with someone who had been a manager at a major brewery. The people there were hired to do a job, to produce beer, and not to engage in any creative thinking or production. Schaeffer also talks about the outcome of the creative process – the beer itself. There are times when he has made the decision to discard an entire batch of beer, not because there was anything wrong with it per se but because it did not match the intended flavor profile. The beer was perfectly fine (to use industry terminology there were no "off flavors") and could have been sold, at a significant profit, in the brewery's tap room. However, to have sold beer that did not match the intended flavor profile would have, in Schaeffer's opinion compromised the brewery's (and the brewer's) integrity. On some occasions, rather than discard beer, they have been able to sell it to a nearby distillery (Toledo Spirits) who have used it to produce, for example, hop-flavored whiskey. Even when it has been possible to sell a batch of beer to the distiller the brewery is making pennies on the dollar.

Head Brewer, Shannon Fink (2016, personal interview, February 9), had a rather serendipitous path into the world of professional brewing. She was a nurse for eleven years, a job that she disliked intensely. She found it unrewarding, stressful, emotionally draining, and overloaded with paperwork. In contrast, she describes her work environment at the brewery as "Zen-like". When asked to identify something that she disliked about working as a brewer she visibly struggled to identify anything and simply stated that she was "living the dream". Indeed, Fink enjoys the process of brewing so much ("It makes me happy" she stated) that on her days off she brews beer at home. Like Schaeffer, Fink started out as a home brewer. She had been introduced to home brewed beer by a nursing colleague and very shortly thereafter was brewing her own beer on her back patio. She was also educating herself by reading as many books about beer and brewing as she could lay her hands on. While her training and experience in nursing meant that she had a solid background in science, Fink also has an artistic streak. She taught herself how to draw in charcoal. She loved the one art course that she took in college. Her father, in fact, encouraged her to pursue her passion for art beyond college but Fink felt that there was no money to be made in art – until she entered the world of commercial brewing. She was a member of the local home brewing club that Schaeffer had founded and when the Black Cloister was close to opening he encouraged her to apply for one of the brewer's positions. Fink describes the brewing process as a "perfect marriage of art and science" (Cunningham 2015b). It is the creative process that she finds most rewarding – the opportunity to take ingredients and create a unique beer, a process of which she never tires. In recalling her days as a home brewer Fink described herself as being like a "mad scientist", always experimenting with different types and quantities of ingredients. Fink did not rely on reading books and trial-and-error to improve her brewing skills. She is also a graduate of the American Brewers Guild Craftbrewer's Apprenticeship Program, a 28-week program that focuses on brewing science and includes a five weeks of practical experience in the form of an internship at a craft brewery. It was after completion of this program that Schaeffer promoted Fink to the position of Head Brewer.

Fink also spoke about the satisfaction that she feels when she sees customers enjoying the beer that she has brewed. She often sits incognito at the Black Cloister's bar. Both Schaeffer and Fink talked about the role passion plays in the industry. Fink noted that much of the work that she does is not creative. She may, for example, spend an entire day cleaning various pieces of equipment. The job is also, at times, physically demanding as 50lb bags of malted barley have to be carried from one part of the brewery to another. But it her passion for the creative task of making beer that makes the less glamorous parts of the job worthwhile. Schaeffer spoke of the important part passion plays in the hiring of new employees. As part of the interview for a position at the Black Cloister interviewees are asked to talk passionately about a topic for five minutes. It can be any topic (it does not need to be beer). Schaeffer reckons that if an individual cannot talk passionately for five minutes on a topic about which they claim to be passionate then the probability is low that they will be able to talk passionately with customers about the brewery's beer. Knowledge of beer is less critical. As Schaeffer noted he can teach

employees about beer; he cannot teach them to be passionate. As a result Schaeffer has listened to passionate monologues from interviewees on a variety of topics from dog parks to human genome sequencing.

5.2 3rd Turn Brewing

3rd Turn Brewing is located in Louisville, Kentucky. Like many craft beer firms, 3rd Turn's story is a familiar one that extends from an individual passion for beer and home brewing to a desire to create something meaningful – an experience and a product – in a local community (or place) that reflects the values and shared history of the owners. Opening in September 2015, the taproom initially focused 100% on guest taps. The micro-brewery served its first own commercial beer, a stout, in late-December. Going forward, 3rd Turn will continue to feature regional guest taps from more established Kentucky brewers such as Against the Grain, Apocalypse, Monnik, Beer Engine, and Country Boy. While many breweries limit outside pours, the owners are committed to celebrating the community of beer that has developed across the state and the Kentuckiana region. The tap room – is just that – a tap room. While no food is available for sale, the owners partnered with local restaurants for delivery, welcomes carry-ins (or potlucks), and the place serves as a gathering place.

3rd Turn was founded by three partners (Brian Minrath, Dale Shinkle, and Greg Hayden), each now on their third career. Despite an unintentional allusion to their personal narratives, the brewery was named for Churchill Downs' Third Turn and positions the brand squarely within the local history (Hayden et al. 2015, personal interview, December 22). Indeed, the name leverages local knowledge of Louisville insiders as the brand refers to a particular in-field location at Churchill Downs where residents can enjoy the derby which has now become an elite event for out-of-town guests and affluent locals. In this sense, the brewery, like many craft beer firms, builds on the well-established themes of neo-localism and explicitly appeals to a niche place-based market. Further, the vision of 3rd Turn blends the values of community insofar as the brewery owners sought "to create a space where J'Town [a community in metropolitan Louisville] residents and other East Enders" can enjoy beer "in a community setting." (Rothgerber 2016, p. 43).

What makes 3rd Turn's story interesting is that the endeavor represents an explicit and intentional desire on the part of Shinkle, Hayden, and Minrath, as well as Ben Shinkle (head brewer and Dale's brother), to re-vision their lives as entrepreneurs and to create something meaningful for their families and hometown. Lifestyle, values, and meaning-making drive their entrepreneurism. For example, Dale and Greg are both chemists who've been friends since college and both subsequently pursued careers in business as a CPA and safety planner, respectively (Hayden et al. 2015, personal interview, December 22). It was in the corporate world that Greg met their third partner, Minrath. As of early 2016, Greg was the only founder that had transitioned to full time at the brewery to pursue his passion and new career. In the case of Ben, Greg, and Dale, the 3rd Turn venture permitted them to take their hobby to the next level. While Ben is the head brewer, 3rd Turn specializes in the scaled up recipes developed by the former chemists – in particular Greg – that serve as the foundation of the production system. To that end, Greg and Dale's passion for chemistry and beer continues to inform their work and each speaks of esters, sugars, and active yeast with a passion that reflect their desire to create "something new".

In terms of their beer, 3rd Turn explores and creates beers that intentionally reside outside of the traditional style guide. For example, the team created a hefe gerst based on a Ukrainian Steam Beer that uses barley as the primary grain (Shinkle 2016, personal interview, February 27). With a current annual maximum production capacity of roughly 2,000 barrels, the goal is to create unique beers in much smaller quantities that will be served primarily at the tap room – as well as on guest taps across Kentucky and southern Indiana⁵. The theme of creativity and collaborating with the community also

 $^{^5}$ In late December 2016, $3^{\rm rd}$ Turn announced a planned expansion and new facility in nearby Crestwood, KY located in Oldham County. The new "farm" location will permit the firm to expand production.

extends to their "mug club". Like many tap rooms, 3rd Turn has implemented an annual membership program and the mugs are handcrafted by a local artist in residence, Fong Choo – a faculty member at nearby Bellarmine University which is also Dale and Greg's alma mater. The individual nature of the ceramic mugs makes 3rd Turn unique and reflects the owner's desire to seek inspiration, foster community, and develop collaboration in non-traditional arenas. Like BCBC, 3rd Turn is operationalizing creativity broadly and deploying everyday strategies that reinforce economic development and themes from the "creative class".

Beyond creating beer, the owners clearly value community, hard work, collaboration, and fun. However, they understand business too. Indeed, site selection was a lengthy process that included working with local officials in multiple locations in suburban Louisville to identify an underserved market (think intervening location). As a result of their efforts, they chose a location – a former Moose Lodge that was once a church – which enabled 3rd Turn to be the first brewery located beyond the outer belt – miles away from other more stablished local competitors – many of whom have pours available on 3rd Turn taps.

6 Discussion

Craft brewers and beer drinkers are part of a broader local movement that increasingly redefines, or perhaps reframes, local economic development. Or put another way, the values-oriented entrepreneurs driving the craft brew industry see themselves as engines of community-building at the micro-scale. In doing so, craft brewers become "change agents". As change agents, brewers and breweries are often the anchor of revitalizing neighborhoods and spur further capital investment. In both of the case studies, the firms intentionally located in more marginal or transitional areas and the breweries are adaptations of prior uses. Moreover, the realities of the craft brewers – and the micro-spaces which they occupy are instructive as their success depends heavily on their ability to leverage creativity (product, marketing, and brand identity) in a very dense marketplace (Mann 2016).

According to Julia Herz, craft beer program director for the Brewers Association, craft "brewers are not just opening up businesses to run a profit; they have a different version of the American Dream – one where you can use your brewing as a platform for improving your community." (Shilton 2016). Craft breweries both contribute to and benefit from agglomeration economies. In an increasing number of cases these agglomeration economies are buttressed by geographic concentrations of locally-owned, often, creative businesses. Indeed, breweries are sometimes seen by policy makers as one of the critical elements of economic growth and neighborhood revitalization (City of Louisville 2014, Loosemore 2016). Indeed, the location of the vast majority of craft breweries in Louisville coincides with revitalizing (arguably artistic or bohemian) urban districts such as Portland (Against the Grain production, Falls City), NuLu (Against the Grain, Akasha and Goodwood), and Germantown (Monnik). To that end, the city of Louisville has specifically targeted the craft beer industry as a critical element of growth in select neighborhoods and a working group has proposed a bike-able "beer trail" similar to the successful bourbon trail (City of Louisville 2014). In the case of Toledo's Black Cloister Tom Schaeffer noted the geographically proximate glass blowing and build and design studios that have contributed to the ambience that he is trying to create for his customers.

In another corner of Ohio, the Great Lakes Brewing Company has been credited with being a catalyst in the socio-economic revitalization of the Cleveland's Ohio City neighborhood. In the late nineteenth and early twentieth century Ohio City was a bustling industrial neighborhood with docks, mills, foundries, distilleries, and bottling works (Ohio City Neighborhood 2016c). By the end of the Second World War, however, the neighborhood was in decline. Pat and Dan Conway, who founded the Great Lakes Brewery in 1986, have been described as the "beer men who became the unlikely leaders of the neighborhood's revival" (Alexander 2013). Today, Ohio City is a vibrant, ethnically diverse neighborhood (34% of its 9,000 residents are African American and 23% are Hispanic) that is teeming with small locally-owned businesses. These include other breweries, restaurants, bicycle shops, book stores, a glass blowing studio etc. (Ohio City

Neighborhood 2016b,d). Since 2005, the crime rate has fallen approximately 25% and real estate values have doubled. It has been rated as the second most walkable neighborhood in Cleveland (Ohio City Neighborhood 2016a).

Like Ohio City, Denver's Lower Downtown (LoDo) neighborhood is another that has benefited from the establishment of a craft brewery. In this case it is the Wynkoop Brewery. Like Ohio City, Lower Downtown Denver was once a bustling neighborhood and a major industrial area that drew its sustenance from the Union Pacific rail yard. By the early twentieth century LoDo was in decline as the railroad's importance as transportation medium decreased. It was not until the late-1980s that LoDo started to witness a revival and the Wynkoop Brewery played a key part in that process. "LoDo's characteristics make it an ideal site for the downtown's restaurant and entertainment center. The Wynkoop was the pioneer which laid the foundation for this vision's realization, which then became an anchor for the broader development of LoDo" (Weilar 2000, p. 175). Today, much like Ohio City, the area is thriving and is home to some of the best restaurants, galleries, shops and boutiques in the city, as well as a dozen or so craft breweries. Compared with Ohio City, however, the LoDo neighborhood is not as demographically diverse; 80.4% of its population is white. Out of 32 Denver neighborhoods it is the 27th in terms of the share of non-whites in its population (Statistical Atlas 2015).

As the discussion suggests, local craft brewers are critical "place-makers" and contribute to the overall sense of place associated with Millennial driven urban revitalization. This is a process and a relationship that is well-established and shows little sign of slowing down. At the same time this has been very much an organic process with home brewers making the choice to commercialize their hobby and in so doing making an incremental contribution to local economic development. However, as we have seen in the Louisville case, the growth of craft brewing has caught the attention of policy makers with the result that some communities are starting to think strategically about how to foster and nurture the industry. This includes enacting legislation to make the regulatory environment friendlier to the industry (Bragg 2016).

7 Conclusion

While it may be too much to say that the craft beer industry has disrupted the broader beer industry there is no doubt that its emergence has impacted in a significant way the large multi-national brewing companies. Faced with increased competition from craft brewers in the United States, Anheuser-Busch and SABMiller finalized a \$100 billion merger in 2016. This merger provides unprecedented economies of scale and, at a time when its share of the U.S. market is declining, gives Anheuser-Busch access to growing markets in Africa and Latin America (Brown 2016). Craft beer's emergence in the United States may now be actively re-scaling economic development and reconfiguring traditional explanations of economic growth. While growth may be a by-product of craft beer entrepreneurs, the evidence suggests the drivers and decisions of entrepreneurs are nuanced, more local, and often reside outside of the simple arithmetic of ROI. While no doubt all entrepreneurs seek to maximize their investment, non-economic drivers such as creativity, community, and even a passion for brewing are critical to the success of craft firms. Indeed, the success of the firms themselves is largely dependent upon the creativity of brewers and the neighborhoods (or communities) within which they are embedded.

While the notion of values-driven entrepreneurism may not necessarily be new (e.g., Ben & Jerry's or Hobby Lobby), the experience of the craft beer industry is unique as the framework that drives the sector may be signposting the emergence of new hybrid models of economic development that account for place, community, creativity, and growth. As the two cases illustrate, the industry at the local scale appears to have been driven – in part – by non-economic drivers and that these drivers are inherently scaled, as well as experienced, at the everyday world of neighborhood communities. More importantly, and

⁶ While craft brewing was popular before the appearance of the so-called millennial cohort research and data suggest that the millennials are the key demographic that have driven growth of the industry more recently. Recent market research shows that 57% of people who drink craft beer on a weekly basis are millennials, compared with 24% and 17% for Gen Xers and Baby Boomers, respectively (Brewers Association 2016b).

not surprisingly, the language of craft brewers parallels that of the creative class and reflects the shifting consumption patterns and lifestyle of a now established millennial cohort.

References

- Acitelli T (2015) When brewpubs started booming. All About Beer Magazine, February 11. http://allaboutbeer.com/when-brewpubs-started-booming/
- Agger M (2013) I love Brooklyn Brewery. The New Yorker, March 5. http://www.newyorker.com/culture/culture-desk/i-brooklyn-brewery
- Alexander D (2013) Beer entrepreneurs fuel comeback of struggling Cleveland neighborhood. Forbes, November 26. http://www.forbes.com/sites/danalexander/-2013/11/26/beer-entrepreneurs-fuel-comeback-of-struggling-cleveland-neighborhood/-#14cc94c3574f
- All About Beer Magazine (2013) Join all about beer for a beer tasting with Wynkoop Brewing Co. All About Beer Magazine, March 29. http://allaboutbeer.com/news/beer-tasting-with-wynkoop-brewing-co/
- All About Beer Magazine (2015a) Cucumber beers: stars of the summer? All About Beer Magazine, August 13. http://allaboutbeer.com/cucumber-beers/
- All About Beer Magazine (2015b) Founders Brewing Co. announces first back-stage series beer of 2016: 'mango magnifico'. All About Beer Magazine, January 25. http://allaboutbeer.com/news/founders-brewing-backstage-series-2016-mango-magnifico/
- All About Beer Magazine (2015c) Ninkasi Brewing Co. announces artist in residence program. All About Beer Magazine, June 26. http://allaboutbeer.com/news/ninkasi-brewing-co-announces-artist-in-residence-program/
- All About Beer Magazine (2015d) Stone brewing re-releases stone 12th anniversary bitter chocolate oatmeal stout. All About Beer Magazine, January 25. http://allaboutbeer.com/news/stone-12th-anniversary-bitter-chocolate-oatmeal-stout/
- All About Beer Magazine (2015e) Tea: an untapped beer ingredient? All About Beer Magazine, April 23. http://allaboutbeer.com/tea-an-untapped-beer-ingredient/
- Alonso AD (2011) Opportunities and challenges in the development of micro-brewing and beer tourism: A preliminary study from Alabama. *Tourism Planning & Development* 8[4]: 415–431
- American Craft Beer (2015) The art of branding craft beer. American Craft Beer, February 18. http://americancraftbeer.com/item/the-art-of-branding-craft-beer.html
- American Homebrewers Association (2016) Homebrewing stats. http://www.homebrewers-association.org/membership/homebrewing-stats/
- Anheuser-Busch (2016) Serving our communities with pride. http://www.anheuser-busch.-com/betterworld/community.html
- Audretsch D, Feldman M (1996) R&D spillovers and the geography of innovation and production. The American Economic Review 86[3]: 630–640
- Beer Wars (2010) Dir. Anat Baron. Ducks in a Row Entertainment Corporation. DVD
- Bolden E (2015) Can craft beer truly express a sense of place? Punch, July 9. http://punchdrink.com/articles/can-craft-beer-express-terroir-with-rogue-farms-wolves-and-people-brewery/

- Bragg V (2016) New bill proposed to help attract more craft breweries to Virginia. WSET.com, January 8. http://wset.com/news/local/new-bill-proposed-to-help-attract-more-craft-breweries-to-virginia
- Brewers Association (2015a) Brewers association reports big gains for small and independent brewers. July 27. https://www.brewersassociation.org/press-releases/brewersassociation-reports-big-gains-for-small-and-independent-brewers-2/
- Brewers Association (2015b) Number of breweries. https://www.brewersassociation.org/-statistics/number-of-breweries/
- Brewers Association (2015c) Tom Schaeffer. https://www.brewersassociation.org/profile/-tom-schaeffer/
- Brewers Association (2015d) The year in beer: U.S. brewery count reaches all-time high of 4,144. December 2. https://www.brewersassociation.org/press-releases/the-year-in-beer-u-s-brewery-count-reaches-all-time-high-of-4144/
- Brewers Association (2016a) Small and independent brewers continue to grow double digits. March 22. https://www.brewersassociation.org/press-releases/small-independent-brewers-continue-grow-double-digits/
- Brewers Association (2016b) Today's craft beer lovers: Millennials, women and hispanics. August 15. https://www.brewersassociation.org/communicating-craft/understanding-todays-craft-beer-lovers-millennials-women-hispanics/
- Brown L (2016) A-B InBev finalizes \$100b billion acquisition of SABMiller, creating world's largest beer company. *Chicago Tribune*, October 11. http://www.chicagotribune.com/business/ct-megabrew-ab-inbev-sabmiller-merger-20161010-story.html
- Calagione S (2011) Brewing Up A Business: Adventures In Beer. John Wiley & Sons, Hoboken, NJ
- Ceres (2016) Brewery climate declaration. http://www.ceres.org/declaration/about/climate-declaration-campaigns/brewery#breweries
- Choi DY, Stack MH (2005) The all-american beer: A case of inferior standard (taste) prevailing. Business Horizons 48[1]: 79–86. CrossRef.
- City of Louisville (2014) Mayor's local brewery workgroup report. City of Louisville, Louisville, KY. http://louisvilleky.gov/sites/default/files/mayors_office/pdf_files/mayors20beer20report20201420ver202.pdf
- Cone T (2012) Number of US famers markets surges. USA Today, August 3. http://usatoday30.usatoday.com/news/nation/story/2012-08-03/farmers-markets-in-creasing/56727330/1
- Crowell C (2013) Craft beer consumer stats: How will they affect your business plan? Craft Brewing Business, May 3. http://www.craftbrewingbusiness.com/business-marketing/craft-beer-consumer-stats-how-will-affect-your-business-plan/
- Cunningham B (2015a) Black Cloister Brewing Co. taps opening date. *Toledo Blade*, February 26. http://www.toledoblade.com/Peach-Weekender/2015/02/26/Black-Cloister-Brewing-Co-taps-opening-date.html
- Cunningham B (2015b) Black Cloister's Fink is head of the class. *Toledo Blade*, September 24. http://www.toledoblade.com/Peach-Weekender/2015/09/24/Black-Cloister-s-Fink-is-head-of-the-class.html
- Day P (2015) How the craft beer revolution started. BBC News, December 30. http://www.bbc.com/news/business-35120401
- Dogfish Head (2016) Ancient ales. http://shop.dogfish.com/ancientales

- Draft Magazine (2011) The dirt on terroir. *Draft Magazine*, July 26. http://draftmag.com/the-dirt-on-terroir/
- Duva N (2014) Elitism, or something else? Millennials and the war on big beer. CNBC.com, November 8. http://www.cnbc.com/2014/11/07/why-those-elitist-millennials-hate-big-beer.html
- Ellison S (2006) After making beer ever lighter, Anheuser faces a new palate. Wall Street Journal, April 26. http://www.wsj.com/articles/SB114601602889736048
- Fallows J (2010) Jimmy Carter: Not the king of beers? (updated). The Atlantic, August 19. http://www.theatlantic.com/politics/archive/2010/08/jimmy-carter-not-the-king-of-beers-updated/61599/
- Fallows J (2016) Eleven signs a city will succeed. The Atlantic, March. http://www.theatlantic.com/magazine/archive/2016/03/eleven-signs-a-city-will-succeed/426885/-?.utm_source=SFFB
- Fink S (2016) Personal interview. Toledo, OH, February 9
- Flack W (1997) American microbreweries and neolocalism: "Ale-ing" for a sense of place. Journal of Cultural Geography 16[2]: 37–53. CrossRef.
- Fletchall AM (2016) Place-making through beer-drinking: A case study of Montana's craft breweries. *Geographical Review* 106[4]: 539–566. CrossRef.
- Florida R (2012) The Rise of the Creative Class, Revisited. Basic Books, New York
- Florida R, Kenney M (1990) Silicon Valley and Route 128 won't save us. *California Management Review* 33[1]: 68–88. CrossRef.
- Founders Brewing Company (2016) History. http://foundersbrewing.com/history/
- Galt RE, O'Sullivan L, Beckett J, Hiner CC (2012) Community supported agriculture is thriving in the central valley. *California Agriculture* 66: 8–1. CrossRef.
- Gatrell J, Reid N (2002) The cultural politics of local economic development: The case of Toledo Jeep. *Tijdschrift voor Economische en Sociale Geografie* 93[4]: 397–411. CrossRef.
- Gatrell J, Reid N (2005) Placing economic development narratives into emerging economic spaces: Project Jeep, 1996-1997. In: LeHeron R, Harrington J (eds), New economic spaces: New economic geographies. Ashgate, Aldershot
- George A (2016) 2016 world harvest report U.S. hops. The New Brewer November/December: 64–69
- Gilman HR (2014) How millennials' use of social networks explains their politics. *Brookings Tech Tank*, November 24. https://www.brookings.edu/blog/techtank/2014/11/24/how-millennials-use-of-social-networks-explains-their-politics/
- Glaeser EL (2006) Reinventing Boston: 1630-2003. *Journal of Economic Geography* 5: 119–153. CrossRef.
- Grossman K (2013) Beyond the pale: The story of the Sierra Nevada Brewing Co. John Wiley & Sons, Hoboken, NJ
- Hayden G, Shinkle D, Shinkle B (2015) Personal interview. Jeffersontown, KY, December 22.
- Hayter R (2000) Flexible Crossroads: The Restructuring of British Columbia's Forest Economy. UBC Press, Vancouver, BC

- Herz J (2014) Craft brewers' 2014 charitable donations top \$71m. Brewers Association https://www.brewersassociation.org/communicating-craft/craft-brewers-contribute-millions-to-local-causes/
- Hopunion (2016) A hop for every flavor and style. https://www.hopunion.com/hop-varieties/
- Imarenezor C (2016) Super Bowl 50: Anheuser-Busch returns to commercial lineup for 28th year. Vibe, January 16. http://www.vibe.com/2016/01/super-bowl-50-anheuser-busch/
- Kaufman A, Gittell R, Merenda M, Naumes W, Wood C (1994) Porter's model for geographic competitive advantage: The case of New Hampshire. *Economic Development Quarterly* 8[1]: 43–66. CrossRef.
- Kaufman BE (1990) A new theory of satisficing. The Journal of Behavioral Economics 19[1]: 35–51. CrossRef.
- Kirchenbauer H (2014) Philanthropy is alive and well in the craft beer industry. San Diego Troubadour, June. http://sandiegotroubadour.com/2014/06/philanthropy-is-alive-and-well-in-the-craft-beer-industry/
- Lee SY, Florida R, Gates G (2010) Innovation, human capital, and creativity. *International Review of Public Administration* 14[3]: 13–24. CrossRef.
- Loosemore B (2016) Falls City announces new bottled beers. The Courier Journal, March 1. http://www.courier-journal.com/story/life/food/spirits/beer/2016/03/01/falls-city-announces-new-bottled-beers/81158592/
- Lyons D (1995) Agglomeration economies among high technology firms in advanced production areas: The case of Denver/Boulder. *Regional Studies* 29[3]: 265–278. CrossRef.
- MacPherson A (1997) The role of producer service outsourcing in the innovation performance of New York state manufacturing firms. Annals of the Association of American Geographers 87[1]: 52–71. CrossRef.
- Magee T (2014) So you want to start a brewery? The Lagunitas story. Chicago Review Press, Chicago, IL
- Mah L (2016) Art Hops beer and logo design make debut at Friday night Art Hop. *Mlive*, January 9. http://www.mlive.com/entertainment/kalamazoo/index.ssf/2016/01/art_hops_beer_and_logo_design.html
- Malecki E (1991) Technology and Economic Development: The Dynamics of Local, Regional, and National Change. Longman, New York, NY
- Mann D (2016) Five funny names in Louisville beer and why brewers come up with them. Louisville Business First, February 1. http://www.bizjournals.com/louisville/news/2016/02/01/five-funnynames-in-louisville-beer-and-why-brewers.html
- Markusen A (1996) Sticky places in slippery space: A typology of industrial districts. *Economic Geography* 72[3]: 293–313. CrossRef.
- Marx K (1959) Economic and philosophical manuscripts of 1844. Progress Publishers, Moscow
- Maslow AH (1954) Motivation and Personality. Harper & Row, New York, NY. CrossRef.
- Matteson C (2017) Boiler brewing company tackles Nebraska-made beer. *Lincoln Journal Star*, January 11. http://journalstar.com/lifestyles/food-and-cooking/boiler-brewing-company-tackles-nebraska-made-beer/article_bfe16c27-b68d-50d2-a90a-fa13fda7ff89.html

- McCann E (2002) The cultural politics of local economic development: Meaning making, place-making, and the urban policy process. *Geoforum* 33[3]: 385–398. CrossRef.
- McWilliams J (2014) The ecological creed of craft beer. Conservation, http://conservation-magazine.org/2014/03/sustainable-practices-in-craft-brewing/
- Mintel (2013) The rise of craft beer in the US craft beer sales have doubled in the past six years and are set to triple by 2017. January 23. http://www.mintel.com/press-centre/food-and-drink/the-rise-of-craft-beer-in-the-us-craft-beer-sales-have-doubled-in-the-past-six-years-and-are-set-to-triple-by-2017
- Monloss K (2016) How Budweiser ditched its old look and crafted a new visual identity. *Adweek*, January 24. http://www.adweek.com/news/advertising-branding/how-budweiser-ditched-its-old-look-and-crafted-new-visual-identity-169144
- National Gardening Association (2014) Garden to Table: A 5-year Look at Food Gardening in America. National Gardening Association, Williston, VT
- Nurin T (2016) It's final: AB InBev closes on deal to buy SABMiller. Forbes, October 10. http://www.forbes.com/sites/taranurin/2016/10/10/its-final-ab-inbev-closes-on-deal-to-buy-sabmiller/#3155e6f137d6
- O hUallachain B, Reid N (1991) The location and growth of business and professional services in American metropolitan areas, 1976-1986. Annals of the Association of American Geographers 81[2]: 254-70. CrossRef.
- O hUallachain B, Reid N (1993) The location of services in the urban hierarchy and regions of the United States. *Geographical Analysis* 25[3]: 252–267. CrossRef.
- Ohio City Neighborhood (2016a) About the neighborhood. http://www.ohiocity.org/about
- Ohio City Neighborhood (2016b) Demographics. http://www.ohiocity.org/demographics
- Ohio City Neighborhood (2016c) History. http://www.ohiocity.org/history
- Ohio City Neighborhood (2016d) Neighborhood guide. http://www.ohiocity.org/guide
- Pew Research Center (2010) Millennials: Confident. Connected. Open to change. Pew Research Center, Washington, D.C.
- Porter M (1990) The Competitive Advantage of Nations. Basic Books, New York, NY. CrossRef.
- Reid N, Gatrell JD (2015) Brewing growth: Regional craft breweries and emerging economic development opportunities. *Economic Development Journal* 14[4]: 4–12
- Rothgerber H (2016) Better beer through Bellarmine chemistry. Bellarmine Magazine, Winter. http://www.bellarminemagazine.com/better-beer-through-bellarmine-chemistry/
- Rotunno T (2014) The BMW of beer: Brewery crafts luxury approach. *CNBC*, May 3. http://www.cnbc.com/id/101636905
- Satran J (2014) Here's how a six-pack of craft beer ends up costing \$12. HuffPost Taste, September 12. http://www.huffingtonpost.com/2014/09/12/craft-beer-expensive-cost_n_5670015.html
- Saxenian A (1994) Regional Advantage: Culture and Competition in Silicon Valley and Route 128. Harvard University Press, Cambridge, MA
- Schaeffer T (2016) Personal interview. Toledo, OH, February 9
- Schönberger C, Kostelecky T (2011) 125th anniversary review: The role of hops in brewing. Journal of the Institute of Brewing 117[3]: 259–267. CrossRef.

- Schnell SM, Reese JE (2003) Microbreweries as tools of local identity. *Journal of Cultural Geography* 21[1]: 45–69. CrossRef.
- Schultz K (2015) Drink your way to sustainability with these climate-conscious microbrews. Yes! Magazine, April 3. http://www.yesmagazine.org/planet/drink-your-way-to-sustainability-with-these-climate-conscious-microbrews
- Schumpeter JA (1942) Capitalism, Socialism and Democracy. Harper & Row, New York. CrossRef.
- Scott A (1988) Metropolis. University of California Press, Berkeley, CA. CrossRef.
- Scott A (1993) The new southern California economy: Pathways to industrial resurgence. Economic Development Quarterly 7[3]: 296–309. CrossRef.
- Scott A (2006) Entrepreneurship, innovation, and industrial development: Geography and the creative field revisited. *Small Business Economics* 26[1]: 1–24. CrossRef.
- Shilton AC (2016) Craft beer vs. Budweiser: How small brewers are winning back the neighborhood. Yes! Magazine, March 2. http://www.yesmagazine.org/new-economy/craft-beer-vs-budweiser-how-small-brewers-are-winning-back-the-neighborhood-20160302
- Shinkle D (2016) Personal interview. Jeffersontown, KY, February 27.
- Shortridge JR (1996) Keeping tabs on Kansas: Reflections of regionally based field study. Journal of Cultural Geography 16[1]: 5–16. CrossRef.
- Smith N (1984) Uneven Development. Blackwell, Cambridge, MA. CrossRef.
- Statistical Atlas (2015) Race and ethnicity in Lodo, Denver, Colorado. Cedar Lake Ventures, Inc. http://statisticalatlas.com/neighborhood/Colorado/Denver/Lodo/Race-and-Ethnicity
- Storper M, Walker R (1989) The Capitalist Imperative. Blackwell, Cambridge, MA
- Svaldi A (2016) Molson Coors claims all of MillerCoors, making home-grown brewer the third largest in the world. *The Denver Post*, October 11. http://www.denverpost.com/-2016/10/11/molson-coors-claims-millercoors/
- The Beer Professor (2015) Community space. December 29. http://www.thebeerprofessor.com/?.p=1573
- Thurnell-Read T (2014) Craft, tangibility and affect at work in the microbrewery. *Emotion*, Space, and Society 13[1]: 46–54. CrossRef.
- Thurow LC (1978) Psychic income: Useful or useless? The American Economic Review 68[2]: 142–145
- Treanor C, Costello B (2015) The Toledo metropolitan statistical area. *Economic Trends* September 3. https://www.clevelandfed.org/newsroom-and-events/publications/economic-trends/2015-economic-trends/et-20150903-the-toledo-metropolitan-statistical-area.aspx
- Tremblay VJ, Tremblay CH (2009) The U.S. Brewing Industry. The MIT Press, Cambridge, MA
- Törnqvist G (2011) The Geography of Creativity. Edward Elgar, Northampton. CrossRef.
- Trubek A, Bowen S (2008) Creating the taste of place in the United States: can we learn from the French? *GeoJournal* 73[1]: 23–30. CrossRef.
- Vandenengel H (2014) The fresh flavors of wet hop ales. All About Beer Magazine 35[5]. http://allaboutbeer.com/article/wet-hop-beer/

- Walker E, Brown A (2004) What success factors are important to small business owners? *International Small Business Journal* 22[6]: 577–594. CrossRef.
- Weilar S (2000) Pioneers and settlers in Lo-Do Denver: Private risk and public benefits in urban redevelopment. *Urban Studies* 37[1]: 167–179. CrossRef.
- Wesson T, Nieva de Figueiredo J (2001) The importance of focus to market: A study of microbrewery performance. *Journal of Business Venturing* 16[4]: 377–403. CrossRef.
- Winograd M, Hais M (2014) How millennials could upend Wall Street and corporate America. Governance Studies at Brookings, May. https://www.brookings.edu/wp-content/uploads/2016/06/Brookings_Winogradfinal.pdf