HEART & MATTER: FERMENTATION IN A TIME OF CRISIS

Aaron C. Delgaty

A dissertation submitted to the faculty at the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the department of Anthropology.

Chapel Hill
2020

Approved by:

Christopher T. Nelson

Margaret J. Wiener

Peter Redfield

Townsend Middleton

Brad Weiss

© 2020
Aaron C. Delgaty
ALL RIGHTS RESERVED

ABSTRACT

Aaron C. Delgaty: Heart & Matter: Fermentation in a Time of Crisis
(Under the direction of Christopher T. Nelson)

In *Heart & Matter,* I explore contemporary artisan movements from the perspectives of the artisans that animate these movements, considering how people draw on this emergent category of alternate labor and identity to navigate crises of social, economic, and personal precariousness within the artisan industry. Moving from North Carolina to Okinawa, Tokyo to Chicago, my collaborators shared the quotidian anxiety of how to keep their crafts - and the businesses, livelihoods, and identities tied up in those crafts – relevant, viable, and even successful. Toward survival, my interlocutors engaged in practices of resilience, innovation, and collaboration, elemental threads that wove their working philosophies of craft. At the visceral intersection of ethnography and apprenticeship, I trace a *working ethos* of emergent artisanship that captures the hopes and anxieties, the successes and failures, the everyday lives and works of craftspeople confronting uncertain frontiers of vocation and taste.

By way of introduction, *Every Scar a Lesson* outlines and demonstrates my primary methodology, an itinerant series of participant observations from the perspective of formal and informal apprenticeship, or what I call a *wandering apprenticeship. Storms Within, Storms Without* examines the resilience crucial to meeting and overcoming the difficulties of craft livelihoods. Despite the ease many associate with industry (even some of those within the industry), being a craftsperson is not easy. The ups and downs of a craft livelihood can be overwhelming, and I trace some of the strategies – ethical or otherwise - craftspeople use to

resist defeat. *Fortune and Glory* contemplates the fickleness of innovation. I discuss the environmentally contingent, cooperative nature of creativity and the possibilities and limitations such a nature enacts. I consider the value innovation can bring to a craft venture, and also the potential consequences to business and craftsperson when the well of innovation runs dry. *Ouroboros* explores the phenomenon of collaboration, touching on the practice of collaborative production, the communal ethos among craftspeople, and the broader concerns of working with and within a community. This chapter reflects both on the creative potential of the craft community, and on its pressures.

For Lauren & Elsie
An artisan's heart flourishes in the comfort of a loving home.

ACKNOWLEDGEMENTS

This dissertation, like the craft labors it follows, was made possible by the collaboration of many.

My deepest gratitude to Chris Nelson, my dissertation advisor, who's invitation to UNC launched this, and whose support, patience, insight, and interest as a mentor has shaped this project and left an indelible mark on me as an anthropologist and artisan. My sincere appreciation to my committee members, Margaret Wiener, Peter Redfield, Townsend Middleton, and Brad Weiss, for generously lending your expertise, for helping smooth the rough edges and fill the gaps of this work, and for seeing promise when I could not. Thank you to the professors, fellow graduate students, and support staff of UNC's Anthropology Department: Rudi Colloredo-Mansfeld, Jocelyn Chua, Paul Leslie, Gabby Purcell, Katie Barrett, Chu-Wen Hsieh, Paul Schissel, Sora Enomoto, Dayuma Alban, Bryan Dougan, Eric Thomas, Katie Poor, and Irina Olenicheva. I could not have asked for a warmer community or greater friends. Thank you as well to my professors and colleagues from UT Austin: Robert Oppenheim, John Traphagan, Heather Hindman, Ben Miller, and Erin Newton. While not directly involved in this project, our time together helped establish the intellectual and methodological foundation on which this book is built.

This project would not have been possible without the generosity of the artisans who opened their doors to me. A special thanks to my mentors who taught me to brew, distill, and craft cheese, who put up with my peculiar questions and itinerant lifestyle. While I won't specify names for the sake of anonymity, working and learning alongside you gave me the

opportunity to become an artisan in my own right. Thank you to the many farmers, distributors, businesses owners, bartenders, and customers who at various times created connections and shared their insights. Thank you as well to the reviewers and staff of the Japan Foundation for funding and facilitating this project.

My appreciation, love, and respect to my family. Thank you to my parents, Cheri, Ron, Larry, Carol, and Larry, who furnished hearth and home through the many ups and downs of this project. A special thank you to my dad for always being my first reader, steadfast editor, and ardent supporter. Thank you to Kenny Porter, my best friend and fellow writer, for being a model of resilience. Laughing and commiserating with you has been an unfailing source of strength.

While so many have supported me throughout this adventure, only one has been my partner. Lauren, your fearless optimism has seen me through this journey's many storms. Thank you for always reminding me of who I am, where I've been, and where I'm going. You are the best part of me.

And finally, to Elsie, my brave, precocious, beautiful little girl. From the first time I saw you, the first time I held you, from your first smile, your first tantrum, for every giggle and tiny handhold, and for all the nights spent dozing on my chest while I wrote this, you have been - and continue every day to be - my inspiration. You are my heart.

AUTHOR'S FOREWORD – A WANDERING APPRENTICESHIP

I came to this book by way of a brewery. In 2012, I traveled to the coast of Japan's northeastern Tōhoku region to survey the local recovery efforts following the 2011 earthquake, tsunami, and nuclear meltdown. I was working with a small inland Buddhist temple, observing and assisting in the funeral rituals it carried out for its increasingly gray community. I had come to Tōhoku to study the aftermath of the tripartite disaster, but found myself engrossed in a much slower burning, if related, crisis: the gradual depopulation of rural Japan, and the quiet struggle of rural institutions like community temples to mitigate the social and emotional fallout of empty houses and broken families. Even so, I occasionally made my way east in search of my original interests.

It was a muggy July day on the bus into Miyako City. I was part of a tour group of mostly elderly pensioners bound for a memorial service further up the coast. Despite the solemnity of our purpose, there was still time for a little sightseeing of the ravaged coastline, a form of dark tourism that popped up with the aftershocks. The seaside was a vacant expanse of overgrown foundations interrupted only by an impromptu general store and a handful of shacks erected by residents who refused to abandon their property. Among the skeletal remains of former residences and businesses was a saké brewery, a lone brick warehouse left standing following the wave. A desiccated brown *sakabayashi* (a bundle of cedar needles) hung above the main entrance announcing the end of the brewing cycle. This month was the brewery's first vintage since the disaster.

Standing within the brewhouse, the owners – a middle-aged couple – pointed out the scars of the past year's trauma; discolored bricks marking the flood line, a snaking crack through a supporting wall, a fifteen-foot stainless steel fermentation vessel lying in a crumpled heap in the far corner where the wave left it. The owners stood next to a pallet of freshly packed boxes, handing out samples and selling bottles to the tour group. The spirit tasted like sake, nothing particularly remarkable. But perhaps that's what was remarkable about it. Despite all the tragedy, the human cost, the upheaval of the landscape and everyday life, people could still make saké that tasted like saké. To those tasting the unblemished spirit, the brewery stood as an icon of local resilience. "*Yoku ganbarimashita,*" one gruff elderly man told the owners, "you did well." For the owners, I imagine the bottles arranged on the shipping floor and the money exchanging hands served as tangible indicators of personal recovery, of hope. The brewery, though still bound to the disaster through memories and scars that would only partially fade, was nevertheless moving forward.

That unexpected trip to a brewery reframed my work at the temple, and ultimately pitched the curiosity that would ferment into the elemental questions of this project: How can the pressures of crisis viscerally manifest in everyday life? How do people cultivate the resilience to weather these crises? How do people adept in specialized forms of labor – brewers and priests, distillers and cheesemakers - use the material and philosophical dimensions of their practice to *work through* the crises in their lives and communities? Unexpectedly, pulling this thread ultimately led me to another brewery.

Brewers build their practice from the recipes and techniques of those that came before them. It's the same with writing a book, and I owe a great deal to those whose writings have shaped the contours of this project. For one, I see this book as in dialogue with Anne

Allison's ethnography of work in times of crisis. In *Precarious Japan* (2013), Allison finds that Japan's four-decade long economic recession has engendered a sense of precarity, the collapse of dependable employment relations, among the Japanese working classes.[1] She argues that precarity at work "slips its bounds," producing an experience of unease in finances, in social life, and ultimately in one's existential state.[2] There is an intimate relationship between labor and life, job security and everyday security, a relationship that is ultimately contingent on one's position within overlapping sectors of nation, workplace, and home.[3] Following this tack, I suggest that it is productive for a comprehensive ethnography of work to take up not only the place of creation, but the public and private places that are productive of the creator.

My approach to this project has also been inspired by the work of Heather Paxson and Brad Weiss, both of whom have brought studies of alimentary crafts more squarely into anthropological focus. Paxson's *The Life of Cheese* (2013) examines artisanal cheesemaking as an ecology of production, a diverse weave of historical, economic, social, regulatory, symbolic, and organic pressures, all of which contribute to the production and valuation of cheese and cheesemakers.[4] Weiss traces a similar ecology in *Real Pigs* (2016), following the assemblages of practices, social relations, values, and histories that have resuscitated North Carolina's heritage pork industry. Weiss finds that at stake for consumers and producers alike are concerns of locality and authenticity tied to pigs and people. Building on this trajectory, my project explores how an ecology of production – particularly one marked by social,

[1] Allison 2013:7

[2] Ibid., 9

[3] Ibid., 9-10

[4] Paxson 2013:4, 31

economic, and environmental precarity - can be productive both of particular tastes, and of particular expressions of labor (work) as well.

I also owe a great debt to my advisor, Chris Nelson, for his suggestion to temper theory with a healthy dose of practical experience. It was 2015 and I was writing my dissertation research prospectus, having shifted focus from the 2011 Tōhoku Disaster to the slower-burning crises of economic and social precariousness, and from the quiet contemplation of the temple to the hectic industry of artisanal alcohol production. Chris recommended I step outside the library and see if any members of the Research Triangle's burgeoning craft breweries or distilleries would be willing to let me shadow them for a production day. Maybe hands-on practice, immersed in the sights and sounds and heat, would illumine some concept or question that remained obscure in the confines of a university office.

The dynamic, reflexive interaction between visceral engagement and intellectual analysis is an elemental thread of this book. In taking up craft through the lens of a sustained, hands-on work, I attempt to illuminate how working lives shape and are shaped by working philosophies. In the field, this endeavor took the form of a *wandering apprenticeship*, a term I borrow from Anthony Bourdain (and a method I unravel in the next chapter).[5] In his ethnography *Learning Capoeira* (2005), Greg Downey argues that apprenticeship serves as a valuable means not only to learn new skills, but also to learn about the nature of the skill and the pedagogy that surrounds it.[6] I became an itinerant artisan-in-training, drifting from North Carolina's Research Triangle to Tokyo, to Okinawa, and back to Carolina in search of new

---

[5] Bourdain 2007:256.

[6] Downey 2005:53

working practices, environments, and philosophies. At times I was taken on as an actual apprentice, a formal relationship directly under a journeyman or master artisan. Most times, however, I was engaged in what Mary Nagata calls an informal apprenticeship, a working environment in which on-the-job training is the typical and preferred (sometimes only) method of instruction.[7] I would generally stay with an operation as long as I would be allowed, leaving when either I felt there was nothing much left to learn, or when events in my personal or academic life conspired to push me along.

This approach had its advantages. For one, switching ateliers approximately every nine months provided a diversity of techniques, perspectives, and environments, and the opportunity to examine how these components of an artisan's livelihood interact. The concept of brewing, for example, is fundamentally the same wherever you go: malt + hops+ water + yeast = beer. However, the practices and relationships necessary to acquire and arrange these ingredients, and perspectives on what is or isn't a good beer or a functional brewery, can differ radically from a North Carolina college town to a Tokyo suburb. Yet particular concerns appeared consistent across these contexts: the practicality of resilience, the value of innovation, and the necessity of collaboration. I argue that these patterns represent a broader ethos that binds diverse working philosophies of craft.

The drawback of my method was a pronounced lack of permanency. My itinerancy represented a point of divergence between my collaborators and me. Because moving on was always explicitly part of my plan, I did not share the same commitment to the business as my collaborators. This wasn't to say that I didn't try to do good work, or that I didn't strive to help better the business during my apprenticeships, but that I generally did not have a desire

[7] Nagata 2007:36

to grow in the business beyond my temporary, largely entry-level status. I would take on new responsibilities when asked, and often actively pursued them, but only as a means to learn new techniques, to further explore the business, or to spend more time working with my collaborators. Becoming more valuable to the business, insofar as that was possible, was incidental. So too was moving beyond apprenticeship.

For instance, while often capable, I avoided working alone. If I worked by myself, which I did from time to time, there was only so much a beer, cheese, or hand pump had to say. Rather, it was more productive for me to work with someone, not necessarily on the same task, but within conversational proximity. This allowed me to ask questions about the work or business, to converse about daily life, and to overhear discussions and muttered remarks, detail necessary for constructing the thick description of ethnography.[8] Yet this method also partially stunted my progression as a professional artisan. The ability to work independently, to run an operation alone, is often seen as an apprentice's coming of age; one no longer needs the oversight of the master to function in the industry. Independence is graduation from apprenticeship. It is signifier of commitment to "step up" into more responsibility for the business and to better oneself, to be more professional. For the bulk of my initial fieldwork, I resisted expressly taking this step – apprenticeship was too useful a method – and thus remained something of a dilettante among committed professionals.[9]

---

[8] see Geertz 1973.

[9] I first encountered apprenticeship as a research method in Robert Desjarlais' 1992 ethnography, *Body and Emotion,* in which the author undertakes a yearlong apprenticeship under a Nepalese Yolmo shaman. Desjarlais' conceit is that by spending a year studying as a shaman, drumming, chanting, and entering trance, he'll be able to grasp through mind and body the emotional gravity of traditional Yolmo healing practices. In the end, however, Desjarlais is ambivalent about his abilities as a shaman, and whether he was even capable of understanding Yolmo traditions from a visceral perspective (Desjarlais 1992:14-7). I encountered a similar anxiety in my own project; the fear that couldn't really comprehend the work of my collaborators because I wasn't a committed professional. But Desjarlais' dilemma also inspired me; part of the excitement that drove

I didn't understand the significance of this distinction until I became a professional brewer. Nor did I appreciate the value of the independence I had previously refused. If you don't consider yourself really part of the tribe, it probably doesn't matter much to you whether they consider you an adult or not. Your objectives are different, and you define yourself in different terms. But when I joined the tribe, that wall came crashing down. All I wanted was space from the head brewer and his lead, to work autonomously, a tacit statement of my arrival. And when I was finally loosed upon the brewery, I came to recognize the gnawing, anxious ambition and looming boredom that must have tinged the working lives and philosophies of my collaborators. I explore these sensations in *Fortune and Glory*.

Money represented another degree of separation. During my tenures, I was compensated largely "in beer" (or in cheese or whiskey), an inside joke among NC brewers referring to the relatively common practice of fledgling brewers eager to enter the industry working in exchange for on-the-job training and insight, as well as a token amount of free beer (see *Ouroboros*). I supported myself with a series of research fellowships from the American and Japanese governments. This gave me a heightened degree of access compared to other unpaid assistants; because I didn't have to work other jobs, I could devote as much time as possible to craft. My only limitation in terms of time was how often the atelier wanted me around. But receiving outside funding was doubly effective here; because I was technically being paid, even if not by the business, my collaborators felt less and less guilty about drawing on more and more of my free labor. After all, helping them was more or less my job.

---

my research was the curiosity as to whether or not it is possible for an anthropologist to become what they study.

Yet, like my reluctance to work autonomously, my relative freedom from wages prevented me from grasping certain dimensions of my collaborators' lives prior to turning professional. As one brewer friend put it, I didn't really have any "skin in the game;" it didn't really matter if I succeeded or failed in this profession, because it wouldn't impact my bottom line. I could be a terrible brewer and still get paid because my pay was not contingent on my brewing. Furthermore, because I was an unpaid intern, there was a significantly lower set of expectations regarding my performance. It wasn't really reasonable to expect professional quality work from an unpaid employee. As such, I didn't – and couldn't – feel the pressure that a real artisan feels, staking one's very livelihood on personal skill, endurance, and creativity.

Having become a professional – i.e., committed *and* compensated - brewer in the later stages of my fieldwork and while writing, I can empathize with my aforementioned friend. At first, the remark irked me. Not being paid to brew beer or make cheese – not being dependent on the profession - didn't make me an illegitimate artisan, I thought. I *was* being paid to do research, and I had to do that research well. It wasn't like I could just not show up for work, I felt. But I actually *could* just not show up for work. As long as I was willing to test my relationships with collaborators, I could come and go as I pleased. Being paid to brew beer and being paid to research brewing beer were different things. In conducting research, my livelihood was not beholden to a particular brewery, a particular set of professional relationships, a particular professional identity. I could always walk away. In fact, I had walked away from several collaborations I found problematic. It was this power to dissociate artisanship from my livelihood, my friend suggested, that made me an outsider.

For an anthropologist, an outsider’s perspective is an invaluable analytical tool. Standing outside provides a vantage into the patterns of practice and thought that animate quotidian life, so intrinsic and subtle that they go without saying to the insider. But an outsider’s perspective can also be obscured; ethnographers see through a glass, darkly. There are certain resonances or rhythms that can only be felt by those on the inside. This book is partly an attempt to bring together outsider analyses of craft livelihoods and philosophies with the embodied experiences of insiders toward blurring and disrupting that perceptual barrier. The voices in this book speak to a heightened degree of conceptual dissonance. My collaborators, though thoroughly insiders by the time we met, were nonetheless routinely destabilized by my presence in their professional and personal lives. This was partly an artifact of my constant questioning that often crept past the bounds of artisanal technique, pushing them to consider their careers, environments, and identities in unfamiliar terms. This was also because my collaborators, educated and curious, inquired as to my impressions and ideas, wanting to know what I thought of them and their professions (I also had the habit of thinking such things out loud). This eventually developed into a sustained dialogue in which we mutually considered the broader patterns and significance of our intertwined lives and work. This dialogue inevitably shaped us. As one collaborator put it, before she met me, she had never really considered herself an artisan, but now she couldn’t help but think what it meant to be one.

Throughout this book, I use the term *collaborator* to refer to those with whom I worked and who contributed their insight to my project. Some may be more familiar with *informant* to describe this role. I, however, was very much affected by a conversation with my dissertation advisor, Chris Nelson, early in my career where he lamented that the use of

informant made us seem like “cops” squeezing a subject for intelligence. This phrasing also suggested an asymmetrical power dynamic with the researcher applying pressure on top and the subject capitulating below. As such, I searched for a suitable alternative. Luckily, my fieldwork offered a replacement: collaborator, one who shares a hand in the work, a largely reciprocal relationship through which a project is collectively brought to life.

Certainly, differences of power still exist – and can be very problematic – in a collaboration (many of which I address in the later chapters of this book). However, I have found these relations to also be malleable and mutable. Different perspectives, skillsets, and talents contribute to the overall goal. While you might be more capable in one stage of the process, you’ll need help at another. Collaboration is a recognition, however tacit, that you can’t do it alone.

Conceptualizing my research as collaboration also acknowledges the inevitability of the researcher altering their fieldsite. As I noted above, I endeavored to do good work for my hosts during the course of my wandering apprenticeship, to add stability and value to the shared project of the business in exchange for access. This commitment led to an interesting discussion with Ellen, the cheesemaker with whom I was apprenticed, on the nature of research ethics. A chemist by training, Ellen often noted the scientific ambitions of anthropology, a discipline she referred to as one of the “softest sciences.” In what would become a regular topic of conversation during our idle moments, El asked me if I ever worried about “contaminating” my fieldsite: if my research was supposed to be a professional study of the everyday lives and businesses of artisans, wasn't I fundamentally altering the object of study through my daily presence? How could I study the business if I

was actively changing it by augmenting its production? "It doesn't seem controlled at all," El concluded. I agreed.

Anthropology is the study of human life, diverse and often unpredictable. My goal was not to impose order. That would be impossible. What I could do was try to understand the flow of my collaborators' lives, attempting to drift alongside them while also recognizing I represented an interruption in that current. And if I can help improve their lives, even trivially, then why not? After all, they are actively helping to improve mine. And if you become friends with these people, how could you not? My commitment then is something of a modified Hippocratic Oath, to do some good, or at least do no harm, but all the while meddling.

While I had an active role in the lives and craft livelihoods of my collaborators, they had a similarly active presence in the research for this book. This book would not have been possible without their efforts and hospitality; their hands are readily visible in the experiences and anecdotes that illustrate my conclusions and obtain in my craft. An ethnographic project is not the work of the anthropologist alone. It is a collaboration; it's collaboration all the way down. We don't set the terms. Neither do our collaborators. Rather, we negotiate them together. Collaboration is an ethics in itself, one in which we do our best to arrive at a mutually beneficial outcome while doing our best not to undercut each other. It's an ethics I never really understood until I got into the field, but it's one of the most important professional and personal lessons that everyone who lent their time, experience, and friendship taught me. This book is a collaboration, a recipe we formulated together.

Sometimes it is easier to define what a project is by admitting what it is not. This book is not a comprehensive treatment of the increasingly global craft movement. Nor is it a

survey of the history of craft production or the origins of recent interest in artisanship and locality, although my collaborators occasionally opined on these matters. Rather, this book operates at a more visceral, intimate level. It serves as a window, however tinted by the subjective position of its writer, into the practices, working landscapes, and philosophical considerations that in part give form and flavor to contemporarily salient notions of craft and local production. This book attempts to capture in some small way the passions, hopes, and frustrations of a movement of which I – for better and for worse – had and have the honor of being part. This book is about the roads traveled by some, and the work that made those roads possible.

TABLE OF CONTENTS

INTRODUCTION: EVERY SCAR A LESSON 1

First Steps & First-Degree Burns 3

Enduring Failures 12

Beer to Cheese 23

Quasi-Professional Brewer 44

Actual-Professional Brewer 53

The Sum of Our Scars 62

CHAPTER 1: STORMS WITHIN, STORMS WITHOUT 65

The Practice of Resilience 75

Embodying Resilience 80

Staying with the Worry 96

Ethics of Survival 108

CHAPTER 2: FORTUNE & GLORY 123

One Part Vision, Two Part Compromise 128

Contours of the Market 133

Expectations of the Community 142

Court of Expert Opinion 153

Burning High, Burning Low, Burning Out 163

CHAPTER 3: OUROBOROS 174

Collaboration All the Way Down 180

Collaboration in Practice..189

Creating Together 199

Market of Friends..208

The Love You Give 218

The Collaborator's Dilemma 224

The Wolf at the Door...230

CONCLUSION: LAG PHASE..244

REFERENCES 251

INTRODUCTION: EVERY SCAR A LESSON

"Education never ends, Watson. It is a series of lessons with the greatest for the last."
- Sherlock Holmes in Arthur Conan Doyle's *His Last Bow* (1917)

"As individuals express their life, so they are. What they are, therefore, coincides with their production" (Marx and Engels 1977:42).

I have a small, circular scar on my left forearm. Early in my research working at a craft brewery in Chapel Hill, I reached between a manifold of pipes in front of the brew kettle to close a valve. The manifold was moving boiling hot wort (the sugary liquid to which yeast is added and from which beer is made); in a moment of carelessness, I caught my bare skin on the exposed metal, searing an imperfect oval into my flesh. The first-degree burn was significantly more painful than its numerical designation suggested, causing a momentary wave of nausea and eliciting a curse. The head brewer noticed my reaction, then the wound, and laughed. "That's your first real injury," he said, voice tinged with what almost sounded like pride. "Now you're one of us." He and the other brewer then proceeded to show off the numerous faded cuts, burns, and scrapes that traced their own arms and legs. It was a working history etched into their bodies. After offering a mason jar of moonshine (kept for ameliorating on-the-job injuries), the head brewer made a colorful, disparaging comment about my toughness, and sardonically asked if I needed to go home. No, I said, I would be fine. "Then walk it off and get back to work."

While the scar has almost entirely faded and the pain long ceased, catching sight of it while writing or during the course of the brew day returns me to that moment. I recall the head brewer's words, what they meant to me then, and what they mean to me now. The scar

represents an embodied reminder etched on my body: to be mindful of my surroundings, and how quickly budding skill can beget reckless overconfidence in an environment where the potential of serious injury to oneself or others is ever-present. Be confident but be careful. But the scar also serves as a badge of pride and a critical touchstone in my professional life: as the head brewer said, it was the moment when I became a brewer, or at least someone on the road to becoming a brewer. Like a ritualized initiation into adulthood, the burn marked the emergence of a new identity, the beginning of my apprenticeship, the first step toward becoming (and being recognized as) an artisan.

In this chapter, I consider how burns make a brewer, the visceral pedagogy that craftspeople endure on their way to mastery. Apprenticeship has been and continues to be one of the most important methods to learn a skill, take up a trade, acquire an identity.[1] For the novice, the world of craft is steeped in precariousness; the uncertainty of inexperience, the risk of injury, the potential for failure. But it is through the cuts, scrapes, and humiliations of apprenticeship that one learns to navigate this world, to exercise one's skill, and to become successful. These scars gradually form the foundation of a working philosophy of craft production marked by resilience, innovation, and collaboration, necessary for surviving and thriving in contemporary craft industries.

In the following, I explore craft apprenticeship from the perspective of an apprentice. Apprenticeship has a venerable tradition as an ethnographic research method, providing a hands-on vantage through which one can observe, work, learn, and critique alongside industry novices and veterans.[2] I take up the realities of contemporary apprenticeship in craft

---

[1] Reinarz 2007: 114.

[2] For examples of apprenticeship employed as an ethnographic research method, see Kondo 1990, Desjarlais 1992, Allison 1994, Nagata 2007, and Hankins 2014.

professions, how it works, how it feels, and what one stands to gain or lose in taking up the identity of craftsperson. I consider craft pedagogies as it manifests in artisan everyday lives, the paths through which artisans shape their professional identities, and the intimate, visceral relationship of these journeys to moments of physical and emotional pain. I trace my own wandering apprenticeship: from making beer in a college town, through a series of collaborations with distilleries, breweries, and bakeries in the United States and in Japan, to an unexpected detour making cheese in Okinawa, to brewing professionally in back North Carolina.[3] The lessons and skills I learned – often the hard way – reveal broader social, cultural, and environmental patterns that characterize craft livelihoods. I intertwine my journey as a wandering apprentice with the experiences of those collaborators that guided me along my way, apprenticeships often significantly less nurturing or more fractious than my own. Drawing on our resonant joys, frustrations, and challenges, our successes and failures, I approach apprenticeship not just as a relationship between student and master, but an immersive, multi-sensory engagement between the individual and the environments in which they work. It is through this rough-and-ready engagement with occupational precariousness that the value and necessity of resilience, innovation, and collaboration are etched into artisan bodies and minds.

First Steps & First-Degree Burns

When I started researching North Carolina's craft brewing industry in 2014, finding an apprenticeship was a difficult task. While brewing programs at universities, trade schools,

[3] I borrow the notion of a wandering apprenticeship from Anthony Bourdain, who uses the term to describe those he observed in the restaurant who declined building equity in a single restaurant and opted instead to travel from kitchen to kitchen collecting techniques, ideas, and experiences along the way. I adopted this approach to collect ethnographic data from a wider variety of perspectives and contexts than a single fieldsite would have allowed.

and community colleges have become increasingly common in the wake of the craft beer boom, apprenticeship and other forms of on-the-job training were the preferred pedagogy for many would-be artisans.[4] A *good* apprenticeship, i.e., an entry-level assistant brewer position at a stable, productive, and profitable brewery under a capable and ambitious head brewer or brewmaster (the terms have become increasingly interchangeable) willing to teach the basics, expose you to new trends and techniques, and – most importantly - provide hands-on time brewing was a rare find. When I shared my initial complications, industry friends and collaborators commiserated, recalling their own struggles finding meaningful practical experience early in their careers: often their apprenticeships or internships amounted to little more than hauling grain sacks, cleaning kegs, and other menial jobs. Many of my colleagues went unpaid: internships that compensated "in beer" were (and still are) common in the NC beer scene, the experience a novice stood to gain was generally considered payment enough. As one colleague put it, the cool factor of being a craft brewer meant that a lot of people were willing to sacrifice financial security to break into the industry. Another brewer maintained a long waiting list of would-be apprentices drawn from the numerous inquiries he received every month. Despite the rapid growth of North Carolina breweries in recent years, opportunities for starting positions, even unpaid ones, remained scarce. During the years I conducted fieldwork for this project, 2014-2018, the number of North Carolina breweries in operation rose from 101 in 2014 to 291 in 2018.[5] Yet the majority of these breweries were small operations often requiring only a single brewer.[6] Even those breweries with the

[4] Chapman 2017, Ocejo 2017

[5] see https://www.brewersassociation.org/statistics-and-data/state-craft-beer-stats/

[6] Statistics from 2018 industry review issues of *The New Brewer* (Brewers Association 2019).

capacity for an assistant could be reluctant: as I experienced myself later as a professional, many brewers are wary to have untrained labor underfoot for the liability they pose and the hassle they generate in an already hectic workday. If they could, many of my colleagues (including myself) were happier to work alone.

All of these elements conspired to deflate my initial assumption that the fledgling industry would eagerly welcome my helping hand. From the fall of 2014 to the spring of 2015, I tried unsuccessfully to get my foot in the door at local breweries. I sent dozens of emails to breweries within reasonable driving distance to the university, asking if they were willing to take on an unpaid (my research was funded) intern as part of a research project the contemporary craft beer industry. The handful that replied were sympathetic to my cause, but ultimately refused. Naïve as I was about the economic pressures of the industry at the time, I didn't realize that unskilled labor, no matter how free, was not something these operations wanted or could afford. I was an unknown variable, a guy with zero professional experience from an *academic* discipline that seemed totally unrelated to brewing, or to hands-on labor of any sort ("real work," as one head brewer later put it). I was a risk. These breweries were *businesses*, not playgrounds for testing out a theory.

A promising lead finally came when a close friend reached out to a business connection he'd made through a university entrepreneur network, the owner of a local brewpub and distillery. My friend, an established entrepreneur in his own right, undoubtedly added some much-needed weight to my request. Perhaps it suggested to his fellow businessman that I was stable and serious enough to allow around his expensive equipment and delicate operation without significant risk to plant or personnel. It was the first time in this project that I would realize something my interlocuters knew intimately: the power and

value of cultivating a diverse portfolio of personal connections. When my colleagues struggled to accomplish a goal – e.g., rapidly source some cilantro, get a license approved, etc. -, a quick call or email to the right person could often prove remarkably effective. Here, an instant message to the right person has translated an obscure academic into someone worth entertaining. The owner contacted the distillery general manager, and the manager then texted me a time to meet with the head distiller. It wasn't brewing (yet), but it was a much-needed start.

I only spent one day at the distillery. I arrived early in the morning at the downtown facility, shook hands with the owner and distillers, and watched the team make a run of vodka from heaping sacks of wheat. Once the still was steaming, we moved to quality control, i.e., sampling various runs of vodka, gin, and whiskey in the distillery's small laboratory. My alcohol tolerance was minimal at this time, and I was drunk after four fingers (in front of professionals unfazed by three times that amount). They talked about new liquors, sports teams, and other things I knew nothing about. They were warm and inviting, but it didn't matter; I wasn't a good fit. I walked home a little after noon, nauseous with a searing headache and melancholy. Maybe this project wasn't going to work after all. If my project was about studying the working philosophies of craftspeople by sharing in their livelihoods, then how could I study distillers if I couldn't keep up with their quotidian habits? I texted the general manager to thank him for his hospitality; he responded asking if I'd like to see the brewery as well. Feeling some hope, I responded "Absolutely."

I arrived at the brewery, a 15-barrel midsize brewpub, even earlier in the morning the next week.[7] I met the two co-head brewers Brian and James, energetic and witty guys then in

[7] A brewpub is defined by the Brewers Association as a combination restaurant and brewery that produces beer primarily for on-site sales at the restaurant. This is to distinguish brewpubs from microbreweries, which are

their mid-thirties who had been working together for a little over five years.[8] After brief introductions and an offer of moonshine to kick-start the morning (cautiously accepted), Brian pushed a pocketknife into my hand and told me to start opening grain bags. Today was a brew day, and it was time to get to work.

The brewpub was as Brian put it an "all-hands-on-deck" situation. If I was going to take up their time and the brewery's limited space, I was expected to contribute to the process in a tangible way. The brewery was first and foremost a *business;* its objective was to make money, or at the very least keep the doors open. As such, anyone who wanted to spend a considerable amount of time in the brewery was obligated to take the work as seriously as the real professionals. After all, this was *real* equipment, *real* ingredients, *real* beer, the sale of which was necessary to maintaining the business and the livelihoods it sustained. This was a markedly different apprenticeship situation than the one I encountered as a priest's assistant in Japan (see the foreword). It wasn't as if the work of the priest wasn't real or wasn't important. Rather, it was that the temple operated more closely to a non-profit organization: it did need to have some revenue from the parish to stay open, but it didn't need to turn a profit. The temple and its priests were a pillar of the community and a seemingly necessary fixture of mortuary care – they weren't going anywhere. But nobody needs a brewery, and nobody has to buy a beer. What's more, amid the current craft beer boom, there were plenty of breweries willing to take your customers off your hands if you drop the ball. Earning business and making money was vital, and everyone engaged in the business – including an

---

primarily production facilities that sell 75% or more of their beer offsite. (Microbreweries are also commonly referred to as production breweries.) see https://www.brewersassociation.org/statistics-and-data/craft-beer-industry-market-segments/

[8] To protect the anonymity of my collaborators, all personal names introduced in this work are pseudonyms.

interloping anthropologist - needed to appreciate that fact. If you couldn't contribute, there was no reason for you to be around. My research thus came to feel similarly *real*, possessed of a certain weight; I would either have to become skilled enough to help, or I would be shown the door. My research would be contingent on being able to keep up with the professionals. There was no room in the cramped brewhouse for dead weight. So, I set to work.

Opening grain bags probably sound like a simple task. It is. And it probably is to some people immediately out the gate. But I struggled with it. The grain bags were 55 kg nylon sacks with a machine-stitched seam running along the top to seal the bag and protect the grain from pests and the elements. The trick to open the bag was to insert the tip of a knife between the braided threads at the end of the seam, cutting the top thread. A loop from the bottom thread should then be freed, pulling on which should easily unravel the length of the bag. You would then pull apart the sides of the bag to double-check for a clean unthreading (loose thread could get caught in the grain mill's rollers), and then move on to the next bag. The whole process ideally would take less than 30 seconds per bag. However, this trick was not immediately apparent, despite Brian and James' patient explanations. It also didn't help that my anxiety at wanting to look capable did just the opposite, making my hands shake, flustering me and making me look anything but. Over the twenty-bag ordeal, Brian would shout from atop the brewing tower, "Come on Delgaty! We could have been done brewing by now!" His brand of encouragement.

The first ten bags were a disaster. I couldn't find the loop and quickly became flustered, worried that I was slowing everything down, looking like an idiot, or that I couldn't cut it (literally). I experienced, in the moment, what I feared to be the potential complication

of this project, the complication I was too self-conscious to name when my advisor asked what possible limiting factors I had considered in formulating this project: that I had no potential to be a craftsperson, that I just wasn't suited for this kind of work. (An anxiety that still surfaces as a professional…)

But things changed on the eleventh bag. My knife found the stitch, my fingers found the loop, and the seam unraveled all the way to the end. The twelfth bag wasn't as easy, but it was easier than the tenth. The task was getting easier. I was getting better. I suddenly felt a degree of confidence for the first time since starting the project. I *could* get better. I might be able to do this.

In retrospect, it may seem like a silly thing to experience an emotional rollercoaster over opening two-dozen bags of grain. It's not the hardest things I've ever done, not by a long stretch. I guarantee it's not the hardest thing anyone reading this could do. That said, like the circular burn on my forearm, the first day opening bags in the brewery stays with me. The experience taught me, however inchoately realized at the time, two things. First, it taught me the potential of emerging skills to change the world before you. It's the tacit realization that the world before you is more malleable, more open to possibility, through your own agency. Tim Ingold describes skill as the "gradual attunement of movement and perception" relative a practitioner's environment, and necessary to recognize opportunities and make use of those opportunities.[9] In orienting you to a specialized environment – the brewery, the workshop, the temple - skill becomes a new facet to your identity that distinguishes you from those that operate outside those spaces, and from who you were before, your *unskilled* self. On becoming a capoeira practitioner, Greg Downey states that training, "ideally, transforms

[9] Ingold 2000: 353-7

the student's visceral sense of self and the way he or she sees the world." This phenomenon is not unique to capoeira, but common to all forms of embodied education.[10] Learning to open a grain bag changed in some small way how I moved through the space of the brewery, a little more capable, a touch more confident.

Second, the struggle and gradual success of opening those first bags demonstrated the captivating potential of craft labor. It was the feeling of being entirely wrapped up in the project at hand. At the time, I was engaged in graduate coursework, teaching undergraduates, applying for fellowships, and designing a dissertation project. Yet all those elements of my waking life faded into the background in that moment. All that mattered was the bag; all of my anxiety, stress, and ambition focused on a series of stitches, all of it unraveling with the thread and replaced by the euphoria of accomplishment. Opening grain bags – a complicated maneuver to the uninitiated – demanded my full attention. Messing up would slow down the pace of work and earn the ire (and insults) of my colleagues. But the task also *engaged* me; like a compelling story or a beautiful vista, the bag, the craft itself, arrested me. Everything else just drifted away.

My collaborators often reflected on the engrossing, liberating power of craft labor. Brian and James were lived expressions of this phenomenon. Brian worked an office position for the local public-school system out of college, a job he enjoyed, but which faced downsizing amidst funding cuts. Unsure of his future, he took a chance and changed careers when a coworker – the wife of a brewmaster – recommended him for an opening at a nearby brewpub. Brian had no experience, only a little homebrewing, but the opportunity to make beer was hard to refuse. And the risk proved rewarding financially and existentially: Brain

[10] Downey 2005: 21

could earn a living and do so through the satisfying repetition necessary to master new techniques and perfect existing recipes. James' situation was similar: James earned a college degree in a field unrelated to brewing, and then worked in a series of restaurants in bartending and management positions. Encountering the emerging craft beer movement via the restaurant industry, James put himself through brewing school at the Siebel Institute of Technology in Chicago in hopes of landing a stable brewing position. He soon found that opportunity, coming to work with Brian a couple years after the latter began brewing. Unlike Brian, James found brewing captivating for the creativity it fostered, the space in which to experiment with new beer styles or exotic ingredients. Being able to focus on the constantly changing day-to-day of the brewery also allowed James to tune out a chaotic family life. Amidst the roar of a boiler or the banter of a creative jam session, James could focus on the work that excited him, lose himself, and claim to not hear his phone chime.

Other craftspeople I met maintained a more ambivalent perspective. For Ellen, a British permanent resident and cheesemaker in Okinawa, the daily demands of making cheese and managing her shop represented a sort of surrogate family, one that consumed, along with all her free time, the occasional loneliness of separation from a family half a world away. This loneliness asserted itself one morning when Ellen very uncharacteristically burst into tears: a beloved uncle had suddenly died back in the UK, and it had taken over a day for her family to finally tell her. She felt grief over the death, but also at how dislocated she had become from her family. We talked about her estrangement briefly, after which she dusted herself off and said, in her usual soft command, "Let's get to work." I met another brewer of a similar mindset, head of a relatively large production brewery, when his wife was late in her second trimester with their first child. Brewing allowed him to muffle the worries

and what-ifs of prospective fatherhood. And the money he was making, the career he was building, gave him confidence that he could provide the future his growing family deserved. But his mounting professional responsibilities increasingly kept him away from home and from the domestic support he felt his partner needed. He openly fretted, albeit in guarded cynicism, that his child was due in the late spring, the busiest time for their brewery.

However, as I will explore in coming chapters, craft's ability to arrest and transpose is not necessarily limitless. While some seem to be able to maintain their trance indefinitely, always finding new techniques, styles, or ventures to pique their curiosity and stoke their passion, for many there comes a time when skills and recipes become rote and the allure of craft becomes "same old, same old." This is only compounded by the practical realities of brewing as a business. For Brian and James, the charm of their occupation was constantly weighed against the effort to keep the brewery and its attached restaurant solvent, to contribute to the six million dollars needed annually to cover rent, materials, taxes, maintenance, and salaries. In execution, this meant brewing the same four flagship beers – the core sellers – dozens of times for one new beer. When adventure gives way to necessary monotony, one can lose some of the fire that initially got them out of bed in the morning. They can burn low, maybe even burn out. Some, like a number of craftspeople I've met, seek more costly alternatives to feel and to forget. But learning to make peace with monotony, to be able to put one's head down, do the work, and endure, is also a critical component of craft's pedagogy.

Enduring Failures

I worked with Brian and James for nine months as an intern brewer between 2015 and 2016. This was much longer than either they or I thought I would hang around. Brian and

James assumed that I, as an academic, would hang around for a day, conduct a couple interviews, and then return to my ivory tower. My visit wouldn't be significantly different from the numerous journalists or bloggers they had entertained over the years. For my part, I didn't think the brewers, busy as they were, would keep inviting me back. But Brian and James gave liberally of their time and knowledge, and I jumped at any opportunity to spend time in the brewery. By the time I left the brewery, I had participated in 30 brew days and had spent nearly as many additional days at the brewery engaged in other tasks.

I owe my access largely to Brian's own turbulent apprenticeship. When Brian began as an assistant brewer, he was under a head brewer, Jim, and paired with another assistant brewer, Ted. The brewery was overseen by a brewmaster, John. Brian described his early career as "terrible," "six months of pure hell." His experience was mostly due to the machinations of Jim and Ted. His fellow assistant brewer was a bully, threatened by Brian's presence and increasing skill (Ted himself was not particularly talented, and largely "coasted" in his job, according to Brian). Ted took advantage of Brian, passing off all undesirable brewery tasks and operations onto him and heaping scorn and ridicule on Brian whenever he made a mistake or didn't move fast enough. Head brewer Jim contributed to the problem mainly by his hands-off approach, dismissing the abuse Brian suffered as "boys will be boys." He also refused to call Brian by his name, referring to him as "Eddie" instead. Ted would shortly take up "Eddie" as a slur to further disparage Brian.

When I asked Brian if there were any incidents that stuck out to him about his terrible first six months as an apprentice, he immediately seized on two events. Indeed, despite nearly eight years of distance between then and now, there was still tension in his voice when retracing these old scars.

Brian was nearing the end of the second month at the brewery and had begun to develop some confidence as a brewer and in the general management of brewery business. One day, Jim sent Brian to the brewery's offsite warehouse to fetch all of the unused kegs; they would bring the kegs to a neighboring brewery to be cleaned. Brian drove the brewery truck to the warehouse and loaded the kegs. As was his custom, he methodically triple-checked the warehouse to make sure no kegs were left behind. Upon returning to the brewery, Jim erupted. These could not possibly be *all* of the kegs at the warehouse. Brian must have missed nearly a dozen. Ted piled on: it was typical "Eddie" to screw up something so simple. Brian's attempts to defend his work just made Jim more indignant and Ted crueler. Fuming, Brian walked out of the brewery and went home. The next day, Jim sauntered up to Brian looking sheepish. "Do you have a fork?" he asked Brian. Brian was confused by the question, and annoyed. "Do you have a fork?" Jim repeated. "No," replied Brian, curtly. "Well," said Jim, "I'm gonna need a fork to eat all this crow." Apparently, he and Ted had gone to the warehouse themselves to catch Brian's mistake, only to find not a single neglected keg.

In another instance, Brian had gone with Jim and Ted to a restaurant in the small town neighboring the brewery. Brian had worked over five months at this point but was still the favorite target for his colleagues' bitter amusements. Sitting down at the table, Jim made a joke that Brian should pay for all of them. His point may have been that Brian was the rookie of the group (and should therefore pay tribute to his seniors), but Ted took this as an opportunity to jibe Brian for being fat. Despite Brian not actually being fat, this was one of Ted's favorite criticisms (it likely stemmed from Brian's gym membership and other efforts to stay in shape). Like always, Ted's disparaging remark prompted a chuckle from Jim who

found Brian's sensitivity to the subject amusing. Brian stoically endured this harassment, but five months of abuse saw its head. Brian stood up, told his co-workers to go fuck themselves, and walked out of the restaurant. This left Jim and Ted not only with the bill, but, as Brian had driven, without a ride home.

Brian nearly quit a dozen times during his apprenticeship. He thought about it constantly, nearly every day, and made detailed plans to leave his position on several occasions. Yet several factors in his personal and professional life had a cooling effect on these designs. When Brian first seriously moved to quit the brewery, his dad interceded and gave him a long pep talk, telling him to stick it out and that there would be better days on the horizon. It would all be worth it if he could put his head down and work through the trouble. Another was the general manager of the brewpub's restaurant, a sturdy, calm personality who frequently commiserated with and reassured Brian. They become close friends through Brian's ordeal, and maintained their working friendship when Brian eventually stepped into the head brewer position.

The figure with the most profound hand in motivating Brian to persevere, however, was the brewmaster, John. Brian described John with a level of reverence he rarely afforded members of his professional community: John was a *true* brewmaster, not like many who use the title these days, largely as decoration. John really seemed to know everything there was to know about beer. John was an "old-school" brewer, of British stock and trained in some of England's most venerable breweries: he used techniques and recipes not because they were flashy, but because they were backed by centuries of empirical proof. It was rumored that John had smuggled the brewery's now proprietary yeast strain out of an English brewery himself. He was also a purist, refusing to add anything unnecessary to a beer. Beer was

supposed to be clean, clear, and drinkable. No nonsense, and especially no fruit. Brian often cited an anecdote: a guest brewer visited the brewery to collaborate on a new beer and used a dozen different grains and nearly as many hop varieties, believing that complexity demonstrated his skill and produced a superior beer, a pointed critique of John's philosophy. The end result was a mess, almost undrinkable in the opinion of all but the offending brewer. In reply, John composed a strong ale that used a single grain and a single hop variety. That beer went on to win a gold medal at a regional competition.

Despite John's imposing expertise, Brian appreciated feeling that he could ask him anything and John wouldn't just provide the answer, he would *teach* the answer. John would go the extra mile and review lessons at a later time, usually out of the blue while his assistants were performing some unrelated operation. While Brian was clamping a hose on a fermentation tank, John would creep up behind him and ask what "lacing" was, and why it was important. He insisted that his brewers read brewing literature and technical manuals, and not just focus on hands-on skills. John was also instrumental in convincing the ownership to invest in Brian and send him to Siebel for the two-week course in brewing technology. As Brian put it, John was fundamentally committed to producing competent, polished brewers.

John ultimately inspired Brian to stay on, and recommended Brian to take over as head brewer when he and Jim moved on to other projects. After retiring, John continued keeping tabs on Brian's progress, sending little notes of encouragement and congratulations from time to time. Unsurprisingly, Brian's close association with and admiration of John led to him picking up a number of the former brewmaster's idiosyncrasies. For one, Brian maintained a traditionalist approach to brewing, preferring straightforward recipes and time-

tested techniques. He encourages his assistants to read and pursue formal brewing education. He also frequently quizzes his assistants, purposely popping in at hectic and otherwise inopportune moments to test general and specific knowledge. (Brian still quizzes me to this day.) His most significant inheritance, however, is his love of teaching. While Brian claimed to be a lackluster teacher and all-around boring individual, my experience was a testament to the contrary. Brian was largely patient while being rigorous, dedicated to teaching how to do something the *right* way until the knowledge set. But these same traits could cause him to seem stubborn or dismissive in the eyes of someone invested cutting-edge recipes or alternative techniques, the fascinations of many contemporary brewers. His expectations also produced friction with some of some of his assistants, who saw him as overly demanding, while he dismissed them as lacking drive.

Even so, what continually struck me about Brian was his unfailing kindness. Through the twists and turns of my apprenticeship, he was consistently present to offer support, even if packaged in his wry sense of humor. His generosity with time, information, and resources was beyond reproach. Brian was one of the central professional figures in shaping my own career as a craftsperson and has since become a close friend. I attribute Brian's kindness in part to his own innate warmth; he is a good person. But I also speculate that this kindness was tempered and mobilized by his unpleasant experiences as an apprentice. Brian knew better than most what it felt like to be beat when already at a disadvantage. He could empathize with taking a risk on a new identity, only to have that promise routinely frustrated. Yet he also knew the power of a caring voice, and how that investment could propel an apprentice through the morass and on to greater things. Brian was fortunate to find that voice in John, and I was fortunate to find that voice in him.

I note all this by way of prefacing and contextualizing the unusually high level of access Brian and James afforded me during my apprenticeship. Brian, I believe, was committed to furnishing the kind of productive learning environment that he was largely refused, and a more overt version of the mentorship he found in John. Thanks to Brian and James, I was able to frequent the brewery several times a week, mostly on brew days, and thus quickly gain a working understanding of the major brewery operations: milling grain, mashing-in, lautering, boiling wort, knocking out, and pitching yeast (the “hot side” of brewing), caring for fermenting beer, carbonation, and packaging (the “cold side). These processes were prefaced, followed, and intertwined with constant cleaning, cleanliness and sanitation being the most important responsibilities of a brewer. I was on my feet for all of this, scrubbing and clamping and lifting alongside the brewers. The trick to telling if water is clean is not to stare at it, Brian explained, but to feel it; if your submerged fingers could generate friction between them, then the water was clean (or at least free of chemical). But how could I know this if I didn’t feel the water for myself?

With these modest skills came a certain degree of confidence and pride. It felt incredibly good to participate in producing beer. It was energizing to watch someone order a pint of beer I had helped brew, drink it, and then order another. The point of brewing a beer, Brian suggested, and the way a brewery stays afloat, is to brew a beer that a patron will drink two of; one pint covers costs, the second pint is profit. To see a patron order two pints was immediate confirmation that you had done something right. Writing a dissertation, while something I also took pride in, did not offer the same immediacy of gratification; beer is more tangible and broadly approachable than an academic text. It also felt good to be increasingly considered a brewer by my collaborators, to walk into a brewery and be

recognized as an insider, “one of the guys,” someone who doesn’t pay for their beer. This recognition was incredibly important to me at the time (and is still important); having an activity and identity outside academia helped me *work through* the anxieties of preparing for comprehensive exams, competing for research funding, and preparing for the next leg of my wandering apprenticeship.

However, the most important lesson I learned from this early apprenticeship, and the most enduring scar I picked up along the way, was a familiarity with humiliation. It was around June, and I had been brewing on a weekly basis for nearly six months. In that time, my mentors had stepped back more and more, letting me run different operations with only passing oversight. I was steadily gaining confidence, feeling like I really knew my way around the brewery.

One day, Brian and James stepped out of the brewhouse to let me run the “knockout,” the transfer of finished wort from the kettle to the fermentation vessel (FV). This meant opening and closing a series of valves to correctly direct the flow of wort to the correct FV, and also controlling the flow speed to ensure that the wort moving through a heat exchanger reached a safe 70°F (down from 212°F) by the time it made contact with the yeast in the FV. Given the importance of the procedure – the knockout was the last real thing you could screw up on brew day – James did step back in occasionally to check my progress and field any questions or concerns. But, as they said, it was ultimately my show.

The transfer went unusually fast. What was normally an hour and half process lasted approximately 40 minutes. I was startled by the unexpected popping of the kettle pump cavitating, having abruptly run out of fluid to move. I reported this to the head brewers, but

they didn't seem overly concerned. I had probably just misjudged the elapsed time. Eased by their confidence, I shrugged the anomaly off, cleaned up, and went home.

My mistake became apparent the next morning. After running some water off the hot liquor tank (HLT) – the brewery's hot water reservoir – Brian realized it wasn't water at all, but wort. It turned out that during the previous day's transfer, a valve connecting the kettle to the HLT had been left open. This valve split the flow of wort to the fermenting vessel, redirecting nearly half of the wort into the HLT. This explained the uncanny speed of the transfer. Brian had to dump the errant wort; it had mixed with water in the HLT and had been sitting overnight in a less-than-airtight vessel. Ultimately, the brewery would be out 50% of its projected production for that brew day. What this amounted to was approximately $10,000 in potential net revenue, a full eighteen-barrel (558 gallon) vessel of finished beer being worth $20,000 at five dollars a pint less beer lost during transfers, comps, etc. For a brewpub that annually generated nearly one million dollars in beer sales alone and routinely donated the equivalent of three full FVs (1674 gallons) of beer to local charities and events every year, a half batch of beer was not a particularly great loss. But it was a loss, a $10,000 careless mistake. My $10,000 mistake.

Brian texted later that day while I worked in the campus library, explaining the situation and stating that it wasn't my fault. However, given the severity of the error, and the worry that such carelessness would become ingrained unless some action was taken, Brain and James agreed that it would probably be best to walk back my responsibilities at the brewery a bit, and have me go back to more of a support role for the professional brewers. Again, Brian said, the mistake was ultimately the head brewers' fault: they shouldn't have

rushed things. Brian told me to come back to the brewery in two weeks – take some time for both parties to "cool off" – and then we could start over.

I understood what Brian was saying: it was his and James' responsibility to make sure I didn't mess anything up, so my mistake could be seen as theirs. But Brian's attempt to redirect the blame did nothing to ameliorate my sense of guilt at betraying their trust. Harder than skills or knowledge, I have found trust to be the most difficult asset to cultivate in the space of craft production - that someone can trust you to show up, do the job, and do it right is slowly accrued day by day – yet the easiest of assets to lose. Brian and James had *trusted* me with thousands of dollars of materials and labor, and I had just flushed half of those materials and all of that trust down the drain. Brian and James had given me the ball, and I had profoundly dropped it.

My confidence was shattered. My reputation, inchoate as it was, felt tarnished. My project – perhaps also my career – was in question. The walls of doubt my steady progress had kept at bay came collapsing down on me in waves of panic and despondence. When a professional brewer makes this kind of mistake, a number of things can happen, generally depending on how new the brewer is. Brian had once told me that the only truly terminable offense at his brewery was introducing the brewery's house yeast to a bacterial infection. But I had heard stories of other breweries where personnel were fired for any infraction that significantly impacted the brewery's bottom line. In an industry where margins mattered, overhead was high, and replacement brewers were practically lined up outside the door, any loss of profits was a black mark. And as an unofficial employee, I felt particularly vulnerable. Yet as time went one and no harsher punishment materialized, my despair eventually

mellowed into melancholy. I considered throwing it in. It was one of the lowest points in my research and to this day in my professional career.

Fortunately, wounds heal. My two-week exile ended, and I returned to the brewery. Sure enough, I was back to hauling grain bags, fetching equipment, and cleaning kegs. It was nearly a month before I was entrusted with monitoring the water levels during a mash-in, a comparatively minor and error-proof task. But as I stood on the tower watching the water rise beneath the grain bed, I felt a healthy tinge of fear. Regardless of how menial this task might seem, I was determined to do it right. I would not break my colleagues' trust, and I would not let myself be humiliated again.

Humiliation is the most enduring and consequential scar I collected as a craftsperson. Like the hot pipe that seared a circle onto my arm, the humiliation of failure burned into my mind a lasting fear of being caught unaware, of dropping the ball when others are counting on you, of breaking trust through ignorance or arrogance. Humiliation and failure have not made me a perfect craftsperson, but they have made me sharper. Failure is unavoidable: sometimes recipes don't turn out, sometimes a procedure doesn't go as planned. Try as you might, you can't win one hundred percent of the time. I'm fine with failure, as long as I've done everything I can to avoid or avert it. Rather, humiliation is the outcome of failure borne of negligence, its sting the loss of your collaborators' confidence. The memory of past negligence, and its cumulative cost to profits, resources, and trust, still haunt me, reasserting itself every time I double-check a valve. It's why I triple-check valves on brew days. I'm not the only one: my collaborators are similarly disturbed, each capable of pointing to specific moments of self-induced disaster in explanation for a perceived quirk. I, like many with whom I collaborated, work harder and smarter to avoid feeling that sensation again. In this

sense, humiliation – chief among a litany of scars - structures the craftsperson and anthropologist I am and hope to be.

Beer to Cheese

I intended my dissertation research to be comparative, exploring how economics, history, and culture could account for similarities and differences between North Carolina's established craft beer scene and Japan's twice-reborn craft industry. Funding for research in Japan came through in late June 2016. I ended my apprenticeship with Brian and James in August (though we continued to be friends and colleagues), my mentors and the brewery's general manager sending me off with dinner and saké shots at a hibachi steak chain restaurant, a practical joke of sorts they found extremely funny. My partner and I packed our bags, made temporary goodbyes to our friends, and took off for Japan.

The Japanese craft beer scene is very different than its North American counterpart. Japan's craft beer movement has two distinct phases. The first began in 1994, when the Japanese government relaxed regulations on beer production by lowering the minimum annual output required for a brewing license from 20,000,000 liters to 60,000 liters (a little over 500 barrels).[11] This inspired a wave of hundreds of pioneer craft breweries looking to find fortune in the newly accessible market. However, the vast majority of these breweries closed in the following decade due to a lack of technical skill, bad beers driving customers away, and the fact that producing 500 barrels was still a steep demand for a small, independent brewery.[12] Compare this to the North Carolina craft industry, where no minimum production requirement exists (rather, there are production maximums), and

[11] Meli 2013

[12] Bernot 2015, Morales 2016

breweries can maintain their licenses and guild status producing a little as one barrel (31 gallons) annually.[13] This initial wave was followed in mid-2000s by a more technically proficient generation of craft brewers motivated in part by the rising popularity of small-scale, locally-produced beer in America. Yet this new generation faces a number of the same regulatory hurdles. To obtain and maintain a production license, breweries are still required to produce a minimum of 60,000 liters annually or risk paying a fine. (Several brewery managers I interviewed factored this fine into their yearly overhead.) Prospective breweries are also required to demonstrate they have qualified personnel to run production; license applications include a section to list brewers and their professional credentials. Japanese breweries are also taxed at a considerably higher rate than American craft breweries, ¥ 222 (approximately $2) per liter they produce, and bottles are beer are taxed ¥ 140.5 ($1.40) at retail, versus an average of $0.14 in the US.[14]

Despite these limitations, Japan's fledgling craft beer industry has survived with a steady increase in microbreweries over the past 25 years, exceeding 300 in 2019.[15] Part of this success is linked to government-promoted initiative and local interests in cultivating *meibutsu,* specialty products produced in and evocative of particular regions, prefectures, cities, or villages across the Japanese archipelago.[16] Locally distinct foods like *jibīru* (local beer) and *jizake* (local saké) are increasingly popular among residents and tourists alike. Yet *jibīru* is a more exclusive taste of place. In his field guide to Japan's contemporary craft beer scene, Mark Meli finds that Japanese craft beer is not the drink of the blue-collar everyman it

---

13 Brewers Association 2019

14 Meli 2013

15 Wilgus 2019

16 Knight 1994

is in the U.S., but rather intentionally associated with luxury, the drink of the discerning, well-to-do.[17] This strategy bears out in the comparative cost of a pint. In North Carolina, the average cost of a sixteen-ounce pint was $5.87.[18] In 2016-19, the average price for the same sixteen-ounce pint in Japan was ¥1200, or approximately $11.50. This markup in part offsets the added costs of Tokyo tariffs and red tape. But the high price of Japanese craft beer is also a point of distinction from the moderately priced macro-producers, and thus a means of performing the relative class and means of those that consume it.[19]

Okinawa's brewing roots date back to the immediate post-war, when the Gushiken brothers, Okinawan locals, translated their experience fermenting and distributing miso and shoyu into a technical expertise for brewing.[20] The brothers launched Orion Breweries, Okinawa's first commercial brewery, in 1957 with logistical and financial support from the Occupation government, Okinawan banks, and from Okinawan industrialists.[21] Orion beer was the product of two visions: first, Orion was pitched to the American occupying forces as a cheap alternative to importing beer (hence the American government's grant). Second, and more important to its founders, Orion was envisioned as an Okinawan public institution, a business and product by and for Okinawans.[22] Similar to Guinness in Dublin, Orion sold beer

---

[17] Meli 2013

[18] See https://www.brewersassociation.org/insights/first-look-at-new-on-premise-sales-price-data/

[19] Pierre Bourdieu (1984) argues that patterns of consumption are one of the most effective and socially salient means of performing class. The more exclusive a commodity that is consumed, the more exclusive or elite the consumer. Commodities tied to the performance of class in turn come to take on the identities of the classes with which they are associated, e.g., wine becomes a facet of upper-class socialization, and beer a staple of the working-class everyday life. As Goffman 1951 notes, affixing a high price to a commodity is one the fundamental strategies for restricting access to that commodity, thus engineering its social significance.

[20] Alexander 2013: 195

[21] Ibid.

[22] Ibid., 203

at a price point that was accessible to the less affluent Okinawans, and provided a stable source of locally-based lucrative employment.[23] In his historical survey of Orion Breweries, Alexander credits the success of the brewery and Orion beer with combating the long-held Japanese mainland stigma against "island goods" and instilling a sense of local pride in the quality and value of Okinawan products.[24]

However, Okinawa's reversion to a Japanese prefecture in 1972 meant the end of Okinawa as a special economic zone and a destination for Japanese tourists to acquire cheap foreign goods. The influx of competitively priced foreign alternatives challenged Orion's dominance in the local market.[25] Orion was able to remain viable by maintaining low prices relative to Japanese domestics and imports, but this was an advantage afforded largely by Orion's capacity for high-volume production and well-established distribution networks.[26] This is not an advantage enjoyed by Okinawa's contemporary craft breweries, which operate under the same taxation and regulation as mainland brewing, often with added shipping costs for materials (as Okinawa is often categorized as an international destination, even when shipped from the Japanese mainland). The result is that Okinawan microbreweries adopt a strategy similar to their mainland counterparts, positioning craft beer as a luxury good, and thus appealing to wealthy tourists and American servicepeople, and a significantly smaller subset of wealthier locals.

---

[23] Ibid., 208-9, 213. For a historical analysis of the social and cultural impact of Guinness on Dublin and Irish identity, see Murphy 2014.

[24] Alexander 2013: 3, 205

[25] Ibid., 220

[26] Ibid., 220-1

At the time of my fieldwork, Okinawa's craft breweries ranged from the moderately-sized Helios (a division of Helios *awamori* distillery) to the relatively small Koza Brewing Company brewpub. Okinawan breweries offered an eclectic mix of beers: from funky styles brewed with local ingredients, such as Helios' *Gōya Dry,* a light beer featuring Okinawan bitter melon, and Nantō Brewery, which claimed to brew all their beers with water from subterranean limestone caves, to highly traditional weizens, pilsners, and American IPAs designed to appeal to Okinawa's year-round tourist crowd and the occasional marine who wandered off base. These breweries were supported by a host of tap houses and restaurants that featured local, mainland Japanese, and American craft beers. Okinawa even held a number of craft beer festivals throughout the year, the biggest being the annual Okinawa Oktoberfest in Naha. This diverse and vibrant beer scene had developed despite Okinawa's dubious distinction of being Japan's poorest prefecture, an enduring repercussion of post-war occupation and ongoing hosting of the American military.[27] Okinawans and researchers of Okinawa often use *chanpuru,* an improvised dish of bitter *gōya* melon and whatever other ingredients are on hand, as a metaphor for Okinawa and Okinawan identity; the melon representing the bitter experiences of wartime and the post-war made palatable, even delectable, by the ad hoc use of ingredients indexing the Okinawan capacity to overcome adversity through creativity.[28] I was interested to see how Okinawans, despite these hardships and legacies of violence, had taken up the relatively un-Okinawan concept of craft beer production and infused their practices, experiences, and creative visions toward making a truly unique taste of Okinawa.

[27] Christy 1993, Figal 2002

[28] Allen 2002: 12

Yet similar to the problem I faced in the States, Okinawan breweries were either too small to benefit from assistance, however free, or too well-oiled an operation to risk introducing a foreign element. The brewery with which I had intended to work, and which had invited me down for that express purpose, had run into permit issues in the time between our initial contact and receiving my research funding. This brewery was still willing to host me, but I would be doing paperwork and hosting beer samplings in their taproom, not brewing. While I ultimately took more of an observer's approach to Okinawa's craft beer scene, I achieved my objective of uncovering the *chanpuru* of local craft foods in an unexpected place: a farmhouse cheese atelier.

I drifted around Okinawa for a couple of months, attending social and industry events and chasing promising leads. I volunteered with some breweries and tap houses, took tours of *awamori* – a locally produced spirit – distilleries, and interviewed leaders in Okinawa's local food movement. But my project took more definite form and purpose when I met Dave. I was attending an anniversary party of a tap house I frequented. Among the event's offerings of locally produced artisan foods was a buffet of craft cheese manned by a Santa Claus-esque British expat wearing a Green Bay Packers cheese-head hat emblazoned with the name of his shop. Like many who met Dave for the first time, I was charmed. He was gregarious and energetic – almost hyperactive – and exceedingly generous with his time and cheese. Unlike the other food stations that packed it up once guests seemed drunk enough to not notice their absence, Dave sliced cheese throughout the night, walking from table to table with a tray and inviting (at times pressing) people to try a cheddar or gouda. Emboldened by beer and Dave's welcoming personality, I took a chance and asked if he'd be willing to sit for a formal interview. Dave agreed without hesitation.

I met Dave the next morning at a nearby coffee shop – he had stayed the night in town. It was early and we were both very hung over, but Dave was brimming with his typical energy. I had prepared a list of interview questions touching on personal history and the role of local production in the Okinawan economy, but these were ultimately discarded in favor of an hours-long back-and-forth comparison of the beer and cheese craft; as curious as I was about what Dave did in his small factory, he was as intrigued by what I had done in the brewery. What temperatures do you work with? How do you move around water? What are your principal ingredients, and where do you source them? What techniques do you use? What best practices? What recipes are you excited about? Have any failed? What have you learned about yourself from doing this? What have you learned about the world? As our conversation entered its third hour, Dave made a suggestion; he had to visit a wine shop up north to take a cheese order (he liked to take them in person when possible), but he also wanted to continue talking. Would I like to come along with him?

The wine shop was a beautiful little wooden building with a hardwood interior, elegant wooden shelves, and a large walk-in climate-controlled room. The owner had once been an executive in the wine industry but left to open his own shop that spoke to his own vision about how wine should be experienced and sold: a slow, personal enjoyment, rather than the fast-paced burn of corporate sales. He and Dave were kindred spirits in their sympathy to craft ethos. We spoke Japanese; the owner asked if I was Dave's new assistant, to which Dave replied "yes." I would recognize this as a pattern in Dave's behavior in the months to come: Dave would run the scenarios of conversation and negotiation in his head, and then operate externally with full confidence that his predicted outcome was correct. I

may have not yet participated in the discussion, but Dave had already asked me to join his factory as an apprentice and I had agreed.

It wasn't until we were nearly halfway home that Dave finally remembered to make a formal offer: his factory was very small, only employing one head cheesemaker – Ellen. They wanted to expand production but didn't have the labor power and couldn't afford to hire with their current margins. If I was willing to donate my time (and help with occasional translation), they would teach me everything they knew about making cheese and allow me full research access. The deal was struck, Dave was pleased, and I was ecstatic.

In fact, the only person who wasn't happy with the arrangement was the head cheesemaker – the hands-on craftsperson and the principal artisan with whom I wanted/needed to work – Ellen. Ellen had never planned to relocate permanently to Okinawa, let alone become one of its foremost cheesemakers. She described her previous life as ordinary: born and raised in a working-class family in northern England, she majored in chemistry at university and worked as an entry-level lab technician for a medical firm. It was a respectable everyday life, if not particularly compelling. So, when Ellen's long-term boyfriend was offered an IT job at a watch manufacturer in tropical Okinawa, it didn't take much to convince her to get married, pack up house, and board a flight with a one-way ticket and no definite plans to return.

When I met Ellen, she had lived in Okinawa for 11 years. She spent most of that time as a housewife, a life she enjoyed for the freedom and the quiet time it offered to think. When she felt bored, Ellen bounced around the island, helping out other members of Okinawa's sizable expat community at their bars and English schools, sometimes paid, often as a volunteer. It was through these connections that Ellen first met Dave. Ellen started as Dave's

customer, she and her husband attracted to Dave's tiny shop by the flavors of their former life in the UK. The frequency of her visits prompted Dave to offer Ellen a position in the workshop. Dave was aiming to expand production – he presently worked alone – and if Ellen would join as his apprentice, he would teach her everything he knew plus a modest salary. Not having much else to do, Ellen accepted

Ellen's apprenticeship was irregular to say the least. I have had the good fortune to have teachers who were serious about training and dedicated to mastery, El decidedly among them. Ellen's rigorous approach to my training was no doubt at least partly due to the very opposite nature of her apprenticeship under Dave. There is a saying in Japanese, *jū nin tō iro* (十人十色), which means "ten people, ten colors." It essentially parallels the English "to each their own." Dave's method of teaching was a particular color, and it could hardly have been more dissimilar from Ellen's. The careful consistency that comes through study and repetition was not Dave's preferred method. Rather, Dave believed in a more abstract, learn on your feet and think with your heart approach. Dave wasn't a proponent of writing down recipes, preferring to recreate cheeses (as best he could manage) from memory and taste. A true craftsperson didn't use recipes; such things were a crutch that impeded one's ability. Ellen was forced to feverishly scribble in her little black notebook notations on measurements, ingredients, and seemingly esoteric references to feel, smell, sound, and other sensory qualities to make sense of a "cheddar." It also came as a shock to Ellen when, roughly four hours into her first shift, Dave left the factory to attend to other business, confident that Ellen was comfortable with the basics. While Dave would continue to pop in for an hour here or there to give advice or answer questions, this first four hours represented the entirety of Ellen's formal training.

Ellen spent the next months reading every book, article, blog post, and pdf on cheesemaking she could find. Dave already had a fairly extensive library and was always willing to provide detail on his experiences and experimentations. The rest El learned through the scientific method: trial and error, repeatable experiments with controls, pages and pages of notes and logs. In time, Ellen made herself a craftsperson. Ellen enjoyed cheesemaking for its quiet, contemplative creativity. She liked looking up a recipe for pecorino or gouda online, executing it in the tiny basement workshop of the dairy farmhouse, and gradually tweaking it over generations into an exemplar of the style. She was good at it; the cheese shop ran so well in Ellen's tenure that Dave largely stepped away from production, leaving it in Ellen's capable, annatto-stained hands. She brought order to the factory, implementing record and serialization systems necessary for tracking cheese maturation and inventory. Ellen was also innovative: two of her first original recipes, a Garlic Cheddar and a camembert with pesto, quickly became best sellers. Quiet by nature, Ellen could quickly become visibly impassioned when discussing a new recipe or recently discovered technique. It wasn't long before Ellen established herself not only as the shop's head cheesemaker, taking on apprentices of her own – including myself - but as an authority on cheese among the island's foreign and domestic residents. It wasn't uncommon for Ellen's workday to be punctuated by patrons asking, often through a translator, what was the best cheese to cook a soufflé with, or what combinations Ellen recommend for a dinner party. Other artisans looked to Ellen for inspiration and collaboration, sourcing ideas and raw materials from her workshop. While not the face of the business – an arrangement Ellen generally preferred - she was a recognized local authority on matters of cheese and craft

production. While consistently thankful to Dave for the opportunity, Ellen's transition from apprentice to master was largely her own doing. I was, and still am, in awe of her.

Learning the ropes of cheesemaking from Ellen was a privilege, but not one she was initially willing to give. I was not Ellen's first apprentice, and those before me had left scars on the would-be master. Ellen was vocally reluctant to take on any more help. In fact, as I later found out, Ellen had admonished Dave just days before I signed on for bringing strangers into the factory to make cheese. Entertaining these "tourists" slowed her down, and they couldn't be trusted to complete any tasks in a way satisfactory to Ellen's standards. Despite Dave's insisting that "many hands make light work," El argued that *unskilled* hands made more work. No more would-be apprentices! She was fine and happy working alone.

Ellen's pleas fell on deaf ears. As I later discovered, even after Dave agreed to bring me on, Ellen petitioned him over dinner the night before my first day to reconsider. Despite not really knowing me, Dave assured her up and down that I was the real deal, it wasn't going to be like the others. Ellen relented, but made one last attempt to dissuade me personally: an email, written in a cold professional voice, informing me to arrive at the factory early, to wear wellies and old clothes, and be ready to get dirty. Ellen later told me that this same email had a fairly high success rate in scaring off potential visitors; it made them realize that they would be expected to work, and not just sit around chatting and eating cheese. However, the message had quite the opposite effect on me: I wanted to work, to finally get my hands dirty in Okinawa, and the email suggested someone who was serious about craft and my participation in it.

Cheesemaking is not a particularly well-established or popular industry in Okinawa. Okinawa does play host to a small dairy industry, with most farmers selling their milk

wholesale to an agricultural co-op where it is homogenized and sold at island grocery stores. But dairy does not factor heavily in the average Okinawan diet. At the crossroads of mainland Japanese interests, American military occupation, and international tourism, Okinawa is exposed to an eclectic mix of cultural influences, rendering a food landscape that is surprisingly metropolitan. Italian cuisine, particularly Sicilian-style pizza, is popular with residents and tourists alike. Some of the older Okinawan residents I interviewed who grew up during the post-war American occupation remembered fondly eating a creamy processed cheese product – their first ever experience with cheese – as part of their government-subsidized school lunches. Perhaps owing to these influences, there is an emerging cottage industry for cheesemaking. When I conducted fieldwork between 2016-18, there were only three established cheesemakers on the island, with a fourth in the planning stages. One was a small goat farm, the owner of which occasionally made several varieties of chevre, but only when he had excess goat milk. When I interviewed the farmer, he claimed to make cheese only to appease his wife, who saw his goat-keeping as a glorified hobby that ought to be monetized. (At the time of our interview in 2017, his cheese machine was broken, and he had no immediate plans to repair it.) A second was a restaurateur, an American naturalized resident in Okinawa, who made cheese several times a month for use in her restaurant. The third was Dave's factory, which supplied a small shop at the local farmer's market with a wide variety of cheddars, goudas, and camembert.

I showed up at the factory the following week. While Dave called it a factory, it could be more aptly described as a small, cramped workshop equipped with two cheese machines and several refrigerators. It was located in the basement of a little dairy farmhouse next to cow pens, nestled in the rolling sawgrass hills of a sleepy rural town in southern Okinawa. I

was wearing old clothes and new boots, carrying my field notebook and bristling with nervous energy. Ellen's initial reception was chilly. My read was that she didn't seem to trust me. To be fair, she had no reason to. I was an unknown. As it turned it out, Dave had relayed little of our conversation to Ellen, failing to convey my background or current objective. Ellen was not aware that I had previously worked in craft workshops, which had comparable expectations regarding punctuality, effort, and dedication. Nor did she know that I was a professional researcher; she assumed I was another tourist on a daytrip. That said, I don't think any of that information would have made much of a difference to Ellen. All she cared about was results, and I was unproven. I would have to earn her trust – and her friendship – the hard way.

Working as Ellen's apprentice was a largely tacit experience, at least for the first few months. We would show up at the factory early in the morning and work the first several hours in almost complete silence, save for the occasional monosyllabic confirmation or brief explanation of a new procedure. Ellen was never unkind – far from it. Rather, as she said herself, Ellen wasn't a people person, preferring the quiet contemplation of her work. In many ways, Ellen reminded me of the Zen monks I had worked with in Iwate in terms of her singular concentration on the task at hand, the cheese a sort of *koan* riddle over which she slowly, methodically puzzled toward contemplating some greater mystery. Touching on my own experiences working in temples, I asked Ellen one day if she felt making cheese – maybe craft work broadly – was a form of meditation. Ellen immediately dismissed this, rejecting meditation as "spiritual nonsense" of which she would have no part. Ellen was a scientist, and making cheese was a *science.*

Ellen emphasized focus and exacting attention to detail, and she expected two commitments from any would-be apprentice. First, to reproduce our house cheeses consistently *by the recipe*. During my tenure, the factory produced on average twenty-eight different styles. Dave saw variety as a fundamental selling point of the whole enterprise: in a community largely unaccustomed to the taste of traditional artisan cheeses, there would be something for everyone. It also ensured that repeat customers would consistently have something new to experience, motivating their return business. Despite the extensive catalog, it was critical that we keep each cheese true to recipe and within an undetectable range of variation; customers coming in each month for the garlic cheddar should be able to expect consistency. This was especially vital for restaurant and pub clients who depended on reliable flavor, color, and texture profiles for cooking and pairing.

Maintaining consistency was fundamentally about cultivating and sustaining trust. Ellen interpreted quality and value in terms of consistency, and believed that the shop's largely Japanese clientele felt similarly. The atelier's cheeses were more expensive than imported gouda or raclette in grocery stores and specialty shops, and significantly pricier than factory-produced cheese. It was also roughly the same cost per gram as cheese produced in Hokkaidō, Japan's northern-most prefecture and the heart of Japan's dairy industry. To sell cheese at Hokkaidō's price point was to imply quality on par. It was a bold statement, and a risky one given the small shop being a new, relatively unknown brand. It was critical to make cheese that not only excelled in flavor, but matched standards set by the shop's Japanese competitors. If they could craft consistently across nearly 30 separate products, Ellen believed, local consumers would come to know that Okinawan cheese, even if made by foreigners, was worth the cost.

Secondly, Ellen expected her apprentices not to slow her down. Like the brewery, the cheese factory was very much an all-hands-on-deck arrangement. Ellen needed someone who could get up to speed quickly (she did not want a drawn-out training period), who could work autonomously, and actually support her and the business in increasing total production. Ellen did not want a student, or at least someone who would be a student for long. The business couldn't sustain it. Ellen needed to produce at least two different cheeses a day – one to four wheels depending on the style - to keep up with current demand. She worked five days a week: three days for cheese production, one for caring for aging cheeses, and one catch-all day for miscellaneous tasks. The atelier's dairy could commit enough milk for four days' worth of production, but Ellen didn't have enough time. Training an apprentice would put even more pressure on Ellen's efficiency. Dave and Ellen's vision was to expand production, not curb it. She was also not necessarily interested in a collaborator, someone with whom she could bounce off ideas and try new things. Maybe this kind of relationship could develop in time (happily, it did with us), but it was not her immediate need. Rather, she needed an extra set of hands, as hers were no longer enough. But they would have to be hands like hers, i.e. hands she could *trust*.

I believe Ellen's expectations and her overarching ethos were the direct result of her secondary apprenticeship as a mentor. Never having been in a leadership role before (and naturally introverted), Ellen had to learn to lead and teach on the job. Unfortunately, Ellen had been burnt badly in the process by a duo of apprentices thrust on her early in her tenure as head cheesemaker and factory manager.

Several months after Ellen finished her hours-long apprenticeship, Dave brought in another apprentice. Neil was an American living long term in Okinawa, a former marine with

no cheesemaking experience but loads of enthusiasm and in need of an English-speaking job. Dave thought he would be great; he had the right attitude. Ellen was unsure about Neil, but she recognized that she felt that way about most people, and also felt too new to the business to second-guess Dave's instinct.

Neil's formal training under Ellen lasted roughly a week before Dave cut him loose to work on his own. Ellen and Neil's working relationship began on an awkward foot. In an attempt at making conversation, Neil showed Ellen a picture of himself with a beard much longer than his current length. Ellen remarked that Neil looked like a "hipster," thinking that hipster referenced a fashion trend and not realizing any potential negative connotations. Neil took umbrage at this comment, which Ellen noticed but did not understand until later that night when her husband explained the label's nuance. But the damage was done, and their relation became strained. Ellen, again admitting to not being good with people, was unsure how to broach the subject and mend the situation. She was also uncomfortable with how sensitive Neil seemed about a comment that seemed innocuous even with the added meaning. Time passed, nothing was ultimately said, and relations between Ellen and Neil lapsed into taciturn coolness.

This breakdown in communication made it extremely difficult for Ellen to address what she saw as glaring deficiencies in Neil's training and work practice. By all accounts, Neil was indeed passionate and loved to experiment with new recipes and flavor combinations. However, Neil was reportedly terrible at organizing and keeping production records. If a cheese turned out well, it was incredibly difficult – if not impossible – to determine what factors led to its fortuitous development. What was the temperature or pH of the milk? How many milligrams of mold culture or rennet did you add? How much garlic

powder? None of this was written down, so it was almost always left to Neil's less than reliable memory. The same was also true if a cheese went wrong, which Ellen recalled they did more often than not. Neil's passion also did not extend to caring for the cheeses as they matured. Rotating cheeses in the refrigerator, wiping or scraping off undesired mold, and maintaining consistent temperature and humidity levels are all essential steps to seeing a raw cheese through its controlled spoilage into a cheese. Neil was not interested in these tedious tasks, and often completely neglected them.

Neil's disregard for essential operations was compounded by his unreliability. Ellen illustrated this with an anecdote from Neil's second week at the factory. Ellen planned to return to the UK for two weeks to attend her sister's wedding. Apparently seeing an opportunity to make his mark on the business, Neil boasted that he would "fill the fridges with cheese" in Ellen's absence. In other words, as Ellen took it, he could run the place without her. However, the day after Ellen left Neil reportedly had a panic attack at the factory. Whether he was overwhelmed by the prospect of working alone or by some other stimuli was unclear – they never talked about it. Neil called Dave to ask if he would finish the day's cheese and went home. Neil wouldn't return until Ellen did, leaving Dave to work alone for nearly two weeks (while he also ran every other aspect of the business). Neil did not produce a single cheese during Ellen's vacation.

Ellen also cited Neil leaving the factory early over minor injuries (e.g., a small knife cut to the hand), or repeatedly disappearing outside for hours to play with barn cats as other examples of his fickleness. Yet perhaps most damning in Ellen's assessment was that Neil could not work alone. He couldn't be trusted to complete tasks or keep records without supervision, and he was generally anxious – despite his bravado – about being left in the

factory alone. It was some relief to all parties concerned, then, when Dave hired Ken, a bilingual Japanese local, as Ellen's second apprentice and Neil's partner. This relief, for Ellen at least, was short lived.

By all accounts, Ken was a very nice guy. Ellen described him as detail oriented to a fault; he could and would follow a recipe to the letter. Working with Neil, this somewhat balanced the latter's shoot-from-the-hip approach. However, Ellen noted that Ken lacked flexibility. Cheese, like beer and many other alimentary crafts, is composed of raw ingredients that are themselves fluctuating variables. The acidity, flavor, and color of milk can change day-to-day depending on the cow's diet and biology. Water, and especially well water, has inconsistent minerality. Mold cultures are homogenous but not monolithic. Humidity and other weather elements are always in play. A cheesemaker, while following a recipe, must therefore also be able to make slight or significant adjustments on the fly in order to maintain desired parameters. It is a reactive science of subtle nuance. Ken, unfortunately, was largely deaf to this nuance. When in doubt, he took the most literal, by-the-book interpretation of the recipe. Almost ironically, this led him to be almost as inconsistent a cheesemaker as Neil.

Ken also came with some quirks. He was an avid practitioner of homeopathy and other new-age theories. He would often attempt to apply the techniques and theories of his discipline to cheesemaking, much to Ellen's ire. For instance, Ken believed that salt was not only bad for the human body, but that it fed potentially harmful bacteria in food. He advocated not using any salt in the factory's cheese, despite it being cheese's principle flavoring and preservative. Even Dave, a self-proclaimed hippie and frequent entertainer of fringe ideas, balked at this. Ken compromised by adding as little salt as possible, just enough

to be detectable to a sensitive tongue, but never enough to give a cheese the full flavor for which the recipe called.

Ellen was aghast. Not only did Ken's convictions seek to alter her carefully honed recipes, but they did so based on ideas that contradicted the scientific principles that undergirded her practice of craft. Cheesemaking was not mystical or new age. It was neither, for that matter, art. Art was something vague and nebulous, based on impulse and inspiration. These were all anchored in *feeling*. No, said Ellen. Cheesemaking was a scientific process. Specific variables needed to be determined, measured, and charted. What separated a gouda from a failure was technical know-how based on hard, reproducible data. Cheesemaking was about precision and control.

Yet Ellen never really expressed her reservations or convictions to her early apprentices. She recalled feeling too new to the position of factory manager, and too uncomfortable with leadership to exert any pressure. Ultimately, Neil and Ken's tenure filled the factory refrigerators with myriad failing, unidentifiable cheeses, kilograms upon kilograms of dead capital that Ellen and Dave were still struggling to sell off or give away well into my apprenticeship over a year later. But her failure left an indelible mark on Ellen's working philosophy. Having struggled in chaotic disorder, El now demanded strict record keeping and factory organization. Having begrudgingly accommodated the fleeting passions and curiosities of her former subordinates, she now took full control of the production schedule and insisted on careful attention to vetted house recipes. Any new ideas would first be discussed and studied against existing precedents in books or on internet forums before any resources were expended. Most importantly, any new apprentices would have to directly support her vision, i.e., the codification of a reliable rotation of flagship styles, and assist her

exclusively toward that goal. No more mavericks. Toward this, Ellen's apprentices would have to be sharp, a particular "caliber" as she put it. If someone was going to take up space in her factory, they would need to improve overall productivity. The faster they could do that, the better. This was a business, after all, not a playground, tourist attraction, or classroom.

The Ellen I met was coldly determined to achieve this goal. The scars of her failed apprentices still aching in her mind, she was taciturn and suspicious in the face of a new, unwanted arrival. But this was what I like most about El; she was all about the business and technique of her craft. It was exactly the purview of my research. This connection cultivated a working relationship based on mutual dedication and respect. She remarked months after I started that she felt slightly relieved when I walked in on my first day with a notebook and pen; it suggested I was serious. She also noted that I was a fast learner and seemed to have a sort of intuition for the work. She liked that I was able to pick things up without her having to repeatedly explain a process. What's more, she could trust me to show up every day and on time. If Ellen made plans, she could count on me to help carry them out.

Trust is a powerful force in craft working relationships. The ups and downs of my time in Okinawa taught me more about the dynamics of trust than perhaps anything else. The opportunities I enjoyed conducting research abroad and to make cheese were made possible by inspiring trust in others. To my memory, there was no single catastrophic mistake in the cheese factory that left a poignant, instructive scar (although it's possible Ellen has a different recollection). Rather, the empathy to understand how someone has been hurt and the desire – the pressure – not to see them hurt like that again comes to have a similarly scarring influence. Earning Ellen's trust and working to maintain that trust gave me a greater

sense of collaborative responsibility, of what it means to be someone's partner, and of the value of mutual confidence.

Trust was an essential dynamic of cheesemaking. The cheese factory was not a place where you could achieve greatness by blowing everyone's minds with some crazy new idea. Between the strain of limited resources and Ellen's firm control, the right to innovate had to be earned. Nor was the factory a space that rewarded or even recognized competition. It was just Ellen and me. Instead, the factory was a place where you showed up every day, took control of your responsibilities, and executed a careful plan. It was a place where you needed to be able to turn your back on someone with confidence that they could still function. Building and maintaining trust was the slow accumulation of hours worked without (or with only minor) incident, the number of repetitive, confident movements, shelves of nearly identical wheels of cheddar. Trust was about the performance of reliability, and I aspired to be reliable.

Over the course of nine months, Ellen and I slowly filled and refilled the factory's refrigerators with successful, thoroughly documented cheeses. I went from a complete novice to a comfortable, confident cheesemaker. As Ellen and I worked more and more autonomously, we became warmer in our personal and professional relationship. We developed some new cheeses along the way. Most were Ellen's ideas, some were a collaboration, and two were exclusively my design. Trust was the currency with which I paid for this opportunity. Profits increased as new customers walked in and old ones returned. Restaurant and shop accounts were happy and online reviews were solid. It seemed like the trust Ellen and I cultivated little-by-little radiated out of our factory, building trust between

the business and its community. And little-by-little we relegated the remaining deviant cheeses of Ellen's first apprentices to a small deep freezer reserved for scraps.

Quasi-Professional Brewer

Returning from Okinawa, I put cheesemaking on indefinite hiatus. It wasn't that I didn't like making cheese. Rather, my resignation was the product of economic limitations. I did attempt making cheese once after resettling in North Carolina. I ordered mold cultures and rennet through a supplier, bought raw milk (which I pasteurized at home) from a local independent dairy, and whipped up a test batch of mozzarella. The cheese turned out well and was quickly picked up by my wife's co-workers. However, the raw materials were incredibly expensive compared to Okinawa, especially the milk (despite being offered at a fair price and generously discounted by the farmer), and the potential profit margin compared to other local craft producers and supermarket cheese made it an expensive hobby and a losing venture.

Until I made cheese at home, I didn't realize how fortunate Dave was that his cheese shop was situated in Okinawa, and on a farm. Unlike the heavily regulated brewing industry, cheesemaking in Japan was largely unknown outside Hokkaidō, and those were large-scale factories. Okinawan bureaucrats had no experience with a tiny cheese atelier and approached it instead as a generic small business. In Japan, small businesses only require formal licensing if their annual revenue exceeds a certain cap. Businesses that fall below that cap only need specific production permits and minimal health checks, saving the business the cost of compliance and licensing fees. Dave also saved a large amount of money by sourcing his milk directly from the dairy on which his factory was located, paying a little above cost. (This was mutually beneficial for the farmer, who used Dave's cheese as a way to showcase

the superior quality of his milk.) Looking at the cost of securing quality milk in America and the hurdles I would have had to clear had I wanted to sell it at a farmer's market, I understood why most American cheesemakers also operate dairy farms: their facilities are already permitted and to code for food production, and they don't have to pay for milk.

Fortunately for me, cheesemaking was largely a detour from my intended project. And returning to the States allowed me to pick up my brewery training where I left off. I used my remaining research funds to enroll in the Concise Course in Brewing Technology offered by the Siebel Institute of Technology in Chicago. Siebel billed the program as an intensive two-week crash course for intermediate professionals that would cover the essential operations of a brewery, as well as seminars on water chemistry, ingredient properties, and basic equipment maintenance. My goal was to conduct a first-hand study of formal brewer education. I thought this would provide an interesting comparison to my hands-on experience, possibly revealing some fundamental threads between theory and method. My principle brewer collaborators had also attended Siebel; perhaps studying where they had studied would offer some insights into their working philosophy. Siebel was also an opportunity to further my own career, which seemed day after day to slip closer to professional brewing. Lastly, given that the course was intended for professional, or at least serious-minded, home brewers, I was excited at the chance to meet some potential new collaborators.

The Concise Course was indeed revealing, but not always in the ways I anticipated. The seminars were broadly useful, touching on a range of subjects in moderate detail. The lectures seemed at times unintuitive, or at least defied our expectations; surprising little time was spent on varieties of grain or hops compared to the multiple sessions on pumps and

valves, much to the consternation of my classmates and me. I didn't realize the practicality of this curriculum until after I started professionally brewing, specifically, until I had my first pump break on me. If you pick up any book on brewing, page through any number of magazines, or browse the majority of blogs, you're bound to find volumes of information on ingredient qualities and combinations. The mechanics of centrifugal pumps is a much more arcane subject, but one that becomes invaluable to daily operation in a professional brewhouse.

But I think upending expectation was the Concise Course's general aim. Here was a room full of pretentions, cocky apprentices or homebrewers, would-be brewery owners, and others variously charmed by the flash and art of the craft brewing industry, myself included.[29] Here was a room full of people ready to delve into regionally produced designer hops, rare specialty grains, and experimental fermentations. In other words, at least from the perspective of our instructors, here was a room full of naive individuals largely unequipped to deal with the working realities of professional brewing. To wit, as I had already experienced (but maybe did not yet fully appreciated), much of real, practical brewing was not high art, but more akin to janitorial labor or farming. Indeed, "janitor" and "yeast farmer" were short-hand terms often used by course instructors to describe the work we could expect in our chosen professions. (Brian himself described brewing as yeast farming on my first day.) Certainly, recipe creation and designing can labels was part of the job as well – the part

[29] Significantly, only one member of my Siebel cohort entered the program toward a career in large-scale industrial brewing with one of the leading international brewing companies. The program director and several of the lecturers noted that the program had become increasingly dominated by craft breweries in the recent decades. Despite this, the course material was still largely geared toward its original purpose of training industrial brewers. Theoretical illustrations were often given in dimensions only applicable to such large-scale brewing, and significant time was spent discussing system efficiencies that would save fractions of pennies. The instructors too were largely veterans of Anheuser Busch and similar large companies. Overall, the lack of material particular to small-scale craft production gave the impression that the institution still very much saw craft beer as a momentary trend in the history of brewing.

we largely fixated upon - but a lot of technical, fundamental processes were required to get to that stage. It was therefore the instructors' obligation, prior to letting us loose on their industry, to beat into us the nuts and bolts of a real working practice and philosophy of brewing through literal lectures on nuts and bolts.

The student composition and motivations were also a surprise, but these too were instructive. Like I noted earlier, I had imagined a room full of professional brewers, or at least dedicated home brewers with similar ambitions. This was not the case. Of the class of 32, only three were actually currently employed in a brewery. Two of these were assistant brewers at production craft brewers, and one was a cellar person, a position typically found at larger breweries that specializes in fermentation and storage operations. A fourth student had been a brewer overseas, but recently lost his job (and his visa) and was looking for employment back home in the States. Two other students were in the process of opening their own breweries. They would often step out to make phone calls between lectures inquiring about equipment orders or the price of real estate in Manhattan. There were four older gentlemen in the course, each at a crossroads in his life. One was a boy's school headmaster considering opening a brewery in Ireland, where craft beer was just beginning to take root. Another – a salesman - seemed to be hunting for potential business partners for some undisclosed venture. The two others, the eldest among us, had been forcibly retired from their previous occupations, and were now attempting to make a new start in their golden years. The remaining students were young, variously employed in tangentially related or unrelated industries, with some homebrewing experience at best. The program's "intermediate" proviso seemed largely ignored or waived. On the first day of class, during a

lecture on malt, one such student leaned over to express surprise that grain was used in brewing.

Not surprisingly, I was the only anthropologist in the room. This made me quite an ambiguous figure among my cohort. To the professional brewers – i.e., those currently or previously employed as brewers – I wasn't really a colleague. Yes, I had worked in a brewery, but as a researcher. Most assumed I just hung back in a corner, watching the action and taking notes. In any event, I wasn't currently employed in a brewery, and thus was not any more a brewer than the other students. This point was made explicit by the former overseas brewer, who styled himself as the only true professional among us (despite being unemployed himself). As he put it, I was at best a "semi-professional" or "quasi" brewer. I received a similar reception from the non-professional students. It was evident from my notes and questions during brewery tours that I had relatively more experience in breweries than they, but I was ostensibly employed by a university, an academic. Again, I was a quasi-brewer, someone who didn't have my head fully in the game. How could I relate to those whose future was singularly focused on the goal of becoming a real brewer?

The social distance my professional ambiguity effected was exacerbated by my repeated reluctance to participate in what almost immediately became the habitual pastime of almost all the course members: social (over) drinking. On the first day of Siebel, almost the first hour, the program coordinator offered two tandem recommendations: that Chicago boasted a diverse and dazzling array of craft breweries that we ought to take advantage of during our stay, and that the course would be graded, so beware overindulgence at the cost of academic performance. A significant portion of my cohort largely embraced the former point while disregarding the latter. After the day's last lecture, students would routinely retire to

Siebel's *stube* to converse and sample the complementary beer offered by the program. Students were officially limited to two six-ounce pours, although this rule was often ignored in practice. When the house taps closed, many would then move on via bus or ride share to Chicago's many local breweries and tap houses. Some sessions would start as a group study rewarded by some pints, but then often devolve into a round of hard drinking. Others abandoned this pretense altogether. One student noted that it was very difficult – and quite frustrating – to try to balance communal studying with communal drinking. You'd start off strong, they noted, working through the day's lectures and confirming the main points. But then one pint would slip into two, then into three. Inevitably, the malaise or exhaustion of student life, aided by alcohol's depressing capacity, would become contagious and studying would turn to commiseration. It's basically a race against the clock, the student lamented, before someone says, "forget this" and everyone else agrees.

This pattern became unsustainable almost immediately. While some participants were able to practice moderation and arrive to lecture the following morning, relatively bright-eyed and focused, more found hangovers a daily struggle. There were few absences, but many noted difficulties following lectures and staying awake during class. This became more pronounced as the days wore on and nightly benders stacked. Frequent revelers began to fall behind in reviewing course material, and more desperate to corral more disciplined students into their study sessions. There were numerous sworn pledges during the noon break to not to go out drinking that night, to get one's shit together and hit the books. But many of these oaths would evaporate by the last lecture. I encountered a fellow student and boarder of my hostel one morning on my way to the bus. He sat on the common room couches, bleary and

wearing the previous day's rumpled shirt. "I can't keep this up," he groaned, "I had no idea there'd be so much book learning and so much beer."

Everyone ultimately passed the course, some livers more worse for wear than others. We celebrated on the evening of the final day with a characteristic pub crawl, visiting a series of craft breweries and drinking along the way. It wasn't a particularly comfortable experience. Unhampered by impending exams, many of the students drank heavily. A number of episodes unfolded: two students struck up an impromptu romance, another awkwardly began holding informal interviews for their hypothetical start-up (in which several students even more awkwardly participated), and a third became bizarrely agitated at the cost of pints and began loudly venting about his personal finances. In all, I drank approximately three pints across as many hours. This became a point of controversy, with several of my cohort first inquiring, despite having a pint in my hand, as to why I wasn't drinking (read: wasn't drinking enough). As their consternation grew, someone threw out the now tired question as to how I was to be a professional brewer if I didn't drink. This drew a laugh from the participants, as it always seemed to do. But then one of the group leaned in closer with an expression of unfeigned concern. "Seriously," he asked, again ignoring the lager I was slowly sipping at this point, "Are you sure you want to brew? You don't even really like beer."

I took this opportunity to slip out to another brewery with a small group of friendly students, and the night took on a decidedly less accusatory atmosphere. I only spoke occasionally with my former classmates after that night, but their incredulity stayed with me. Comical lack of observation aside, my colleagues' critique suggested a significant underlying assumption about a brewer's professional identity and its relationship to drinking culture: a

brewer is someone who drinks often and a lot. I was generally reluctant (and probably incapable) to drink volumes comparable to my cohort. In their eyes, this demonstrated a lack of conformity with the status quo, and therefore a certain lack of the qualities they felt necessary to be a professional brewer. This wasn't the first time I had encountered this perspective; it should come as no surprise that those who produce beer are generally fond of drinking it, and that they frequently engage in the pastime. A brewer who doesn't drink is conspicuous in the way of a cook who doesn't eat. But this encounter was singular in how consistent the sentiment was despite the relative diversity of the student body. Here was a collection of soon-to-be and current professionals from across the country who shared a largely coherent assumption about how professional brewers drank (or ought to drink). What I had initially assumed to be a particularity of the brewing community in North Carolina suddenly revealed itself to be a much broader pattern.

Sociologist and philosopher Pierre Bourdieu argues in *Distinction* that taste – i.e., the prevailing aesthetic of what is seen as good, proper, and appropriately social – is a form of social control. To declare that something is "in good taste" is a function of one social group, typically the dominate group in the context, toward critiquing, subduing, and rejecting the actions or values of another. It is through defining taste that a group police and reproduce themselves. It is also the means by which these groups identify and demarcate the outsider, i.e., those whose tastes do not align with the group norm.[30] While Bourdieu focuses on socio-economic classes, the practices of taste-setting are readily visible in any social group, including the brewing community. What one drinks, how often they drink, and how much

[30] See Bourdieu 1984

they drink are all matters of taste. The extent to which one upholds this taste – acts *tastefully* – is thus grounds upon which to judge an individual's membership in that community.

Matters of taste in the brewing community are abundant and highly consequential: one of my brewer friends once lamented that, even though he liked to buy fancy clothes and dress up for events, his proclivities generally weren't welcome among his colleagues. Other brewers would often tease him for wearing suits or dress pants, anomalies amidst the plaids, jeans, and brewery t-shirts that dominate brewer fashion. Although characterized as playful ribbing, my friend nevertheless felt uncomfortable to the point that he would only dress to his preference on the weekends and at events where he was reasonably sure brewer acquaintances wouldn't attend. Another friend struggled with his introverted personality, feeling it was at odds with the gregarious, personable brewers featured prominently in industry publications and social media. To what extent was being socially active a professional requirement, he wondered, in an industry dominated by social relations? How far could he really expect to advance if he preferred to work quietly and stay home on the weekends? Probably not far, he lamented.

Managing these matters of taste took on a new immediacy as I updated my resume and prepared to enter the brewing community as a professional. As an intern assistant brewer, my unofficial status and primary identity as a researcher exempted me to some degree from the scrutiny of my collaborators. I was only partially an insider, and therefore outsider enough to permit lax attention to prevailing trends. I only had to talk the talk and walk the walk to a point. But Siebel presented a new environment, one that was thoroughly professional. Even those members of the course that were not industry professionals aimed to

be as such, and therefore sought to carry themselves as professionals and apply what they saw as professional standards. Through their lens, I was decidedly quasi-professional at best.

Actual-Professional Brewer

Among the observations and lessons that I took from Siebel, the most enduring was a simple paired observation and directive often repeated by our instructors: “No system is perfect. Work with the system you have.” This point was illustrated most effectively by the head brewer of a Chicago-area brew pub when discussing why he bought pre-milled grain.[31] This is a paraphrase of a much more colorful and expletive laden account:

> “Yeah, I buy pre-milled grain. It sucks! I know it. You don’t have to tell me. It means I’m dependent on some other asshole milling my grain. I don’t have that control. But I don’t have room in my brewery for a mill. Where would I put it? We can’t change the building too much – it’s historical. So, what do I do? I can either work with what I’ve got and make some good beer, or I can just go home.”

This statement has appeared repeatedly in my fieldnotes over the years and is something of a truism among the brewers with whom I’ve worked. At one level, it represents a commentary on an empirical truth of craft production. It is very unlikely that you have the capital or resources to build a brewing system exactly to your specifications, or that you find a facility in which to install that system that meets all of your needs without causing any problems. Even if you do, it’s almost certain that you’ll discover some inefficiency or inconvenience when you actually run the system, or when you look to expand. If you hold out for the perfect brewery, you’ll never actually make a beer.

Yet at a more abstract level, this statement is a challenge directed at artisans to produce despite the inherent limitations of one’s context. The faults or idiosyncrasies of a

[31] Pre-milled grain is malted barley and other malted grains that have been milled by the supplier prior to arrival at the brewery. Many craft breweries employ their own grain mills, buying the grain intact and crushing it to their specifications. However, some smaller breweries lack mills, due either to lack of space or capital, and thus buy pre-milled grain.

brewhouse are not valid excuses for producing bad beer. “If so-and-so’s brewery is shit, and she’s still winning awards, then what’s your excuse?” Importantly, this isn't a rejection of context, a call to disregard one’s working environment and charge forward. Rather, it represents a radical embracing of that environment: a brewer ought to know their working environment within and without the brewhouse, all of its strengths and faults, so thoroughly that they are able to critically engage that environment, coordinating and bending it, toward producing something that tastes good. In order to work in an environment, you have to fully understand that environment and develop yourself to work successfully in it. This ethos of resilience represents a fundamental component of the craft working philosophy, one I unpack in greater detail in the next chapter.

I was able to field-test this ethos almost immediately after venturing into the professional world. Writing a dissertation is a fairly unstructured period of time in a graduate student’s life. The classes have been taken, the comprehensive exams passed, and the research conducted. There really aren’t anymore demands than write up and pay your bills. Interested in putting my newly minted certificate to use, I opted to pay my bills by brewing (and do some more research while I was at it). However, my first brewing position was an unmitigated disaster, and only lasted for a single day, about eight hours in total.

I responded to a job posting for a large production brewery shortly after returning from Siebel, had a brief phone interview with the owner, and arrived at the brewery for an interview in early November. I was under the impression that I was applying for an assistant brewer position, part-to-full time depending on the season (spring to summer being the busy season for most breweries in North Carolina). What I actually encountered was quite unexpected. After meeting the owner in his conference room and talking for nearly thirty

minutes about his future plans and his background, he offered me the job. He asked no particular questions as to my qualifications or experience, relying exclusively on our previous phone conversation and my resume. He also seemed surprised when I had questions of my own: what would be my hours, what was the compensation, and were there any benefits? The owner waived these questions aside, save for stating a salary that was on the lower end of industry standard (fair, I thought, based on my professional experience). The owner then asked again, with an air of impatience, whether or not I would take the job; “It’s yours if you want it.” I said I did. “Can you start today?” he immediately followed. I wasn’t really dressed for brewing, but I said I could make a go of studying their system. We shook hands and I filled out some tax paperwork.

I was led out onto the brewery floor by the factory manager, a young man a little older than myself with a thick southern accent. The manager then introduced me to some younger men washing kegs as the new “brewer.” I corrected him, noting that I was the *assistant* brewer. But he corrected me, criticizing me for not knowing my own job title. This was the fastest promotion I ever had, and I’m not embarrassed to say that I felt a rush of excitement at my new standing that momentarily countermanded my previous disquiet. But this came rushing back when I met the assistant brewer and head brewer. The former, a recent college graduate with no previous brewing experience and three weeks on the job, was immediately perturbed that a brand-new hire outranked him. His manner was somewhat cold, and his explanations of operations laced with a degree of derision. Yet he was practically affable when compared with the laconic head brewer.

The head brewer was another young man around my age. He had served as the brewery’s assistant brewer for only a matter of months before being promoted when the

previous head brewer quit. He had been in the position for three months, but this relatively short time had evidently been disproportionately taxing. His face was haggard and worn, with deep circles under his eyes. His clothing was disheveled, and he seemed exhausted, repeatedly leaning on the platform railings or his mash paddle and sighing deeply. I learned little from him, as he disliked talking or explaining his actions and grew quickly frustrated by follow-up questions. The factory manager had actually warned me ahead of time that the head brewer hated teaching, and that I would have to learn the system by watching him. The only information the head brewer did convey was that he was glad I took the job because he was in desperate need of a break. He claimed to have only taken three days off in as many months, as there was no one else to run the system. He stated that I should expect to work 70-hour weeks for the time being, with that lessening to some extent as I and the assistant brewer became competent on the system and could distribute the work more evenly. I should also consider myself perpetually on-call in case of any equipment malfunctions, rush orders, or personnel changes (read: sudden resignations).

I spent the remaining seven hours of my tenure collecting more data on a very different brewery from the one I had researched prior to Okinawa. For one, the head brewer seemed untrained for his position (understandable given his limited prior experience). I observed him adding brewing salts – calcium chloride and calcium sulfide used to condition water prior to brewing – in the penultimate whirlpool stage, rather than during the mash-in. I also noted that he used his mash paddle to take gravity samples – i.e., the amount of sugar suspended in solution - in such a way that condensation on the paddle mixed with the wort, ultimately diluting the sample. He then added only several handfuls of rice hulls, used to increase the filterability of a mash bed, to a grain bill of nearly 3000 pounds. When I asked if

that amount of rice hulls would be sufficient, he declined to respond, but then later complained of slow lautering.[32] The factory manager complained about consistency issues, noting that recent batches of the brewery's flagship IPA had to be recalled when a state inspection at a warehouse revealed that the alcohol percentage was significantly higher than what was advertised on the can. Staff relations were also notably more fractious. I was informed that the support staff – cellar people and keg washers – did not care for or respect the brewing staff, and this wasn't really a team environment. Two keg washers quickly took to ribbing me about my education (not uncommon in my experience). This escalated, however, when they, joined by the factory manager, endeavored to shock me by repeatedly attempting to show me homosexual pornography on their phones. When I refused to indulge, they paradoxically called me a homophobic slur.

As bad as the operation seemed and as uncomfortable as my interactions with the staff became, I kept thinking about the Siebel truism, "No system is perfect. Work with the system you have." Yes, I was having an awful time, wasn't fitting in, and wanted to walk out at numerous junctions. But the position was also an opportunity: here was an imperfect system. Why couldn't I make it work? If I couldn't, was I really cut out to be a brewer? If I didn't take this opportunity, as bad as it was, would I ever have another chance? Maybe I was just overreacting to all of it, bent out of shape because this brewery didn't immediately offer the cozy companionship of my former brewery. Maybe I just lacked the resilience to really make it in this industry…

[32] Lautering is the process of running hot water ("liquor") through a bed of grain. The grain bed acts as a natural filter through which the water runs and picks up sugars from the grain, ultimately draining through the bottom of the mash vessel and collecting in the kettle.

This chain of anxiety was broken by a text message from my friend, the head brewer with whom I had previously worked and had been updating throughout the day with condensed accounts of my misadventure. His advice was to the point: "Fuck them. Walk out." So, I did. I sat in my car and emailed the owner my resignation before I left the brewery parking lot. I spoke with my friend on the long drive home, recounting the day's events in more detail alongside my worries and insecurities. Thankfully, he treated my concerns as ridiculous. The job proved to be awful, so why wouldn't you walk away? He would have. Moreover, walking away wouldn't have any bearing on my future employability. Why would it? Don't put it on your resume. Don't be silly! Finally, he was sorry. Not only because I had a bad experience, but because he let me go into that situation. My friend had heard a lot of negative rumors about that brewery and should have warned me against it. The North Carolina brewing community is tightknit, and professionals generally look out for each other. But it felt bad to tell me to not explore an opportunity when he couldn't offer any alternatives. Maybe the place had come around? Maybe the rumors were just the fabrications of unjustly disgruntled ex-employees? Either way, I should get over it: this kind of thing happens, I learned from it, and I could try again tomorrow. As he put it, it was time to put on my "big boy pants." In other words, I needed to be resilient.

I spent the next month transcribing and organizing my fieldnotes from the previous two years and applying for the occasional local brewery position. Opportunity did eventually come again a month later in the form of two interviews, one at another, albeit smaller production brewery, and the other at a small brewpub. The former went well, but they ended up going with another more qualified candidate. The latter interview was much less formal, but endearingly personable. Logan, the head brewer, had replied to my email inquiry several

weeks earlier saying that theirs was a small operation – just a head brewer and assistant brewer – and that they currently weren't in need of anyone. However, Logan noted, things might be changing in the near future and he would keep me posted. Logan's prediction came to pass in early December; his current assistant brewer of two years had become dissatisfied in the position and was looking to move on. It wouldn't be a lot of hours and wouldn't pay very much, Logan warned in his later email, but if I was interested in getting my foot in the door and learning what I could, he'd love to have me out for an interview.

I was at the brewery the following day. It was a small 15-barrel brewpub nestled in the quiet downtown of a western North Carolina city adjacent to and largely dependent on a nearby military base. The brewery was somewhat British pub themed with an attached restaurant which also functioned as a nightclub on weekend nights. The brewing system was old and well-used, consisting of a compact mash-tun, combination kettle and whirlpool, and independent hot liquor tank common among brewpubs. There were only three fermentation vessels, but six serving tanks, suggesting less of a need to process beer quickly. Indeed, as I was later informed, the brewery only produced 450 barrels a year on average (although Logan estimated the total capacity at 1000). All in all, the brewery reminded me of the brewpub in which I started, just a touch shabbier.

Yet I found this shabbiness charming, as I did the head brewer. Logan was an athletically built man in his mid-30's with a shaved head, neatly kept beard, and calm demeanor. He was very soft-spoken, making him difficult at times to hear over the hum of pumps and roar of steam jackets. Logan had been the head brewer for a little over three years when I first met him. He had started at the brewpub as a bartender but was unexpectedly promoted to assistant brewer when his predecessor failed to show up for work on a brew day

and the head brewer, needing a hand, drafted Logan. Logan seized the opportunity, serving as assistant for three months. During this time, he read as many brewing books as he could find at the local library and scoured online forums and wikis. He took notes on every step of the process, trying to run processes independently whenever he could. These opportunities were plentiful, as unknown to Logan and the rest of the staff, the head brewer was a closeted alcoholic and often too drunk or hungover in the mornings to function. The head brewer never drank at the brewery and would claim that he had migraines or the like, retiring upstairs to sleep on a couch while Logan worked alone. Eventually this lifestyle overtook the head brewer, and he left the brewery in Logan's hands to enter rehabilitation out of state. Largely self-taught and with less than a year of professional experience, Logan was now head brewer.

Logan inherited a mess. The previous head brewer was by all accounts a perfectly capable and competent operator. Yet his chronic drinking had eroded these qualities to the point of pervasive mismanagement. Recipe quality control had been the direst casualty, resulting in a run of the brewery's flagship beers that were either markedly different from customer expectations, or just plain bad beer. The brewery's reputation had suffered greatly, and the negative impact on distribution was significant; Logan wondered aloud on several occasions whether this damage was permanent. The flagship recipes were also in disarray, lacking consistent notation on tasting or modifications. Logan also found the major cleaning operations of the brewer to be insufficient for properly maintaining brewery cleanliness; too many corners had been cut. These was likely the primary reasons the beer was so inconsistent. The brewery owners were not "beer people" and had no formal or informal

expertise, and thus the brewery basically functioned autonomously within the wider business. Logan was on his own.

Despite not attending Siebel, Logan's objective echoed the Institute's mandate: he would take this broken brewery and make some good beer. This would become something of a mantra for the head brewer; when arrangement didn't work out, when equipment broke, or when ideas or recipes fell flat, Logan would remind me (and himself) that "we still make good beer here." And Logan did make good beer. The walls of the brewery were covered in medals from regional and state competitions. He had worked hard to repair relationships with distributors and the brewery numbers were climbing, albeit slower than Logan would have liked. Unlike the restaurant and nightclub aspects of the business, the brewery was profitable and carried itself. I was initially fairly ambivalent about our beer – a brewer friend said that I was too "down" on my own beer – I thought it was good, but I wasn't sure how it really faired in the open market. But then Logan and I participated in my first beer festival together in a little farming community even farther west. Unlike other festivals I've attended, people actually had to buy their beer. My doubts were proved unwarranted when we sold out an hour before the festival's end.

The brewery's gradual revival was partly due to Logan's hard work, and partly due to his ingenuity. If Logan didn't know how to do something but thought that it would help the brewery, he would teach himself how to do it. Sales were lacking, so he taught himself to be a salesman, riding along with other salespeople to learn the trade. If a piece of equipment was broken, he watched a tutorial online and fixed it himself. He took a leadership position in the local craft beer community, solidifying relationships with other breweries through formal collaborations and informal friendships. Logan was a brewer's brewer. While Logan

reformulated the flagship recipes, introduced his own creations, and fine-tuned the brewing process, he also reworked himself, largely independently, into the head brewer his operation needed, a head brewer who could brew some good beer.

I owe Logan a lot. He gave me an opportunity to make good beer and honored his commitment to teach me everything he could toward that goal. He pulled me out of my funk and helped me earn a professional identity in the brewing industry. When Logan decided to move on and help start a new brewery in another part of the state, he prepared me to take over as head brewer in my own right. Although I ultimately declined this position for another assistant brewer position, continuing my wandering apprentice as I write this now, my tenure with Logan facilitated my progression from apprentice to someone appreciably more capable and independent (though still very much a work in progress).

The Sum of Our Scars

This chapter has walked a meandering path through the working realities of apprenticeship, tallying my share of scars and considering those of the artisans who guided me. Woven into formal education and on-the-job training, injury is a critical pedagogy of craft. The physical and emotional pain created by error and the embodied afterimages of suffering that shape future practice represent a fundamental cycle that animates the transition from novice to professional. Like a sculptor's chisel, learning through injury and pain – learning the "hard way" – has the effect of chipping away the unnecessary, revealing the critical in sharp relief.

Certain key concerns have emerged repeatedly during my wandering apprenticeship, exerting pressure on the practices and perspectives of myself and those with whom I have collaborated. Struggle, failure, hope, control, skill, vision, identity, and trust are all

components of a larger pattern that animates craft livelihoods. Yet I believe these concerns ultimately point to more fundamental conceptual categories, guiding the observant practitioner like trail markers to some more essential framework. To struggle toward a goal, to encounter, endure, and eventually overcome failure, and to hope for a better tomorrow are expressions of the *resilience* vital to take up a craft and maintain one's place within it. The capacity to exercise control of one's environment and change it through constantly developing skill toward some unique vision is the *innovation* necessary to carve out one's place in an increasingly competitive and volatile craft landscape. In cultivating an identity that is both individual and communal, and in accruing the mutual trust necessary to mobilize a disparate community of producers, consumers, and fellow craftspeople toward a common goal, one appreciates the power and demand of *collaboration.*

As I traced in *Wandering Apprentice,* my initial research project began with a basic question: how do people use contemporary craft movements to navigate moments of financial and personal precarity? As my project unfolded, I realized that, more fundamental than paying bills or personal self-worth, the crisis my colleagues shared was the quotidian question of how to keep their crafts - and the businesses, livelihoods, and identities tied up in those crafts - going. Resilience, innovation, and collaboration were the answer, the elemental threads that wove my interlocutors' working philosophies of craft.

In the following chapters, I consider each thread in turn. *Storms Within, Storms Without* examines the resilience crucial to meeting and overcoming the difficulties of craft livelihoods. Despite the ease many associate with industry (including those within the industry), being a craftsperson is not easy. The ups and downs of a craft livelihood can be overwhelming, and I trace some of the strategies – ethical or otherwise - craftspeople use to

resist defeat. *Fortune and Glory* contemplates the fickleness of innovation. I discuss the environmentally contingent, cooperative nature of creativity and the possibilities and limitations such a nature enacts. I consider the value innovation can bring to a craft venture, and also the potential consequences to business and craftsperson when the well of innovation runs dry. *Ouroboros* explores the phenomenon of collaboration, touching on the practice of collaborative production, the communal ethos among craftspeople, and the broader concerns of working with and within a community. This chapter reflects both on the creative potential of the craft community, and on its pressures.

These chapters draw on a collection of experiences and observations, some of which are personal, some related to me by collaborators, and many of which are shared. In doing so, they begin to illustrate a *working* philosophy of craft, a philosophy that both pertains to the nature and practice of a specific work, and which persists in a state of generative flux constantly made, modified, and unmade in the practice of that work. These stories and the philosophy they illumine are the product of the hopes and anxieties, the successes and failures, the everyday lives and works of craftspeople at particular times and in particular places. The following is the sum of our scars.

CHAPTER ONE: STORMS WITHIN, STORMS WITHOUT

"And as for small difficulties and worryings, prospects of sudden disaster, peril of life and limb; all these, and death itself, seem to him only sly, good-natured hits, and jolly punches in the side bestowed by the unseen and unaccountable old joker. That odd sort of wayward mood I am am speaking of, comes over a man only in some time of extreme tribulation; it comes in the very midst of his earnestness, so that what just before might have seemed to him a thing most momentous, now seems but a part of the general joke. There is nothing like the perils of whaling to breed this free and easy sort of genial, desperado philosophy…"
- Herman Melville, *Moby-Dick*

I found myself driving to the cheese factory one morning in torrential rains, weaving around fallen tree branches and nearly bogging out on narrow partially flooded roads. Storm season had brought a powerful typhoon to Okinawa, making landfall only hours before my daily commute. Ellen, the head cheesemaker, and I had discussed the situation the afternoon before, worrying over weather updates on our phones. We had two choices: on one hand, we could cancel work for the following day. This would ensure our personal safety but put the cheese – and thereby the business – at risk. The intense humidity of Okinawan summers necessitated daily moisture controls for cheese. A lapse in care, even for a day, could potentially spoil all of our work. A power outage could accomplish the same disaster. On the other, we could brave the squall to protect our handiwork; adjust temperatures and humidity, scrape unwanted molds, and pack the refrigerators with ice from a nearby convenience store (equipped with a generator) if – more likely, *when* – the aged power grid failed. Ultimately, the cheese took priority.

I wasn't a stranger to storms disrupting craft production. During my initial stage of fieldwork as an intern brewer, a thunderstorm nearly ruined my first porter. It was a Friday night in April, and we had just brewed an 18-barrel batch that would likely last us into early Fall (it has been my experience that dark beers sell slowly during the warmer months in North Carolina). The brewers and I then left town for an overnight stay in Hickory, NC to attend the annual Hickory Hops Beer Festival. This departure was not without trepidation; weather sites predicted thunderstorms, and the Triangle's power grid is notoriously susceptible to outages by lightning or strong winds. It would be risky to leave a fermenting beer unattended for a weekend with these storms on the horizon and no one to reset or recalibrate the automated systems if the electricity cut out. Yet Hickory Hops was an important event for the brewery; it was the largest festival the brewery attended throughout the year, one of the biggest beer competitions (silver or gold medals could reap notoriety and raises), and served as a vital social nexus for NC brewers, especially for novice brewers looking to make connections (or an anthropologist looking for data). It would be unfair to require any of us to miss it. So, unlike in Okinawa, we risked the beer to better ourselves.

It was a negligible risk, and likely nine times out of ten it would have proved unremarkable. Yet in craft there is always an element – often many elements - of production outside the craftsperson's control. In this instance these elements formed an extraordinary chain of other-than-human actors that seemingly conspired to undermine our work. First came the storm itself, which rolled through the Triangle around 11:00 pm Friday night. A questing bolt of lightning overloaded the brewery's power grid causing an approximately 30-minute outage. When power was restored, all of the solenoid valves that control the flow of glycol (a cooling agent) to the fermentation tanks clicked on, permitting the glycol's

circulation and dropping the beer back to safe temperatures. That is, all of the valves clicked on except for the one controlling the newly fermenting porter.

As many brewers will tell you, brewers don't actually make beer. Creating beer is the work of yeast; brewers are more like yeast farmers, producing and maintaining the environments in which yeast can thrive. When yeast makes beer, it eats the sugar in wort, the solution brewers extract from malted grain. In consuming sugar, yeast produces four by-products: ethyl alcohol, carbon dioxide, more yeast, and heat.[1] Most yeast strains are very sensitive to temperature and have optimal ranges in which they are most productive and produce the best flavors and aromas. When yeast gets too cold – say, 36° F – it goes into a hibernation phase which halts consumption and reproduction. Chilling fermenting beer, "crashing" in brewer parlance, is used to stop fermentation and allow yeast to settle out at the bottom of fermentation tanks for preservation, removal, and collection for use in future beers. Too much heat can scorch the yeast, distressing it to the point of temporarily or permanently damaging the culture, or even killing it. Even a little extra heat can be problematic; a couple of degrees over the optimal range can make yeast hyperactive, causing it to ferment faster and generate potentially undesirable flavors and aromas.

This latter scenario occurred that Friday night. The glycol was unable to properly circulate and cool the fermenting yeast due to the shorted valve, which allowed the tank to warm by 3° F, which in turn sent the yeast into overdrive. By the time we caught the issue Sunday afternoon, it was too late; the accelerated fermentation had taken two days instead of

---

[1] Properly maintained yeast can reproduce four to five times its original volume during fermentation.

three. This stressed pace created a buildup of butyric acid, a compound that occurs in strained fermentations and carries a noticeable undesirable flavor and aroma of sour milk.[2]

It was not a complete disaster, but it was pretty close. At least that's how the head brewer felt. Here was 18 barrels of beer - $20,000 of potential profit – tainted by undesirable characteristics and perhaps headed for the drain if they could not be remedied or at least masked. "I hope we're not fucked," the head brewer said while pacing the brew house. Rallying briefly, he followed this shortly after with, "It's going to be okay."

This began a week of worry and rumination on all our parts, but especially for the head brewer. We floated a couple of ideas as potential solutions. One was simple and passive: do nothing. Time in the tank and carbonation could mellow or even erase the offending characteristics. The other suggestion was more active: cut the beer with a strongly flavored additive that might cover up the butyric acid. Cold-brewed coffee was the most popular and strongly considered option, fruit puree another. But this tack had two caveats that gave the head brewer pause. First, adding something to the beer would mean fundamentally changing its profile and identity; it wouldn't be a porter anymore, but a *coffee porter*. We wouldn't have a straight porter on tap, potentially limiting our appeal to the already limited dark beer crowd to those who also liked – or didn't mind – coffee. If the consumer base was too small, the beer would sit in the serving tank for a year taking up valuable tank and tap space. We might still ultimately have to dump the beer for being too old (and unpopular). Second, even if we made peace with changing the beer's profile, there was no guarantee that the additive would solve the problem. In fact, the coffee or puree could

[2] More on butyric acid: While butyric acid is an important flavor compound in other contexts, it's generally considered an off-flavor in brewing. Butyric acid is produced by bacteria that thrives in warm environments with little to no oxygen. This is exactly the sort of habitat our rampant fermentation produced. See *The Oxford Companion to Beer* (2012:198).

meld with the butyric acid to produce something even more offensive. Both the butyric acid and the additive were partially known, partially unknown variables: they could react together in ways we had anticipated, e.g., the coffee masking the butyric acid, or in ways we hadn't – a sour milk coffee porter. Either strategy presented the risk of serving an unpopular, even undrinkable, beer.

Ultimately, we compromised on the less invasive approach. If the beer turned out bad, it sat better to some degree to have a beer that was bad because of forces outside our control (thunderstorms and rambunctious yeast) rather than one that was bad because of our intervention. Indeed, the sour milk notes did mellow over time and when mixed with carbon dioxide. Only a handful of pints were sent back by patrons with more sensitive palates. Some long-time customers even said it was our best porter to date. (This was a particularly galling sentiment, given the circumstances of its creation.) The beer sold slowly, as expected of a dark beer during the summer, but it did sell. Yet the head brewer remained unsatisfied. Once a week or so, he would pour a pint, sit at the bar, and scowl; he still tasted and smelled the butyric acid. He regretted not acting, even if that action was dumping the beer down the drain.

Enduring that regret, however, led the head brewer to a new resolve: to never spend another season questioning the quality of a product while it sat on tap. Indeed, nearly two years later when, as he and I worked together again, a mislabeled bag of grain imparted a cloying sweetness to an experimental brew, the head brewer kicked open a valve and watched the beer flow onto the ground and down the drain. "We can brew it again," he stated, seemingly resolved. Then, as if to add a post-script response to our unspoken anxieties over the waste, he disingenuously added, "who cares…"

Craft production, like perhaps all human endeavors, is steeped in uncertainty. Anne Allison, a prominent anthropologist and authority on Japan's contemporary social malaise, has introduced the notion of precarity, an *existential unease* pertaining to one's individual identity and place in the greater social milieu. Allison approaches precarity as a relatively novel phenomenon: a widespread contemporary anxiety related to over, under, and unemployment, the product of post-bubble Japan's three-decade recession and the destabilizing influence of neoliberal global capitalism. In other words, the Japanese middle-class used to have the dream of lifetime employment, but that dream has eroded leaving a significant segment of the working (and pre-working) population uncertain of its prospects.[3] I imagine this story is familiar to many Americans. I grew up in Michigan listening to my grandparents' generation reminisce about the auto industry, how whoever wanted to work could walk down the street in Grand Rapids or Detroit and get a job, a house, a family. Now the factories are empty, and the jobs have drifted overseas.[4] Precarity certainly is a word of the times.[5]

However, while precariousness may emerge in new forms or configurations, precarity itself - at least as it pertains to human labor and livelihoods - is not really anything new. If anything about Allison's observations are novel or strange, it's that salarymen in Japan and auto workers in Michigan enjoyed a period of seeming certainty in their employment.

---

[3] Allison 2013

[4] For a compelling account of the struggle to work and live during the emergence of the Midwest's Rust Belt during the 1980's, I recommend Christine Walley's *Exit Zero* (2013). Examining the impact of Chicago's declining steel industry on her family and her own childhood, Walley considers the repercussions of working environments on the livelihoods, communities and physical bodies of workers and their families.

[5] Enrico Moretti offers an enlightening study of the precariousness of contemporary employment in his recent *The New Geography of Jobs* (2012), in which he argues that growing overseas industry and the domestic shift from manufacturing to IT has unsettled American economic and occupational confidence. See also Ocejo 2017.

Work is rarely, if ever, without an element of danger. At a practical level, occupational attunement to precariousness is observable in equipment design (e.g., a fail-safe), best practices, insurance policies, unions, and working philosophies. But individual livelihoods also necessarily emerge within and can be irrevocably impacted by macro-scale socio-economic, political, and environmental forces. I experienced this firsthand making cheese in Okinawa during the summer of 2017: newly elected Donald Trump was engaging in a Twitter war with Kim Jung Un while North Korea fired test missiles over Japan, and my American military friends reviewed evacuation plans in the event that the strategically located bases were targeted. Suddenly, and surreally, our concerns over milk production and radio advertising were curtailed by a very real fear that the factory would be obliterated along with the island by forces oceans away. Ellen's response to the increasingly unsettling situation was as enlightening as it was fatalistic: "I guess we'll just keep making cheese until the bombs go off."

Grappling with uncertainty is a recurrent theme in craft communities of work, where it is often framed as the foil to industrious artisans. Sitting in a pub in western Michigan, my father excitedly recounted how Founders, a widely successful Grand Rapids-based brewery, had almost failed, only narrowly avoiding bankruptcy by cutting the chains on their foreclosed plant, sneaking in and brewing the first batch of what would become their most popular flagship brand.[6] Stories like these (which can occasionally veer into the exaggerated territory of tall tales) flavor the shop talk among craftspeople at conferences and festivals,

---

[6] According to Founders Brewing Company's official website, the brewery did face bankruptcy very early in its history. The bank threatened to chain the brewery doors, prompting the co-owners to buy a pair of bolt cutters just in case. However, they were never actually forced to use them.

My father reportedly heard his version of the story at an entrepreneur conference in Grand Rapids, positioned as an example of how determination can overcome staggering obstacles. I'm unsure whether the embellishments were a product of my father's retelling or that of the presenter, but it's interesting to consider how narratives of craft resilience can circulate in broader professional contexts and take on lives of their own.

and provide material for magazines, blogs, and memoirs that collectively represent the defacto public face of craft industries. Positioned as such, these stories serve an important purpose by reinforcing notions of how craftspeople ought to respond to adversity, i.e., with grit, determination, and a certain devil-may-care nonchalance. Expect difficulties as a craftsperson, they intimate - it's not all free beer and t-shirts - but endeavor to overcome them.

Industry publications and memoirs tend to position resilience as the ability to roll with the punches of entrepreneurship, keeping the doors open while maintaining their founding vision. Ken Grossman's (2013) account of guiding Sierra Nevada through its storied history and Sam Calagione's part memoir, part tongue-in-cheek entrepreneurial guide *Brewing Up a Business* (2005) are both illuminating examples of the struggle not only to survive in an emerging market, but to do so while upholding core values of quality, creativity, and integrity. Often couched in these first-hand accounts are narratives of ultimate, if gradual, success: if the craftsperson has enough skill, endurance, or courage, or the right combination of all three, their venture – and the ideals upon which that venture is established – will prove viable.

These perspectives are instructive, and I do not mean to imply that they are in any way disingenuous or contrived. They provide a valuable reference point for craft experience, and I've personally drawn on these narratives for inspiration in harder times. Yet there is also a certain hagiographic element to writing about the past, depicting "how we survived" from the perspective of those who survived. Sierra Nevada, Dogfish Head, and Founders had their struggles – and undoubtedly continue to struggle in myriad ways as all breathing businesses do – but the immediacy of danger has largely passed. These memoirs and stories are told

from the position of ventures that have succeeded, of people that will likely survive (at least financially) come what may.[7]

Again, this isn't to trivialize the ongoing journey of these craftspeople. Rather, it is to acknowledge another potentially illuminating set of perspectives, those told from the viewpoints of craftspeople currently engaged in the struggle to survive. These are the stories of those who haven't yet made it, who may never make it. These are stories full of the anxiety of uncertainty as resilience is lived on a quotidian basis where resources are tight, bills are due, and futures are unproven. They are also stories of profound hope, the unrealized potential change that propels so many craftspeople forward. These are accounts of the mundane techniques, dissonant philosophies, and small moments of triumph and failure that move craftspeople day-to-day in a context where tomorrow is not guaranteed. This is resilience in *progress,* in *practice.*

An appreciation of resilience in practice is a matter of perspective and distance. I spent a summer in Northern Japan's Tohoku region working with Buddhist temples in the wake of the 2011 earthquake and tsunami. One day in late July I helped board up an old temple ahead of an approaching typhoon. The next morning, I took the opportunity to survey the damage caused not only by the storm, but also by the disaster the year prior. I noted heavily scarred wooden paneling, chipped and glued together ceramic tiles, and cracked stonework. Strikingly, the entire foundation of the temple had shifted by nearly three inches, a permanent reminder of the earthquake's impact on the region. The temple's ledgers bore additional witness to the strain of trying to maintain a crumbling building in a dying

[7] Consider that one rarely sees books on shelves about failure or by those who failed, especially within entrepreneurial literature. Despite ultimate failure being a very real possibility for all craftspeople, it is rarely discussed as part of the industry's public face. This omission is important, as it informs the way we conceptualize entrepreneurship and risky endeavors like craft livelihoods and receive those who struggle.

community.[8] The priests and their families did their best to hide the worry etched onto their faces, wondering if theirs would be the last generation to tend the venerable institution. Yet from a distance of 100 yards, standing under the faded *torī* gate that marks the entrance to temple grounds, none of this stress and degradation was apparent. The temple stood seemingly as it had stood for nearly 300 years: intact, unbent, resolute. Observing resilience as a working process benefits from an intimate approach at which the ugliness and courage of its actors come into sharpest relief.

Drawing on my experiences living with craftspeople and working as one myself, I understand resilience as the struggle to keep going. This struggle was woven through my collaborators into their crafts, businesses, and communities. The fight to persist manifested in their works, in their professional and everyday lives, and in their ambitions and fears for the present, past, and future. This practice of resilience is the emergent trajectory of a living organism, rather than the ability to realize or maintain a particular structural form or identity. This is a study of people and networks constantly in motion, reacting and evolving in response to myriad internal and external forces only partially within their control. The desire for integrity still obtains, but sometimes it is as open-ended and bare as day-to-day survival: to keep the doors open, to keep producing, to keep living as a craftsperson.

[8] The steady depopulation and economic decline of Japan's rural communities has been extensively documented by anthropologists of Japan. Dwindling education and employment opportunities compel young people to leave their native towns and villages in favor of more prosperous metropolitan areas, chiefly prefectural capitals and Tokyo. Rural populations become increasingly gray and unable to support the already struggling economies. Deceased elderly residents are not replaced, and whole communities die out. While urban tourists and big city politicians bemoan the loss of small-town values and wax nostalgic about idyllic countryside living, there is little done by policy makers to stem the flow of resources out of these areas. For detailed accounts and analysis of this ongoing and widespread dilemma, as well as how rural communities have responded, see John Traphagan's *The Practice of Concern* (2004) and Satsuki Kawano's *Nature's Embrace* (2010). For a more recent follow-up, see Traphagan 2018.

This chapter explores the often-obscured dynamics that shape craft production and producers. I consider first the practices that craftspeople employ to navigate and survive a working environment marked by variability and steeped in precariousness. I examine the practical techniques and skills these artisans develop through a dexterous use of their bodily senses: taste, touch, sight, smell, and sound. Resilience in practice also entails an active engagement with historical precedent: drawing on the practical and intellectual methods that have proven effective in the past – the so-called industry "best practices." I also explore the psychological defenses contemporary craftspeople cultivate to grapple with the anxieties that emerge in their work and livelihoods. In doing so, I analyze the reflexive potential of these anxieties to shape not only how artisans labor within their professions, but also the ways they approach and imagine their lives. I close this chapter with the less noble applications of resilience: cheating, misrepresenting, cutting corners, and manipulating toward continued survival. Here I attempt to move past industry gossip and customer reviews to a framework for parsing why some producers, even those with seemingly sterling reputations, do seemingly disreputable things. This framework, what I call the ethics of survival, is not an attempt to excuse certain behaviors, but rather to provide context to better understand the complexities of practice as it emerges at the limits of resilience.

But let's begin with the good.

The Practice of Resilience

Resilience in practice is principally about making things work. This wide-ranging philosophy is economically expressed by the maxim, "No system is perfect. Work with the system you have," the oft-repeated informal motto of the Siebel program and a common refrain among my artisan colleagues. "No system is perfect" is not an excuse for bad beer or

cheese. It is rather an "and so what" acknowledgement of the lack of total control craftspeople invariably experience in their working environments. No one has the best equipment, the best ingredients, the best location, and the best personnel, and the ability to manage every contingency. "Work with the system you have" is a morally tinged injunction to make something *good* regardless of any limitations. In day-to-day work, I often hear provocative rhetorical inquests to the effect of, "If X can make good beer, and her equipment is garbage, what's Y's excuse?" It's not bad equipment or bad environments that make bad beer. It's bad brewers.

A good craftsperson, on the other hand, is able to make good – even excellent – products despite less than ideal circumstances. In my experience, craft endeavors can succeed with very little, or fail with much. Some of the best beer I had in Tokyo was brewed by a tiny restaurant down the narrow road from my pension. The "brewhouse" consisted of a one-barrel (31 gallon) mash tun and kettle nestled in a broom closet, the lone fermenter - a converted cafeteria stew pot - tightly squeezed in an alcove under the stairs. The brewers milled their grain with a small press run by a power drill, taking turns with the chef who used the same tool for grinding walnuts. The beer was great, the handiwork of a brewer trained at a local agricultural college, a stable of traditional and funky styles inspired by personal vision, consumer interests, and whatever ingredients were locally available or affordable to import. The space was cramped to be sure, but these tight quarters seemed to me to produce an intimacy between brewer, chef, and customer alike. By planning, and perhaps also by the intellectual osmosis of proximity - the chef and brewer could never stand more than ten feet apart during the workday -, the beer and food paired remarkably well (the term for beer/food pairing is *mariāju*, an English loan of "marriage" and an apt term in this context), with one

complementing the other gastronomically, aesthetically, and conceptually. This dynamic created a similarly engaging atmosphere; standing at the front bar, you could see the pieces working together, hear the banter, and feel like a part of the greater process. Rather than be impeded, this brewery was able to turn its seemingly disadvantageous small size into a feeling of camaraderie. Indeed, the brew pub largely subsisted - and continues to subsist - on a dedicated crowd of regulars who gladly paid thousands of yen nightly to be a part of the little craft community.

Some may be wondering why our brewery in the opening anecdote did not implement some sort of failsafe or monitoring system – maybe an app on our phones – to catch such an event before it could jeopardize our work. This question illumines a crucial dilemma of resilience in practice common to craft businesses. Simply, but perhaps not satisfyingly, it's because we could not afford the equipment or technology to implement such measures. The potential resilience of a craft business, like an ecological system, is directly influenced by the stressors particular to its genus and present in its environment. In this case, the primary stressor for our brewery – and for many small craft businesses – was money, the sheer economics of being able to protect the business and keep it afloat. We could, for example, replace our cooling system with a more contemporary digitally integrated system that would actively monitor tank temperatures and send data directly to us and our repair specialist. But that would also likely cost upwards of $10,000 with parts and labor, our potential profit for three months. Only breaking even for a whole quarter is a risky proposition in itself, considering the current precarious economic climate and fickleness of consumer tastes.

Ultimately, putting resilience into practice means operating with and often against the limitations of one's economic, social, and ecological context.[9]

Conversely, I've observed much wealthier operations fail to achieve the productive rhythms of their smaller, poorer colleagues. For instance, I briefly worked with a large production brewery that was able to furnish a 60 barrel brewhouse, nearly a dozen fermentation tanks, and an extensive canning line, but struggled to retain a brewing staff (largely due to low pay and unfavorable working conditions, per local industry gossip), and thus struggled to produce consistent beer and fulfill purchase orders. (I recently read that this same brewery plans to buy a new fully automated brew system, perhaps an attempt to bypass the human element.) Another brewery I observed was able to purchase land, a large warehouse, and a sizable production system outright with the help of a team of investors. Their plan was to gradually "grow into their facility" as interest spread and sales increased. However, the company's leadership decided to position themselves as a niche brewery in a bid to differentiate themselves from the competition. Unfortunately, this strategy ultimately fell flat when the brewery's traditional English styles failed to mesh with local tastes.

Greater resources can certainly bolster the potential of a craft business to endure hardship by replacing broken equipment and sustaining it through lean years. Yet these anecdotes suggest the potency of skilled craftspeople, artisans who grasp both how to navigate the complexities of their craft, and how to connect through that craft with broader populations. (I explore the latter more extensively in *Ouroboros*.) It should be noted here that the craft communities I researched did acknowledge the potential of equipment, environment,

---

[9] Here I draw on Heather Paxson's notion of an ecology of production, defined in her ethnography of craft cheesemaking as "…nested spheres of productive activity… made possible, organized, and constrained by broader social, economic, and legal forces" (2013:32).

and resources (the lack thereof, or an overabundance tied to investor expectations) to disrupt work and qualify a craftsperson's experience and product. I haven't found an underlying assumption among my colleagues that a truly skilled craftsperson can unilaterally triumph despite any or all limiting factors. Failure can happen to the best of us. Rather, the craft ethos of making things work privileges and emphasizes a craftsperson's resourcefulness and ingenuity in confronting and overcoming these myriad limitations and contingencies. Craftspeople recognize an ever-present degree of insecurity in their work; there's always the possibility that something could go wrong. Resilience in practice here is not about eliminating risk entirely, but rather minimizing its potential and mitigating what remains.

Craft production is always partly outside human control. Craft is not the labor of the craftsperson alone; the materials and even the environments of production have lives of their own. They express those lives alongside and sometimes against the craftsperson in shaping the both the process and the final product.[10] Consider the anecdotes from the beginning of the chapter. Both in cheesemaking and in brewing, the craftsperson can only partially control

---

[10] I draw here primarily on Bruno Latour's work on the agency of things, what has been dubbed Actor-Network Theory (ANT). For Latour (1988, 2005), agency is not strictly the domain of human beings and other sentient life, but more broadly defined as the capacity to effect change on the world. Anything, human, animal, material or immaterial can possess this form of agency. This agency is revealed when things interact through their ability to transform other parties, what Latour calls mediation. For example, a brewer cultivates a yeast culture, selecting for certain qualities, a yeast microbe feeds on sugar, transforming it into ethanol, and the resultant beer in turn intoxicates the brewer.

I also find Jane Bennett's *Vibrant Matter* (2010) compelling in its suggestion that all forms of matter, even seemingly inanimate things like metal and rock possess a spark of active life. Bennett imagines this life in terms of *vitality,* the capacity of things to not only impede human will and activity, but also to "act as quasi agents or forces with trajectories, propensities, or tendencies of their own" (viii). *Vitality* is the potential of a thing to change itself and the world around it, an *active life expressed through the ability to change the world around it* (viii-xiv). All things possess *vitality,* the potential to be *vibrant,* be they human, animal, or thing, animate or inanimate. Even that which appears death, that which is discarded, that which seems inert possesses a *vital materiality* (6). In this way, even a metal chain can possess a perceptible life. For instance, metal is the packing together of atoms, imperfectly fitted. Atoms wander in the free spaces between atoms. The quivering of these free atoms represents a metallic vitality, a life that expresses itself in various forms through the metal itself and across the assemblage (e.g., cracks in a chain) (59).

While those I collaborated with did not articulate their work in these theoretical terms, they nevertheless point to fundamental tensions animating the practices and philosophies of brewers, cheesemakers, and other craftspeople who are intimately aware of the power of seemingly inert things.

production. The non-human agents in both contexts, hostile weather and rampant microbes, resist the craftsperson's vision by actively interfering with their work. As noted before, the brewer does not brew a beer. Rather, a brewer works *with* variable raw ingredients, fragile equipment, idiosyncratic yeast cultures, and volatile climates to produce a beer. Each element, human or non-human, animate or inanimate, contributes to the creative process. Craft is always the work of many. Yet each element maintains a degree of inscrutability for the human coordinator: grains and hops fluctuate crop year to crop year, tools can break from everyday wear and tear without warning, yeast can rapidly mutate, and storms can suddenly explode across a sunny sky. The craftsperson is tasked with navigating these myriad uncertainties toward creating a finished product. From the chaos, beer.

Embodying Resilience

The practice of resilience obtains in managing the craftsperson's relationship to uncertainty: working on what can be controlled and preparing for what cannot. Resilience is enacted through an assemblage of skills, techniques, and dispositions that orient the practitioner to a working environment not wholly in their control.[11] Textbooks and manuals can effectively guide you through the basics of brewing a beer or pressing a cheese, but can only partially familiarize the novice practitioner with their new occupational paradigm. Adeptness in craft manifests more acutely as an embodied adaptation to the work environment. This adaptation is partly inherited during apprenticeship in the form of best

[11] My approach to resilience as an embodied practice takes inspiration from French sociologist Pierre Bourdieu's theory of *habitus*. Bourdieu (1977) defines *habitus* as patterns of behavior that humans develop in response to their social conditions. These patterns serve as models with which people organize their behavior relative society: the proper ways to speak, eat, form relationships, etc. However, these patterns are not monolithic; people are able to improvise, modify, and deviate from patterns to suit their needs and desires. Importantly, Bourdieu argues that *habitus* functions predominately at the subconscious level; people tend to absorb and rework patterns reflexively in response to the subtleties of their social worlds.

In *Distinction* (1984), Bourdieu returns to *habitus* to theorize the formation of cultural tastes, an application germane to the contemporary phenomenon of craft and locality.

practices and other forms of transmitted knowledge. It also emerges organically as a craftsperson realizes what works, what doesn't, and what can go wrong through a visceral engagement with their craft.

The craftsperson is the most fundamental implement in performing resilience. It is through their thinking, feeling bodies that craftspeople undertake essential tasks, envision profitable trajectories, and confront crises as they arise.[12] But as I have noted in the previous chapter, the body is a tool that must be honed to a new purpose. For many, this begins with an overhaul of the senses.

Craft labor draws on the five basic bodily senses: taste, touch, sound, smell, and sight. It is through these that most craftspeople first begin to understand the dynamics of their working environment. Yet while the senses they use are recognizable, the ways in which they use their bodies to navigate the complexities of practical craft can often exceed conventional application. Take, for instance, taste.

The tongue is a powerful and versatile instrument. Perhaps the strangest use to which I've witnessed taste applied was an eccentric head brewer who, for want of a more refined method, went through his brewery licking coolant pipes to detect any leaks of sweet glycol. But the more quotidian applications of taste are predictable: tasting raw ingredients to determine their freshness or defining characteristics, sampling finished beer or cheese for quality control or to write product descriptions. Taste is used not only to discern the good, but also – and more critically – to detect and diagnose the bad. Developing an expansive palette attuned to the subtle gradations of flavor is an invaluable skill for any craftsperson

[12] It is important here to discard the Cartesian distinction of mind versus body. Neurological function and bodily action are so inseparably intertwined that demarcation of the two, even theoretical, is unproductive at best, misleading at worst. I use "body" here as shorthand for this synthesis, and to emphasize the physicality of this dimension of resilience in practice.

working with food. Brewers, for example, encounter numerous off-flavors, including buttery diacetyl (the compound used to flavor movie theater popcorn), green apple acetaldehyde, the aforementioned butyric acid, and myriad soapy, solvent-like and even cardboard-like essences. A significant portion of a brewer's ongoing education involves learning to appreciate these flavors in increasingly minute concentrations, drawing the line between an acceptable and unacceptable presence. I have personally struggled with this component of the craft curriculum more than any other, having an inexperienced palate, but I have known seasoned brewers who can detect traces of oxidation in a beer by scent from across a table.

Like many brewers, distillers, and proponents of craft foods, I use "off-flavor" here as short-hand to indicate compounds like diacetyl and acetaldehyde detected in beer at levels unacceptable to taste or style. In practice, these compounds in moderations can be highly desirable in beer depending on the style and the drinker. In low concentrations, the buttery notes and viscous quality of diacetyl compliment the robust flavors and bodies of European stouts. In Japan, I encountered a brewery at which every beer I sampled regardless of style was exceedingly tart (e.g., IPAs and Pale Ales that tasted like Farmhouse Ales). It was apparent that the brewery's yeast strain was stressed, if not infected. I couldn't finish a beer, and many recent residents I spoke with – especially those who had experience with craft beer in bigger cities or abroad – disliked the beer, describing it as having a *hen* (weird) taste. However, the brewery nevertheless enjoyed a strong local following. Their general consensus: this was how *kurafuto* (craft) beer was supposed to taste. "Off" is truly upon the tongue of the imbiber.

Debates over matters of taste bring us to an important aspect of practical resilience pertinent to alimentary crafts: embodied resilience obtains not only in the craftsperson, but is

distributed to some extent across all bodies that interact with the craft and its product. In the context of beer, it matters not only what the brewer tastes in the brewhouse, but what the customer tastes and *expects* to taste when drinking a pint. The client's embodied experience of drinking directly impacts the brewer's livelihood; if the customer is happy, the brewer wins. But people do not always know what they want, and consumers, especially those in the craft market, can be very open to new experiences. While some brewers I've met work *reactively,* brewing well-established and popular styles, many others experiment *proactively* to find the next big thing. Anthropologists have long observed that social values of taste – what is tasteful, what people have a taste for – do not spring up organically, but are carefully cultivated by groups invested in certain trends prevailing over others.[13] It was through just such gradual husbandry that light fizzy lagers became the quintessential American beer, or exceedingly hoppy IPAs came to be associated with craft counterculture.[14] Craft brewers work to expand the palates and prepare the expectations of their existing and potential customers through engaging consumer education programs: detailed product descriptions, menus that detail the small-batch brewing process, and complimentary tasters. The owner of the cheese shop in Okinawa was notorious among island residents and visitors for his generosity in giving free samples of cheese; whenever approached about the potential profit

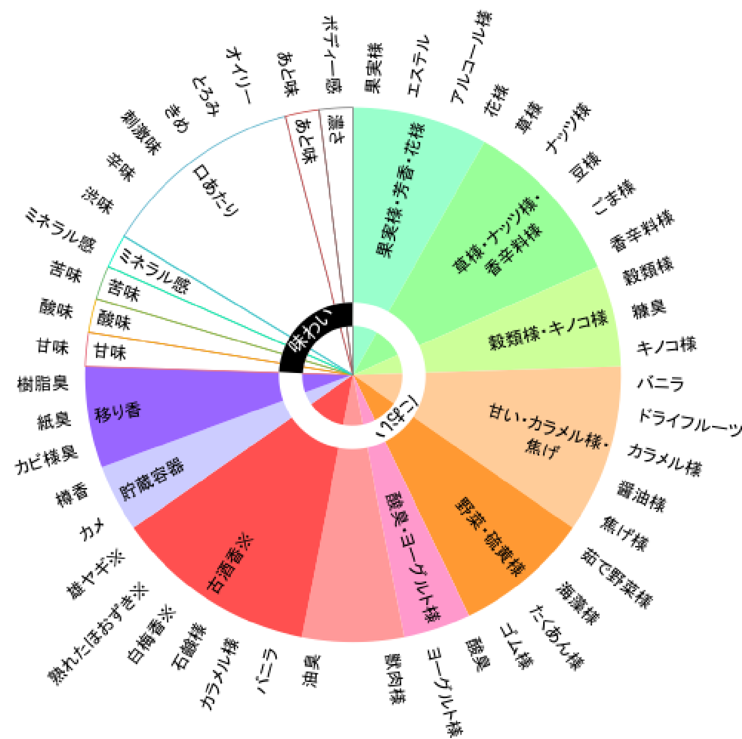
---

[13] In *Distinction* (1984), Pierre Bourdieu contends that the cultural tastes of dominant classes tend to dominate the tastes of the other social classes, thus forcing individuals of economically and culturally dominated classes to conform to certain aesthetic preferences, lest they risk societal disapproval by appearing to be crude, vulgar, and tasteless persons.

[14] For a history of how certain styles came to dominate different sectors of the beer world, I recommend William Knoedelseder's. *Bitter Brew* (2012) and Tom Acitelli's *The Audacity of Hops* (2013). *Bitter Brew* traces the history of Anheuser-Busch from the perspective of the Busch family from the company's inception to its eventual takeover by InBev in 2008 and its aftermath. Knoedelseder's narrative is significant for detailing the extensive marketing A-B employed to secure market dominance, ensuring that Budweiser was *the* American taste for beer. The rise and fall of the Busch family and the struggle of A-B to survive changing markets and consumer trends also serves as a useful illustration of resilience in action. Comparatively, Acitelli presents an anthology of vignettes from pioneer craft brewers working in the shadow of A-B and other macro-breweries and endeavoring to carve out their own market as a counterpoint to mass-produced lagers.

lost by giving so much cheese away, he excused it as a cost of acclimating the local population to artisan cheese. How could he expect someone to buy a premium product without first verifying by taste that it was indeed worth the price? Elsewhere in Okinawa, I worked with Foreigner's Awamori Appreciation Club, a group of expats fond of Okinawan craft distilleries, to assemble and translate a flavor wheel for awamori tasting based on the same diagrams used in American breweries. The club's idea was to use the wheel as a conversation piece and helpful reference to attract non-Okinawans to the local spirit. Cheese samples and flavor wheels are strategies borne out of doing business in a market saturated by choice and dominated by multi-million-dollar advertising campaigns. By taking a more visceral tack in educating minds *and bodies*, craftspeople are able to entice consumers who desire a greater tangible connection to what they consume.[15] However, while an effective, increasingly necessary strategy, it is through the dissemination of taste that craftspeople can again encounter the dilemma of partial control: you can lead a customer to the bar, but you can't make them drink.

[15] Weiss (2016) provides a detailed analysis of how craft and local food purveyors work to educate potential customers, drawing them to artisanal commodities by empowering their clients with the knowledge to discern quality products. This includes cultivating a basic understanding of the work involved (e.g., techniques, working conditions, etc.) and how this work distinguishes a craft and/or local product from an industrial product.



Awamori Flavor Wheel, courtesy Awamori Gaikokujin Dokukai, Okinawa, Japan.

Returning to the craftsperson's body, touch is arguably the handiest sense (pun intended) when it comes to a number of applications. One of the first lessons I learned as an assistant brewer was to test water cleanliness not by sight – visual acuity and lighting quality varies – but by touch. Rub your fingers between a stream of water flowing from a pipe or tap. If your fingers generate friction, it means the water is clean. Slippery fingers indicate chemical, the result of the top layers of your epidermis dissolving away. Touch took on a greater importance in cheesemaking. Wading my hands day after day in one hundred degree plus whey, I gradually learned how the subtle differences in a curd's texture and firmness indicate when it is ready to be strained, cubed, and pressed. It took over a year after retiring from the craft for the persistent burn damage to finally heal.

Learning through the body can be a double-edged sword. The incremental conditioning of craft builds the muscle memory, dexterity, and awareness that sensitizes the skilled body to the subtle rhythms of the workshop. A craftsperson develops a *feeling* for their craft in the literal sense. But these skills can come at the cost to the body itself. I often observed the hands of my brewery's on-call handyman, affectionately dubbed the "Grim Reaper" for his proclivity for delivering bad news, as he broke down and rebuilt a fan motor: his nimble fingers flew over the small bolts and threaded delicate wires, adeptly conversant with what was to me an esoteric amalgamation of metal and circuitry. I also registered the off-white scar tissue that discolored his knuckles and the lengths of most of his calloused fingers. Here were the echoes of countless burns from acid, flame, and friction, the currency with which the student paid his tuition. As I argued in the introduction, the pedagogy of craft is an accumulation of injuries, minor and significant. This practical education does not end with apprenticeship but continues for as long as one maintains an embodied connection to their craft.

Seeing the daily damage to the exposed skin of my hands, my wife would often ask incredulously why I wouldn't wear gloves at work. At the time, it was mostly because gloves were not available in the shop, and because everyone else worked without them. I gradually realized that the lack of gloves was not due to negligence, but necessity. Gloves could protect our hands from burns, but the protective barrier would also engineer a separation between our bodies and the medium of our craft. How could I collect useful data if I couldn't feel the water or curd? A fellow brewer justified the risk of these visceral techniques: "If I run water with caustic between my fingers, then I know there's no more caustic when it stops burning.

Better my fingers than someone's throat." Ultimately, bare touch was a far more accurate and cost-effective tool in matters of literal life and death.

My craft colleagues operated within a cacophony of sound. The restless growling of a boiler, the steady whirring of a pump, the soft bubbling of a fermentation, and the lively chatter of a full taproom compose the everyday rhythms of their working lives. As I explore at length in chapter three, craft is fundamentally a collaborative, communal process; sociality is as unavoidable as it is necessary. Learning a craft means learning to listen, attuning oneself to a unique chorus of meaningful sounds both human and nonhuman.

For better or for worse, contemporary craft production, at least that of many craft foods, is often heavily mediated by mechanical and motorized equipment. The increasing accessibility of smaller-scale power plants and packaging systems allows a greater degree of hardware and automation in small craft businesses.[16] Some I spoke with, most of whom were craft consumers rather than producers, saw mechanization of small-scale craft production as a shame, a tragic but necessary artifact of the times, or even a betrayal to traditional unmediated hands-on craft labor. Yet many contemporary craftspeople find these metal and plastic interlopers essential to survive in an increasingly competitive and precarious marketplace. Survival in a capitalist market ultimately comes down to making money, and

[16] Packaging beer is a useful example here. During the emergence of the craft beer market in the 1980's, there were no specialized canning or bottling machines for small-scale operations like Sierra Nevada or Anchor Brewing Company. Distribution was chiefly the purview of macro-breweries, and the packaging systems on the market reflected that scale. Smaller producers looking to package would either have to buy a used macro system and scale it down, or for those with engineering and DIY skills, fabricate one.

These restrictions no longer apply. The craft beer industry has grown with consumer interest, birthing a range of ancillary industries including micro-canning. Companies like Wild Goose (Denver, CO) offer prefabricated and compact canning and bottling systems for small-scale breweries at reasonable costs. Contemporary packaging systems have also become increasingly user-friendly, offering streamlined designs more approachable to less the mechanically-inclined. It is more possible than ever now for a modestly-sized craft brewery with limited technical experience to acquire and implement a quality, cost-effective packaging and distribution program.

turning a profit demands the ability to produce a sufficient quantity of something consistently and at a manageable cost. Modern conveniences that improve speed, efficiency, and proper storage can play a critical role in this. They also bolster the accessibility of certain crafts, allowing a greater diversity of practitioners to participate in a greater variety of localities. While some do emulate traditional methods and conventions as faithfully as possible (cost be damned!), the average contemporary artisan cheesemaker does not have access to the naturally occurring climate-controlled cave systems of their predecessors. Enter the refrigerator.

The steady mechanization of contemporary craft production introduces a dynamic set of actors – co-workers – to whom craftspeople must listen and attend. Really, this is nothing new. The artisan's workshop has long proliferated in specialized implements that take on lives of their own and, in doing so, urge the craftsperson's consideration.[17] Modern innovations only change the composition of actors. In order to perform, craftspeople are obliged to discern the nonverbal communications of the tools that animate and enable their trade. Like a veteran mechanic listening to an engine, a well-attuned craftsperson can often diagnose the health of their work environment from sound, sifting through the clamor for ominous rattles and suspiciously missing buzzes. One head brewer I worked under could tell if a CIP sprayball was jammed based on whether the water ejected from the ball made an even splash when coating the stainless-steel kettle.[18] Another could tell from the creaking of

[17] A treatise on brewing published in 1874 devotes an extensive chapter to the then newly designed saccharometer and what its application means for modern beer production (see Loftus 1874).

[18] CIP stands for clean-in-place and refers to the internal cleaning systems installed in many contemporary brewing vessels. CIP systems often consist of a pipe connected to a sprayball which, when fed a water or chemical source, will spin and coat the interior of the vessel with jets of the water/chemical. This mostly prevents brewers from having to climb inside the vessels to manually scrub, a definite plus if you're claustrophobic.

pipes whether the boiler was straining to keep up with demand or about to short out under pressure. I myself have spent hours on a ladder with a stethoscope pressed to a fermentation vessel, trying to pinpoint the faint bubbling indicative of a leak. As many craftspeople can likely relate, it always seems like something is about to break, that some new malfunction is always just around the corner. It often is. Age and use inevitably grind everything to dust. But often also the trappings with which we work give us, like thunder in the distance, some small indication of trouble to come, a warning to fix something now before it fails spectacularly later. By listening to the subtle changes in a motor’s rhythm or the steady drip of a tank, craftspeople can try to stay at least a half step ahead of disaster.

Human-to-human communication in craft can be no less fraught. Part of the auditory habitus of craft involves receiving the orders and requests, subtle intonations and nuanced speech of colleagues and customers to keep ahead of expectations and stay relevant in a competitive marketplace. For some, this attentiveness can come naturally. But others can struggle with the demands to be flexible and deferential. I noted the latter in a number of my apprentice colleagues. Many artisans I met in the course of my research did not come to craft directly, but as an alternative to (or escape from) an alternate profession. Some were managers, project leaders, or otherwise highly skilled and independent; they were accustomed to knowing what they were doing, being in control, and issuing orders, not receiving them. However, many found this power dynamic turned on its head when entering a craft; now they were novices, clumsy, and taking direction from supervisors the same age or younger.

One apprentice brewer I encountered in North Carolina had recently started an internship at a friend’s brewery through a brewery program at the local technical college.

Prior to brewing, he had worked as a headhunter for an IT company, recruiting specialists to work for his parent company and its affiliates. He worked largely independently and primarily from home, and had been effectively his own boss for over a decade. Now as an unpaid intern (he was still working his day job when we met), he chafed under the direction of head brewer six years his junior who insisted on monitoring and double-checking his every move. His frustration manifested in a sort of shaky bravado: he would brag that he was actually pushing the head brewer to perform as much, if not more so, than the head brewer was pushing him, that he and the head brewer were not so much employer/employee but professional equals, and that the head brewer often deferred to him in matters of creativity and process. The intern was fairly candid with his perspective with anyone who would listen, including the head brewer. This caused a lot of friction. When I asked my friend for his assessment of the matter, he put it plainly: the intern didn't like to listen. His arrogance inhibited his ability to take direction, to modify his practice, and to learn. He felt he already knew it all, so why listen to someone else?

I'm not without sympathy for characters like the intern. In some ways I can empathize, having had to stow my professional academic identity to assume an apprentice's identity on multiple occasions. However, through these experiences I have also come to appreciate the importance of being present in the moment. Regardless of the knowledge and experiences one carries into a new occupation, being willing to listen to a greater diversity of voices allows a more profound and nuanced understanding of the world in which we live and work. Sometimes the best way forward is to slow down, breathe, and listen.

As I learned from my artisan collaborators, a craftsperson's sense of smell has numerous parallel applications with taste. In the context of food-based crafts, smell couples

with taste to detect off-characteristics. Olfactory sensitivity is critical, as an unwanted smell is often a sign of contamination. This was particularly pertinent in cheesemaking, where learning to recognize the scents of different mold cultures was the most noninvasive method of determining whether or not a cheese was maturing properly (cutting into the cheese was the most direct method, but this would waste cheese and expose the cut edge to oxygen and possible contamination). For a period of time, the cheese shop struggled with a yeast infection that primarily affected cheddars and other cheeses that used mesophilic cultures. The infection manifested as a rosy pink hue on the cheese's surface, which would have been quite fetching if not for the fact that the cheese also exuded a horrible aroma of sour feet and vomit. By researching in books and blogs, we concluded that a yeast infection was to blame. We worked from there to gradually isolate the cheeses into a separate fridge, mainly using smell to sift through the cheeses as the pink skin only manifested on some of the infected. This amounted to holding dozens of wheels of cheese up to our noses, inhaling, and fighting the urge to get sick.

Smell can also aid craftspeople and consumers in discerning the fine from the good from the great. I worked closely with an American craft distillery as a translator and go-between for a distribution campaign into Japan. Familiar with panel judging,[19] I also occasionally assisted with their product development as a taste tester. In one instance, the distillery had accidentally over-aged a run of whiskey in oak barrels; the resultant spirit had a remarkable caramel and vanilla nose, but an overpowering woody flavor. The distillers

[19] As I discuss in later chapters, beer, liquor, and other craft food competitions are notably consequentially to artisan production and livelihoods, bringing valuable feedback and recognition. Aroma (nose) is one of the main criteria upon which these products are judged. Being able to replicate the scrutiny of the judging panel in the workshop offers a critical competitive edge to those artisans willing to train themselves to detect the same subtleties.

resolved to taper the offending flavor by blending the whiskey with younger vintages. Their objective was to find a combination that would best maintain the striking aroma while also mellowing the taste. To this, they arranged eight samples and asked several employees and me to rank the blends based on aroma and flavor. Analyzing and cross-examining took nearly three hours, during which we smelled cups full of ground coffee to reset our senses. In the end (and quite tipsy), we were able to sniff and taste our way to a suitable compromise.

Either professionally or casually, the qualities and quality of craft foods and craftspeople are measured at least partly on their scent. A good nose quickly becomes an invaluable tool, and is highly sought after in the world of craft gastronomy. At the same time, an underdeveloped sense of smell may also indicate the quality of a craftsperson. Brian, the head brewer with whom I first interned, was forced to let an assistant brewer go when he failed to detect an infection in a batch of beer. The assistant had failed to adequately clean a fermentation tank before transferring wort and yeast into it. The remnant yeast and proteins from the previous beer spoiled during the following beer's fermentation, leeching butyric acid (see above) into the beer. The resultant beer smelled and tasted strongly of blue cheese, immediately apparent when the beer effervesced when poured. Contaminating a beer was bad enough – for Brian, it was the single terminable offense at his brewery – but insult was added to injury when the assistant kegged the beer and brought it to the grand opening of a restaurant owned by the brewery's former chef. When pointed out by partygoers, including the chef and the brewery's general manager and owner, the assistant dismissed their concerns, claiming that there was no off-characteristic and that they were too drunk to know what they were talking about. For Brian, furious at this twenty-thousand-dollar-error and potential PR disaster, it wasn't just that his assistant had been careless or belligerent (he

admitted to bearing some blame for not double-checking his subordinate's work). It was that, as an artisan, the assistant could not detect such a profound error even when it was pointed out to him by the average consumer. Brian fired the assistant the next day.

In an adjacent case study, the head distiller of the aforementioned craft distillery experienced an occupational midlife crisis when he failed to detect a similar infection. Again, the culprit was butyric acid, propagated in the distillery's heat exchange system. This ultimately contaminated three different runs of liquor, leading to three separate product recalls. When the bottles were brought back to the distillery for testing, several colleagues and me, along with the owner and assistant distiller, immediately identified the off-characteristics. But while it presented so strongly to us that we could smell the opened bottle across the table, the head distiller couldn't detect it. Yes, he noted, there was something slightly different about these runs compared to the shelf standard. Yet it registered to him as a slight sweetness reminiscent of Juicy Fruit gum. He wouldn't go as far as to say the off-flavor and aroma was an improvement, but it certainly wasn't bad enough to recall a whole pallet of bottles. Nevertheless, he conceded that if his customers and coworkers all detected something bad, there must be a problem. And, if he could not recognize that problem consistently enough to stop it from happening again, perhaps he was part of that problem. "Maybe I'm just losing it," he lamented over a glass of whiskey. "Maybe I just don't have the nose or palate for this anymore."

In honing the body into a craft instrument, it sometimes happens that particular bodies are not suited to the work, or that they break down in time. Many of my artisan colleagues in the US and Japan have had experiences with failed apprentices who just didn't seem to grasp the craft at some fundamental visceral level (see *Every Scar a Lesson*). But time eventually

makes a ruin of even the most tuned body. Thousands of miles apart, brewers Brian and Logan and cheesemakers Ellen and Dave at times openly wondered how long they could stay active in their profession; aching backs, arthritic fingers, and irreparably damaged livers served as painful reminders that every artisan's body, no matter how skilled, is finite.[20]

While undeniably still valuable, I've found sight actually to be the least potent of the senses, surprising given that sight is generally considered in the West to be the dominant human means of observation. Certainly, craft, and especially craft food, is a visual medium. If the first bite a consumer takes is with the eyes, then their first drink occurs when they see the can or pint. Aesthetics aside, my artisan collaborators gleaned a variety of data with their eyes. "It's always something," Brian would often exclaim, usually amid leaking gaskets or exploding pumps, lamenting the propensity of things in the brewery to break or malfunction. "You have to keep your eyes open. You also have to know where to look." In brewing and distilling, a valve opened when it should be closed or an unmonitored gauge can spell disaster, including mortal injury. The brewers I worked with consistently encouraged me to embrace an almost neurotic approach to visual assessment in the brewhouse; double or triple-check everything, and always keep an eye on hazardous elements. A brewery can be a surprisingly dangerous environment, and there never seemed to be a shortage of horror stories to reinforce the value of vigilance. One brewer I knew kept a picture of an exploded

---

[20] The majority of my artisan collaborators had no definite long-term career plan. When asked, most would just off-handedly reply, "Well, I can't do this forever," or something to that effect. Most who owned their own businesses were still relatively young, vaguely surmising that they would inevitably sell their business or have a relative or apprentice inherit it. Those without ownership had even less of an idea. Some of the brewers I worked with hoped that would eventually graduate into the rank of Master Brewer or Brewmaster, nebulous titles that generally amounted to consultancy for startup craft breweries.

Perhaps unsurprisingly, most of my collaborators did not want to talk about end games. Who does? But I imagine that some of their reluctance to consider or formulate even tentative plans is due to the craft ethos' preoccupation with action and creativity. Craft celebrates movement and newness, orienting practitioners and consumers toward the experience of endless possibility. It is maybe not surprising that those operating within a working philosophy so fixated on life have little inclination to consider death.

fermenting tank on his phone, a reminder of what happens when a brewer overcharges a vessel and hasn't triple-checked the failsafe. Brian had a favorite story about boil-overs: boil-overs occur when barometric pressure changes or disruptions in liquid surface tension cause boiling wort to surge over the top and out the doors of a kettle, spilling onto the floor and potentially unsuspecting brewers. A brewer he knew had an assistant who wasn't paying attention during a boil-over, and ended up getting splashed with the superheated brew, washing down into his boots and cooking his feet. His point was two-fold: never turn your back on a boiling kettle, and don't wear shorts in the brewhouse.

Yet sometimes applications of sight can be necessarily indirect. In contexts where the object of production cannot or ought not be viewed directly, other forms of visual data serve as mediators between practitioner and product. Brewers, for instance, are generally unable to view a fermenting beer with the naked eye: beer is typically fermented, conditioned, and stored in stainless steel vessels that intentionally prevent as little exposure to light as possible. Anyone reading this who has exposed a pint or bottle of beer to sunlight will know that UV light (and even florescent lights to a lesser degree) can skunk a beer in minutes. Brewers instead track fermentation and maturation by extracting small samples (each sample represents a loss, as it can't be returned to the tank), measuring gravity (the density of sugar in wort decreases as it's consumed by active yeast) and charting changes on temperature and pressure gauges. Similarly, in cheesemaking cutting into a cheese is the most certain way to see what's going on during the aging process. However, each cut also exposes the cheese's interior to oxygen and potential bacteria. (It also dries out the cut edge, creating waste.) Staring at her cheeses every day and keeping extensive records, Ellen could make educated guesses as to a cheese's progress without having to resort to invasive methods.

Some interventions, no matter how deftly performed, can damage a craft product. This is particularly salient in alimentary artisanship including brewing, distilling, baking, and cheesemaking, where every liter or gram sold counts and even seemingly minor meddling can radically alter a beer or cheese's appearance and taste. It is critical to employ a light touch. How much is enough, and how much is too much, are subtle nuances of practice that emerge from trial and error (with emphasis on error), and from knowledge shared and passed down within the community of work.

These working histories, the best practices of craft brewing or cheesemaking, acclimate the craftsperson to the contours of the working environments in which they are employed through embodied techniques of taste, touch, sound, smell, and sight. Through the gradual cultivation of one's body, this extra sense manifests as a situated awareness, an attunement to the workshop and all the actors, human and non-human, that animate it.[21] It's not a perfect synchronization (there is always some loss of fidelity), but it does enable a deeper sense of practical confidence. It's having a feeling for what *works*. In a climate in which so much can go wrong, where so much occurs beyond the craftsperson's control, the visceral practice of resilience serves as a means to at least partially navigate the tempests of craft.

Staying with the Worry

A chill freezes my insides as the bottom drops out of my stomach, that same feeling when you begin the descent from the apex of a rollercoaster. My head flushes as I realize how badly I've messed up. Maybe I forgot to close a valve or tighten a clamp. Maybe that weld in the tank finally failed. It's happening too fast to process. Either way, there's an

---

[21] Ingold 2000, Downey 2005, Ocejo 2017

unstoppable deluge of beer spilling out onto the floor. It's a $20,000 mistake, happening on my watch; the head brewer is on vacation, hundreds of miles away. I start to pace, panicking as beer and cold sweat soak my clothing. I'm surely going to lose this job. Will I ever work in this industry again? The room begins to spin around me. Then I wake up.

I started having nightmares about a month after turning professional (this is just one of several recurring episodes). I never had them as an intern researcher, at least not about craft matters (always about academic worries). I imagine something changed when brewing beer evolved from a scholarly interest to the means by which I supported my family. Now I had real skin in the game. I was now also officially responsible for production: if something went wrong with a beer, it was my name – and my reputation – cosigning. There was no hiding behind interloper status. My colleagues had similar experiences. Brian reported often waking up in the middle of the night, panicked that he had forgotten some crucial step in the process the day before. Images of bursting tanks or brewhouses on fire would keep him up until the early hours of the morning. Logan frequently punctuated his reasoning for doing this or that with "it helps me sleep at night." Glowering at a stack of unpaid bills, one hand on his forehead, another on a fourth pint of red, an owner/operator gestured exasperatedly at the codification of his mounting debt, "this is the shit that keeps me up at night…"

Coupled with embodied practice, the habitus of resilience demands the management of pervasive occupational uncertainty, i.e., the everyday anxieties of craft labor and of a livelihood dependent on the success of that labor. Where precariousness exists, and it permeates craft industries, it has often struck me that craftspeople take pains to ignore that precarity or act as if it doesn't faze them. Charlie Papazian, the patriarch of American homebrewing, is known for his trademark phrase "Relax, don't worry, have a homebrew."

This general mentality seems to carry through to professional brewers, many of whom read Papazian's work early in or prior to their careers.[22] But there is an implied, knowing wink in Papazian's call; a craftsperson cannot help but worry at least to some degree in a world in which so much can go wrong. (Hence his recommending the steadying hand of alcohol.) Resilience here is not the absence or disregard of worry, but the capacity to operate amid that worry. It is the ability to remain (at least outwardly) cool and in (partial) control in a context of *inevitable* crisis.

Anxiety was an interesting component of the craft livelihoods I observed and in which I participated, albeit a difficult one to pin down. This is particularly true in the craft beer community. On one hand, anxiety was a recurrent object of industry conversation. Sierra Nevada's Ken Grossman regularly frets over ethical standards and expansion in *Beyond the Pale* (2013). A prominent story arc from his memoir is the years-long legal battle he fought to secure ownership of Sierra Nevada from his erstwhile partner. Despite being recorded years after the fact, the strain of the experience is palpable in his account. Sam Calagione, founder of Dogfish Head, recalls his numerous brushes with disaster and bankruptcy humorously, effecting an almost cavalier attitude to bodily and entrepreneurial risk. Archeologist and beer enthusiast Patrick McGovern's *Ancient Brews* (2017) serves as an itemization of the pitfalls, compromises, and other frustrations McGovern and his brewer colleagues encountered in attempting to recreate recipes all but lost to the historical record.

[22] For a detailed discussion of the impact of Papazian's career and philosophy on the amateur and professional craft beer industry, see Hindy's *The Craft Beer Revolution* (2014).

Industry periodicals often strike a far gloomier tone, forecasting the end of the craft beer boom or some other storm on the horizon.[23]

Papazian's aforementioned call to eschew worry is widely circulated at the amateur level in the pages and emblazoned on the covers of his numerous publications. Speak at length to a homebrewer and you'll understand why: brewing can be tricky even with professional-grade specialty instruments controlling temperature, measuring pressure, and eliminating bacteria, and with years of professional experience. The average homebrewer, especially when starting out, often works with an uninsulated stockpot for producing wort, ferments in a plastic bucket, and brews in the back yard beset by all the variables of an uncontrolled environment. In some ways, it's a harder road.[24] Approached at the bar after a day of brewing, I swapped stories with a visiting homebrewer who ruminated on all the little things that had gone wrong with his beers: equipment malfunctions, stalled fermentations, cracked bottles. It was stressful, he noted, as an amateur craftsperson when each failure represented a waste of his limited free time. Sure, experimentation, trial and error, was part of the hobby's fun and challenge, but he at least wanted something drinkable to show for it. "Thank god for beer," he exclaimed, echoing Papazian.

---

[23] As I was researching and writing this book, the most prominently suggested threat to the craft beer industry was the proposed legalization of marijuana. There was growing concern and speculation among journalists and their informants that a core of craft beer drinkers – i.e., 20-30 somethings with expendable income and artistic sensibilities – would spend their drinking money instead on legally available weed. There were numerous pleas for craft brewers and brewery owners to find some way to jump on the cannabis bandwagon lest they be left behind. Beers brewed with hemp were one such response.

[24] Brewing equipment available to the average homebrewer has come a long way in terms of quality and sophistication over the past couple decades. While many homebrewers, especially those with limited financial resources, still brew with stainless steel kettle pots and ferment in plastic buckets, there are an increasing number of electric or gas small-scale mash-tuns, conical fermenters, computer-controlled chillers, and carbonation systems on the market. If you have the money and space, you could create your own tiny brewery at home. Indeed, some very small professional breweries – sometimes called nano-breweries – use this equipment commercially, further blurring the distinction between amateur and professional. This technological renaissance has no doubt been fueled by the current craft beer boom and emergent interest in craft production and DIY culture.

In the course of my research, I've encountered anxiety at a more visceral level where uncertainties indelibly shade the day-to-day rhythms of craft livelihoods. As noted above, Brian disclosed that during his first couple years as an assistant brewer he would sit up at night wondering if he closed a critical valve and, when he finally slept, would have nightmares about beer pouring out on the floor. (His nightmares were very similar to mine, and to many of the assistant and head brewers I spoke with over the course of my research and professional tenure. I like to think of these anxiety-induced dreams as almost a rite of passage for novice brewers, a passing of the torch from one neurotic generation to the next). Now the head brewer at the same brewery, his worries had metamorphized: he lied awake fretting over whether hops would arrive in time, whether new recipes would be successful, and whether the business and industry would hold out long enough to put his daughter through college. These concerns were made more acute by the fact that he, like many contemporary craftspeople I met, opted into the craft industry, leaving a seemingly more stable industry and lucrative career (in his case, business administration) for a job that pays on the low end of the middle-class spectrum (the average brewer is North Carolina makes around $38,000 annually)[25] in an occasionally volatile market of luxury, i.e., ultimately unnecessary, goods.[26] The pressure of this choice drives not only his worth ethic, but also his anxiety; he chose to take a risk and, if everything falls apart, he feels singularly responsible.

---

[25] This average salary is an estimate based on anecdotal evidence and the pay rates listed on online job postings.

[26] In his own ethnography of craft labor, Richard Ocejo (2017) argues that given the precarious work conditions of the modern economy, people increasingly pursue alternative jobs like brewing, bartending, and other crafts "because they provide meaningful work with many intrinsic rewards" not easily obtainable in the contemporary economy dominated by IT and office labor (xx). Many of Ocejo's informants working in the "craft" industries come from a Middle-class background with training - often college degrees - in the so-called "knowledge industry." However, these people either failed to find gainful employment in this industry, or found the work unfulfilling (136).

The concept of opportunity cost came up repeatedly working alongside craftspeople in the US and in Japan. Opportunity cost occurs when one mutually exclusive option is chosen over another, the cost of choosing that opportunity being the loss of profits or resources that could have come with the other options. My colleagues often wondered whether they had made the best choice in opting for their crafts. During rough quarters at the brewery, my aforementioned friend would openly consider returning to business administration or IT work (his undergraduate specialization). Ellen, the head cheesemaker I worked under in Okinawa, a British national, at times struggled with the fact that her commitment to making cheese abroad separated her from family and friends. A pâtissier I often drank with had missed the childhoods of his oldest two children while perfecting his craft in France and California. Now independent in Okinawa, he slowed down considerably, selling pastries out of his sedan's trunk to GIs and pocketing his newly found free time to play World of Warcraft with his youngest. In a rare case where craft was the more lucrative of two careers, I myself opted to give up teaching university courses on contract in order to brew fulltime. All of these instances lead to the same what-if questions: what if I picked the wrong path? What would I have if I hadn't chosen craft? What if I've made a big mistake? The costs of choosing craft can be steep, and the balance is regularly paid in anxiety.

While the risks of work and agency could weigh heavily, acknowledgments of anxiety were strikingly sparse in the daily lives of my collaborators and in the literature of their professions. It was not that anxiety was hidden; rather, it was palpable, painfully at times. Rather, for all the pressure it exuded, it remained largely unspoken. This presented a curious paradox of the craft working philosophy. While prominent figures like Grossman and Calagione do openly (and widely) share some of their more anxiety-inducing experiences, I

believe it's important to keep in mind that these accounts are shared years after the fact and by those who are widely considered successful by both their peers and the wider population. Artisans working in more vulnerable contexts can reveal novel and important perspectives on anxiety, but I found it difficult to access their experiences. Those I've worked with were reticent about sharing their trepidations. Many deflected questions with humor: a head brewer I collaborated with, having opened a new nano-brewery that year in a seemingly saturated market, joked that his strategy for standing out from the competition was to subvert consumer expectations in an age of quality craft beer by instead making "shit beer."[27] Others would deny anxiety altogether or forcefully redirect away from the question. When a steam generator repeatedly failed one day, Kyle, a head brewer I collaborated with, experienced a mild panic attack at the thought of how much it would cost to replace it. Yet when I voiced a similar concern, he lashed out, criticizing me for worrying too much and suggesting that I get a prescription for Prozac. Still others found solace in self-medicating, applying Papazian's advice to relax and have a homebrew at the professional level. One brewer I encountered mitigated the pressure of owning and operating his own brewery with a combination of his own beer and cocaine. The aforementioned Kyle drank liberally, switching between beer and hard liquor as his anxiety waxed or waned. Another head brewer took up cannabis for relaxation and creative inspiration. As I will discuss in chapter three*,* substance abuse pervades craft communities of work, particularly craft brewing. I postulate that this in at least in part due to the reluctance of craft brewers to openly discuss anxieties about their work.

[27] The subversion of expectations in this instance evokes the earlier subversion of craft beer. As memoirs and historical monographs are fond to recall (see Calagione 2005 and Grossman 2013), craft beer prior to the contemporary renaissance had a reputation for being bad: it was often a flawed product, inconsistently brewed by those with more heart than technical skill. Yet despite these shortcomings, craft beer survived because it was the antithesis of technically flawless, consistent mass-produced lagers. It was the unique quality of craft beer, warts and all, to defy the expectations of adventurous consumers looking to be surprised.

How can we account for this reticence? Why might craftspeople be hesitant to share the more intimate trepidations that come as part and parcel with their chosen professions? Given the amount of popular and academic literature and media produced about the craft (beer) boom in the past decade, why might occupational anxiety remain a relatively unexplored aspect of craft livelihoods? Drawing on my personal and ethnographic experiences, my impression is that widespread silence on the matter of anxiety – and on the darker, less savory aspects of the profession in general – emerges from collective and individual struggles to keep craft – at least a particular representation of craft – and craftspeople going.

"It must be nice to be a brewer." I've heard that sentiment often echoed in myriad ways during my research and professional career. Accountants, lawyers, nurses, and even my academic colleagues would express envy while sitting at the bar contemplating the idea of being paid to make beer. In one memorable instance, a drunken festival goer sidled up to my booth while I served an increasingly impatient crowd, exclaiming, "I bet this is the most stressed you've been all week. I'd love to sit around all day drinking beer. How do I get your job?" In fact, that moment was stressful, but not for the reasons my intoxicated interloper surmised. At the time, I was attached to a failing brewery set to close in several months, and this festival was the last opportunity for the head brewer and me to score some competition medals to add to our resumés before heading out onto the job market. We were fighting to survive. I didn't mention any of this, however, offering only "yeah man, cheers," my go-to reply for deflecting awkward encounters. I didn't have time to get into it, and I doubt the attendee, no doubt there to unwind, would have been interested in learning the structural uncertainties surrounding a product that for him was most likely an uncomplicated pleasure.

For many consumers, I imagine, craft beer is an uncomplicated pleasure. It (usually) tastes good. It supports small/local businesses. It's cool. The marketing of craft beer, including media representations and the performances of industry professionals - particularly brewers - is intended to emphasize these very qualities, most prominently its coolness. In the 1980s, Japan's Ministry of Foreign Affairs initiated a propaganda campaign bluntly named "Cool Japan." The objective of this campaign was to promote the aspects of Japanese culture that might most appeal to foreigners, specifically Western tourists: technology (robots and bullet trains), pop culture (anime and Pokémon), and traditional arts (tea ceremony and karate). While successful, the Cool Japan campaign has been (in my opinion, fairly) critiqued by anthropologists and other observers for promoting certain positive, marketable aspects of Japanese culture - largely devoid of context - while simultaneously, many would argue intentionally, obscuring less desirable, complex, and painful realities of everyday life in Japan: economic disparities, racial prejudices, and mental health crises (e.g., suicide).[28]

The capacity to appear impervious to uncertainty is an appeal to the perceived aesthetics of craft culture and consumers. Like a flight attendant who endeavors to smile and stay calm amid rude passengers and turbulence, being carefree as a brewer is a performance of emotional labor to sell both a product and an idea: air travel is comfortable and safe, craft beer is uncomplicated and cool. There is a prevailing "no worries" bravado in the craft beer industry. This is likely in part tied to ideals of toughness and bravery that circulate in an industry still predominantly occupied by men. More so, I believe it is a deliberate projection of an ethos animating craft beer and those that produce it. Mass production is frantic, beset by images of harried, grimy men pulling levers to the piercing shrill of stream whistles. Craft

[28] For a critical analysis of "Cool Japan" and its domestic and cross-cultural impact, see Anne Allison's *Millennial Monsters* (2006).

is cool, collected, artistic. It is *slow food*. This easy-going facade works to perpetuate the sentiment that craft beer is a *pleasure* to both produce and consume.[29]

Compartmentalizing worry is also a practical skill. A lot can go wrong in a craft workshop, especially during the more sensitive operations. “It’s always something;” it can feel like two more things break as soon as something is fixed, that some new crisis is always just around the corner waiting for you to let your guard down. The ability to keep a cool head and stay focused can turn the tide of disaster. One day, while cleaning a cheddar at the cheese factory during Okinawa’s rainy season, the sound of quiet scrapping was broken up by an ominous gurgling. Ellen and I looked around as it grew louder, increasingly alarmed until a pulsating column of water erupted from the floor drain. Days of monsoon rainwater had overwhelmed the local sewer system, propelling the runoff back from which it came. Ellen considered the rising water, now several inches off the ground, while I took a video with my phone (for posterity). “Well,” she interjected in her typically soft, collected manner, “we should probably move the cheese up a shelf. Let’s just keep an eye on it.” Then, as afterthought, “maybe grab a bucket just in case we need to bail out the factory.” She resumed her scrapping, unfazed by the murky flood now lapping at the ankle of her purple wellingtons.

This might not seem like a particularly high-stakes situation, and it ultimately wasn’t – the water level eventually receded after never rising higher than a foot, sparing the cheese and the bucket. But even seemingly minor crises are trying. Some mishaps can be legitimately scary. Imagine instead if the liquid wasn't muddy sewer water, but boiling wort.

---

29 Ocejo calls this sort of performance institutional charisma, an affective force that can not only motivate customers to participate, but also motivate workers to accept less than ideal working conditions or job security (2017:133). See also Meneley 2004.

Sudden boil-overs are frequent during North Carolina's spring and summer storm seasons, where shifting barometric pressures can push steam back into a kettle, violently rousing its scalding contents out onto the shop floor and any unsuspecting brewers. Be it searing liquids, pressurized gas tanks or boilers, or caustic chemicals, the threat of bodily harm or death is very real in some craft environments. Severe mishaps are not common enough to be an everyday occurrence – at least when a shop is run well – but they are common enough to compel thoughtfulness. Mistakes are more likely when working with old or second-hand equipment (as many craft breweries do), or when training an inexperienced assistant. Mistakes are bound to happen. *When* they occur, a steady hand and unclouded mind can save lives. Ruminating on worry, breathing new life into your anxieties every time you bring them up, can be distracting, even crippling. In day-to-day working life, perhaps it's safer to shut the worries away in order to focus.

Insulating oneself from anxiety can also represent a long-term survival strategy. All crises, whether major or seemingly trivial, exact a toll on a craftsperson's psyche. Immediate crises – flooding workshops, boil-overs, bursting hoses, etc. – are stressful to be sure, but I have found that it is the slower burning crisis of incremental failure that can dramatically wear down a craftsperson. Sometimes, despite all your training, your knowledge, your preparation, a project falls flat. This, I think, is the main social dilemma of craft production: it can only fully succeed when validated by others. And when that validation is not forthcoming, it can be brutal.

I have intimately grappled with failure as an artisan. The last quarter of 2018 was particularly harsh. My daughter was born in October, but prematurity and other complications necessitated an 11-week-long stay in the NICU. My wife and I visited her

every day; my wife would spend most of the day with Elsie, and I would walk down to the hospital from the brewery every evening. Watching her hooked up to monitors, not being able to take her home week after week while other families passed in and out in days, was an increasingly painful and depressing experience. Perhaps as a way to take my mind off things, my head brewer proposed I design a beer from the ground up, and, if the recipe was good, then we could brew a full batch for sale. Excited, I planned a sessionable (low alcohol) IPA accented with Sorachi Ace hops I had encountered in Japan, a nod to my previous fieldwork. The head brewer approved, and we brewed it. The finished beer was great in our opinion and in the opinion of the brewery staff. However, the beer struggled to sell. It took a long time to move all sixteen barrels – a good portion of that in donations – and customers were unimpressed. It was a hard hit to my confidence, and the anxiety it provoked only served to exacerbate an already stressful period in my life. But the head brewer took the misfire in stride: “Oh well. Better luck next time.”

The weight of trying to maintain and coordinate a complex web of human and non-human actors - distributors, equipment, customers, yeast - can be immense. Couple this precarity with the stresses of everyday life *outside* the workshop and it’s no wonder why a fair percentage of craftspeople burn out (see chapter two). This sort of fatigue is no doubt common across occupations, particularly small businesses in which fewer people handle a greater number of roles. But what I have found remarkable is the devil-may-care way in which contemporary artisans handle these tribulations, the desperado philosophies so many of my informants and those in craft literature employ to ride out the storm. I met a former brewer/operator at the bar weeks after he had shuttered his brewery. I asked him how he was faring. “Not bad,” he said. “Last week I kinda wanted to kill myself, but I didn’t. I guess I’ll

do some homework and try again." Whatever his actual inner thoughts, inaccessible to the outside observer, his was a performance of resilience characteristic of modern craft. A shrug, a laugh, a pint of beer. Try again next time.

Ethics of Survival

Tomas sank into a deck chair across from me, taking off his wire-rimmed glasses and massaging his tired eyes. It was evident from the dark circles and his two days of stubble that he hadn't slept much recently. He was working as a civilian contractor for a nearby American military base to make ends meet, managing the inchoate brewery in his severely limited free time. He was one of several owners of a start-up brewery in a sleepy southern Japanese coastal town, a late buy-in who had become de facto CEO when his partners had gone silent. By his own admission, he was in over his head.

"The bad news," he said, sighing and squeezing his brow, "is that the brewery is still in the very early stages. We're not as far along as I thought we'd be when I invited you down here." "How early stage?" I asked. "Well, we have a building that's perfect, but we don't have a permit because it's not zoned for combustible production." Tomas' brewery couldn't brew. They also didn't have any brewing equipment, save for a small homebrew kit; the owners couldn't justify buying the equipment until they had the license. "We need to sort out the paperwork to start moving again," Tomas explained, "that's why I was hoping you'd still help us. It's a pretty difficult situation, but I'm feeling hopeful."

The scope of Tomas' difficulties became starkly apparent when I looked over the paperwork he forwarded me later that week. The partners had already attempted to submit their license application twice, but the forms had been rejected both times due to errors and insufficient information. Now Tomas was trying a third time. Yet in an attempt to save their

dwindling capital, rather than seeking professional clerical assistance (numerous agencies provide bilingual aid for completing and filing legal paperwork), the owners opted to translate and transcribe their application using Google Translate. As a result, some questions had been translated totally inaccurately, leading to answers that must have been very confusing to the Japanese clerk tasked with processing the application. Most of the questions were either only partially answered, or not answered at all. For instance, the license called for a detailed breakdown of the brewery's flagship recipes,[30] necessary equipment and materials for producing said recipes, and projected production costs. The owners were reluctant to provide the full details, fearing that their recipes would be stolen, and not understanding why such information would be necessary. "Everything I learned about business in the States doesn't make sense here," a frustrated Tomas lamented during a follow-up meeting.

My arrival generated some optimism for Tomas and his silent partners, and a new plan: I would stick with the brewery-in-progress, helping to complete their paperwork while also training their Japanese and non-Japanese – mostly American and Western European - taphouse staff. Despite not having an operational brewery, the owners had built a taphouse through which they sold popular American and British pub food and craft beer, including their own, which was brewed on contract by a brewery in California.[31] Their primary

---

[30] Flagship is an industry and marketing term for the keystone product or products of the business. These are ostensibly the products that will make up the lion's share of sales and will help shape the business' identity (although this is not always the case). For instance, Budweiser and Bud Light are the flagship beers of Anheuser Busch.

[31] Contract brewing is a fairly common, although not widely discussed practice among start-up craft beer enterprises. It essentially outsources beer production to a larger and/or better equipped operation. The contracting brewery produces the beer for the contractee based on the latter's recipe and specifications. The contractee is thus able to sell and market the beer as their original product, despite not having the facilities or expertise to brew their own. This practice is also called "white labeling," referencing the absence of the craftsperson's identity attached to the product, or "ghost brewing," a play on the better-known practice of ghost-writing.

Contract brewing can take several forms. The most common in my experience is when a smaller brewery finds demand for their beer exceeding their production capacity. In this instance, the brewery either

customers were tourists from America, Europe, and East Asia tourists, with a healthy number of local Japanese regulars. This venture was intended to generate revenue and brand recognition for the planned brewery. I was to teach the staff some basic beer vocabulary, and how to conduct a proper tasting with customers in English and Japanese. It wasn't the brewery research I had planned, but it was a sufficient gateway into Japan's craft scene as I tried to find my footing in the community.

Yet things fell apart almost immediately. When I stepped into the taphouse for the first training session, the general manager had no idea who I was or why I was there; Tomas had not informed him at all. Assuming I was a new hire from the base (as were most of the foreign staff) despite my attempts to explain, he set me to work washing glasses. When the owner arrived two hours later, mildly inebriated (he had come directly from another meeting), he ordered a beer and launched into his ideas for my role in the business broadly, which seemed to have changed significantly in the interim. I would work at the taphouse in an expanded capacity, taking over many of the duties of the general manager as Tomas' de facto manager. I would pour beer, wash glasses, stack the inventory, order the beer, replace the point of sale system, while also training staff and completing the errant paperwork. I was generally okay with this, but Tomas took it a step further. In an ethically dubious turn, Tomas proposed that I pose as the brewery's head brewer, as having a head brewer onboard was a requirement for the license. I would have to declare that I was receiving a salary and sign off

---

contracts with another brewery (one producing below capacity) to produce their more popular beers. Other small breweries will rent space in larger breweries and still produce their own beer, although off-site. Another contract arrangement involves a non-brewery entity – e.g., a cheese shop, bakery, or other artisan business, a museum, or a golf course – contracting to produce a limited-run collaboration beer for promotional purposes. Typically, the contracting brewery is cross promoted in these partnerships, but not always.

The Japan-based business I worked with did not advertise that their beer was brewed by contract. They justified this by emphasizing that the beers were based on their recipes, and that contracting was a temporary arrangement while they worked to get their own facility.

on license documentation. This would be a strictly paper arrangement, Tomas appended. (I shouldn't expect to receive any salary.) A couple beers later, Tomas also suggested that I write a letter to the mayor of the city asking that the district in which the warehouse they had purchased was located be re-zoned so that they could use it as the brewery. Tomas rationalized that my domestic and international university affiliations would provide the leverage for this request.

More than a little taken aback, I noted that this all seemed like a tall order. I was also not comfortable with misrepresenting myself on legal documents, nor was I confident that I had the influence to rezone a neighborhood. This flustered Tomas, who saw my intervention as the last chance to get their project back on track. Yes, he acknowledged, it wasn't exactly above-board. But desperate times called for desperate measures. I nevertheless demurred. "Give it some thought," Tomas implored, "we'll work it out in the morning." Opting to extract myself from an ethically precarious situation, I walked out the door at the end of my first shift and never went back. I never heard from Tomas after that.

As I write this looking back on the little brewery in Japan that could have been, I note the anger and frustration in my fieldnotes. I felt I had been catfished, lured out and taken advantage of by unorganized, unscrupulous adventurers. But I don't feel that raw indignation anymore, and whether my initial assessment of their character was accurate or not, I think the situation these owners found themselves in and the choices they made were more complicated and extenuating than I first allowed. Here was a group of professionals (albeit from non-craft industries) who, through various circumstances, found themselves in a social, cultural, and bureaucratic context very different from the one they'd known. Despite conceptual and linguistic limitations, they still struggled to see their vision – an

American/European-style craft brewery in Japan that offered a fusion of Western and local tastes – to fruition and establish themselves in their adoptive community. But licenses and plans didn't work out, time stretched on, funding and patience wore thin, and things became increasingly desperate. As difficult as it may be to empathize, I don't fault them for taking a chance in trying to leverage me in a last-ditch strategy, however ethically dubious their methods might have been. Survival is a powerful motivator, and I've witnessed some pretty awful practices upheld in the name of keeping the doors open. I also know from first-hand experience how tenuous ethical lines can become when you're up against a wall.

To close this chapter, I want to consider the ethically ambiguous practices some of my collaborators and their colleagues employed toward their own and their business' survival. Publications, be they industry, academic, or popular, tend to focus almost exclusively on the virtuous aspects of craft: the honesty of local production, the integrity of artisans committed to their art, and their dedication to taking pains and not cutting corners.[32] Like the uglier sides of so many things, these practices are often overlooked or ignored. Yet shady practices are also a crucial component of resilience. The craft industry I encountered was sometimes driven forward by exploiting employees, misrepresenting products, and pilfering ideas.[33] In order to claim a comprehensive understanding of how contemporary craft

---

[32] In their ethnographies of artisanal cheesemaking and heritage pork farming (respectively), Heather Paxson (2013) and Brad Weiss (2016) contend that the enhanced value of craft commodities compared to industrial goods is a direct product of the perceived hard work that goes into creating the craft.

[33] Prolific chef and writer Anthony Bourdain reminisces extensively on the underside of work communities in *Kitchen Confidential* (2007), his gonzo exposé of culinary labor and lifestyles. Bourdain describes many questionable practices carried out behind the scenes of respected and decorated restaurants: drugs, sex, and recycled bread. His point in airing this dirty laundry is not to change the prevailing habitus of his profession – he is very clear on that point – but rather to marvel at how these dubious practices nevertheless contribute creating *good* food, functional businesses, and accomplished professionals.

endeavors can function, succeed or fail, I think it is necessary to appreciate both sides of the ethical coin: the practices we celebrate and those we abhor.

Anthropologists and other critics of work have repeatedly noted how ethical frameworks emerge in relation to particular forms and environments of labor, organizing community members – producers and consumers alike - around shared notions of what constitutes good practice and bad, authentic or inauthentic, morally permissible or impermissible.[34] But members of these communities have the capacity to question, ignore, violate, or otherwise form ambiguous relationships to these ethical norms.[35] While some of my collaborators justified unethical practices as a necessary measure to contend with their circumstances, no one I questioned felt comfortable when employing said measures. Ideally, they would never be used. But as this chapter – and this book – have tried to emphasize, craft never operates in an ideal state. These are not the ethics of an ideal state, but rather the imperfect ethics of survival that emerge in a precarious world.

Moving among small businesses in Japan and the US, I witnessed a number of less-than-above board business practices carried out in the name of craft. Intellectual theft was one. Perhaps the most egregious example I encountered was one foreign goods importer who would buy nearly expired bottles of beer from a prominent California craft brewery, relabel the bottles with his own sticker, and then sell the beer to fellow expats and curious Japanese interested in the American craft market. I had the opportunity to try a bottle – a relabeled chocolate stout - at one point working while at the cheese factory (we used a reduction of the beer to condition our gouda rind); it was light-struck (i.e., skunked) and had aged poorly in

---

[34] Heath, D. and A. Meneley (2010), Ogden 2011, Redfield 2013, Weiss 2016, Ocejo 2017

[35] Nordstrom 2004, Brodwin 2013

inadequate storage conditions. Yet the beer was still sold at a premium – 1000 yen (approximately $9 at the time) per bottle – due to being an imported craft product. The scheme was selfish: it preyed on unsuspecting non-craft drinkers (the majority of Japan's population), making a quick yen on their interest in a novelty, not caring that the beer would not only leave a bad taste in the consumer's mouth, but also possibly of their opinion of craft products broadly. (This same importer also once sold the owner of the cheese shop a bag of stale brown American Cascade hops for use in cheese, claiming that pelletized hops were supposed to be brown and desiccated.)

An established North Carolina brewery I knew through a brewer colleague encountered a more blatant instance of intellectual theft when their long-running winter seasonal beer was plagiarized. For anonymity's sake, I'll call it the Reindeer's Run. The beer was popular enough to have a cult following and represented one of the brewery's main sources of publicity and seasonal sales throughout the year. However, this popularly also attracted professional imitators. After a new brewery opened up several blocks down the street, employees at the established brewery began hearing reports of another Reindeer's Run circulating in the community. As it turned out, the new brewery had produced a copycat of Reindeer's Run, selling the beer through its taphouse under the same name even. While brewers routinely take inspiration from other artisans' work (many IPA recipes start off as a Bell's Two-Hearted clone) – such is the inherently collaborative nature of creativity -, it is rare to see such a blatant non-transformative infringement on another's intellectual property. It's unclear exactly how the new brewery's management justified this thievery. According to those working in the local brewing community at the time, the brewery sprang up abruptly in a saturated market captained by people who lacked technical training or experience and who

were relative newcomers to the craft beer industry unaccustomed to its etiquette. Perhaps the desperation of trying to survive immediately out of the gate, underprepared and underequipped, pushed the brewery to extreme measures. Whatever the impetus, the result was much clearer: the originator of Reindeer's Run issued a cease and desist, and its ersatz rival disappeared from taps. (The offending brewery's reputation never recovered, and later shuttered for want of revenue.)

These last two case studies are rather clear-cut examples of ethical malpractice. The line separating right and wrong is more starkly rendered, and more blatantly crossed. (It is likely more difficult to empathize with the offending actors, to try and understand the circumstances that motivate them to objectionable means.) But they are also extraordinary. More epidemic to contemporary craft is the subtle exploits that artisans employ to save time, money, and energy. These are the white lies of the craft world, convenient to the fibber and mostly inconsequential to the recipient (at least in theory). Yet it is through minor subterfuges that many craftspeople carve out opportunity in a precarious and competitive world.

The recent American sour beer boom provides an illuminating arena for this kind of artisanal opportunism. Styles characterized by a pronounced sourness including Belgians, farmhouse ales, and gose have become increasingly popular in recent years, specifically among craft breweries. When the trend really started to gain momentum in the mid 2010s, many craft breweries jumped on the bandwagon offering sours of their own. But sours aren't easy to brew. A good sour strikes a balance between flavor and sourness; the beer should not be one-note or overbearingly tart. Occasionally, brewers will produce multiple batches of a sour and blend them together into a single beer to even out the profile. Many brewers are also

wary of brewing sours due to the risk of infection. Sour beers often use specialized *Brettanomyces* yeast strains that can spread rapidly through a brewery, contaminating other beers or yeasts. (This can be particularly scary if the brewery uses a proprietary or heirloom yeast culture.) If an infection occurs, it is very difficult to completely remove unwanted yeast spores from a facility. Once the genie is out of the bottle, it can be impossible to put it back in time. Owing to this, some breweries with adequate resources, such as Wicked Weed out of Asheville, NC, have established entirely separate facilities that exclusively produce sour beers. Less well-endowed breweries have had to risk it, relying on strict sanitization regimes to ensure the continued viability of their non-sour products.

Still other breweries have entered the sour boom through less scrupulous means. When I was conducting fieldwork at a North Carolina brewery in 2015 as sour popularity started to flourish, stories began circulating in the craft community of breweries marketing failed or infected beers as intentional sours. The pattern was as follows: a brewery would produce a non-sour beer, but then by infection or mishandling introduce a souring element. Rather than disposing of the soured beer (as they likely would have done before), the brewers would instead take advantage of the demand for sour beers and the relative lack of consumer experience with sours at the time to sell an otherwise spoiled beer (and maybe also score some points with the hipster crowd). I recall many of my collaborators grumbling that it seemed so many of their American IPA-centric colleagues had become wild yeast specialists and unofficial Trappists.

The problem with this was not that the brewers were selling bad beers. Some of the unintentional sours were certainty unpalatable, unbalanced, and overwhelmingly tart, but others were actually quite good. Customers were not complaining. Rather, as one head

brewer I worked closely with put it, the issue was that the souring was not *intentional*. To call something a sour beer, or worse an established style like gose or lambic, was to claim that the beer had gone to plan. It was at core a misrepresentation. Some I spoke with argued that this wasn't a big deal as long as the beer was good: as long as the customer was happy, who cared? Don't be a snob! But many more agreed with my head brewer. They noted that all brewers make mistakes sometimes and that no one with any history in the industry has a spotless track record. But these brewers typically own their mistakes, either discarding the beer or marketing it as a one-off or even as a mistake. I encountered one brewery that had a tap dedicated to its mistakes. It was frustrating to see breweries operate as if they were above their mistakes, and to do so toward misleading their customers. Chronic misrepresentation could also poison the market against sour styles. One brewer I interviewed was angry at the prospect of a customer being unwilling to try his kettle-soured ale because they had a bad sour at a rival brewery, or had reason to suspect that all sours were mistakes (and all breweries selling them were crooks). He feared that the indiscretions of a few could severely damage the credibility of the whole craft community.

Fruit beers are another trendy phenomenon susceptible to exploitation. Fruit beer is an umbrella term for any beer brewed using fruit, and in which a fruit flavor and aroma are the defining characteristics. These brews are popular with many demographics – especially those who do not typically enjoy beer's traditional bitterness - throughout the year, especially during warmer months. However, fruit beers can also be very tricky to brew. In terms of consistency, fruit like grain and hops fluctuate from crop year to year in terms of flavor, color, and potency. The fermentable sugars in fruit add another layer of variability: it can be difficult to determine what percentage of the sugars from the added fruit will ferment out,

how this additional fermentation will impact alcohol percentage, and how the remaining unfermented sugars will impact sweetness. It is also difficult to predict how strong or subtle the fruit flavor will be in the final beer. Will one pound of blueberries for every barrel of beer be overpowering, or will it be undetectable? (These concerns are particularly acute when brewing with a new untested fruit.) Finally, the fruit if not properly sanitized and handled can become a vector for bacteria and wild yeasts that can infect a beer (although aseptic fruit purées have become increasingly available and affordable).

What is the right way to brew a fruit beer? Some brewers argue that the fruit should be locally sourced, organic whole fruit processed and added in the brew house. The more hands-on and labor intensive, the more pure or authentic the craft. Some who cannot afford or otherwise opt against local and organic premiums or the additional labor costs use cheaper and more convenient ready-made fruit purées (many of which are organic and, as mentioned, aseptic). But there are also those who, out of fear of real fruit's idiosyncrasies, convenience, or sheer economics, choose fruit extracts or emulsions. Brewing extracts are typically colorless alcohol-based liquids shipped in plastic jugs, cost mere cents per ounce (artificially flavored extracts are cheaper, naturally flavored, slightly more expensive), and require no specialized handling or storage. Some breweries make their own extracts (my brewery routinely made an extract from toasted coconut and moonshine for a coconut porter), but it is temptingly cost-effective to buy a gallon of mostly synthetic raspberry extract from a wholesaler.

If craft suggests taking pains, and craft consumers assume hands-on labor and whole fruit recipes - even if not explicitly stated - as a result of that emphasis, then is it misleading

to use extracts?[36] Is this corner-cutting, and if so, does it undermine the craft ethos? Does the use of extracts fail to even merit being considered craft? Some would say unequivocally yes. But I've met many more who make allowances. One brewer, a seasoned veteran well-decorated in regional and national competitions, excused extracts as a necessary evil of doing business in a competitive marketplace. In his perspective, fruit extracts provided an affordable means of enhancing existing beers and appealing to a wider taste community, particularly those who might not like a traditionally bitter or malty beer. Some of his colleagues argued that if these breweries couldn't afford real fruit (or didn't have the skill to utilize it), they shouldn't resort to substitutes. Yes, my brewer friend acknowledged, extracts were not ideally craft. Yet, he disliked such all-or-nothing dogma.

He admitted that his perspective wasn't entirely unprejudiced. To save money and time, he used an extract to brew his most popular seasonal beer. The beer was easy and cheap to produce, sold at high volume with great profit margins. Using extract also produced a very consistent flavor and aroma; no surprises from a bad bushel. The brewery depended on the beer's four-month production season to pay rent and overhead for the entire year. The money saved and made during this period also allowed the brewer and his staff to attempt more experimental beers during the remaining months, including many full fruit and organic honey beers, without worrying so much whether a recipe would hit or miss. If they poured too much money into a full fruit beer and that product failed to sell, the brewer rationalized, they'd take a pretty severe hit. Too many resource-intensive failures and they wouldn't make payroll. Extract beers were ultimately how the brewery keep its doors open. Furthermore, there was also no guarantee that his customers would like a purée-based version better. They might

[36] See Paxson 2013, Weiss 2016

even like it less! So why take the risk? Besides, the head brewer laughed, that extract beer won medals every year.

It is interesting to note that while my friend and many of his colleagues debated the authenticity of using extract versus full fruit or fruit purees, a number of traditional brewers would decry any beer that used any fruit flavoring, natural or artificial. For instance, the head brewer referenced here trained under a British brewmaster who believed that fruit belonged in cider, not beer. At least not *real* beer. It wasn't until this brewmaster retired that my friend had an opportunity to brew the increasingly popular fruit styles. Demarcating the parameters of beer seems as old as the formalization of its production: the German *Reinheitsgebot*, the "purity law" in circulation since the early 16th century, restricted the ingredients in beer to water, malted barley, and hops. (The law would be amended later to allow yeast following the discovery of its central role in fermentation.)[37] Attempts to define real beer, be they nationally enforced purity laws or the grumblings of a traditionalist, suggest not only the ongoing struggle to brew *good* beer, but also how efforts to demarcate *good* or *authentic* are informed by the prevailing zeitgeist of food, work, and stewardship. Generally, contemporary American craft brewers stress the importance of taking pains in production, harkening back to idyllic eras when artisans produced small-batch commodities by hand with care.[38] *Good* beer is made without cutting corners. Yet only 500 years ago, a relative blip in the long history of beer production, *good* beer was "pure" as determined by the standards of the most prominent beer authority of the age. *Good* beer, *real* beer did not need the obfuscation of

---

[37] Rogers 2014: 20

[38] Calagione 2005, Grossman 2013, Hindy 2014

fruit and other adjuncts. So much for the hazy IPA's and breakfast stouts of their modern descendants.

Faux sours and fruit extracts exemplify how the practical and ethical contours of resilience are bounded and complicated by the context of practice. If resilience is the struggle to survive in a precarious landscape, then the available resources and prevailing expectations of that landscape structure not only what kinds of struggle are possible, but also communal opinion on how those possibilities ought or ought not be employed; in other words, how to survive, and how to survive *well.* A dissonance can emerge between what is good from an aesthetic standpoint and the more primal good of survival. In the above case studies, consumer tastes and surging demand prompt brewers to pursue trendy, profitable styles. Some have the capital and skill to engineer a nuanced sour or consistently brew with bushels of fresh seasonal fruit. Others are not so endowed, yet must still compete in the same finite economy. The capitalist dilemma of craft inspires workarounds, shortcuts, and other ethically dubious behaviors. And it is in this socio-economic framework that another set of practical ethics obtains, not in which bare survival is the end-all, be-all, but in which the desire to keep the doors open overshadows other more noble aspirations. Contemporary craftspeople do their best to adhere to the aesthetics of craft - hands-on, all-natural, local - but within the confines of one's material reality.

Craft in practice is not ideal. For those for whom craft is a livelihood, it does not – cannot – function as an idyllic cottage industry that privileges aesthetics and nostalgia over viability and profit. I have had the pleasure of speaking with hobby farmers and homebrewers who practice their art for art's sake. But these practitioners are largely insulated from the harsher currents that animate craft as a business. A study of resilience is indicative

of this. Behind the sublime is the visceral, the scars that painstakingly create a body attuned to danger. Hidden from public discourse are the daily skirmishes with melancholy, fear, and broken dreams. For all the beauty, there is compromise and fraud. Craft is a struggle brought to life by artisans adapting their needs, ambitions, and selves to the rhythms of a perilous workshop-turn-world. It is a messy, zoetic fight to persist.

CHAPTER TWO: FORTUNE & GLORY

"Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"
(Lewis Carroll, *Through the Looking-Glass,* 1871)

Early Monday morning, I stared bleary-eyed at the weekly production schedule. As a can of Boss coffee burned my bruised fingertips, my heart sank. I was seven months into my Okinawa fieldwork, five months into my tenure at the cheese shop. Ellen and I made two cheeses a day, four days a week. This week, like so many weeks, four of the eight available slots were occupied by the primary antagonists of my present working life: Pesto Camembert and Garlic Cheddar.

Pesto and garlic began their careers auspiciously enough. Initially born of boredom and necessity, head cheesemaker Ellen and owner Dave sought to create some new combinations that would break up the monotony of plain pecorinos and cheddars and potentially entice a domestic population that generally saw dairy as a deviation, not a staple. They observed that Italian cuisine, either prepared in the homes and restaurants of their Italian expat colleagues or more cosmopolitan Okinawan residents, was particularly popular on the island. If they could employ some of Italian cooking's characteristic flavors in cheese, maybe they could attract a wider audience of customers – American and Japanese – to try an unfamiliar commodity like artisanal (*kurafuto*) cheese.

Ellen and Dave's hypothesis was correct to a degree that exceeded their expectations. The Garlic Cheddar was basically as described: an English-style cheddar that when cubed was dusted in garlic powder prior to pressing. The garlic powder made for a cheese instantly

recognizable by its sharp aroma and brilliant orange hue, an artifact of the powder enhancing the natural annatto dye.[1] The Pesto Camembert was a truly unique creation. It was also Ellen's first independent *and* widely successful recipe. Rather than a dainty 3-inch circular pillow, Ellen's Pesto Camembert was roughly cubed, tossed in a house-made pesto using local basil from a friend's farm, and gently pressed into a basket with the topmost layer un-pressed to form what she called "craggy peaks." The cheese initially looked ghastly, a greenish-brown stained clump of curds. But as it matured, the mesophilic and penicillium cultures coated the cheese in a fluffy, snowy blanket. When cut into, a cross-section of the finished cheese revealed an intricate marbling of creamy white and vivid sage green.

When samples of garlic and pesto hit the shop (Dave encouraged a very liberal try-before-you-buy policy, arguing that taste was ultimately the best sales pitch), the cheeses rapidly gained traction among local cheese enthusiasts. What's more, the cheeses increasingly won patrons away from what Dave referred to as the "Kraft crowd," customers who generally opted for mass-produced, mild, and/or processed cheeses. The Pesto was particularly popular with Japanese customers, many of whom had sensitive palates and were accustomed to mild flavors, and found in the Pesto just enough spice to be adventurous. The Pesto and Garlic quickly became the shop's number one and two top sellers, respectively.

However, the success of these cheeses came with an unanticipated cost. Dave's vision was to cultivate a workshop that embraced experimentation, that constantly tried new things, weird stuff, a place that would be known for having the most diverse, creative lineup of

---

[1] Annatto is a natural dye frequently used in cheesemaking to give certain styles – e.g., cheddar – an orange coloring. Natural dyes are made from the seeds of the achiote tree (*Bixa orellana*), but cheaper synthetic dyes also exist. The intensity ranges from a soft yellow to a deep vermillion depending on the amount of annatto used per unit of milk. Some in the craft cheesemaking community argue that annatto in high concentrations can also impart a slightly nutty or peppery flavor, but I have not personally experienced this.

cheeses. Theirs would be a business marked by innovation. The popularity of Pesto and Garlic presented an obstacle to this vision. As their popularity grew, their production demanded more and more of Dave and Ellen's finite labor power. The Pesto progressively evolved from a one-off experiment to a twice-a-month cheese, to a twice-a-week cheese (even more some weeks for special orders). The Garlic followed a similar trajectory. By the time I joined, Pesto and Garlic accounted for over thirty percent of the workshop's total production.

Dave and Ellen faced a dilemma. In order to keep experimenting, to stay creative and true to Dave's dream, they needed to generate revenue to pay the bills and, hopefully, expand the business to create even more styles. But in order to make money, they needed to cater to local tastes, making the kinds of cheeses for which people would actually pay. It was risky to develop a new cheese: you could get excited about a cheese, plan it out, make the cheese (sometimes over multiple attempts to work out the kinks), try to promote and educate the community on why they ought to buy it, and ultimately have it sit ignored on a shelf, a blow to both your finances and professional enthusiasm. But when that risk paid off, as it did with the Pesto and Garlic, there was a lot of market incentive and financial pressure to neglect other creative commitments in order to press the advantage and finally make some money.

Ellen was characteristically ambivalent about the predicament. Practical to a fault, she saw the value of prioritizing high-selling cheeses. After all, as she often noted, the objective of any business, craft or otherwise, was to make money. Yet she was not entirely without an artist's sensibility; she admitted on a number of occasions that making the same cheeses over-and-over again was "a bit boring," and she was sometimes chagrined over which cheeses had become so popular (she hated how the garlic powder's odor stained her hands

for days after production). For his part, Dave undulated repeatedly between wanting to grow the business by racking up sales, and nostalgia for his original vision of a "cheese laboratory." Working primarily as the cheese shop's marketing and sales force, he had a much more engaged experience of customer reaction to cheeses, and thus found more satisfaction in satisfying their wants. But he never lost his yearning for a place of unfettered creativity. Looking one day at shelf-after-shelf of pressed orange wheels and white baskets, the manifestation of his bid for profitability and sustainability, he wondered aloud if his business had "lost its heart."

Ellen and Dave's struggle illustrates an acute tension in the craft industries I researched, between creative expression and market popularity. In making a popular cheese, Ellen and Dave were able to substantially improve the business' profits and stability, but at the cost of committing the shop's limited resources – labor, time, and storage – to reproducing profitable cheeses over exploring new ideas, stifling their capacity to innovate. I encountered a similar impasse as a professional brewer: I've brewed flagship beers dozens of times for every opportunity to try something new. It gets boring. But fortune seldom favors the bold in matters of customer taste. Rather, it favors the practical and repetitive.

Even so, brewers and cheesemakers cannot subsist on practicality alone. Nor can a craft business. While a certain degree of consistency is required, change is vital for both a craftsperson and their enterprise. In this chapter, I consider how, why, and to what effect craftspeople cultivate innovation. I take innovation as the alchemy of continual renewal through which craftspeople evolve to meet the shifting demands of their fickle worlds and selves. Innovation is in-part expressed through creativity, the practices through which one transmutes the quotidian into the novel. Yet this transformation is at least partially

circumscribed: creativity is one part vision plus two parts compromise. Creativity is constrained by the economic, historical, and cultural dynamics of the working environment in which it is expressed, shaping the creation into something only partially representative of the original vision. Innovation is also expressed through the desire to overcome these limitations, to beat the odds, and to see one's creativity flourish. Passion is the fire that fuels craftspeople; the capability to engender constructive change kindles the flame that keeps practitioners invested in their craft. But passion is a capricious muse: the fire comes and goes, often without warning, and it can easily be extinguished when resistance becomes insurmountable or when craftspeople become complacent and resistant to change.

In the following pages, I explore innovation as practice and as animating force. In *One Part Vision, Two Parts Compromise*, I examine the practical dynamics of creativity as it is performed and realized in real-world contexts. I contend that *compromise* is the essence of applied creativity. Here I draw a permeable barrier between the realm of imagination and the reality of production, hereafter the *working landscape*.[2] Working landscapes are crisscrossed by prevailing currents, some stronger and some weaker, of economics, community, history, and culture. Craftspeople may begin with a vision, a conceptual plan of action, a theoretical wheel of cheese, an imagined brewery layout. But when enacted, these visions are pulled upon by the flows of the landscape, compelling the craftsperson to adjust course lest they risk capsizing. The pressures of market sustainability, social capital, and industry expectations operate in asymmetrical relation to the craftsperson's imagination: no idea implemented in the real-world escapes these conditioning factors. Some suffocate under the restrictions

[2] I borrow here from Heather Paxson's characterization of working landscapes, another term for her concept of ecologies of production, that encompass both the constellations of working agents – humans, animals, plants, tools – and the social forces that enable and constrain those agents (2013:32).

imposed on their vision. But not every craftsperson sees these constraints as limitations: some find a creative challenge in navigating the contours of their working landscapes, seeking inspiration and opportunity in creating not only against, but *with* its demands.

Burning High, Burning Low, Burning Out takes up this latter thread, considering how craftspeople, through their creative practice, cultivate passion. I use passion here in the everyday vernacular: as a catch-all term people within and without the craft industry use to describe experiences of enthusiasm and fondness associated with their work.[3] Passion is a reaction to what is still possible, the capacity to keep moving, experimenting, and changing. Innovation renews the self, enkindling the desire to keep going. As I illustrate, many craftspeople within the practice of creativity constrained by exacting localities and stifling professional conventions nevertheless find the space to innovate. Others are less fortunate, less endowed, less adaptable, and find their flame gradually – or suddenly - snuffed out.

Let's begin at the intersection of unbridled imagination and fettered practicality.

One Part Vision, Two Parts Compromise

I stood aside a high-top table, watching one of the brewers' dogs chase its tail. Nursing a beer, I considered how the collie running in a circle served as an apt representation of the evening. I also resigned myself to the fact that one beer wasn't going to be enough.

Our group consisted of two head brewers – one from the brewery I was presently researching, and one from a neighboring brewery, also a co-owner –, the neighboring brewery's other two owners, and an assortment of friends and wives curious to see what we

---

[3] My Japanese interlocutors most often described their work in terms of *kandō* (感動), the characters of which combine *emotion* (感, *kan*) and *movement* (動, *dō*). Used as a verb, my collaborators and friends would talk of feeling *moved by* their creations and the creations of others, and by the fact that they could sustain themselves through such *moving* work.

were doing. I was also there, but as an assistant brewer and researcher, I was relegated to the kid's table while the professionals talked. We had assembled to design and plan a collaboration beer, the first in a proposed series of joint operations. The idea was that both breweries, one established in the community and the other in its first year, but both struggling to attract customers, could join forces to produce something new and radical to bring people through our doors. It was a worthy plan: I've personally never witnessed a collaboration beer help revive breweries to the extent these brewers hoped, but collaboration beers can be a successful marketing gimmick, especially in tight-knit communities. Whether the community was interested in such a device, and whether the proposed beer would be good enough to capture that interest, was still academic at this point.

The head brewers leading the meeting envisioned our sit down as a jam session; participants – at least those with adequate experience or equity in the business – could throw out ideas, turn them over, and see what connected. In theory, this committee of creative, invested artisans and operators would ultimately land on a recipe that would be representative of both brewers and, given the diversity of perspectives artisan and otherwise going into its creation, could not fail to appeal to an equally diverse range of consumers. In practice, it was a drunken fiasco.

From my perspective, the issues began with a lack of clear vision as to what the beer would be stylistically. Would it be a light or dark beer, ale or lager, explosively hop-forward or sessionable, sour? These were all possibilities pitched by the head brewers in brewhouse get-togethers prior to the formal meeting. I thought some of the options would have been whittled down in the interval, but I was mistaken. The night started with a rehash of the possibilities. After thirty minutes of debate, interspersed with jokes and calls for more beer,

the brewers and owners settled on an IPA, arguably the safest choice.[4] This led to a discussion of how strong to make the beer: would it be a single IPA, or a double, triple, or quad?[5] Opting for a little risk, they decided on a double, aiming to finish at nine percent alcohol by volume (ABV). Forty-five minutes in, it was so far, so good. But it was at this point that the specter of compromise began to make its presence truly felt.

Having elected a style as a framework, designing the beer now became a matter of what grains, hops, and yeast to use (neither brewery used a proprietary yeast culture). This was where the vision truly began to unravel. My head brewer wanted to keep costs as low as possible so as not to draw the attention and oversight of the penny-pinching ownership. Likewise, the owners of the other brewery, struggling to keep their new business viable, wanted to avoid committing too much capital to the project. To save money, a "kitchen sink" approach was taken to selecting ingredients. We pooled our surplus bags of base malt (mostly 2-Row barley) - each brewery using a different supplier –unsure how they would meld. The specialty malts, normally carefully selected to tune color and character, were chosen from a small shipment the new brewery had received by mistake. For hops, the most critical flavoring component, each brewer or owner nominated a personal favorite; uncomfortable with denying anyone their darling, they compromised by using them all. The

---

[4] IPA, or India Pale Ale, is one of the most popular and enduring beer styles in the craft scene, and is characterized by a pronounced hop presence.

[5] Double, Triple, and Quadruple (Quad) are style descriptors typically associated with IPAs, and generally denote a greater hop presence and alcohol percentage. A Double IPA, also known as an Imperial IPA, are more intensely hopped than standard IPAs and finish at 9% ABV or over. Triples and Quads (written as Tripels and Quadrupels when associated with Belgian styles) continue this trend, incrementally upping the hops and gravity (although there is some discrepancy over where a Double, Triple, or Quad begins or ends).

yeast was another leftover: a spare packet of saison-style ale yeast.[6] Suddenly the beer was a Belgian.

What began as a potentially promising idea became a Frankenstein's monster of compromise. It wasn't what they had envisioned, a beer that would breathe new life into their businesses. While the beer fermented and conditioned, the head brewer of my brewery perseverated over whether it would actually be any good; he'd never attempted this sort of style full-scale. The collaborating head brewer and owners visited frequently during those weeks, attempting to strike a tone of brazen optimism by musing about the medals they'd surely win, and what the next collaboration would look like. Unfortunately, the sales bore out the former's fears. The beer failed to sell well even during its launch week. It sold a little better at the newer nano-brewery, perhaps because their younger clientele was more predisposed to high ABV and/or experimental brews, but both breweries struggled to find the market. The beer didn't help matters. It wasn't bad, just a little too weird. A little too tart, a little too hoppy, and a little too strong; the beer lacked balance and, most important for that area's clientele, good drinkability.[7] The whole project ultimately fell flat. Despite a writeup in the local newspaper and a couple of reviews from area bloggers, the helter-skelter Double IPA was relegated to a one-off experiment. And while the brewers remained on good terms, their breweries did not attempt to co-create another beer.

This case study does not present the image that people generally associate with creativity in the industry. In my experience, it is far more common to see or read accounts of

---

[6] Specifically, *Saccharomyces cerevisiae var. diastaticus.*

[7] Generally speaking, drinkability in beer is an expression of how easy the beer is to drink. Factors that improve drinkability include low alcohol percentages, mild bitterness or other flavor profiles, and appropriate carbonation – not too sharp, and not too flat.

wild experiments and daring risks that result in fortune and glory, often against all odds.[8] But I would argue that my vignette represents a more realistic depiction of the creative process in practice, not only of how craft visions are formed and translated into action, but also of the myriad forces that pull those visions into unexpected trajectories. The brewers began with a straightforward ambition: to create something that would excite the community. But like all the best laid plans of mice and craftspeople, the real world imposed its limits when it came time to realize that ambition. Differences of creative opinion, economic and material constraints, and finally consumer interests all contributed to the vision's practical misfire. Creativity is not boundless freedom, a vision made manifest without loss. Creativity is compromise.

In this section, I examine some of the real-world forces that compel this compromise. The *contours of the market,* shaped by available resources and consumer tastes, delineate not only what creations are possible, but which can flourish. The *expectations of the community* form dense tapestries of obligation and tradition that pull craftspeople toward myriad commitments at times contrary to their financial ambitions. Lastly, artisanal visions are judged in the *court of expert opinion* where industry colleagues, pundits, and other community leaders police the boundaries of what can and cannot be considered appropriately craft. Creativity *in practice* demands the flexibility to work against, alongside, and at time *with* these forces. For some of my interlocutors, these forces exerted a crushing pressure. But others found in these limitations inspiration to push the boundaries of their craft.

---

[8] As I noted in the previous chapter, there is a marked preference – or at least desire to publish – inspirational stories over those that terminate in failure. This is truer for the general consumer audience than for craft professionals, but I have found this trend still obtains in a community where the victories or disasters of like businesses are seen as a bellwether for the health of the broader industry.

Interestingly, the bi-monthly magazine *The New Brewer,* published by the Brewers Association craft beer trade group, includes a state-by-state report on recent brewery openings and closures. The inclusion serves as a general picture of the health of the craft industry in each state.

Contours of the Market

Sitting at the brewery's bar, worrying at a pint while going over our excise taxes, one of the myriad forms of documentation necessary to perpetuate a legitimate business, I felt a gentle tap on my shoulder that interrupted my tedious train of thought. A customer, a man in his 40's, neatly but casually dressed, introduced himself. He was visiting his daughter at the university and was just in town for the weekend. His server had pointed me out as one of the two brewers. He was hoping to have a chat to pass the time while he waited for his daughter to finish her class. He was a homebrewer and, although fairly new to the hobby, was thoroughly enjoying it. He was an insurance adjuster by trade and appreciated brewing as a creative outlet. It was nice, he reflected, to produce something with his hands that he and his friends and family could enjoy.

Our conversation eventually veered into talking shop. Had I ever brewed a stout with vanilla, he asked. Yes, I had brewed a chocolate stout that used a vanilla extract as a complimentary note. "But have you ever used real vanilla beans?" he amended. He had bought some organic vanilla beans from Mexico at his local homebrew shop, and there was just no comparison to store-bought vanilla extract. Apparently, his friend was bringing him some saffron next week, and he planned to use it in an IPA. "Do you ever try wild stuff like that?" he asked, beckoning for another pint. Not that wild, I explained, but we do try some new things here and there when we get the opportunity. "I'm not trying to tell you how to do your job, but you really should take some chances. You never know! People might really like a saffron beer!" He jokingly added that I better credit him when I make one

No offense was taken. He made an accurate observation: our brewery, like many craft breweries I encountered with limited production and storage capacity, played it safe. But to

also be fair, such outside interpretations fail to grasp that monotony or risk aversion in craft production is often not for lack of thought or courage (although it can be), but necessary practicalities. It is fun to brew a beer for the first time, to gradually dial in the recipe, to evolve it from a copy of Blue Moon or All Day IPA to something distinct and emblematic of your brewery. And it is rewarding to then see that beer, the product of so much work, catch on with customers, develop a following, and fly out the door, stacking the till in the process. But it is less fun and less existentially rewarding to brew that beer over and over again, dozens of times a year. But continually reproducing popular beers ultimately paid the bills. Sometimes – more often than not in my experience – you just had to bang out a tried-and-true beer to keep production moving and keep the doors open.[9]

On the bright side, unvaried as our tap selection was, at least we sold our beer. The expectation to continually produce the same beer was driven by healthy market demand. By way of contrast, I worked closely with another brewery that, despite all the efforts of the head brewer, struggled to sell enough to stay viable. The brewery was located in a military community; the majority of its patrons were active military personnel, retired veterans, or military families. The prevailing drinking culture favored mass-market International Lagers that could be easily obtained in base commissaries or local restaurants whether they were

[9] Herein lies a fundamental difference of perspective between professional brewers and amateur homebrewers. Again, I want to preface this by noting that I mean no disrespect at all to homebrewers; the creativity and passion of the American and International homebrew community is immense. Many professional brewers have their start as homebrewers – myself included – and what begins as an experiment in a garage often finds purchase on a brewhouse floor. But the liberty to experiment with premium ingredients and try wild style variations is a luxury more obtainable at the small homebrew scale, but seldom as available to full-scale professional operations. Organic Mexican vanilla beans or fresh saffron are expensive and represent a huge outlay of capital when bought for even a 16-barrel (496 gallon) brew versus a 5-gallon home batch. The homebrewers I've known generally brew as a hobby, not needing to make money off their beer. If a scotch-barrel-aged kvetch farmhouse ale is really good, maybe they win a medal. If it flops, they're out some money and personal time and maybe their pride takes a hit, but not typically their financial stability. Many professional craftspeople are very creative, but the financial risks and realities of professional craft diminish the potential of many to express that creativity.

stationed in North Carolina or Yokosuka, Japan. Some adventurous souls sought out locally or regionally particular craft beers, but they were a minority compared to those demanding a Budweiser or Coors Light. Refusing to cater to these restricted tastes, the head brewer suffered dismal sales numbers for his craft. (He eventually left this brewery to try his vision in a smaller community he hoped would be more receptive.)

Craft markets are not monolithic, but vary considerably in terms of available resources, product saturation, and community tastes. Resources are constituted not only by access to raw ingredients – e.g., availability and per unit cost of malt, hops, milk – but also the existing infrastructure to support the craft industry Craft brewers in Japan, for instance, struggle with high material costs due to having to import most varieties of malt and hops. In exchange, they benefit from a highly developed and cost-effect mass transportation system; consumers are more able, and thus more likely, to stay out longer and drink more knowing they can safely return home even if they're three sheets to the wind. (Hourly "capsule" hotels and a pervasive social ambivalence to public intoxication further embolden Japan's marathon drinkers).[10] American craft breweries have to worry far more about potentially overserving

[10] A visitor to Tokyo or Osaka may well encounter a drunken salaryman (*sararīman*) sleeping off a bender on a park bench, suit jacket folded neatly on the rail to avoid wrinkles, or slumped against a subway train door, unmolested by fellow passengers or the local constabulary. Once while visiting a friend in Fukuoka, I discovered a gentleman who appeared to be in his mid to late 40s sprawled across the top of a roadside hedge, out cold. I watched for a while as several police offers passed by, glanced at the slumbering man, and continued about their business. The man's situation aroused at most a light chuckle from some passersby, but the majority either didn't notice or didn't acknowledge what to them was a quotidian occurrence. This is just one instance from Japan's fascinating, yet arguably toxic, drinking culture.

For critical analyses of Japanese drinking culture, its origins, and its impact on Japanese society, I recommend Anne Allison's *Nightwork* (1994), which explores the intersection of drinking behavior and post-war middle-class work culture from the ethnographic perspective of a hostess bar. For more recent studies of alcohol dependence and alcoholism, I also recommend Amy Borovoy's *The Too-Good Wife* (2005) and Paul Christensen's *Japan, Alcoholism, and Masculinity* (2015).

their customers and how they'll get home, although ridesharing companies have addressed this latter to an extent in some areas.[11]

Markets can also become permeated by craft products, significantly limiting craft opportunity. Before the deluge of craft beer flooded communities and store shelves in the past decades, it was relatively novel to find a small-batch local brew.[12] While craft breweries of that era struggled more to educate consumers on the distinctive qualities and potential of craft beer versus the mass-produced lagers that dominated the market, there was also less competition from rival breweries with similar scales and sensibilities. Those who created the niche had it largely to themselves. According to the Brewers Association, as of 2018 there are 7450 craft breweries or brewpubs active in the United States alone, a number projected to continue growing.[13]

These breweries are not evenly distributed; Asheville, NC, had over 30 breweries in 2018 (with more planned), and boasted 21.6 microbreweries per 100,000 people in 2016, the third-highest concentration in the US.[14] But there are still plenty of communities that are yet to have any established local breweries, let alone too many. The brewer mentioned above who struggled to find purchase in the military city ultimately relocated to a rural community in North Carolina of less than 10,000 to help launch the town's first local brewery, giving up

---

[11] There are a number of tutorials and training programs in circulation that address how to prevent overserving alcohol drinks. One such is the ServSafe initiative administered by the National Restaurant Association. Having taken the online course in 2018, I can attest that it does adequately cover the basics of how to recognize intoxication and how to deescalate an inebriated patron when cutting them off. However, the instructional video examples the course provides are exaggerated and overacting- customers gesticulating wildly and shouting absurdities. As such, the course struggles to capture many of the subtleties of intoxication and thus convey how to detect and appropriately mediate between the patron and alcohol.

[12] Calagione 2005, Acitelli 2013, Grossman 2013, Hindy 2014

[13] The Brewers Association keeps a running count and history of active US breweries year to year. These statistics are available at www.brewersassociation.org/statistics.

[14] McCarthy 2016, Amcghee 2018, Glenn 2018

the conveniences of the metropolis but gaining a sustainable following (with only minor tweaks to previous recipes).

Interwoven in concerns over resources and saturation are the ebbs and flow of consumer tastes. Taste is an incredibly erratic phenomenon. I met many brewers who, echoing the cheese shop's philosophy, believed the best way to capture consumers' attention was to produce as diverse an assortment of beers as possible in search of the next big style. One brewery I worked with featured 20 of its beers on tap in its attached bar, 10 of those taps dedicated to one-off experimental brews. However, even if one is able to strike gold with the next New England IPA (all the rage in the late 2010's), that success is fleeting. Inevitably, as a style gains popularly and starts making money, other craft producers will vie for a piece of the action by making their own version of the style. Pretty soon every brewery has a New England IPA, the customers slowly but surely become jaded, and craftspeople arrive again at the problem of oversaturation. Conversely, at other times it seems that consumers are practically beholden to certain products, stubbornly resistant to anything that might rival the tried and true. I have sat in brewpubs that exclusively serve craft beer and overheard disgruntled customers lament that they can't have a Budweiser or Coors Light; "Can't I just have a *beer*?" was a common refrain. But prevailing tastes can also suddenly and unexpectedly change: looking over alcohol sales for the past three years, the general manager of a college town brewpub noted a steady quarterly decline in revenue. "When I was in school, we drank every day," he recollected, "What's happening to this generation?" This continues to be a reoccurring worry among many craft brewers: Has the bottom fallen out of craft beer? Is the market saturated to the point of exhaustion? Is the party over?[15]

[15] The owner of a brewery and distillery also explained his struggling sales in terms of generational shifts in taste, speculating that kids were opting to "stay home do Quaaludes on the couch" instead of drink beer or

But I don't think the party is ever over; it just evolves. The constant fluctuation of the market necessitates innovation at pace: find an opening, exploit it while you can, and then move with the inevitable change. React, renew, repeat.

I frequented a nano-brewery and pub in Tokyo that understood this principle well. Established in 2014, the brewpub's three-person team – a chef, a front of house manager, and a brewer - encountered many of the above forms of market turbulence in their short operating history. Craft beer has never been a particularly easy or stable industry in Japan. Traditionally, Japan has had a severely high production cap in place that taxes breweries whose annual output falls below a certain barrelage. This policy actively discouraged smaller breweries from entering the market, a collusion between regulatory bureaus and business conglomerates to protect the interests of macro breweries. This cap was significantly lowered in 1994, allowing many artisans to hang up their shingle. However, the first wave of craft brewers, for lack of technical training or an unprepared public, almost entirely failed.[16] It wasn't until the next millennium that a new generation of craft brewers, trained in technical schools and agricultural colleges at home and abroad, began to carve out a foothold by

---

whiskey. While changing preferences for recreational substances may play in a role in declining alcohol sales nationwide, the decline is also – and more predominately – the result of young college and professional consumers, faced with the economic precarity of the ongoing recession and rising costs of living, are attempting to save money by limiting luxury spending (Mull 2019).

[16] Of the breweries that survived this first wave, perhaps the most contemporarily successful and famous within and without Japan are YOHO Brewing (also stylized as Yo-Ho Brewing), founded in Nagano in 1996, and Kiuchi Brewery, makers of Hitachino Nest Beer (the bottles with the cute red owl), which opened as a saké brewery in 1823 and began craft beer production in 1996. Two commonalities the seem to bridge first wave survivals like YOHO and Kiuchi are 1) that the founders had considerable training in brewing and fermentation science prior to opening their doors - while Kiuchi built upon its foundation as a saké brewery, the original head brewer of YOHO purportedly trained at California's Stone Brewing (Jay 2013) – and 2), that these breweries attempting to distinguish themselves from their macro competition by brewing a diverse line-up of styles inspired by European and American small-scale breweries (Japan Beer Journalist Association 2015).

For a more detailed history of Japanese beer production, see Jefferey Alexander's *Brewed in Japan* (2013). For a sketch of the rise, fall, and rise of Japan's craft beer industry, see Mark Meli's *Craft Beer in Japan* (2013), which also includes a guide to active breweries.

brewing quality beers, educating customers, and appealing to more cosmopolitan tastes. Yet these brewers still face daunting challenges. For one, Japan taxes breweries based on their beer's malt content; the higher the percentage of malt in a beer, the higher the fees.[17] This incentivizes breweries to cut their grain bill with adjuncts like corn, rice, and sorghum, and punishes those who attempt traditional full-malt – and full flavor - beers. Add to this that Japanese consumers, like many Americans, generally opt for yellow, fizzy international-style lagers, and are more likely to play it safe with an Asahi Super Dry than experiment with a micro chocolate stout.

These local challenges were still very much at play when I encountered the brewpub in 2016 and as I followed them over the years. In response, the owner-operators devised a number of creative strategies to meet and overcome the constraints of their working environment. The first was to bank on taste as a point of distinction. The owners chose to prioritize flavor over avoiding taxes and tariffs, investing in premium malts from Canada and the UK and hops from the US and New Zealand. To balance cost, their flavoring adjuncts were predominately local and in season: hazelnuts, tart yuzu, and green tea. Their prices reflected their luxurious ingredients: ¥700 (approximately $7) for a half pint and ¥1200 ($12)

---

[17] Japan's tiered tax scheme has actually contributed to the development of three categories of beer separated by malt content. "Beer" (*bīru*) in Japan is classified as a malt beverage containing 67% or more malted grain as the total fermentable base. *Happōshu* (発泡酒, lit. "foaming alcohol," also sometimes translated as "sparkling wine" or "sparkling alcohol") describes any beer with less than two-thirds malt content, and is taxed at a proportionately lower rate. Below *happōshu* in both malt content and tax rate is the most recent category, "third-category beer" (*dai-san no bīru*), which often contain no malt at all (Meli 2013).

Interestingly, some craft breweries in Japan attempt to save money by applying for a *happōshu* permit instead of a beer permit. (Several brewers I interviewed claimed *happōshu* licenses were also cheaper and easier to obtain than beer licenses). Some of these breweries actually produce lower malt beers, while others use full malt despite the restrictions of their license, banking that the overworked and understaffed bureaucracy won't have the wherewithal to catch them. However, these breweries are still obligated to label their canned and bottled beers as *happōshu;* products receive significantly greater scrutiny from regulatory bodies and consumers when distributed.

Their hope, as one brewery I visited put it, was that customers would disregard the package when they tasted the better beer (and – like patrons of a bygone speakeasy - not give up the ghost out of appreciation and understanding for rogues working against an unfair system).

for a full. (Compare this to $3 and $5.50 in the US, respectively.) But rather than apologize for these prices, they paired their beer with equally high-end braised lamb stew, shallow-fried chicken (*karaage*), and fresh hand-cut potato wedges – the intersection of British pub fare and Japanese *izakaya* food, elevated. The handwritten menu and chalkboard beer list thus struck a clear tone: this was not your average bar, but something posh, distinguished, artisan.[18]

Second, while the brewery enjoyed a small but sustainable stream of new and regular patrons, the owners were still wary of market volatility. After all, the craft industry had crashed once before. To cultivate their patrons' enthusiasm, the brewer employed one of the most novel approaches I've encountered in my studies: he formed a club. The club was organized to commemorate and promote a hazy-style IPA that predominately featured Calypso hops, a unique American varietal rare among Japanese brews.[19] Affiliation was a very casual affair; all one had to do was show up at the brewery, order a Calypso pint, and they were officially a member. Club dues were similarly informal: the brewer asked only that members, assembled in a Facebook group, continue to enjoy the Calypso beer at the brewery and, if they happened to buy one of the club's specially printed t-shirts, to please wear the shirt to promote a communal atmosphere. The club's Facebook group posted regular updates featuring the most recent hop shipments (noting differences in color and acid content between crop years), yeast cultivation, and photos of t-shirt-clad patrons enjoying the beer,

---

[18] Distinction seems to be a common advertising trope among Japanese craft breweries. Whereas US craft breweries increasingly characterize their businesses and beers in terms of locality, small-batch, or hand-made, contemporary Japanese breweries tend to emphasize the diversity of their products – e.g., offering more styles than just lager of Japan's macro breweries -, and how this creativity translates into a top-shelf experience (at top-shelf prices). See Alexander 2013.

[19] Calypso hops are primarily used for adding aroma and flavor (as opposed to bitterness), and are variously described as imparting an apple, pear, stone fruit, pine, citrus, tropical, earthy or mint quality to beers.

often at locations other than the brewery. Outside of notices for festivals or guest taps hosting the Calypso beer, the blog ran no advertisements. Rather, the club celebrated the beer's creation and acknowledged the community that enjoyed it.

Forming a club in and of itself is not a particularly original idea. A number of American and Japanese breweries institute mug clubs; generally, regular patrons purchase a mug (usually larger than an average pint) that is stored on the brewery or taphouse's premises and entitles members to fill their mug whenever they visit, often at a discount. Other breweries host run clubs, bicycle clubs, yoga, and other get-togethers that pair drinking with exercise. Many of these may not require formal membership or dues, but still work to build community through repeat attendance and accountability. But the Calypso club was singular in my experience in that the proposed conceit of the group was to appreciate the beer as *creative expression*. This may sound self-evident: surely all breweries are actively engaged in promoting their beer. They are, but the focus is different. Mug clubs encourage customers to drink beer by cultivating a sense of loyalty, aesthetic and/or monetary, to a *place,* i.e., the brewery that holds their mug. Exercise groups promote beer as a reward supplemental to the focal activity; come, work out, and then treat yourself to a beer afterward. By contrast, the Calypso club simultaneously transcended the brewery and centered brewing: the little brewpub was an atelier, the locus of artistic imagination, from which sprang the more dynamic and essential creation. The art took on a life of its own beyond the studio. Drinking a pint, wearing a t-shirt, or following the blog represented an opportunity for club members to engage this life and to participate alongside the craftsperson in developing not only a new beer, but also a new community of taste invested not in a particular beer, but in the creative essence of craft more broadly.

Whether or not the Calypso community will be able to in turn transcend the precarities of economics and human apathy remains to be seen.

Expectations of the Community

Craft labor, like human creativity broadly, is enmeshed within the community, complex tapestries of relationships, conventions, opinions, and obligations.[20] Craftspeople work within and through these tapestries, the rhythms of the community enabling certain projects while constraining others. In a very tangible sense, communities shape what expressions of creativity are possible. French anthropologist Claude Lévi-Strauss used the artistic technique bricolage, the creation of a work by assembling and combining sundry materials and items at hand in the studio environment, to illustrate how people within a community draw on diverse elements of the available culture to create their practice of everyday life.[21] My artisan collaborators too pulled inspiration from their communities, be it locally-sourced ingredients or social movements, to create the things that become emblematic of their careers, businesses, and the broader craft. However, as French sociologist Pierre Bourdieu suggested, creative types are not limited to the elements in their immediate social field. Rather, they have the capacity to innovate within the patterns they're presented, to notice gaps, flaws, or opportunities, and to dream something more.[22] Whether these additions will mesh with the existing collage, or whether the radical improvisations of craftspeople will be found too dissonant in the court of public opinion and cast off, is a matter of trial and error.

[20] Bourdieu 1977

[21] Lévi-Strauss 1966

[22] See Bourdieu 1977.

The communities in which craftspeople and craft businesses operate present a double-edged sword of opportunities and pitfalls. On one hand, the craftspeople I knew that understood their community well, had a feel for the local rhythms, generally flourished. Despite the preponderance of Asahi and Kirin lagers in the Tokyo market, the Calypso club brewery found and courted a small but loyal band of gourmands in the heart of the city. Compensating for the dearth of locally grown brewing materials, an Okinawa brewery prominently advertised brewing with “coral water” sourced from a subterranean limestone cave as a point of homegrown distinction from mainland and international craft labels. On the other hand, miscommunication or misunderstanding can bring the walls crashing down. A brewer who grew up in a small town and worked in its craft community for over 10 years often told a favorite cautionary tale to curious listeners (and potential rival upstarts): an out-of-towner IT professional who fell in love with the town during a business trip decided to relocate and open a brewery. While his first batches of beer were still conditioning in their tanks, the owner visited the neighboring bar/concert space – an enduring local fixture - and abruptly demanded of the owner, sight unseen, how many kegs he wanted to buy monthly. The bar owner promptly dismissed the brewery owner. As word spread of the former owner’s arrogance, interest in the brewery’s beer dried up at other local bars and restaurants. “It’s a tight-knit community,” the local brewer explained. “Had he just been a little patient and listened more, he’d still have a brewery.”

Yet even while allying strongly with a community presents opportunities, it can also carry a restraining weight of expectation. Communities have minds of their own. One scenario in which these minds manifest is craftspeople and their businesses taking up social causes. In 2016, when North Carolina’s government passed the so-called “bathroom bill,” a

controversial measure that required people to use the bathroom that corresponded to the gender listed on their birth certificate, craft brewers came together in protest. Led by Ponysaurus Brewing Co. of Durham and Mystery Brewing of Hillsborough, over 30 North Carolina craft breweries contributed resources and labor to brew, package, and distribute the "Don't Be Mean to People: A Golden Rule Saison" both as a form of protest to what they saw as discrimination against the LGBTQ+ community, and to raise money for organizations supporting that community.[23] While the initiative garnered praise and appreciation from LGBTQ+ individuals, organizations, and allies, other locals were less enthusiastic, seeing the protest beer as either needlessly divisive – "businesses should stay out of politics!" – or anathema to their personal prejudices or their perceptions of local, national, or religious values. Rumor in the craft community at the time was that some of these disgruntled customers were expressing their displeasure by boycotting the participating breweries, particularly Ponysaurus and Mystery.

Communities also tend to express their collective opinion when they feel something is being (or has been) taken from them. Once a darling in the North Carolina craft beer community, Wicked Weed of Asheville fell hard from grace in 2017 when the owners accepted an offer for an undisclosed amount (rumored to be $800 million or more) and sold out to Anheuser-Busch.[24] While ownership characterized the sale as a "strategic partnership" and claimed to still be craft, the community felt betrayed. Here was a pillar of Asheville craft, a town fiercely proud of its identity as a rising mecca of independent beer, essentially discarding the community that made the brewery a success. Craft supporters experienced

[23] Specifically, proceeds from the Don't Be Mean to People saison were split evenly between Equality NC and Queer Oriented Radical Days of Summer (Hooley 2016).

[24] Furnari 2017, Kell 2017, Noel 2018

flashbacks to Goose Island's 2011 unprecedented 100 percent sale to AB InBev, a deeply upsetting event for Chicagoans who built and identified with the Windy City's quintessential craft brewery.[25] Consumers and merchants alike voiced their grief through their wallets and social media: calls to boycott Wicked Weed filled Facebook timelines and article comment sections, and some Asheville and other North Carolina beer purveyors refused to stock their bottles.[26] Yet as with Goose Island, this initial outrage at Wicked Weed had seemingly negligible long-term impact on the brewery's sales and community presence. Wicked Weed continues to appear on supermarket and bottle shop shelves, participate in craft beer festivals, and publicize its identity as an innovative local institution.[27] Bolstered by AB-InBev's multi-million-dollar distribution and advertising infrastructure, Wicked Weed was able to surmount local unrest by finding a surrogate in the broader, less personal domestic and international drinking communities.[28]

Building reciprocal relationships with communities is a critical component to the success of many craft endeavors, and a hard lesson learned to others. After all, unless a business comes out the gate with a strong multi-regional distribution platform or a lucrative

---

[25] For a thorough unpacking of Goose Island's formative years, the circumstances and pressures leading to its sale, and the aftermath of John Hall's decision on Goose Island, Chicago, and the craft community broadly, see Josh Noel's *Barrel-Aged Stout and Selling Out* (2018).

[26] The boycott extended beyond North Carolina's borders, with taprooms and bottle shops in other states joining NC businesses in clearing shelves, canceling orders, and hanging notices of Wicked Weed's excommunication from the church of craft (see Andrews 2017 and Shikes 2017).

[27] As of 2019, Wicked Weed emphasized on their website history section, "Wicked Weed operations, innovations, and brewing are managed by Wicked Weed employees in Asheville, North Carolina." (https://www.wickedweedbrewing.com/learn/our-history/)

[28] In a more cool-headed analysis, Cliff Mori, who admits a personal connection to Wicked Weed and its founders, speculates that Wicked Weed's decision to partner with AB InBev was partly to gain access to broader distribution networks – AB InBev providing the infrastructure to more easily sell across state lines – and partly to raise capital for future expansions. As an endnote, he does wonder whether the acquisition will allow Wicked Weed to continue brewing premium beer with premium products, or if macro cost-cutting will dull the brewery's craft edge (see Mori 2017).

collaboration with another organization, it will be at least initially financially dependent on its immediate community.[29] Thus, when craftspeople create, they are obliged to create with their community in mind if they want a chance to survive.[30] This does not mean only producing what a community is explicitly asking for; trying to anticipate what a consumer base *could* want is an important aspect of carving out a niche in a competitive marketplace (after all, the entire craft industry's impetus is based in part on the informed speculation that people would probably go for a hoppy IPA over a fizzy lager). Creating for the community is more fundamentally a practice of innovating in a way that invites the community to innovate *with* the craftsperson. Reciprocal working relationships, intricate explicit and implicit entanglements of give-and-take, are one method by which craftspeople ally the community to their cause, welcoming and obligating them to share in craft projects.

Creating working relationships between craft and community can be accomplished in part by creating and selling things that add value to the community, be it enjoyment, job opportunities, or local pride. But bare market transactions have their social limit: a craft business can't ceaselessly extract money from a community without giving something in return. One could argue that exchanging good for currency is an even trade; what more could be expected of a business? The answer, in practical application, is "a lot." For reasons I

---

[29] For instance, I interviewed a brewpub in Okinawa that, while selling their beer in their restaurant, relied primarily on their beer being distributed through a chain of island and mainland resort hotels owned by the brewery's parent company. As a result, the brewery's beer was not so much a reflection of local tastes, but a broad range of standard by-the-book craft styles – a weizen, a stout, a pale ale, an IPA – that would appeal to tourists and guests seeking a premium, but not necessarily *placed*, product.

[30] According to Brewers Association, around 48% of brewpubs and 24% of microbreweries of breweries have closed since the 1980's (Gribbins 2013). These figures have increased in more recent years in correlation to the boom in brewery openings (Furnari 2018). Journalists and analysists have suggested that mounting market competition and struggles to manage business logistics – particularly for brewpubs – may be the cause for a certain percentage of these closures (Crowell 2017, Furnari 2018). Based on my experiences with breweries like that run by the aforementioned carpetbagging IT professional and the cautionary anecdotes of my collaborators, it is safe to assume that a failure to connect to the community can also account for fair portion of these closures.

discuss further below, local businesses, and especially craft businesses, are caught up in webs of social expectation and responsibility that are inextricably woven into market commerce. I mentioned free samples briefly in this chapter's opening anecdote. I want to return to this, as I think samples, donations, pints on the house, and other forms of complementary service illumine the critical tension of reciprocity between craft creators and the communities for which they create.

Complimentary cheese was a recurrent point of contention between the head cheesemaker and owner. I did not realize the extent of the program, or the problem, until I had worked with the workshop and storefront for some time. Dave's argument was that the local population – native Okinawans, American service people, and mainland Japanese residents and tourists – would not be willing to buy artisanal cheese unless they were able to first appreciate. From Dave's perspective, most Japanese – and Americans for that matter – "cheese" was a whiteish or orangish, mildly salty (but mostly bland), inoffensive creamy pat or block. Fancy cheese was something you encountered in higher-end Italian or French restaurants, but not something you bought for the home. Dave wanted to convince these cheese novices to see his vision: that hard(er), strong(er) smelling, and sharp(er) tasting cheeses – *real* cheeses – were not only better-quality products, but contributed to a better quality of life. The challenge here was that the mass-produced six-packs of creamy camembert or bags of shredded mild cheddar cost around ¥200-400 (approximately $2-4), while Dave was asking ¥1000 (roughly $10) for 100 grams (and that being an uncomfortable margin).[31] How could he justify the price difference? For some, the artisanal or craft

[31] It's interesting to note here that Dave viewed mass-produced cheese and artisanal cheese as direct competitors. It was a zero-sum game: a customer buying a factory gouda would not buy a craft cheddar. Ellen, on the other hand, did not see the two as mutually exclusive. Rather, they served different purposes: an individual could use a cheap bag of shredded mozzarella for a pizza, and compliment that pizza with a tray of

(*kurafuto*) label was enough; of course, hand-made cheese would cost more. But others were not so understanding. But Dave believed taste could bridge this conceptual gap: if they could experience the cheese first-hand, they would appreciate his vision (and the associated cost).[32] Dave recognized that some profit would be lost in giving free samples. But this was not only the cost of doing business; it was the cost of changing the world.

Ellen acknowledged the utility of samples, and that it was in some ways unfair to expect customers to buy a premium product sight unseen. But she worried more about the expenditure of labor and inventory. It wasn't just that Dave gave away free samples in the shop; he in fact was notorious on the island for giving away copious amounts of samples (as social media reviews could attest). Dave's generosity also extended to community events – festivals, cooking classes, neighborhood parties – where he would carve up whole wheels of cheddar or pecorino, not expecting a single yen in return. This was essential to creating goodwill and spreading the word, Dave argued. The shop would make it all back and then some! But Ellen was unconvinced; what would motivate people to buy cheese if they could just get it for free at the next event? And given the workshop's limited production capacity (it was only Ellen making cheese most of the time), it was difficult to justify giving away such a relatively high percentage of the shop's output.

---

fancy pecorinos. These competing perspectives deeply influenced the aggressiveness with which Ellen and Dave approached their shared endeavor: Dave was more inclined to go to lengths to gain a competitive edge against "big cheese," discounting cheese and donating wheels to community functions, while Ellen was more content to live and let live, believing the two to exist in related but ultimately separate markets.

[32] French sociologist Michel Callon (1986) coined the term *interessement* to describe the practices and processes through which individuals associated with a project – e.g., laboratory research – draw additional supporters to the project and invest them in its success. The craft businesses with which I have worked, particularly those attempting to gain footholds in communities where their particular specialty is largely unknown, are engaged in strategies of *interessement.*

Ellen's struggle was compounded by her qualitatively different relationship to the cheese. While Dave did occasionally suggest recipes or (more rarely) participate in hands-on cheesemaking, these were predominately Ellen's creations, things she had labored over for months -sometimes a year - at a time. She envisioned them, made them, cared for them, and even sometimes talked to them (although she was embarrassed whenever caught in the act). To see cheese given away for free was like having pieces of herself carried out the door without clear purpose. Ellen was not romantic; the point of making cheese, she believed, was ultimately to make money. Ellen was proud of her work – a quiet but intense pride – and found that pride acknowledged when her cheese sold. The value of her work took on a certain tangibility when money exchanged hands. One or two samples per customer was an acceptable loss. But to see whole refrigerator shelves emptied without compensation was effectively an erasure of her efforts and, by extension, the expression of her professional identity.

The cheese shop's grappling with gratis cheddars was by no means exceptional; gift economies permeate craft communities and animate their enterprise. Alongside the transaction of commodities for currency or other valuables or services are complex networks of reciprocal gift exchange in which things are given not with the expectation of immediate reimbursement, but with the assumption that the goodwill or merit generated by the gift will eventually, if indirectly, return to the giver.[33] Breweries, for example, engage in gift economies at a variety of formal and informal levels. Perhaps you've gone into a tap house

[33] For a classic interpretation of gift economies and the practical and ethical dynamics of exchange, see Malinowski's *Argonauts of the Western Pacific* (1984). Malinowski's early ethnography describes the Kula ring, an intricate constellation of gift relationships connecting Trobriand Island communities. Malinowski contends that the exchange of practically useless but ritually significant jewelry and other commodities between island groups wove together the relationships necessary for all sorts of economic and social activity.

and had four beers. When you go to settle your tab, you find that the bartender charged you not for four beers, but only three. The comped beer is likely an implicit request for a nice tip, but it is also a material show of appreciation for the customer with the hope that they, impressed by the gift, will continue their patronage (and recruit their friends) at a later time. One brewpub I worked with maintained a close relationship with the local university, catering extensively to faculty and alumni functions. The brewery annually donated nearly 16 barrels (496 gallons) of beer to the university's athletics booster club, anticipating that the gesture would help call the brewery to mind when the club's wealthy members sought out future event spaces. Like Ellen, however, the head brewer struggled with the cost of all the free beer. Sifting through the season's inventory and sales records, head in hand, he wondered aloud whether these offerings actually translated into sales down the line. "I just don't like seeing our beer walk out the door."

There seems to be a prevailing expectation that craft businesses, as community institutions, will freely give back to that community.[34] I find that this expectancy is more pronounced among alimentary crafts: food and drink are perhaps seen as smaller ticket items, less intrinsically valuable or labor and capital intensive, and thus easier for the craftsperson to part with while uncompensated. I also think these assumptions emerge from the culturally communal nature of food and drink. Anthropologists, historians, and even casual observers

---

[34] The social positions and obligations in which craft business find themselves in some ways echoes the potlach ritual practiced among some North American First Nations people. In his classic study of gift exchange, Marcel Mauss (1967) describes the potlach as a festival in which village leaders, having accumulated wealth and resources due to their station, expend their fortunes in lavish – almost reckless – displays of gift giving to their community members. Mauss theorized two objectives for this ritual. First, by acquiring and then rapidly exhausting their wealth, leaders demonstrate not only their generosity, but their confidence in their capacity to reacquire what they've lost. They demonstrate the potency of their authority by brazenly flirting with risk. Second, Mauss argues that gifts obligate their reciprocation, albeit often indirectly. By giving to the community, the leader both obliges the recipients to continued relationships. And by giving in the extreme, the leader competes with potential rivals, out-doing them with the sheer magnitude of their generosity.

of human culture have remarked on the capacity of food and drink to promote communal activity by bringing people together and helping them *stick* together. This is both a product of food and drink's effect on physical and social bodies – a meal presents a common ground and alcohol eases inhibitions – and an aspect of its accessibility relative other craft commodities; it is generally easier for a group to share a wheel of cheese or keg of beer than a basket or painting.[35]

Participating in these gift economies can add up to a staggering cost for small businesses. During my tenure as a professional assistant brewer, we received donation requests from university associations, local businesses, and non-profit organizations for kegs at least twice a week. These requests were compounded by brewery co-founders and investors who, as stakeholders in the business, felt entitled to draw on the business to support their personal social or charitable obligations. In one year, we gifted nearly 45 barrels (1,395 gallons) of beer, or about five percent of our total production.[36] Two distillers working in the same community reported that their distillery gave away 1400 liters in 2018 to various community interests, an "obscene figure" in their opinion – over 12 percent of their total production. During one interview, the general manager of another brewpub gave an exasperated wave at his open laptop; his inbox filled daily with requests for gift certificates, kegs, or other assorted donations. Just that day, a table of lunching guests had flagged him down and asked if he would donate something to their auction for new playground

[35] Appadurai 1981, Meigs 1988, Watson 1997, Harrison 2005, Paxson 2013, Rogers 2014, Solt 2014, Weiss 2016

[36] 5% was only a portion of what the brewery gave away in free beer. The aforementioned practice of bartenders pouring beers gratis in expectation of larger tips was a time-honored tradition at this brewery as well. Add to that the beer the brewers and their guests drank on a "brewer's tab" and the kegs or cans they brought home, and the gift economy claimed on average over 10% of all weekly over-the-bar transactions.

equipment. When the manager hesitated, the head of the table threatened to never come back to the restaurant. "I can't wait to see what they say on Yelp," he sighed.[37]

Despite the burden, my collaborators universally deemed gift-giving an inescapable cost of doing business, and vital to building bridges with the local community. Yet they also admitted a pervasive uncertainty as to whether all the goodwill they presumably generated was actually impacting sales. Like supplicants offering a coin to the gods, these craftspeople could never be sure, and could never ultimately control, whether or not their prayers for commerce would be answered. The customers are deities fickle to the last. Even so, could they afford to resist these pleas? To a person, the answer was an emphatic "no."

Gift economies, local reputation, and community dependence present yet another instance of when the practical realities of creativity exceed the control of creators. Craftspeople who rely on their craft for their livelihoods express their creativity at the pleasure of their patrons. A brewer can ask $6 for a finely crafted pint of IPA, but it is the community of consumers who ultimately decide the value of that pint by their willingness to pay for it. For contemporary craftspeople in America and Japan, engaging the community through donations and other charitable work is one strategy by which they demonstrate the value of their craft. Yet, as these craftspeople become more successful, the community takes notice and intensifies their expectations accordingly. Like Alice, brewers and cheesemakers find that they have to run faster and faster still just to stay in place.

---

[37] Requests and expectations for donations are also very prevalent in restaurants, so much so that those within the industry have started to voice their frustration. In an op-ed for the Charleston City Paper, Angel Postell writes on behalf of beleaguered restauranteurs advocating that people and organizations pause before assuming a restaurant or other small service business has the means to support their cause. She advises that they first get to know the business they want to entreat – what their charitable interests are, what their budget is, second, provide flexible options for giving, and finally reciprocate by patronizing the restaurant (see Postell 2017).

Court of Expert Opinion

On April 1st, 2019, Craftbeer.com broke the story that the Brewers Association would be updating the Beer Style Guidelines to include "glitter beer" as an official competition category. The story, as implied by the suggested pairings of peeps and construction paper and glue, was an obvious April Fool's joke, but one that landed because of the industry controversy surrounding actual glitter beers being produced in craft breweries across the country.[38] Glitter beers are self-explanatory: beers, usually hazy or cloudy styles (e.g., New England IPAs), that are accented with extra-fine edible glitter. The glitter does not convey any flavor and is purely aesthetic, creating a swirly eye-catching display. Yet this seemingly harmless gimmick has been mired in controversy. Some have raised doubts as to whether the gimmick is actually harmless, citing the Food and Drug Administration distinction between "non-toxic" and "edible" glitter – the former containing potentially harmful compounds – and suggesting that glitter beer creators may not be careful to select the latter.[39] Others complain about the cost and clean-up associated with the style: one of my colleagues paid $80 for edible-grade glitter to dose a 1½ barrel (46.5 gallon) batch, very costly in comparison to the other materials (although he admitted he could have probably acquired it cheaper on contract). He also wondered aloud how many caustic cycles it would take to finally rid his draft lines of the sparkly dust. Many others, including a number of brewers I worked with, disliked glitter beer *because* it was a gimmick: it was a (not so) cheap advertising ploy, the glitter added nothing of substance, it didn't require any technique, it depreciated the industry.

[38] See Sparhawk 2019 for the original post.

[39] Helf 2019

Whatever the particular reasoning, a contingent of brewers filled the comments section to passionately argue that glitter beer didn't deserve to be considered “craft.” Hence the joke.

Alongside market flows and social obligations, constraints on creativity are also internalized and reproduced within the community of practice itself. Experts within the craft community, be they fellow craftspeople, authorities, influencers, or enthusiasts, enact what I call the *craft aesthetic,* a meshwork of subjective, loosely shared, at times dissonant notions of what is good or bad, beautiful or ugly, authentic or imitation. By designing new styles, teaching techniques, awarding competition medals, writing on foodie blogs, or leaving reviews, these experts circumscribe what can and cannot constitute craft. As new innovations arise, the emergent critique of the craft aesthetic follows, encouraging some while diminishing others. Yet neither these boundaries, nor the discourse that forms them are monolithic; the politics of craft are characterized by concurrence and bandwagoning, but also by (fierce) debate.[40] For those that claim glitter beer is a gaudy hazard unbecoming of craft, there are those who insist that the wild rebellion a pint of shimmery beer represents is the essence of craft itself.

While the category resists universal definition, there are some common conceptual threads that artisans and consumers alike ascribe to craft. For one, the craft label generally signifies a degree of care.[41] Care is expressed through the skillful practice of craftspeople, knowledge and techniques *carefully* honed and applied to bring the best out of the raw materials. Speaking on artisanal cheesemaking, Heather Paxson suggests that the hours and

---

[40] I draw on Annemarie Mol’s use of politics here to index a state of debate of flux, one in which the discourse on truth has not crystallized into a definite form (1999:75).

[41] Calagione 2005, Brodwin 2013, Paxson 2013, Ocejo 2017, Noel 2018

effort cheesemakers contribute to produce a cheese are recognized by the consumer as hard work and care, justifying in their minds the premium cost of the artisan label.[42] Many craft workshops put this care on display, be it through brewery tours or windows showing off laborers in motion. Visiting Mackinac Island as a child on family vacations in the 1990's and early 2000's, I stood outside the sidewalk windows of many candy shops looking in on steel hooks or marble slabs where local artisans pulled and folded the island's famous saltwater taffy and fudge. At present, craft enterprises post to social media videos of workdays, host tastings, and coordinate DIY classes, hoping to provide a more in-depth insight into their working lives.[43] And while skill is certainly a performance art, it is not merely for show. As I noted in the previous chapters, most successful craftspeople sacrifice time and limb to cultivate the embodied techniques and situational awareness necessary to transform the mundane into the extraordinary. It takes an artisan's care to make an artisanal thing.

Care is also indexed by an artisan's investment in the craft and its outcome. It is not only that they *care for* the things they produce, it's that they also *care about* the thing and the broader context in which their labor occurs.[44] This is a matter of insider critique as much as it is of outsider perspective. Among my colleagues, one of the most quotidian criticisms of

---

[42] See Paxson 2013:49-50. Paxson, like a number of scholarly, industry, and popular writers on craft, juxtaposes the care of artisanal labor with the presumed carelessness of factory labor and impersonality of automated mass-production. While there are certainly instances in which factory labor is detached by design– the Fordist assembly line as evidence -, I would hazard that painting all mass-production as devoid of care is working with too broad a brush. Studying at Chicago's Siebel brewing school, many of my instructors were retired Anheuser-Busch or Miller Coors employees, much to the chagrin of the almost entirely craft/small-batch-focused student body. Yet despite the automation and scale these former macro-brewers employed, what they emphasized was attention to detail, career-long practice, and an intimate understanding of the materials and tools of work. Care at any scale.

[43] Richard Ocejo suggests that tours and other forms of community engagement work to demonstrate the authenticity of craft by letting consumers see, touch, smell, and taste the work in motion for themselves (2017:75).

[44] Paxson 2013:151. See also Grossman 2013.

fellow craftspeople was their apparent lack of care. A collaborator not showing up on time for a joint brew day, an assistant complaining about being tired, or even a rival turning out a subpar cheese were all grounds to cite an artisan for taking their craft for granted. Writing and researching while I worked professionally, some of my supervisors and interlocutors wondered if I really had my head in the game, was I really committed to craft?[45]

Like skill, commitment is a performance. Alongside bettering themselves, one of the most recurrent reasons my colleagues offered for why they participated in festivals, attended trade conferences, and maintained continuing education was to "be seen," demonstrating their continued engagement in the craft.[46] Many craft businesses purposefully advertise their connection with raw materials, posting images and accounts of their trips to hop farms, dairies, and apiaries, emphasizing what a pleasure and privilege it is to work with these ingredients and how important it is to sustain local, fresh producers. Stewardship is a rising theme in an increasingly environmentally conscious industry, with craftspeople prioritizing sustainable practices and trying to reduce their footprints.[47] Given that artisans almost invariably rely on the natural world to create, be it reliable clean water, abundant wheat

---

[45] Interestingly, doubts as to my commitment came up most routinely when I refused to drink, or declined to drink a certain amount. As a PhD candidate working on my dissertation, I often refused alcohol so that I could be sharp to write in the evening. My abstention would often be met with protest: I needed to relax, or how could I expect to become knowledgeable about beer or liquor if I never drank? On one such occasion, a colleague was direct, "Do you even want to be a brewer?" I discuss the social pressures that permeate craft alcohol in the next chapter.

[46] Robertson 2017

[47] Kamikatsu Rise & Win is an extreme example of the craft push for ecological harmony. Kamikatsu, a small town on Japan's Shihoku island, has recently gained some notoriety for an ambitious "zero-waste" policy. By sorting their trash into 34 categories, the town has achieved a recycling rate over 80%, and hopes to eventually reach 100%. Rise & Win has taken up this challenge, building their brewery out of reclaimed materials, structuring their facility for maximum efficiency, and recycling brewing materials into fertilizer (Sisson 2015).

harvests, or favorable weather patterns, it follows that craft enterprises have a vested interest in caring *for* and *about* the cradle of their production.[48]

Alongside care – and often closely tied to it – craft is commonly perceived as local. Local itself is a highly amorphous, contested term taken up by craftspeople, business owners, media, and consumers alike toward describing and categorizing their work and preferences. Perspectives on locality seem endlessly varied, with participants in the same industry or community offering diverse or even contradictory interpretations of the category. In practice, there seems little, if any, consensus over how local ought to be defined, what exactly it signifies, or how it ought to be applied. Despite its ambiguity, local remains a potent label, ubiquitous in craft branding and on the lips and minds of producers and consumers. Calling something local does have meaning, and a generally good one.

As a practical rule-of-thumb, I interpret local as *around-here-ness*. I use the term local as a shorthand for matters of the *around here* as they emerged in the everyday discourses of my collaborators regarding how people orient themselves to craft places and objects. What holds the myriad opinions together and what makes local approachable as a conceptual category for academic, market, and personal analysis is their shared commentary on *around-here-ness*.

Someone labels something – a person, a business, a product – *local* when they associate it with *around here*. *Here* is the place pertinent to the labeling individual at the moment; a neighborhood, a town, a region (the Piedmont, the Midwest), a state, or a country. The scale of *here* is a matter of opinion and context. *Around* is also significant, as it allows

---

[48] In recent years, the Brewers Association has furnished a growing range of manuals and mentoring on the development and implementation of sustainable practices. (see https://www.brewersassociation.org/best-practices/sustainability/sustainability-manuals/)

for a helpful inexactness of place. *Here* may be a particular town in the mind of the labeler, but *around* can include an area which is not necessarily *here* but is still meaningfully connected with the place. A restaurant in Durham may claim to use local pork, for example. The pigs are not raised and slaughtered in the city, however, but in the more rural counties of the Piedmont area. But because the Piedmont and the pork produced in it are readily linkable to Durham as an extension of the broader place *around* the *here,* most customers would generally accept the pork as local. (Although, importantly, some may not.)[49]

Locality is thoroughly a matter of perspective, and there is often wide disagreement on what *around here* constitutes. Individual and organizational delineations of local are constantly shaped by the similarly evolving zeitgeist of the time and place. While a producer may determine products originating from the Piedmont to be *around* enough to the *here* of Durham to be local, a customer may just as readily not. Matters of percentage are also significant to calculating locality: what percentage of ingredients in a product are from *around here*? Can an American brewery claim to make local pilsner if its grain is from the UK and its hops from the Czech Republic? It certainly can, claiming that the actual work of synthesizing these raw ingredients into beer is performed locally by local craftspeople. This is not necessarily an appeal to percentage, but rather of potency; labor as a transformative process overwrites the identity of imported ingredients. Other inquiries include what percentage of a product is made in-house, and what percentage of the products produced are sold locally. The latter is both a question of exclusivity – to what extent is the product unique to *around here* – and the extent to which the producer is invested in the local economy (see above).

[49] See Weiss 2016.

Where craftspeople struggle is in trying to seize this zeitgeist and create in ways that are *local enough* while still remaining viable. One distillery owner I interviewed prided his operation on only sourcing local organic wheat, spices, and honey. For him, local meant strictly from the Piedmont. This position would pose a dilemma for Okinawan awamori distillers, who also pride themselves on being authentically of and for Okinawa: due to the cost and availability of domestically grown rice, most distillers import from Southeast Asia. Rather, local distillers point to *Aspergillus awamori,* a black mold indigenous to Okinawa, as the agent that not only transforms grain into alcohol, but foreign rice into a local product. Further, as a number of awamori festival goers I interviewed noted, awamori is great in part because it is "cheap" (*yasui*) - a 750 ml bottle can be bought for as little as 1000 yen ($10). To use domestic grain would inevitably raise this base price, and thus make awamori less accessible to the population of one of Japan's least affluent prefectures.

Even when impractical, or even detrimental, using local commodities can present an enticing edge to craft producers, and the pressures to "be local" can be immense. Staff at a small brewery in the southeastern US were excited when a new company started malting with grain from farms in the neighboring counties. The malthouse sold itself as craft maltster, a team of experts dedicated to quality and to bettering the community from field to pint. It was using lower grade grain from farms that traditionally produced for animal feed. The malthouse assured the brewery that the skill in the malting process and the quality of the local grain would overcome these deficits. Besides, the malthouse would be supporting local farmers by helping them transition to a more lucrative market. These ideals came at a premium, averaging $5 more a bag compared to the brewery's standby Canadian and UK malt, and shipping in 50lbs bags as opposed to the competition's 55lbs bags. The brewers

reconciled the cost and the uncertainty of brewing with an untested grain; the malt had a good story, supported a worthy cause, and, as one brewer put it, it was "cool to try something new." They agreed to give it a shot.

Unfortunately, the brewery encountered issues with the grain almost immediately, and what would become a yearlong relationship was plagued with technical irregularities and interpersonal conflict. The malt did not live up to its promised potency. The brewers had to increase the pounds of malt to achieve their target gravities (density of sugar in solution); some runs were so inefficient that they struggled to fit all of the necessary grain in the mash-tun. The grain was also inconsistently malted and sloppily packaged at times: the brewers showed me a bag of barley malt that was still slightly green (i.e., under-kilned), another where the grain still had tiny green shoots (acrospires) sprouting from the grain, and a third that was accidentally mixed with wheat and black malt. When the brewers brought these quality issues to the malthouse, the management was dismissive. None of their other customers were complaining, they claimed, inaccurately if the commiserations of the brewery's colleagues were to be believed. Maybe the brewery's mill wasn't adjusted correctly, or maybe the brewers weren't familiar with small-batch production, a sales rep with a background in home brewing condescended. What do you want us to do about these gravities? one brewer finally asked the malthouse owner. "Use more bags."

This was the kernel that broke the brewer's back. After a year and almost 50 pallets of grain, the brewers made the difficult decision to end their relationship with the local malthouse and return to using UK malt. The gravities soon returned to normal, but the brewers were left troubled. It felt bad to drop a local provider, to lose that relationship and the market edge it could provide. Other breweries, even though they experienced the same

difficulties, questioned the brewers' decision; weren't some extra bags worth the story? Didn't the cause justify the trouble? Surely the malthouse would sort things out in time. The brewers ran the same calculus, but came to a different solution. In this instance, local wasn't good enough.

While some balked at the brewery's rejection of the local, I find this sort of deviation yet another common thread of the craft aesthetic. Indeed, many within the industry and the community see craft as embodying a spirit of rebellion. Contemporary craftspeople are perhaps remarkable for the fact that, though they build upon history, they also actively flaunt tradition in the name of creativity, of pushing the boundaries of their crafts. Artisans I've met, particularly brewers, are often quick to point out the storied histories of their crafts – you'd be hard-pressed to find a craft beer monograph that doesn't begin with the ancient Egyptians or reference the *Reinheitsgebot* - or geek out over some rediscovered style or technique.[50] These histories inform and animate contemporary craft industries, but at the same time represent a foil against which many actively fight, a past that *exists uneasily alongside the present*.[51] I have worked with artisans who engage in certain practices because that is the way they've always done it, it was the way it was done before them, and is proven to get results. I have worked with just as many who refuse such conventions simply because they are conventions.[52] But many more find themselves in between, borrowing from tradition and adding their own twist.

---

[50] At the time of writing, traditional Norwegian kveik recipes were all the rage (see Fowle n.d.).

[51] Nelson 2008:2

[52] It may be interesting to note that the Craft Brewers Association, the US's primary craft brewer's guild, recently removed "traditional" from their list of what qualifies "craft," citing that the "traditional" descriptor is no sufficient to encapsulate the range of activity or products carried out at breweries endeavoring to meet market demands and stay ahead of the curve (Gatza 2018). In other words, contemporary brewers have simply become too wild, too reactive to be framed with this term.

Ellen, the head cheesemaker, found herself in this latter category. Her cheeses were inspired by classic European styles - cheddar, gouda, pecorino - but with added flourishes that made them unique to the Okinawan atelier and enticing to the local population. There was certainly no other cheesemaker like Ellen on the island, and none I could find in Japan. But her creativity came at a cost. I asked Ellen once if she had any interest in returning to her native England to compare notes and swap ideas with other artisans. No, she said, and then added that she likely wouldn't tell her former countrymen that she was a cheesemaker. "Cheesemakers in England go to school, and they specialize in a style," she explained. Ellen, who was largely self-taught and experimented broadly, would be an aberration to a community of work deeply rooted in institutionalized tradition. Ellen saw herself as a deviant of sorts, and sometimes worried whether her Okinawan cheddars and stiltons were subverting the intellectual properties of their regional namesakes, places she admired as a fellow, if divergent artisan. In a very real sense, Ellen's craft embodied rebellion, her creativity potentially excluding her from her peers. While some revel in being an outsider, Ellen just felt lonely. "Even if I went back," she sighed, brushing a camembert with paprika, "who would want to talk to me?"

In the earliest stages of this project, when I was still doing background research and observing as an intern brewer, I maintained an idealized dream of what it would be like to own and operate my own brewery. I had so many ideas about what I would brew, how I would set up the interior, what sort of events I would host. Oh, the things I could do, the community I could create, if only I had complete creative freedom! While I still harbor a version of this dream, my vision has been tempered by the cold realities of the industry. Three years as a wandering apprentice, working alongside intelligent and resourceful artisans

in the visceral minutia of their everyday craft, has taught me that there is no such thing a *complete* creative freedom. We all create together, or we don't create at all. Market fluctuations, consumer tastes, community pressures, and the ever-watchful critique of craft producers and institutions form a crucible through which every vision must pass. Some find the essence of their creativity in their resourcefulness and experience a thrill in overcoming the challenges of a world outside their control. Others find only crushing despair as their dreams die by a thousand cuts. Personally, I find myself in the same place as many of my fellow craftspeople, somewhere in the middle, possessed of a pragmatic passion…

Burning High, Burning Low, Burning Out

My phone alarm chimes, pitiless, as I roll off my futon onto the hard laminate of a studio flat; 5:30 am, another early Thursday morning in Okinawa. It's only halfway through the workweek, but my back already aches from hoisting 20-liter milk jugs, my legs stiff from long hours on a cement floor, my hands burnt, cut, and stained orange. Too tired for shoes, I don a pair of flipflops – I'll have the energy for work boots later – splash some water on my face, grab my keys, and stumble through the heavy metal door into the cool twilight. A short drive, then a stop at the little convenience store at the intersection of the country road leading to the workshop. I stare at the little self-service coffee maker as it prepares an iced coffee, whirring and bubbling, one of the few uncomplicated pleasures in my working/research life. An hour later, the milk is pasteurizing, and Ellen is taking a silent inventory. It's rare for her to say much before lunch. Prepare the ice bath, add the culture, set with culture. A garlic cheddar again; I'll have to scrub my hands raw if Lauren wants to go out tonight. At lunch, I scroll through Facebook. Friends and colleagues on summer holiday, airconditioned libraries, coffee shops in Tokyo, one guy's taking the month to sail and really reconnect. I put my

phone away because I'm worried I'm becoming too negative, too jaded, but then I take it out again to upload a photo of yesterday's pecorino. Back at it, the cheese is ready to be cut, strained, cubed, and cheddared.[53] My cheddaring doesn't look as nice as Ellen's, and it bothers me (I take a picture of her basket to study later at home). Cut again, hand toss in garlic powder – I should just buy gloves – press, and watch Ellen try to Tetris the new cheeses into an already cramped fridge. I clean the floors while Ellen finishes some paperwork. Taking out the trash, I pause to say hello to one of the barn cats sleeping in a moldy cupboard. It ignores me, but the small one-sided interaction picks me up a little. Ellen steps outside, locking up. "See you tomorrow then?" We chat a little about Friday's plan while we walk to our cars. I check Instagram later that night; my uncle comments, "It looks like you're having fun! (cheese emoji)." I think about the new chili pecorino Ellen's okayed for tomorrow, my first approved recipe. A small light in an otherwise weary world. I "like" my uncle's comment, set my alarm, and crash into sleep.

Passion is a difficult subject to tackle, be it related to craft, work generally, or daily life broadly. In part, this is because passion is fundamentally subjective: what passion is to someone is as varied as the person answering it. It is also because passion is so nebulous: the personal experience can change rapidly without warning, and is thus difficult to pin down. Add to this that most craftspeople I worked with had neither the time nor the patience to explore the depths of their psyche. Even so, the concept would arise from time to time in the course of work. My interlocutors used passion to reference a number of imbricated experiences: passion was at times a synonym for inspiration, a font of ideas from which my colleagues drew to change their worlds. At others, passion indexed a vested interest in the

---

[53] Cheddaring is the process of cutting cheese curds to release more whey. Removing additional whey increases the cheese's acidity, giving it a sharper flavor.

outcome of project, a business, or a community. But in most cases, the elemental thread that wove together their articulations of passion was the experience of feeling compelled to move forward, the momentum to stay with and continue developing their craft. It was the inaudible, nagging voice in the back of their heads that, despite pain, frustration, and monotony, motivated brewers, cheesemakers, and bakers to persistently get out of bed and fill their boots. Passion was the unseen current that could carry craftspeople into exciting unknown waters, sometimes even beyond their initial interests, or leave them becalmed in seas of apathy.

If creativity is the alchemical reagent of innovation, then passion is the catalyst that sets the synthesis in motion. A combination of internal drive and external encouragement, passion is the existential compulsion to persist in innovating, that which pushes a craftsperson to keep renewing their craft, their community, and themselves. At times, passion manifests as a burst of excitement, a spontaneous upwelling at the prospect of sheer possibility. More habitually, passion is slow, steady, subconscious flame invigorating craftspeople to toil through the everyday grind.

As a fire, passion must be constantly tended to keep burning, and part of the habitus of craft is searching for ways to enkindle that fire. By and large, my collaborators burned hottest when they witnessed their creativity effect change in the world around them: a new cheese that struck a chord with customers, a movie night that filled a taproom, or a gold medal that justified a raise. Money could partly quantify a craftsperson's impact, but it was very rare for my colleagues to cite increased revenue or a fatter paycheck as the reason they endured (after all, very few get rich through their craft).[54] More prominent was to measure

---

[54] The deemphasis of money as a motivating force I experienced was likely an artifact of the particular demographics my collaborators (formerly) inhabited. Many contemporary craftspeople come from middle-class

the influence of their work in terms of community buzz: if people were talking about the beer to their friends, bringing cheese or pastries to a party, making mention in magazines or travel blogs, then they must be doing something right. Some self-actualizing souls perceived change as a personal experience of fun, the potency of their creativity directly proportional to their enjoyment. Many others I interviewed or worked with spoke of the satisfaction of overcoming a challenge. Ellen often remarked how rewarding it was to see a fridge full of maturing cheese, the empty shelves compelling her to action. An owner/brewer I met resisted hiring an assistant despite struggling to keep up with production, relishing the pressure and pride of surviving crunch periods alone. And many artisans, especially apprentices (and including myself), are drawn by the possibility of self-cultivation, finding in the rigors of craft the opportunity to develop skills and realize their creative potential, to prove they belong in a world they admire.

Yet all fires occasionally burn low. Sometimes, despite all the hard work and best intentions, craftspeople can fail to manifest the change they desire. In the relatively short time I've studied and worked in the industry, I've recognized that the charm and thrill of craft labor is volatile, at times mercilessly so. The work patterns and rewards that hold an artisan's attention today might not tomorrow. This is especially true for novices: when the learning curve is steep, it can feel like you're acquiring something new every day. But the time spent in training yields diminishing returns as apprentices become more skilled. Eventually, most things become routine: same skills, different day. There is also no guarantee

---

backgrounds and white-collar industries, and while craft labor is more existentially rewarding, the transition often entails a significant pay cut (Ocejo 2017). But for those without higher education or formal training, craft industries may represent an obtainable source of financial stability, perhaps even access to health insurance and other benefits. Furthermore, even those with specialized training or college degrees who stay in artisan careers for long periods of time may find their non-artisan credentials have lapsed and their options subsequently diminished, and thus become increasingly dependent on craft as a source of income.

that customers will like everything – or anything - you do. Take a cheesemaker who makes a dozen different styles of cheese to keep herself entertained and emphasize the creativity of the business, but all anyone wants is camembert with pesto. As a professional brewer, I've poured time and energy into designing new recipes or hosting events on plenty of occasions only for the beer to sit in a keg or a movie night to go unattended. It's hard not to think "why bother?" But, as illustrated in this chapter's introduction, even a successful product can threaten to transmute something exciting into a source of dreadful repetition. While creative attainment can stoke an artisan's passion to engaging in their craft, meeting with repeated failure to realize creative change can gradually suffocate it. Encountering dead end after dead end, unable to move forward, some craftspeople find their fire snuffed out altogether.

This latter scenario is difficult to articulate concisely. For those who experience it, burning out is often a slow and painful process, a death by a thousand cuts years in the making. It is also deeply idiosyncratic. I've struggled with the onset of burnout several times across my academic and craft careers, and it's hard to convey to those outside the work loop just how insurmountable a creative rut can feel. Yet burnout is an important phenomenon to tackle, not just for craftspeople, but for all those who draw their livelihoods from creative expression. To this end, I believe ethnographic storytelling provides a fertile ground for beginning to explore the nuances of passion in practice and its gradual collapse. The following attempts to contribute to existing literature on the intersection of passion and specialized labor.[55] This is a sketch of a brewer, and his struggle to keep his passion burning.

I first met West during the earliest stages of my fieldwork, when I was still bumming around small-town brewing communities to see who might be willing to host a PhD student

[55] Kondo 1990, Desjarlais 1992, Calagione 2005, Grossman 2013, Ocejo 2017, Noel 2018

with no practical industry experience. He invited me up to his brewery for a tour and a chat. West was nearly six years into his career, not quite a veteran, but well-seasoned and confident in his practice. He initially struck me as intelligent, witty, and charismatic. Pointing out various pieces of equipment and explaining their functions, he described the *work* of brewing; it wasn't a hobby, you couldn't "mess around," or do anything by half-measures. But that didn't mean the job wasn't fun. "You get to make beer for a living," he laughed. "How many people get to do that?" He saw himself as a brewer for his community; if the people sitting at the bar were happy, he had done his job. After leaving West, I jotted down my impression in a notebook: "diligent" and "easy-going."

We connected again the following winter, this time for a series of in-depth job shadowing sessions. West was only a year older, but it hadn't been an easy year. Working in greater proximity, it quickly became apparent that West was deeply frustrated with his situation. Beer sales were considerably slower than previous years. Before, West recalled, the brewery would go through 30 kegs on a Thursday. Now it was barely kicking ten. The general manager blamed liquor sales for cannibalizing beer sales, but the brewer couldn't help but wonder if there was something he was doing wrong. "Maybe people just aren't drinking beer these days," he occasionally suggested, as if to drive away his lingering anxieties. Poor sales were coupled with a seemingly endless list of broken or malfunctioning equipment: a failing boiler, holes in the stainless-steel kettle, and leaky pipes were just some of the issues that kept West up at night. There wasn't money to fix anything, however. The brewery owner had recently acquired a new venture which was sucking up most of the available capital. It was starting to feel like the brewery was no longer a priority.

Despite the setbacks, West remained relatively vibrant. He was possessed of a spirit of cautious optimism that, though things were currently in a rut, they would get better. He expressed confidence in his own energy and ability to shake things up. Assuming that drinking behaviors were cyclical, West believed that customers would inevitably turn back around to beer. West planned to develop some new recipes and finetune some old ones. He also toyed with the idea of cultivating a hop garden on the roof. When drinking beer became trendy again, he would be ready.

The following summer was particularly cruel. Not only did sales continue to slow and ultimately stagnant, but August saw the departure of West's longtime co-head brewer. After much deliberation and a great deal of anxiety, West's partner left the brewery to pursue an exciting independent position where he would have full creative control. Though West characterized it as a "stupid move," wondering aloud often and to anyone who would listen why someone would leave such a "cushy" job, I got the feeling that this incredulity served to mask a sense of jealousy: his partner was leaving for bigger and better things, excited to finally brew all the weird stuff he wanted to try, while West would be left behind in a crumbling brewhouse, still stuck in a rut, but now a degree lonelier. This drama distracted from any significant innovations. The hop garden never materialized. Toward the end of that summer, West first suggested, quite out of the blue, that perhaps this life was no longer for him. "Sometimes I just want to walk away."

I left after the summer to conduct fieldwork, but kept occasional tabs on my friend. From long distance, things seemed to be incrementally improving. He had hired a new assistant with no experience, someone he could train from the ground up. Showing him the ropes seemed to give West new purpose. But things soon began to deteriorate. The assistant

was not a quick learner, and didn't seem eager to study. He was also sensitive to criticism, and became surly in the face of reproach. West was frustrated. He'd occasionally vent his frustrations in an email or text, wondering whether he should just fire the assistant. Maybe he would be better off just working alone?

Despite the turbulent working relationship, the business year was relatively healthy, and the brewery saw a slight uptick in production and revenue. Maybe the wheel was finally starting to turn? Increased profits made it possible for West to attend the Craft Brewers Conference for the first time in years. It was an inspirational experience; West returned excited to try some trendy new styles and techniques that he hoped would capitalize on the brewery's recent momentum. I was back from Okinawa at this point, working at another brewery while writing, but I would visit occasionally to catch up. From time to time, I would see flashes of West's old fire: brainstorming ideas, networking with local businesses and non-profits, participating in collaborations. It was reassuring to see him work to pull himself out of a slump.

However, the conference seemed to be a high point from which West's situation began a perpetual descent. Over the next year, his enthusiasm took hit after hit. The first blow came almost immediately after he returned from the conference. In his absence, his assistant had committed a series of critical mistakes that left West no choice but to fire him. It was an ugly breakup, with the assistant accusing West behind closed doors of neglecting his training and failing to properly utilize his skills. By all accounts, the assistant was neither skilled, nor eager to work. This upset West all the same, who took the unwarranted criticism very personally. This was followed by West winning a gold medal in a state-wide competition for a new recipe. West was exuberant, texting me late Friday evening to share

his victory. But his jubilance lasted only the weekend, after the brewery ownership failed to acknowledge the achievement. In the past, West explained, his success in competitions had been met with praise, social media boasting, and even bonuses. This time, the general manager gave a half-hearted "cool." The owner forgot to respond to the text. "See," West worried over a beer, "they don't even care…"

West took a chance with his next beer, a beer featuring Sorachi Ace, a Japanese hop varietal with a unique aroma and flavor profile that can either tend to intense lemon or dill. West had never used Sorachi Ace, rarely tasted it, and was unsure exactly how to control for lemon and avoid dill. Yet he took the risk, and almost immediately regretted it. I spoke with him the day after he brewed it: he was convinced it smelled of dill. Pacing the brewhouse, he repeated, "This was a mistake." And while the beer turned out well – and very lemony – it sold slowly. Wanting to strike gold again, he considered brewing the competition beer again, but realized that he had neglected to write down the recipe's specific ratios. It was around this time that I noted West – a heavy drinker from the time I had first known him – had significantly increased his alcohol consumption.

As the year wore on, West complained regularly about needing a vacation. "I just need to get away from this place," he grumbled, "it's killing me." But after West returned from a week-long cruise, his apathy quickly set in again. He'd spend long hours sitting at the bar, drinking beers (and the occasional glass of wine) and playing on his phone, joking with the bartenders about how little he planned on accomplishing that day. He moaned almost daily about being bored. But if someone suggested a new project, he'd generally dismiss the notion. West wanted a raise – he hadn't received one in over three years – and why should he take on extra responsibilities without additional compensation? After all, it wasn't his fault

that work was slow. West fell back on the claim that people just weren't buying beer, ignoring that his former partner and several other colleagues were in the midst of expanding their operations to meet growing consumer demand. But I don't think the discrepancy was lost on him. Rather, his lack of productivity gradually eroded his drive and self-worth. I asked him during a visit what he planned to do that day. "I don't know," was his reply, "maybe jump off the roof." A joke, but a telling one.

When I left West, he estimated himself to be nearly 100 pounds overweight. His body ached, especially his back and around his kidneys. He spoke of having no energy, no ambition. He openly talked about quitting his job to bartenders, managers, and anyone else who would listen. He couldn't quit, however, because he needed the salary and benefits, and what other job would offer him the flexibility to leave when wanted and drink for free when he stayed? He darkly referred to himself more than once as a "professional alcoholic." But in moments of clarity, West glimpsed himself through the jokes and bravado. As he worked through his sixth pint of the afternoon, he lamented, "I'm just burnt out, man. I'm just burnt out."

West's story illustrates what happens when the alchemy of renewal fails, when creativity falters, passion dwindles, and innovation grinds to a halt. Unable to change his community, unable to change his brewery, and unable to change himself, his flame flickered, sputtered, and was finally snuffed. Faced with the cold, he ultimately turned to the false warmth of alcohol, only quickening the onset of an apathy-induced hypothermia. (I explore human-alcohol collaborations extensively in the next chapter.) In knowing West, I lost a degree of the naiveté with which I viewed craft lives and worlds. Innovation, like resilience, is a struggle. It doesn't come easily. Creativity is not bare freedom, but an intricate

choreography of compromise. Sometimes those with whom we create inspire us, and sometimes they bring us down unwelcome paths. The strain of continual renewal, of the myriad calculations necessary to see one’s vision through the everyday, takes a toll on passion, the very fuel that turns the wheel. The stakes of cultivating passion are immense: enkindle the fire that makes you an artisan, or lose it all.

CHAPTER THREE: OUROBOROS

"It is interesting to contemplate a tangled bank, clothed with many plants of many kinds, with birds singing on the bushes, with various insects flitting about, and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent upon each other in so complex a manner, have all been produced by laws acting around us." – Charles Darwin, *On the Origin of the Species,* 1859

"So all life is a great chain, the nature of which is known whenever we are shown a link of it."
– Sir Arthur Conan Doyle, *A Study in Scarlet,* 1887

I walked up to the brewpub eight o'clock on a brisk summer's Friday morning, coffee in hand and still shaking off the cobwebs of sleep. It was graduation weekend, and the usually quiet college town would soon be pulsating with the nervous energy of soon-to-be-graduates, proud parents, stately faculty, and frantic event staff. Before the students could walk and celebrate, a thousand preparations would need attention; for the brewpub, it was easily the busiest weekend of the year. Over the next three days, the small business would earn nearly ten percent of its annual income, and potentially generate enough income to see it through the slower summer session. I was there to record it, to see how the brewery and restaurant operated at its busiest, the seemingly minor yet vital role it played every May in the ritual life of a town subsumed by academia. I planned for a hectic day and hoped for excitement. I didn't prepare for a crisis.

I had frequented the brewpub for nearly three years as an ethnographer, intern, customer, and friend, recording typical and atypical days alike; I was beginning to feel fairly confident that nothing would surprise me. I was wrong.

Heading into the building, I was startled out of my usual morning daydreaming by a Spanish-speaking porter insisting that I come back outside. It was only then that I noticed the head chef and the rest of the kitchen and cleaning staff standing around in the small loading dock. Walking over to the head chef, I gestured to two unfamiliar white pickup trucks; was there an inspection? “Something like that,” the head chef answered. When I pressed further, he claimed to not know the details. We just couldn’t go inside right now, and he didn't know when we’d be allowed back in. He was visibly agitated. I asked if the matter was police related (a body had been discovered outside an acquaintance’s brewery earlier in the year, and the incident was still fresh in the brewery community’s memory). “No,” was the chef’s flat response.

We stood outside for nearly an hour as the overcast sky threatened rain. The head brewer was running late, and he called me to ask if I had made it up to the brewery yet. When I explained the current situation, my friend grew distressed; it was graduation weekend, he reminded me, and people would be arriving to pick up kegs for their parties. The head chef was on and off his phone, talking in hushed tones to whom I assumed could only be either the general manager or brewery owner. Not knowing if they’d be needed anytime soon, some of the sous chefs had wandered off to a nearby coffee shop.

It was a quarter past nine when a young man in his early twenties emerged from the building, followed by an older woman with a leather briefcase overflowing with papers. They were in turn trailed by a middle-aged gentleman holding a white plastic bucket; as he passed near to me, I glanced in the bucket and saw a length of heavy-gauge chain. The head chef and the young man exchanged a brief word, and the former signaled that we were clear to enter the building. Whatever the issue was, it had finally been resolved.

It took several minutes to unlock all the doors and motivate the staff reluctant to end their unexpected, very welcomed break and return inside to the obligatory scramble needed to make up an hour's worth of missed prep work. The head brewer and the general manager arrived simultaneously in this interval, the former confused and the latter noticeably furious. A clipped exchange between the two confirmed my suspicions: "What the hell happened?" the head brewer asked, stepping out of his sedan. "What the hell do you think?" the GM replied tersely, fidgeting with adrenaline. "We didn't pay the rent." He turned to head inside, pausing briefly to point out a small purple splotch on the front of his shirt. "And now I've got smoothie on my shirt," he steamed, "Start of a great day!"

I gleaned more details of the crisis as the day progressed. The head chef and some of his staff had arrived shortly before eight, but were soon ordered out of the brewpub by the young man – the landlord's son – and his entourage. The chef watched as they chained and padlocked the doors. (Not wanting to embarrass the business, the head chef had feigned ignorance when I inquired that morning.) It seemed that the business, through some jumble of miscommunication, had indeed neglected to pay the rent for three months, incurring a debt of nearly $150,000. The landlord retaliated by seizing the property. It was not until the owner personally delivered a check with the overdue amount that the landlord finally relented.

The head brewer openly worried about his job security. If cash was that tight, maybe the place would close for good; three neighboring restaurants had shuttered just months before. The general manager raged through the brewpub, uncharacteristically tossing chairs and slamming doors. In his view, he had lost more than just a nice shirt. He felt he was on good terms with the landlord, a relationship of mutual respect he had cultivated over years. Now the relationship was strained at best, likely irreparably damaged. The GM felt

humiliated. He, the head brewer, and a number of other staff members who learned of the morning calamity through the tireless gossip mill that runs through most restaurants wondered aloud if it was time to update their resumés. For his part, the owner was equal parts defensive and contrite: In a closed-door meeting with the GM, he questioned what was the big deal? The rent was just a little late. Businesses float bills all the time. He never received an overdue notice. The landlord was just being a jerk. However, after the GM's persistent interrogation, the owner acknowledged fault. Hands to his eyes to staunch the flow of tears, he promised it would never happen again. He had violated bonds of trust with the landlord, the GM, all of his staff, all of those who worked with him toward a shared project on which they were all mutually dependent.

The chaining of the brewpub's doors represented a failure to sustain the obligations of collaboration. It also illustrated the precarious position of lives and livelihoods entangled in webs of mutual support and reciprocation. Craftspeople make their way through the world in (uneasy) partnership with diverse assemblages of animate and inanimate things, socio-economic and political infrastructures, and environments, for good and for bad, and whether they recognize their myriad collaborators or not. This dependency demands the craftsperson to be engaged, mindful of others, not just artisans, but the community and broader ecology that supports artisan projects. When this mindfulness lapses, as it did with the brewpub, the whole project falls apart.

In his monograph on the founding and eventual acquisition of Goose Island Beer Company by AB-InBev, beer journalist Josh Noel portrays the emerging craft brewing industry as almost idyllically cooperative.[1] Rather than callously fight for market space, craft

[1] Noel 2018

brewers are known to be quick to help and open-handed with their would-be competitors: advice, resources, and technical support are freely given. Memoirs from craft's early founders repeatedly echo this point: Ken Grossman, founder of Sierra Nevada, contends that camaraderie is a "hallmark of the craft movement."[2] Alongside extolling the virtues of pursuing an idiosyncratic vision, Dogfish Head's Sam Calagione recognizes that even the most determined visionary sometimes needs a little help; luckily, the craft beer community is exceptional in attracting helpful - and charitable – souls to its cause.[3] In their how-to guide to starting a craft brewery, Brooklyn Brewery co-founders Steve Hindy and Tom Potter emphasize the importance of cultivating durable partnerships, recounting the many occasions on which the open-handed support of other brewers, technicians, and community members helped the inexperienced owners sustain their business and move it forward.[4] Although Noel suggests that macro beer's invasion of the craft space has spelled the end of the age of craft solidarity (Goose Island's sale being the harbinger of this shift), my brewer colleagues did not find this to be the case.[5] If anything, the uncertainty generated by conglomerate meddling has only knit the craft community tighter. A head brewer I worked under put it simply, "When someone needs help, you help them. That's what we do." Whether it's lending a case of hops on the fly, popping down the street to help fix a broken draft line, contributing to a charity brew day, or just covering a visiting brewer's tab, there is a pervasive sentiment that

---

[2] Grossman 2013:227

[3] see Calagione 2011. It may be interesting to note that Calagione has published a more recent book outlining a business philosophy that emphasizes collaboration between competing businesses. Calagione argues that through a radical internal and external culture of working together, potentially rival businesses can achieve mutual success

[4] Hindy and Potter 2005

[5] Noel 2018:x-xi

we're all in this together (and should act accordingly). It is this sort of everyday communism that distinguishes the craft industry from its macro counterpart. Collaboration is what craft does.

In this chapter, I explore the dynamics of collaboration, the state and practice of *working together* that defines contemporary craft. Collaboration is the fundamental working structure that animates craft production, and the overriding ethos through which craftspeople conceptualize and manage their interconnected working lives. Collaboration expresses the working ecology of craft, in which diverse actors are connected, consciously or unconsciously, through mutual projects the outcomes of which they play a role in shaping. In practice, collaboration entails the management of intricate webs of personal, professional, and material relationships. Dorinne Kondo writes, "Becoming a full-fledged artisan and a full-fledged human being at the workplace means engaging with the world in a particular way, cultivating a close relationship between men… and the material and natural worlds. Solidarity is created between men and the world, and between men and men: those who share this engagement with tools, materials, and the season."[6] To successfully create, craftspeople must orchestrate these disparate collaborators, drawing on those they need and struggling against those they do not, capitalizing on the advantages of a robust yeast while mitigating the potential fallout of an incompetent assistant. The skillful management of collaboration is essential to survive, a crucial means of navigating risk and overcoming crisis.

Collaboration is expressed in myriad forms, from co-designing new products, to engaging in secondary markets, to practicing mutual care. Relationships in craft are seldom purely professional or transactional, but take on deeply personal significance and stakes.

---

[6] Kondo 1990:247

Significantly, the experience of collaborating and the outcome of collaboration are not uniformly positive. Working *together* may imply cooperation, shared interests, and advantageous results. These benefits often materialize, but for a price. Relinquishing power is the unavoidable cost of collaboration that diffuses agency across networks of competing egos. Risk may be effectively diffused, but at the cost of the individual being diminished. As I will demonstrate, a closer ethnographic examination of collaboration in everyday practice renders a more nuanced, often more fraught picture.

In the following pages, I examine collaboration in theory and function, tracing its contours from the perspective of those that live in and through it. I consider the strategies they employ to prosper together, and the concessions they endure. In doing so, I endeavor to illuminate how the worlds that craftspeople create come around to shape them in ways that often exceed expectation and intention.

Collaboration All the Way Down

Before answering the question of *how* craftspeople collaborate, it might be useful to consider *who* - or *what* - collaborates. Craft businesses, like any ecology, are complex assemblages of organisms, energies, and naturally-occurring and artificial infrastructures, coming together and falling apart in intricate choreographies of construction and destruction. The everyday working lives of craftspeople and the daily operation of their businesses are contingent on and animated by a diverse tapestry of things *working together*. These collaborators make themselves visible and tangible through the impact they have on the everyday rhythms of craft production, the interplay of which is illuminated by closely following those rhythms. The Okinawan cheese atelier offers a useful illustration.

In order to make a wheel of pecorino, Dave first needed fresh milk. The overly pasteurized milk widely available in Japan's supermarkets or from the dairy farmers' co-op wholesalers lacked the fat content and flavor profile necessary for making good cheese, so Dave formed a strategic partnership with a local dairy: dissatisfied with the policies of his local co-op and eager to showcase the superior quality of his milk, dairy owner Sōichirō jumped at the opportunity, offering Dave a steep discount on milk, nearly exclusive access to said milk (any milk that Dave did not use would go to a handful of private accounts, and then to the co-op), and use of his farmhouse's basement. Sōichirō and his dairy would become Dave's primary and most important ongoing collaboration.

Yet before Dave could press his first cheese, he needed the appropriate permits and licenses. If he was to distribute cheddars and goudas to a waiting populace, he had to receive approval from the governing body that protects that populace's interests. Dave was able to avoid much of the bureaucratic scrutiny that typically attends expat business applications by hitching his workshop to Sōichirō's existing production license, essentially making the atelier a subsidiary of the Japanese-owned dairy.[7] Sōichirō thus became not only Dave's supplier and landlord, but his business partner as well. Licensing was followed by an inspection to confirm that the new production facility was up to code: floors sufficiently beveled, refrigeration at temperature, potential contaminants properly contained, and a consistent

[7] A number of my expat collaborators remarked on how difficult it was to secure a business license or the necessary building permits as a foreign resident in Japan. While it is officially legal for a foreign resident to be the sole owner and proprietor of a business on Japanese soil, many I spoke with, even those fluent in Japanese or with backgrounds in entrepreneurship, found it much less of a hassle to have a Japanese partner operate as the legal face of the business.

source of potable water available.[8] Annual reevaluations would typically return a short list of additional mandatory improvements and adjustments.[9]

With permits squared and a source of his primary raw material secured, Dave now needed to actually extract the milk. The collaboration on paper was much more complicated in practice. It wasn't that Sōichirō wasn't reliable – he was – it was rather that dairy, like any complex system, had its own way of doing things that often exceeded the control of either Dave or its owner. For one, while the volume of milk the cows produced was never an issue, the flavor, aroma, color, and pH levels of the milk fluctuated day to day. While supermarket or wholesaler milk lacks the fat and flavor to make good cheese, it is homogenized so that restaurants, coffee shops, and private consumers, etc., can count on a consistent product. Working with fresh milk, it was up to Dave, and eventually his apprentices, to control for variation by adjusting recipe amounts or delaying production to let milk further acidify.

Dave, or more accurately his apprentice-turned-head cheesemaker Ellen, also struggled with finding suitable personnel at a reasonable cost. Ellen was his first hire, and easily his most important. As detailed in previous chapters, Ellen, a fellow British expat, quickly went from having no artisanal experience to running the production side of the business nearly single-handedly. With Ellen's help, Dave was able to expand the business, offering a wider variety of styles and even opening a storefront in a nearby produce market (a collaboration which carried its own various opportunities and complications). But personnel

---

[8] Health inspections are carried about my agents of local branches of Japan's Ministry of Health, Labor, and Welfare (*Kōsei-rōdō-shō*).

[9] The annual health inspections were an interesting collaborative experience in their own right. Given the rarity of cheesemakers in Okinawa, the inspectors were generally unfamiliar with the ins and outs of the process; they used a repurposed ōbento (a traditional Japanese lunchbox) shop inspection form with annotations penciled in the margins. Dave would have to walk the inspectors through the whole process, explaining necessary storage temperatures and partitions, and listing the various by- and waste products and their ultimate destinations. A good deal of the inspection was therefore left to trust in Dave's transparency and respect for his expertise.

issues went downhill from there. Dave rapidly hired two additional assistants to work under Ellen, neither of whom ultimately proved competent or were satisfied with their compensation. Ellen and Dave returned to working alone, occasionally taking on volunteers who didn't mind a little dirty work in exchange for learning some cheesemaking and escaping the boredom of an Okinawan winter.

As the business grew, so did its network of collaborators and obligations. Dave and Ellen began working with Joe, an American chef and pâtissier who had relocated to Okinawa to open a bakery. Ellen provided Joe with cream and ricotta for his pastries, and Joe reciprocated by promoting the cheese shop to his customers and lending Dave the occasional piece of equipment; once, when Dave's mixer blew a motor, Joe lent him a spare still new in the box. Joe ultimately sold Dave the mixer at retail price, a significant boon for Dave given the cost of importing appliances to Okinawa. Dave also connected with Berndt, a German expat who began baking traditional German breads first out of nostalgia, then as a business. While Berndt's operation was very small, the workshop happily traded several liters of whey every month for a couple of loaves of bread, as well as to forge ties between fellow artisans working in Okinawa's burgeoning craft industry. Of these artisan collaborations, some were contentious. In an effort to help out a fellow expat restauranteur who was determined to make their cheese in-house, Dave began sharing surplus liters of Sōichirō's milk with her. Most commercially available milk in Japan has lower fat content than ideal for making cheese, and most dairies prefer to sell directly to the farmer's co-op. Dave provided the restauranteur (who did not speak Japanese) a valuable connection to a local source of fatty milk. In return, the restaurant represented a potentially lucrative collaborator in the small, but growing, expat artisan community. Sōichirō approved of this arrangement, appreciating the opportunity to

further exhibit the superior quality of his milk. Initially amicable, the relationship became strained when the restauranteur started requesting more milk to feed her growing business. In a year, the amount required by both the cheese shop and the restaurant exceeded the total production of Sōichirō's cows. Shortages led to arguments, and ultimately a falling out. While this dispute had negligible impact on either business – the restaurant found another milk source – it did create a palatable, persistent point of tension in their tight-knit artisan community, lasting even months after the relationship was finally terminated.

Other potential collaborators sought out Dave. The city's local enrichment and tourism association contacted Dave about carrying his cheese in a government-sponsored specialty shop that featured locally-produced goods; Dave and Ellen's cheese would be sold alongside local baskets, pottery, and handicrafts as proud examples of local artisanship. Dave was also invited to be interviewed on the local radio and television stations to promote his cheese and speak of the value of local production. This was a big deal for Dave not only professionally, but personally: the specialty shop almost exclusively carried products made by resident Okinawans and to be counted among the town's local artisans indexed to Dave a hard-won sense of belonging in his adoptive community. This feeling was compounded when the same tourism association reached out to Dave in an attempt to connect the face of local cheese to a start-up goat farm, hoping that Dave could provide the farm a source of income by making goat cheese on contract. Another substantial caller was Mr. Kin, owner of a small ice cream factory. Mr. Kin proposed what initially seemed an exciting opportunity: using Sōichirō's superior milk and Dave/Ellen's ricotta, he would create a cheese-flavored ice cream. Mr. Kin assured Dave that the ice cream would be a hit, and that he could secure freezer space in the island's largest convenience store chain. However, the arrangement fell

apart quickly. Mr. Kin made a prototype of which Dave and Ellen approved. Without consulting the cheesemakers, Mr. Kin made a second version and sent that to the retail. Ellen and I first tasted the new recipe after I discovered it at a convenience store near my flat; it was almost flavorless. Perhaps Mr. Kin had found the original recipe too expensive, and had cut back on the pricy ricotta and whole milk. Whatever the impetus and strategy, Dave and Ellen implored Mr. Kin to fix the recipe. When Mr. Kin refused, claiming he knew the market best, Dave scuttled the project.

While Dave and Ellen encountered difficulties in a variety of forms through their collaborations, the most persistent source of trouble was Okinawa's climate. Although weather patterns and atmospheric phenomena may not possess the kind of agency we typically associate with human actors, they nevertheless play a fundamental role in shaping craft production and stability. Often, my interlocutors, navigating living ecologies to secure their livelihoods, came to regard the impersonal forces that they worked with – and often against – as potent, if ambivalent collaborators.[10] This was certainly the case for Dave and Ellen, who routinely wrestled with Okinawa's hot and humid tropical climate to make cheeses designed to be aged in the cool cheese cellars of temperate Europe. Refrigerator space was a valuable commodity, and the cheesemakers had to adjust internal humidity daily with makeshift plastic bottle humidifiers based on the cheese style's preferred environment. The workshop's refrigerators, all second or third-hand, also frequently broke down, requiring expensive repairs and even more expensive replacement parts, many of which needed to be imported from the mainland; often it was cheaper to scour the consignment store for a

---

[10] This phenomenon is not limited to artisans. Reflecting on a youth spent as a maritime adventurer in the merchant marine, Joseph Conrad wrote, "The sea has never been friendly to man. At most it has been an accomplice to human restlessness" (in *Mirror of the Sea,* 1906).

replacement than have a refrigerator repaired.[11] Dave and Ellen's difficulties with controlling their climate were most sharply realized in their struggles to cultivate blue mold cultures. A lover of stiltons, Dave desperately wanted to propagate a house blue culture.[12] Ellen saw it as an interesting challenge. Yet try as they might, test cheese after test cheese failed to manifest the telltale blueish veins. It was unclear why exactly Ellen and Dave couldn't get blue cultures to bloom; they tried everything they could find in books and online blogs, even going so far as to buy a Russian-made cream separator to experiment with different fat percentages. Alas, no solutions. (Ellen's best guess was that the abundance of white mold spores in the atelier's microclimate was stifling the blue spores.)

Conversely, the cheese shop's most persistent source of support were the local customers. As word of Dave and Ellen's cheese circulated around the island, an ever-growing number of customers streamed from military bases and residential neighborhoods into the tiny storefront to buy cheese. Some were put off by the significantly higher price of Dave's craft cheese – nearly four times supermarket cheese – but most were not bothered to pay more for something exceptional. More significantly, they came to Dave's shop to talk about cheese. What was a stilton? What made a cheese a cheddar? Was pecorino good to bake with? What did Dave or Ellen recommend for a wine party? Dave never missed an opportunity to chat at length with his customers, taking them through history and process, unfailingly accompanied by a liberal number of samples. Like many contemporary craft entrepreneurs, Dave emphasized the importance of cultivating a community with shared

[11] Despite being a Japanese prefecture, items shipped to Okinawa from the mainland islands incur international shipping fees due to the distance.

[12] As in previous chapters, I render cheese names in lower case, despite typically being capitalized, to distinguish interpretations of the cheese style made outside the protected designated origin.

tastes and values.[13] His relationship to the customer was not purely or even primarily transactional. A former teacher, he saw the visitors to his shop as students as much as anything; they came for the opportunity to expand their horizons beyond what supermarkets could provide, and to be part of Okinawa's home-grown slow food movement.

Even though Dave was generally successful in cultivating a following, sometimes his attempts to serve as island tastemaker backfired: an outspoken critic of military aggression in any form, his anti-military base Facebook comments would occasionally set off social media firestorms among the American servicepeople and their families. Once when Dave expressed hope that an incoming typhoon would wash a nearby base into the ocean, members of several pro-military Facebook groups called for a boycott of his business. While the outrage quickly subsided, the boycott was a jarring reminder of the precariousness of the business and his livelihood; Dave was not independently wealthy, and relied on his customers' patronage. Small wonder then that Dave was periodically dazzled by the promise of fortune and glory, as when the aforementioned Mr. Kin boasted of nation-wide distribution, or when Dave's little shop was briefly courted by a luxury hotel chain (the hotel ultimately backed out of negotiations, feeling that the cost of artisanal cheese was too great when factory camembert would suffice). Despite these pressures, Dave maintained an idealistic hope for his and Ellen's work: that while their cheese would support their livelihoods, it would also bring people together, stoke passions for quality food and traditional craft, and improve our collective quality of life one emmental at a time.

---

[13] In his ethnography of artisanal pork farmers in North Carolina, Brad Weiss argues that cultivating connections between local people, local producers, and local products is a fundamental strategy of craft projects, connections that ultimately help sustain the artisan movement (2016:155).

Like Darwin's tangled bank, even a tiny cheese workshop teems with collaborators: humans, animals, plants, microorganisms, business partners, coworkers, suppliers, other businesses, fellow artisans, equipment, governments, customers, climates, and the objects of craft themselves. For better and for worse, each agent contributes to the creation, perpetuation, and destruction of craft commodities and livelihoods. My artisan colleagues generally adopted a radically inclusive perspective on collaboration, admitting as a collaborator anyone or *anything* that contributed to the production of craft object, regardless of whether the agent acknowledged the craftsperson or recognized its contribution. Although they did not always adopt "collaborator" as a term for describing a brewery pump or a mold culture, my colleagues described their connections to these non-human entities as intimate working relationships. Dairy farmers like Sōichirō spoke of the frustrations and joys of working *with* cows and goats, brewers admitted that it was their yeast that really brewed their beer, and Ellen chatted with her cheeses to pass the time alone in the workshop. If collaboration is fundamentally the state of *working together*, then all that lend a hand to that work can be counted as collaborators. Moreover, as I have demonstrated in the craft practice of resilience and process of innovation, these non-humans *ought* to be counted, even *demand* to be counted. Kettles and malted grains may not be personable in the same way as a human collaborator, but they are nevertheless engaged at a vital level in the production of craft. Typhoons and thunderstorms can have an even greater role than their human counterparts in shaping a cheddar or conditioning a stout, and are ignored at the artisan's peril. Sentient or unconscious, animate or inanimate, global or microscopic, these collaborations are the elemental threads from which the fabric of the craft everyday is woven. Like a world made of turtles, it's collaboration all the way down.

Collaboration in Practice

While collaboration describes the essential interaction of diverse actors that organizes and animates craft lives and livelihoods, collaboration also indexes a category of collective work through which craftspeople foster camaraderie, launch creative projects, and attempt to overcome moments of crisis. In this section, I move from the tangled bank to examine what I call *collaboration in practice*, the formal and informal, spoken and tacit agreements that artisans strike up between their peers, fellow professionals, and their communities. These practices emerge from and are influenced by the subtler webs of cooperation, but are distinct from the baseline structural collaboration in terms of intentionality. Collaboration in practice is the deliberate drawing together of disparate collaborators by craftspeople toward an anticipated outcome: a beer, a festival, a cause. The following explores a number of the ways in which these artisans endeavor to weave their working environments into mediums of collective support and prosperity.

Before delving into the applied dynamics of collaboration, it is important to underscore some of the risks that play a fundamental role in shaping the experiences, execution, and outcomes of collaborative projects. As with collaboration in structure, collaborations in practice are susceptible to instability, inequity, and destructive outcomes. In popular and industry craft publications, collaboration generally receives a positive gloss: working together transmutes into working together *for the common good.* Symbiosis is assumed. But, as most artisans can relate, collaboration in everyday practice is far more ambivalent. Many, perhaps most, collaborative relationships *are* generally positive: camaraderie among co-workers, a strong history with a dependable supplier, the cultivation of a productive yeast culture are all sources of strength and pleasure. However, this veneer

obscures the lived reality of craft, in which opening oneself up to the potential benefits of collaboration also entails exposing oneself to potential dangers should that relationship misfire. Strength and vulnerability go hand-in-hand.

One of the first lessons I learned after I went professional as an artisan was the importance of a strong, reliable network of skilled associates sympathetic to the craft cause. As I will discuss below, the right friend at the right time can help you out in a critical pinch, be it caused by a blown pump, a shortage of basil, or a deserting assistant. It is critical to cultivate these relationships, reaffirming and fortifying them through acknowledgement and reciprocation for one's current predicaments and for the battles to come. Yet even well-established, successful collaborations can falter and fall apart. Collaborative relationships are fragile.

I worked at a brewery that had established a personal friendship with a HVAC technician who, through his close association with a number of local breweries, came to specialize in brewery boilers and chiller systems. All brewery systems are different, rife with their own idiosyncrasies and quirks. This is even more true for older, well-used systems, which through the course of their careers become a patchwork of replacement parts, retrofits, and workarounds. Understandably, it's difficult for an unacquainted technician to competently diagnose and repair such a system, having trained on newer equipment. Conversely, through years of service calls our technician had become intimately familiar with the ins and outs of our antiquated boiler and finicky chiller. His friendship with the head brewer was such that he could be counted on to rush over in the case of an emergency, e.g., when our draft line chiller suddenly died ahead of March Madness. He would also

occasionally pop in unannounced to do some preventative maintenance in exchange for a couple beers or lunch. His value to our operation could not be overstated.

Even so, professional relationships, even when backed by personal friendships, can fragment if the expectations that substantiate that relationship are not met and the arrangement sours. Relations with our technician became strained when the brewery consistently failed to pay its bills in a timely fashion, a combination of poor cashflow during the slower months and clerical error on the part of a disorganized accountant. The head brewer and technician tried to keep peace, the former offering sincere apologies and the latter reciprocating with patience. However, as the bills went unpaid and the brewery's excuses seemed more and more like a callous attempt to dodge its obligations, the technician experienced mounting pressure from his company to stop prioritizing our brewery and focus instead on more trustworthy clients. Unable to placate his employer further, the technician became increasingly slow to return calls, and only visited when a dearth of work allowed the brewery to creep to the top of the queue (a rarity). Essentially blacklisted, the head brewer had to resort to another company and a series of significantly less qualified technicians on several occasions when key pieces of equipment broke. The brewery did eventually sort out its finances and the working relationship was rekindled, albeit with the proviso that the brewery pre-pay for services with a credit card. The falling out and the circumstances that attended it remained a point of awkwardness between the head brewer and the technician, however, noticeably cooling their friendship. Such is the precariousness of working together.

Adding to this precarity, collaborations often lack an equitable distribution of agency and are characterized by asymmetries of power. Collaborators seldom have an equal say in their shared projects, and some may have seemingly no say at all. Nor are all collaborations

necessarily consensual, insofar as collaborators have the capacity to choose the terms and extent of their involvement.[14] Those who have served as an assistant likely can relate that choice is more often the privilege of the master. To be sure, assistant brewers, bakers, or cheesemakers express some degree of consent in agreeing to take the job. But while assistants opt to enter into an apprenticeship, it is frequently from that point that their agency begins to diminish. Lead artisans often exercise considerable control over their operations; a significant majority of my colleagues who either occupied assistant roles or had previously related experiencing an acute lack of influence in shaping day-to-day operations, the future of the business, and creative direction. Some leads took their authority to unreasonable extremes. The head brewer of a thriving craft brewery shared that, when he was still an assistant, the ownership, fearing a delay in production, ordered him to brew a beer when the head brewer failed to show up for work. When the head brewer arrived the next morning, he was incensed by the breach in the chain of command. Without tasting the assistant's beer, he dumped the entire batch onto the brewhouse floor. (This incident would later incite that head brewer's termination, allowing the assistant brewer to step up. Perhaps remembering his previously restricted agency, he took a much more liberal approach with his assistant, having him brew independently often while the head brewer was off or away.) Yet such abuses were

[14] While not the focus of this section (or this book), non-human collaborators are also subject to issues of consent and power asymmetries. It is unclear to me the extent to which Sōichirō's cows or the brewer's yeast are capable of consenting to their participation in craft production. Nonetheless, animals and microorganisms are as essential to making cheese or beer as their human counterparts, if not more. One brewery at which I worked gave their spent grain to a local pig farm, a common practice for breweries. The farmer would occasionally express his thanks for the free feed by bringing us some cuts from the pigs we fed. The reciprocation was appreciated, but I often found myself wondering as I raked grain out of the mash tun into plastic bins and my mind drifted if the pigs appreciated eating our waste products, and if the bacon from their bodies could be considered a form of thanks. If they had a choice between tasty grain and their lives, they'd probably prefer to live. It may seem a frivolous worry, but a number of anthropologists and food writers take the ethics of human-animal collaboration seriously. And given the importance of these other-than-human participants in human craft and artisanal ambitions, perhaps we as producers and consumers ought to be attentive to the ethics of our multi-species collaborations.

rare, and most assistants acknowledged the rationale behind the asymmetry – they were less experienced, hadn't paid their dues, etc. - and a number of those who had moved into leadership roles admitted to adopting similar arrangements with their assistants. But some were less flexible. I encountered one assistant brewer who was exceptionally yet tacitly dissatisfied with his work situation. Having completed a certificate at Siebel, he bristled at what he felt was an unduly long apprentice period. The assistant wanted to learn more. More so, he wanted to create his own recipes. But his head brewer insisted on mastery of the fundamentals – cleaning, hauling grain, and basic maintenance – and a strict division of labor: creativity was the head brewer's domain. Despite increasingly overt pleas from the assistant, the head brewer wouldn't budge. After six months, and with no concession in sight, the assistant accepted another position at a brewery that explicitly promised greater responsibilities and creative license.

But even a lead brewer's or head baker's authority can be exceeded by the currents of power and influence that course through communities of practice and taste. Social media is one such asymmetrical collaboration. I never encountered an artisan, restauranteur, or business owner who unreservedly endorsed customer review aggregate sites like Yelp or Google Reviews. Some allowed that such sites could help promote a business and, if properly curated, customer impressions could help finetune service and suggest problematic products or dishes. But most of my correspondents felt that review sites were a nuisance at best, an impediment to business – "the enemy," as one general manager phrased it - at worst. The worry was unfair reviews written by unknowledgeable customers. In an interview on the subject, one of my brewer friends pulled up a screenshot of a Yelp review he had saved on his phone: "the stout was too dark," one star. The problem, my friend sighed, is that a one-

star review is weighted the same on these sites whether the person is an expert or a novice. Brewery personnel could dispute the review or leave a comment, but that would often only serve to stoke drama. Others took a more creative approach: a confederation of Baltimore-based brewers recently produced a beer, “2 Stars Not My Style” as a satirical rebuttal to rating culture.[15] Most just tried to shake it off. Indeed, that was often the advice more senior professionals gave new brewers. “What can you do?” While many of my colleagues were quick to point out the absurdity of an unskilled perspective distilling the complexity of skilled labor into a reductive numerical score (“what does a three out of five mean anyway?!”) and paragraph blurb (“their beer is just not good …”), it didn’t change the fact that aggregate review sites were both accessible and influential. A star-based ranking was quick to give and easy to digest, and a significant percentage of potential customers would base their decision of where to eat, where to drink, or what to buy on that data, abridged as it was. Some tried to frame this as a positive. A brewer friend, while admitting that the system was far from ideal, still routinely pointed to his brewery’s Untappd scores, a review website and app specializing in beer, as an index of its relative success. His brewery was brand new, still feeling out recipes and the clientele; the four-out-of-five average he held across his beers suggested that he and his team must be doing something right. Ultimately, hate it or love it (or just somewhat tolerate it), review sites were an unsolicited yet potent collaborator there to stay. As one bar manager summarized, it was better just to leave it alone, learn to live with it, and hope it eventually went away.

Finally, craft collaborations are often ambivalent in terms of whether they help or harm. Even collaborations initiated with the best of intentions can rebound on the

[15] Rao 2019

participants, sowing strife and serving to undermine the networks the arrangement was meant to bolster. Collaborations can begin constructive, but over time and as circumstances change through the fickleness of human emotions and markets, gradually become destructive. One brewery I interviewed initially had a very amicable deal with a local farmer who hauled off the brewery's spent grain as feed for his cows. As the American recession dragged on, however, tensions arose between the partners over the relative cost of the arrangement. The farmer argued that he should not be responsible for replacing the plastic grain bins as they became damaged, citing the convenience he provided the brewery. The brewery disagreed; the farmer should replace the bins for the fact the grain provided at least two days' worth of free feed per week. The farmer eventually relented, but rather than replace the bins, he attempted to save money by patching the cracked bins with duct tape. The leaks continued, and the plastic wheels remained broken. The bins became a weekly source of strain, but a lack of alternatives (most nearby farmers already had similar relationships with other breweries) forced the brewery to continue the relationship.

In some situations (albeit rare in my experience), collaborations can be unknowingly or deceptively caustic from the outset. Such was the unfortunate relationship between a brewery and an offshoot distillery. After over a decade of successful operation, the owner of a small craft brewery was looking to expand, but found himself at a crossroads. On one hand, he could expand his current business, converting an available warehouse into a second brewing location focused on packaging (a canning line) and keg distribution.[16] Alternatively,

[16] A considerable number of early successful breweries including Sierra Nevada, Goose Island, Oskar Blues, and New Belgium followed this model, opening up additional facilities, often in other towns or states (see Grossman 2013, Myers & Ficke 2016, and Noel 2018). Contemporary breweries are continuing this trend, though some of those with greater startup capital are opting instead to build an initially larger facility that they can grow into, and opening up satellite taprooms as their brand gains popularity (Myers & Ficke 2016:59).

he could aim ahead of the curve and jump on the emerging craft spirits movement. After considerable debate – and varied input from brewery management – the owner opted for the more ambitious of the two plans: he would launch a distillery featuring a wide range of local, certified-organic craft liquors. It would be a symbiotic relationship, the owner assured his staff, synergistic. The brewery and distillery would cross-promote and bolster the stability of both brands by diversifying the portfolio of the parent business. If craft beer took a dip one year, distillery sales could compensate, and vice versa.

Despite valid concerns over whether or not anyone involved was truly qualified or prepared to open and run a distillery, whether or not the brewery could support the distillery during its extremely capital-intensive start-up phase, and generally whether or not anyone had done a sufficient amount of homework on the subject, the staff by-and-large maintained a degree of cautious optimism and kept their lingering reservations mostly tacit. Staff concerns became more vocal as the distillery's permitting and construction phases dragged out on over several years, and staff hired on for the new facility sat around at the brewery or the empty warehouse with little or nothing to do. Much of the tension focused on money: how much longer until the distillery would start generating revenue? Should they really be paying for these idle staff members? And what would be expected of the brewery once the distillery's start-up capital ran dry? But even as these anxieties mounted, they were still at least partly mollified by the distillery's potential; it could be a huge success, all the pain would ultimately be worth it, and all involved could very well stand to make a great deal more money. Besides, the distillery was too large of an investment to stop half-way.

Finally, the distillery was completed. However, the new facility did not so much roar into production as it slowly came online, accompanied by numerous hiccups. The long

construction phase severely restricted cash flow, leaving little flexibility to cover unexpected – or even expected - costs. The distillery burnt bridges almost immediately, failing to pay a local contractor - the same contractor that serviced the brewery - for equipment instillation. After numerous unsuccessful attempts to recoup his expenses, the contractor eventually forgave the debt, but refused to work further with either the distillery or brewery. Another sequence of unpaid or partially-paid bills left the distillery without a crucial software update for automated equipment; the distillers ultimately disabled the automated components and resorted to doing it "the old-fashioned way."[17] Matters did not really improve over the years, with the distillery plagued by overdue invoices and the resultant inability to source necessary materials. At the time I sat down to talk with the assistant distiller over the current state of the business, his synopsis was grim: they were over $1400 behind to the grain distributor, had exhausted their line of credit with the packaging supplier and had to make advance payments (money they didn't have on hand) for glass bottles, and, as a result of these issues, were running out of inventory at the state ABC stores. When in stock, local sales were decent, but some of the more lucrative distribution deals had fallen through when two shipments were rejected in sequence for defective bottles. Profits were also offset by very liberal gift and donation policies on the part of the owner and upper management; the assistant distiller estimated that one in every five bottles from the distillery was either donated to a local event (sometimes to charities, but just as often to social clubs), gifted to a friend of the business, or went home with an employee. Despite protests, the owner defended the practice as necessary to build and maintain community connections, and foster employee morale. It began to seem like one misstep or breakdown after another, always followed by a

[17] In his own research with craft distillers, Ocejo (2017) notes the tendency of under-capitalized artisans to make virtues out of necessities.

set of excuses from the owner and distillery staff at best, or demoralized shrugs at worst. "What the hell is going on over there?" was a common refrain at the brewery.

Along the way, the brewery continued to fund a considerable percentage of distillery operations. Frustrations were compounded when the distillery's financial struggles began to directly impact the brewery: quarterly bonuses ceased, salaries were frozen, and company-sponsored social events became increasingly infrequent. Financial tensions became simultaneously fraught and absurd when, during a weekly brewery meeting, the general manager requested that employees cease purchasing writing materials with the company credit card, and instead help out by bringing pens from home. Everyone knew the reason for the brewery's cash shortage; the distillery, and particularly its viability, was a routine topic of conversation behind closed doors and over after work beers. But everyone also realized that there was nothing that could realistically be done about it; too much money, too much time, and too much pride had been put into the distillery for it to just close, or even to be sold. So inextricably tied up in the distillery as it was, the brewery needed the distillery to succeed, lest the distillery sink and the brewery be pulled down with it.

This is an extreme example of collaborative disfunction. In most instances, collaborations are more of a mixed bag: they help, sometimes considerably, but also harm. Such was the dynamic with Dave's arrangement sharing milk with the restauranteur. Initially, all parties benefitted from the arrangement – Sōichirō sold more milk, the restauranteur was supplied to pursue her ambitions, Dave cultivated a community connection while doing a good deed for a friend and the local artisan community. However, as both businesses increasingly competed for a finite source of milk, the collaboration became increasingly strained, ultimately falling apart. The fallout was an enduring social rift in a relatively small

professional community. For Dave, like so many artisans working in the tightly knit environments of craft industry, gaining the strength of camaraderie came at the risk of becoming vulnerable through those same connections. This same contentious dynamic also characterizes the working relationships of craftspeople and alcohol, one of humanity's oldest companions, but also one of its most ambivalent collaborators.

Creating Together

Perhaps the most easily recognizable expression of collaboration is product co-development, hereafter production collaboration. When breweries, distilleries, or bakers refer to a "collaboration" (*korabo*, in Japanese), they are typically referring to an agreement between two or more parties to come together to leverage their particular skills, unique perspectives, identities, and customer bases toward the creation of a mutual product (assuming of course that everything goes well enough). The configurations of collaborators are potentially endless, as are the products. Craft breweries frequently pair to produce beers that capitalize on the synergy between their individual identities; two breweries I frequented in the NC Triangle, both of whom catered to the local collegiate communities and whose head brewers were adamant UNC Chapel Hill Tar Heel supporters, brewed an annual collaboration beer during March Madness. After several years, when a mutual friend and Carolina fan became head brewer at another local brewery, they invited him to join their collaboration. Craftspeople also often collaborate with those possessing skills outside their expertise. At the time of writing this chapter, beers brewed with pastries – donuts, honeybuns, cinnamon rolls, etc. – were in fashion, and many breweries in North Carolina and across the country collaborated with bakeries, patisseries, and donut shops to produce interesting interpretations of the emerging style.

It is important to note here that while diverse areas of expertise can enrich a collaboration, the differences of perspective that often emerge from particular training and livelihoods can become a source of conflict when collaborators fail to see eye-to-eye. I experienced this firsthand when attempting my own pastry beer, a donut stout. Prior to brewing, I cast around to numerous local bakeries and donut shops to see if they'd be interested in collaborating. A number refused, or simply didn't reply, but one expressed clear interest, answering my query with a concise but emphatic "hell yeah!" When we actually met at the owner's donut shop, however, the gap between our expectations quickly became apparent. Despite his initial enthusiasm, the owner met my pitch with a blank stare. He responded, jarringly admitting that he wasn't even aware that my organization made beer. He wondered why we wanted to brew a beer with donuts, and expressed concern that it wouldn't be any good. I tried to assuage his fears by citing my experience and the precedents set by other breweries, but this did little to improve his disposition. Ultimately, he consented to *sell* us donuts for the brew. He wasn't really interested in participating in the brew day, nor in the potential of cross-promotion. Not wanting to reduce the collaboration to a simple transaction, I bailed, making my own donuts for the brew on the brewpub's fryer.

While profit is important for any business, and is certainly one of the end goals of collaboration, product collaboration for my artisan colleagues was about more than just making money. For one, collaboration was a valuable and reliable means to build productive working relationships between artisans.[18] Working on a mutual project – a beer, a cheese, a festival - brought together like-minded craftspeople, sometimes with similar skills, and

---

[18] In my experience, this is the most common reasons for collaboration. Even when other objectives are the expressed purpose for a collaboration, building professional and personal networks is often an ancillary objective.

sometimes with dissimilar yet complementary talents and perspectives. New relationships enrich artisan working lives. By pooling skills and experience, craftspeople are able to explore new creative opportunities, like new techniques or recipes, while also diffusing the anxiety of the unknown across a team of experts. A brewpub I worked with that specialized in more traditional English-style ales proposed partnering with a local friend's more contemporarily-minded brewpub to produce a New England IPA, a hazy, fruity style in vogue but out of the former's wheelhouse. If the brew succeeded, both would have a new recipe to tinker with independently down the line. If it failed, well then at least it would be faster to unload sixteen barrels of subpar beer through two breweries. In any case, more heads – and more taps - would be better than one.

New faces, conversations, and rhythms of labor can also break up the monotony of regular workdays. This was often the impetus at the cheese atelier: whether a strength or a weakness (the interpretation changed based on the viewer and the context), Dave struggled to sit still. He was always on the move, in and out of his little white hatchback between the workshop, the shop, retailers, and potential accounts. Dave hated boredom – something with which I could sympathize – and was perpetually on the lookout for the novel. He encouraged the development of new recipes, celebrated when new cheeses became popular, but shortly after shifted his interest to the next idea. As I noted in the previous chapter, Dave saw innovation as the fundamental identity of his business. To further foster that innovation, he would occasionally look outside the atelier for potential collaborators, anyone who might offer a new spark. Ice cream makers, goat farmers, bakers, restauranteurs, local historians, and various other artisans and experts all passed through the workshop.

Dave's most ambitious, and ultimately most professionally and intellectually profitable collaboration was with a local *awamori* distillery. *Awamori* is a rice-based spirit native to Okinawa made with a black mold culture, *kuro-kōji* (*awamori aspergillus*), particular to the island. Like yeast with brewing, the *kuro-kōji* is largely responsible for *awamori's* smooth character and distinctive flavor, and as such is a closely guarded asset among the island's many distilleries. Knowing this, but enamored by the possibilities of working with something so thoroughly and uniquely Okinawan, Dave approached numerous distilleries requesting to use their *kuro-kōji* to make a new cheese. Most replied with a flat "no," but one distillery was curious. Founded in 1882, the distillery was well established, a long-serving member of Okinawa's *awamori* distiller's guild, and family-run for generations, an old guard in Okinawa's artisan community. Yet this distillery was also unique among the relatively conservative *awamori* community in that it was willing to experiment and push the boundaries of what a traditional Okinawan distillery could do. Its most recent innovation, aging *awamori* in whiskey barrels, had gone over well despite some internal and external reservations. Seeing the value of pairing craft foods with craft alcohol, and the potential of *kuro-kōji* to tie different products together, the distillery accepted Dave's proposal.

The actual process for making the cheese, the steps the distillery took to prepare the mold culture for transport, and Ellen and Dave's technique to cultivate the black microbes into a viable cheese, is unfortunately a trade secret, one of the few processes my colleagues specifically requested I not share. What I can share is that process on the cheesemakers' end was one of lengthy trial and error; they were attempting to convince the *kuro-kōji* to make something it had never made before, something that had never even been considered in Okinawa's historically desolate dairy landscape. There were a number of failures, the

frustration of which was compounded by the many months required to determine whether or not a cheese had succeeded. Even the victories were qualified, as Ellen would then have to analyze what went right and apply it to the next batch. Yet, these vexations were offset by the excitement and novelty of the collaboration. Along with the distillery, the cheesemakers were producing something truly original. Consistency was hard won, but when Ellen and Dave finally realized their goal of producing the desired product, the struggle to achieve the result was worthwhile. The final cheese was rich and creamy, not unlike a camembert or brie, but possessed of the mellow tang that immediately expressed *awamori.* The collaborating distillery loved it, and the cheese became widely popular within and without the *awamori* community.

Artisans also collaborate toward mutual causes. Anthropologist Dorinne Kondo, in her study of how artisan labor shapes human perceptions of the self and the other, argues that the engaged communal nature of artisan labor engenders solidarity between fellow practitioners and between artisans and the worlds in and through which they create.[19] Solidarity has been a persistent theme of the contemporary craft movement. The Brewers Association lists among the concepts that popularly distinguish *craft* brewers a tendency toward community engagement, be it in the form of donating products, sponsoring events, volunteering, or other expressions of philanthropy. This was evidenced in 2018, when Sierra Nevada led a nation-wide brewery collaboration in support of the victims of Northern California's Camp Fire disaster. More than 1,400 American breweries, at least one in each state, answered Sierra Nevada's call to brew the aptly named Resilience IPA. Sierra Nevada provided the recipe, a portion of the raw materials, and advertising models; participating

[19] Kondo 1990:247

breweries donated 100 percent of the proceeds. An unprecedented movement in terms of scale, the Resilience collaboration prompted Brewers Association representatives to emphasize in their annual industry report the progressively strong association between craft brewing and "doing good."[20] This altruistic impulse is not limited to brewers; most craftspeople I encountered participated in varying forms of formal and informal charitable intervention throughout the year. Cheesemakers, bakers, distillers, and pâtissiers could be counted on by fellow artisans and host communities to answer calls for aid and action.

Collaborations represent a medium for collective action; while craftspeople certainly can "do good" independently, there is often greater efficacy in numbers. This action can take the form of promotional products, sponsored fundraising events, and festivals.[21] Whatever the method, craft interventions are consistently organized around and directed toward communities. Communities can be geographic: a brewery organizing a 5k run to raise money for a local scout troop, a constellation of alimentary artisans organizing a pop-up market to promote awareness of food security in a metropolitan food desert, or a vast network of breweries, suppliers, and retailers supporting victims of the northern California wild fire. In Okinawa, where locals often worried over a glass of *awamori* whether the melting icecaps meant worse typhoons this year, and the threat of base construction to coral reefs was a

---

[20] Gatza and Watson 2019

[21] While the various craftspeople I encountered emphasized the importance of giving back to the community, only brewers crafted products specifically inspired by and evocative of a cause. This may have to do with the particular materiality of beer: Recipes are generally straightforward – grain bill, hop additions, adjuncts -, and thus fairly easy to plan and execute collectively, even with non-brewers. Beers – at least ales – can be brewed, carbonated, and packaged in a matter of weeks, allowing breweries to react swiftly as actionable needs arise. Canned, kegged, or bottled, beer is also more portable and less perishable than cheese or bread. Beer is also accessible, easy to consume and appreciate (you don't need a sommelier to tell you how to enjoy a quality beer, as one brewer put it), and affordable to the average consumer. Lastly, craft beer is relatable. An established fixture in popular consciousness – superstar breweries like Bells and Sierra Nevada, dedicated craft shelves in supermarkets, brewery names and insignias splashed across t-shirts and trucker hats – craft beer is highly visible as a brew day photo-op on social media or as an artfully designed can in a retail space. All in all, beer is a craft well suited to rapidly translate a cause into a highly mobile, broadly appreciable commodity. (see Heying 2010)

flashpoint of passionate protest, community was imagined at a global scale. This was partly the impetus behind the Okinawa Vegan Food Fest, an annual collaborative event that brought together local craftspeople specializing in food, drink, traditional and contemporary handicrafts, restauranteurs and food trucks, musicians, artists, and activists, all toward advocating more sustainable, ethical human-environment relationships. When I participated, entry to the festival was free, and while participating vendors generally charged regular street price for their food and crafts – the financial circumstances under which these artisans operated made it impossible for most to donate outright – they gave their time and energy to share in the festivities and promote the festival's socio-ecological message. Indeed, compared to other large-scale festivals on the island, the Vegan Food Fest exuded a much more open vibe, with craftspeople inviting guests to sidle up to their stalls or trucks and chat about their identities, practices, and role in the local eco/vegan movement, rather than churning customers through the line.

Collaborations can also benefit communities formed by shared identity. I noted the "Don't Be Mean to People" project in the previous chapter, a collaboration between more than 30 North Carolina craft breweries that brewed a beer in protest of the HB2 bathroom laws affecting transgender individuals. Artisans and craft food purveyors in Okinawa displayed donation boxes in a loosely connected campaign to raise money for victims of the 2011 Tōhoku and 2016 Kumamoto earthquakes. (A number of these craftspeople had themselves relocated from these areas in the aftermath of disaster.) A North Carolina brewery I worked with participated in the annual Triangle Hops for Hope, an event that paired representatives from local corporations with local breweries to produce original beers, the proceeds of which supported Children's Flight of Hope, a non-profit that arranged air

transportation for children needing specialized medical care.[22] Craftspeople are also quick to aid members of their own community: when a prominent area brewer was involved in an automotive accident and incapacitated, fellow brewers donated their labor to brew in his stead and keep his business going during his long recovery. Okinawa's expat artisan community was particularly tightknit, especially when it came to helping new arrivals establish themselves on the island. Once, when a new restauranteur wanted to hold a soft opening, artisans and chefs – many of whom had already contributed to the restaurant's crowd-sourcing campaign - donated their products and skills to help make the launch event a success.

The craft proclivity for community-based intervention I believe owes to the fact that most craft businesses are themselves beneficiaries of community support. A brewery just starting out, with limited distribution and even scanter brand recognition, relies on the willingness of a town, village, borough, or neighborhood to give the newcomer a shot. Even as the brewery establishes itself, it continues to depend on the patronage of the community – or communities - to sustain it. Many fledgling (and even veteran) enterprises also depend on the goodwill of the craft community – some spare hops here, a word of advice there – to see them through their oft-tumultuous startup and the myriad crises that arise in the course of operation (I discuss the informal communism of craft below). For many artisans, craft is intensely personal; many recall the vulnerability of being new to a profession, to an area, or

[22] The Hops for Hope event presented an interesting case study in altruistic collaborations in that it paired small, independent craft breweries with decidedly un-craft corporate entities, what many in the craft community considered the antithesis of craft. A brewer who participated one year reported that while the event was "fine" and "for a good cause," working with the corporate representatives was frustrating. The brewer felt that the representatives were operating out of a sense of company obligation, and weren't really interested in the beer. This impression was validated when the representatives expressed no strong opinions during the recipe planning meeting, and then declined to participate in the brew day. The brewer concluded that their perspectives were just too far apart. Not wanting to risk a similar experience, he declined to participate in future iterations.

to an identity, and the impact the support of their communities made. If craft is characterized by a deep engagement with the *place* of practice, then this engagement is also productive of a desire – perhaps even an obligation – to reciprocate, to give back to that place.[23]

Lastly, though infrequent in my experience, production collaborations can also serve as the means toward resolving a conflict. A well-known example in the craft community is the Collaboration Not Litigation collaboration between Avery Brewing of Colorado and Russian River of California. A potential conflict arose when the breweries realized they both brewed a Belgian ale named Salvation. But rather than send cease-and-desist notices or take the matter to court, the head brewers, strangers up to this point, avoided litigation by blending their beers into an original collaborative recipe (hence the name).[24] Often, these collaborations address more private disputes. I knew two brewers who had worked together earlier in their careers in a close, albeit sometimes tense, partnership. Unbeknownst to his co-worker, one brewer began discreetly soliciting and entertaining offers from other area breweries. The brewers had different philosophies when it came to brewing: one erred on the side of tradition, while the other was hungry to experiment. As he told it, despite liking his current brewery and appreciating the opportunity it provided him, the desire to find an outlet for his own vision compelled the brewer to seek alternative employment. When he finally

[23] It's certainly arguable that craft altruism is at least partly self-interested, insofar as the public relations generated by the collaboration translate into increased brand recognition and sales. That said, I never encountered that critique among craft producers or their patrons. When Anheuser-Busch canned and distributed drinking water in 2016 and 2017 for those impacted by hurricanes Harvey and Florence, there were mumblings within the craft community about big beer's latest PR stunt. Yet, North Carolina craft breweries are uncynically celebrated when they convert their large boil kettles into sources of potable water for their communities following hurricanes or blizzards. I've wondered about this seeming double standard. I think the reason craft breweries are exempt from much of the skepticism associated with corporate altruism is that craft businesses are generally firmly *emplaced* in their communities. It is natural for such a business to help out its community, as the community and business are natural allies, neighbors helping neighbors. *Placeless* as AB-InBev and its products are, detached from any particular community, perhaps it strikes onlookers as unnatural when a distant corporation suddenly displays local interest.

[24] Klein 2011

announced his departure to a new brewery one town over, his partner feigned aloofness when together, but was vocally upset out of earshot. Tension mounted during the departing brewer's one-month transition, exacerbating an already fractious relationship. The partners stopped talking, communicating only in terse questions and monosyllabic answers. The brewers maintained an icy silence for several months after the separation, finally thawed when a mutual friend suggested the two join forces to brew a new beer: a traditional grain bill and classic hops for one, an experimental fermentation method for the other. The beer was pretty good by all accounts, but the more valuable product was the realization that they were much better friends, and more professionally functional as occasional collaborators, than co-workers. Through collaboration, they forged a new chapter of their ongoing partnership.

Market of Friends

Product collaborations are often the most visible forms of collaboration in practice, and represent moments of exception from the quotidian rhythms of craft lives and livelihoods. But undergirding these overt collaborations are subtler, more pervasive cooperative practices that bind craft communities in North Carolina or Okinawa together: informal markets and the everyday communism of craft.

Craft enterprises are enabled, and in some senses ensnared, by their participation in formal and informal markets. These markets are the manifold flows of resources from which artisans draw the means of their craft. By *formal,* I mean those legally recognized and regulated transactions between economic entities mediated by the exchange of capital. *Informal markets* index networks of exchange directly between craftspeople, regulated by personal relationships, individual sentiments, and the social pressures of the community of

practice. While distinct in structure and custom, the boundaries of these markets are blurred and permeable in practice. Simultaneously navigating the currents and eddies of these entangled systems of exchange is vital to survive and thrive.

Formal markets supply most craft businesses with at least some portion of the ingredients, equipment, and other resources necessary to function. Part of maintaining a craft business is securing reliable access to these resources, many of which are now widely or cheaply accessible to the general public, through contractual agreements with specialty suppliers. A craftsperson certainly can source their materials from a retailer: Dave bought his milk from a supermarket in the earliest startup days of his cheese shop. But it wasn't until Dave contracted with Sōichirō's dairy that he was able not only to source milk with a significantly higher fat content (and thus better for cheesemaking), but also at wholesale prices that finally enabled viable margins. Acquiring supply contracts is a complex form of collaboration in its own right, and even smaller craft businesses can gradually amass a dizzying array of providers. The brewery I worked for regularly relied on six primary suppliers: two separate distributors for malted grain, one for base malts (pale ale and pilsner), and another for specialty malts. (The brewery also replaced equipment through a separate division of one of these grain providers.) In order to cover the myriad varietals used throughout the year, the brewery also maintained contracts with multiple hop providers, three at one point, then later streamlined to two. Caustics, acids, and other sanitation chemicals came from a different specialty distributor, and CO2 and nitrogen for carbonation from another. The brewery also retained handshake agreements with an HVAC repair service, a boiler repair service, and a plumber for any maintenance issues (i.e., if something breaks, we'll be sure to call you first). Add to this a virtual rolodex of on-demand suppliers for fruit

and honey, non-contracted hops, and more obscure pieces of equipment, and the brewery began to appear like a vast web of contractual relationships and obligations. And while some of the ateliers I studied pursued the ideal of self-sustainability, growing, foraging, or otherwise independently sourcing a percentage of these resources, none were able to fully realize this dream. Ultimately, all brewers, and likely all craft businesses, are inextricably caught up in these webs of supplier dependence.

Informal markets represent a counterpoint to and supplement of the formal market, extending the reality of dependency on external suppliers but with added flexibility, accessibility, and personability. Informal markets are organically woven from the casual exchange of professional goods and services within the more intimate boundaries of a community of work. In my experience, dealings are more personal and direct, often occurring candidly between craftspeople and largely eschewing outside mediation. The terms of exchange are likewise uncomplicated; the majority of informal market interactions I observed or participated in during my research were one-off trades of ingredients or sales of surplus equipment over beer or coffee, and the longer-duration contractual arrangements I witnessed were rarely sealed by anything more authoritative than a handshake. For instance, I worked with two breweries that agreed to evenly split costs and bottle sales from a collaboration beer, yet never drafted any form of contract or even bothered to hammer out the specifics of the deal, assuming both parties would "do right by" the other. It should not be assumed that participants in informal markets were reckless or were correspondingly casual in upholding deals. Quite the opposite, in fact. Many craftspeople I worked with felt the informal market was comparably more reliable – not to mention amicable and affordable – than its formal counterpart. Personal obligations and the social pressures of the work

community acted as a far more effective market regulator than commercial or legal institutions. In the informal market, one's reputation is everything, and the community of work, especially at the local scale, is far too small a world to effectively hide malfeasance, and far too volatile to survive without integrity.

In practice, craftspeople make use of both formal and informal exchange. Navigating the nuances of these intertwined forms of commerce is a crucial skill to survive, and to turn a profit. Nowhere is the subtle interplay of formal and informal markets more apparent than in North Carolina's secondary hop market. Securing a reliable supply of hops can be one of the more daunting necessities facing a craft brewery. In the U.S., breweries typically contract hops from a major distributor like Brewers Supply Group (BSG) or YCHops. These contracts not only provide hops at discounted wholesale rates, but also ensure that breweries will have access to hops throughout the contract year, often stored in the distributor's warehouse. However, distributors generally only establish advantageous contracts with breweries that they deem worth their time, i.e., willing to purchase above a certain minimum amount per month or year. Very small-scale operations, including the recently popular nano-brewery models, can struggle to meet these minimums. These breweries are left to a number of alternatives: such as distributor secondary markets that sell excess hops – called "spot hops" - after contracts have been settled. Brewers can also arrange informal contract relationships with larger breweries burdened with excess hops, often allowing the smaller breweries to pay the same wholesale prices.[25] Alternatively, smaller breweries can team up and approach

[25] Hop contracts are structured around crop year, i.e., the year the hops were grown and harvested, and contract year, the year the contract goes into effect. There is a one-year offset between crop and contract year: a 2018 contract year is for hops grown and harvested in 2017. Breweries generally sign multi-year contracts, contract year 2016-18 for crop year 2015-17. When a new crop of hops becomes available in January of the new contract year, a brewery can opt to receive the hops en masse, or elect to parcel shipments throughout the year. In the latter scenario, the unrequested contracted hops are stored in a distributor warehouse; breweries contact the distributor and request hops as needed. If, at the end of a contract year, there are unused hops left in storage, the

distributors as a collective. Even with greater numbers, there are potential risks in soliciting multi-year contracts. Craft breweries, like any business, are subject to the volatility of the market, and sudden dips in customer demand and brewery production can leave contract holders sitting on piles of dead capital in the form of excess hops.

For those brewers looking to work outside formal or informal contract relationships (and avoid their potential risks), websites that list and sell excess hops and "spot hops" can provide a viable alternative. The Lupulin Exchange is an online storefront where users can buy and sell aftermarket hops or hops outside of traditional distribution. Sellers, typically brewery representatives, can list hops for sale, detailing the variety, crop year, quantity for sale, and brewery of origin, and then set a price per pound, of which Lupulin Exchange takes a small percentage as intermediary.[26] Buyers, be they professional brewers or highly active homebrewers, can search by these same criteria, comparing prices and crop years - the LE provides historical data on average, low, and high prices in a sidebar display. Sellers can fulfill and ship orders independently, or arrange orders to go directly to their hop distributors who then process and ship from their warehouses (although not all distributors offer this service). Buyers are able to contact a seller directly to ask for clarification or, occasionally, negotiate. I worked at a brewery that made extensive use of the Lupulin Exchange, offloading hundreds of pounds of excess hops from overly ambitious contracts. From time to time, brewers would contact us through LE offering to buy directly, sometimes offering to drive to our brewery for expediency or to save on shipping. Typically, these buyers would

---

distributor can charge the contracting brewery a monthly storage fee. These storage fees can quickly become burdensome, especially when a brewery experiences a dramatic decrease in production, and off-loading excess hops and avoiding storage fees is impetus to participate in informal markets.

[26] Surveying and using the site, I noted that a majority of sellers identified as breweries, but some independent hop farms or smaller brokers also made use of the site as a digital storefront.

expect a lower price per pound, reflecting the cutting out of the middleman and a courtesy from one industry professional to another.

At a more intimate level, brewers can pursue the aftermarkets of their local professional community. Most of the brewers with whom I was professionally connected belonged to a closed Facebook group to which they would post industry updates, classified ads, useful tips, and pleas for materials. This example represents a fairly typical request:

"Need 22 lbs of Citra for brew tomorrow, supplier is late. Can replace next week, or pay now. Cheers!"

How a brewer might respond to this post would come down to a number of personal factors, the most influential being 1) how rare were the hops in question and 2) how well they knew the requester.

Some hops are harder to find than others, be it because they're not widely grown or because they're highly sought after (or both). Fashionable varieties in high demand - e.g., Citra, Galaxy, Dr. Rudi - could be nearly impossible to find on any market, particularly late in the season. In the above scenario, if the requester posted in January or February shortly after the new crop became available through suppliers, there might be a number of replies willing to sell or exchange. (There's also the chance that someone might offer to trade Citra for another variety of hop, but given the value of Citra, that is unlikely.) However, the request may garner fewer replies the later in the year it's posted. In 2019, for example, Citra was so over-utilized that it practically disappeared from all markets by late May. A brave soul posted to the NC Facebook group in early June seeking 11 pounds of Citra, and was met with only laughing emojis. (In fairness, the poster acknowledged the absurdity of the request in subsequent comments.)

In the event that brewers are willing to part with their hops, the question becomes whether they loan, trade, or sell. Loans, the delayed reciprocation of hops between two breweries, were the most frequent activity on the informal markets I observed. The decision to loan hops, as opposed to trading or selling, was partly determined by expediency and necessity: if the offering brewery does not need the hops immediately and can wait for the receiving brewery's shipment to arrive, then a simple loan may be acceptable. Alternatively, the offering brewery may consent to a loan if their contract on a particular hop is depleted - and their supplier no longer has any inventory - and they need that specific variety for a future project. It is also influenced by trust: do you believe the borrowing party will honor the obligation to reciprocate? (It is therefore a testament to the camaraderie of the NC brewing community that many brewers readily practice lending.) While the most common method of exchange, loans were also the most fraught. Debt complicates craft lives and relationships; there was discomfort in being in debt to another brewery, or in being the holder of a debt owed by another. Ameliorating this awkwardness (to some extent) required a delicate etiquette, the rules of which were largely unspoken. Hop loans ought to be repaid as soon as possible for mutual peace of mind; it was incredibly rude to let a debt ride for an inordinate period of time. Once, despite promising to replace the hops the following week, a brewery failed to reciprocate my brewery for over a month. The head brewer was reluctant to inquire after the hops (a common sentiment among the NC craft beer community), but eventually asked me to email the brewery. They replaced the hops the next week, but the head brewer refused to ever loan to them again. Loans also incurred interest, yet most craftspeople I met in the U.S. and Japan never openly acknowledged that rule for fear of looking crass. Generally, breweries would supplement replacement hops with growlers (64

oz. glass jugs) or six-packs of beer, or more rarely t-shirts or other forms of brewery merchandise. There was no explicit calculus to determining appropriate interest – one brewer I knew based the amount of beer he requited on an estimate of how much the lending brewers could probably drink in an evening after work - yet it was best to err toward generosity to avoid developing a reputation for being stingy.

Alternatively, brewers could exchange hops by trade. Using the above example, a fellow brewer could respond that they have extra Citra, but it would be great if they could trade those excess hops for a different variety, say Galaxy (an Australian variety of similar value), to use in an experimental beer. Trades were generally based on rough equivalency: the price of a bag of Cascade for a bag of Centennial, eleven pounds of Galaxy for a couple bags of specialty malt, a brew-worth of Warrior for a round of golf and dinner, etc. These calculations were deliberately inexact. Too strict of attention to relative cost per pound was gauche, the mark of a miser; requesting to have hops weighed in both parties' presence evidenced a lack of trust. As with loans, there was a tacit assumption that fellow craftspeople would be fair, and an expectation that they would err on the side of generosity. Certainly, there were instances where individuals breached this etiquette. Sometimes brewers proposed bad trades in which relative values were too dissimilar, e.g., attempting to offer an eleven-pound bag of Liberty ($8.50/pound) for the same weight of Citra ($25+/pound). The other could reasonably reject the trade, but that sort of thing was painfully awkward for many. Community members could also earn reputations for being cheapskates, or just plain dishonest. I knew of one brewer who often agreed to trades at amicable terms, only to haggle for a better deal prior to the exchange. Another brewer was notorious for arriving at exchanges having consistently – conveniently - misplaced or forgotten the agreed upon hops,

swearing he'd bring them around next week, effectively changing the terms of the trade into a loan. But these negative examples were the exception: trading for most was the easiest, least awkward, and most cordial expression of the informal market. Trading expanded the possibilities brewers enjoyed, allowing them to transform their stock into exciting new hop varieties, or entirely different materials or experiences. And by participating, brewers helped reaffirm their professional and community relationships without the burden of later reciprocation.[27]

Finally, when in doubt, brewers opted for cash transactions. Selling hops to other brewers represented an alternative means of exchange when loans or trades were in some way unsuitable. Loans, for instance, could pose logistical difficulties. Most craft breweries are small, operating with minimal staff at 40 plus hours a week to stay profitable. Given these hectic schedules, it was often difficult to coordinate appointments to reimburse hops. Buying hops outright was often easier. Brewers might also resort to selling when they had nothing compatible to trade. More poignantly, cash and checks were the preferred medium of exchange when brewers lacked trust. For all of the American craft beer movement's claims to internal camaraderie (claims well-evidenced), there were still bad actors in the community and precedent to avoid interpersonal risk. Many I worked with could relate stories of being burned before. One brewer I knew well frequently sold hops and grain to a colleague

[27] When brewers - or any craftspeople for that matter - collaborate frequently and over long periods time, developing a foundation of mutual trust and understanding, sometimes their interactions in the informal marketplace can assume the appearance of gift-giving. A brewer I worked with would regularly travel to a colleague's brewery to spend the day washing kegs in his automated keg cleaner (a contraption that condensed a day's worth of physical labor into a couple of hours leisurely work, but a convenience the former's brewery could not afford). By way of reciprocating, the former brewer would invite the latter brewer along to university basketball games using his brewery's season tickets (the result of another collaboration between the brewery and the university). The transaction appeared on the surface to network friends socializing outside work, but the borrowing head brewer made a point each season of prioritizing his brewer friends with keg cleaners or other valuable services, ruefully referring to this consideration as "the cost of doing business."

operating the next town over. Observing one such interaction, I was struck by my friend's insistence on being compensated in cash. When his colleague complained that he didn't have cash on him, and asked whether a check would suffice, my friend, normally so generous and flexible with fellow brewers, hesitated. He ultimately accepted a check, admitting to me later that it wouldn't have been "a good look" to refuse, but cashed the check immediately, fearing it would bounce. He shared the context of his trepidation later that day: he used to loan or trade materials with that colleague all the time, but the latter was always slow to repay, often repaid with inferior-quality hops, and nickel-and-dimed him in negotiations. Cash – or check, in this case – was the most reliable and expedient means of satisfactorily completing the transaction and preserving their already damaged working relationship.

As this anecdote illustrates, like loans and trades, there was a nuanced decorum to buying and selling with fellow craftspeople. Likely a reaction to what they saw as the cold, impersonal character of corporate dealings (a world many in the craft community left), there seemed to be a concerted effort to make commerce as open, friendly, informal, and hospitable as possible. Many brewers, including my aforementioned friend, were vague in price negotiations, never too demanding about payment, often downplaying needing the check or money before giving over the hops (even though they, as most understood, really did). In the event that materials had to be weighed out, brewers were purposefully inexact, rounding up to the nearest pound and often overfilling bags by a couple ounces. Setting reasonable prices for hops was typically an elaborate, subtle performance in indirectness. The brewers I worked with never applied a premium to hops sold on the secondary market; they either sold at their distributor cost, or a little below, especially if the hops weren't of the

current crop year. If asked to quote a price, most rounded down to the nearest dollar.[28] Often, transactions would conclude with brewers suggesting a drink, or vowing to treat each other to beers the next time they were in town. These conventions served to reaffirm the amicability and supportiveness that marked the community, reinforcing the ideals of a community to which brewers wanted to belong. And the social pressures attached to loaning, trading, and selling on the informal market in turn shaped the brewers themselves; as one brewer put it in concise, strong terms, "No one wants to look like a cheap fuck."

The Love You Give

In his historical analysis of debt and its role shaping human sociality, *Debt: The First 5,000 Years* (2011), anthropologist David Graeber proposes the concept of "baseline communism," or "everyday communism" to describe a habitual philosophy of "from each according to their abilities, to each according to their needs" enacted throughout cultures on a quotidian basis.[29] Taking a view wider than particular socio-economic systems, Graeber argues that communistic action is endemic to human sociality. Holding open a door, sharing a meal, bumming a smoke, or helping a friend move house; communism manifests in everyday expressions of courtesy, hospitality, and humanity.[30] These expressions of assistance – the "from each" – are often so minimal and so effortless that they go unnoticed, even by those who receive them; someone, even a total stranger, would hardly refrain from

[28] Among the brewers and other craftspeople I encountered in North Carolina and Japan, no one felt comfortable making a profit off a fellow craftsperson on the secondary market. Intentionally offering low quotes or weighting scales in the recipient's favor were common practices. Indeed, it seemed my collaborators were more willing to take a small loss to benefit a colleague than to take advantage of one (or even invite rumors of such behavior). Certainly, my sample group could have been peculiarly kindhearted, but based on what I've witnessed first-hand and the second and third-hand anecdotes I've collected, I doubt my collaborators were exceptional in that regard.

[29] Graeber 2014:95, 98

[30] Graeber 2014:95-8

passing the salt. Nor, Graeber reflects, would that person be likely to ask what they will get in return for passing the salt: the aid is so apparently inconsequential that it does not oblige direct reciprocation.[31] Yet, as Graeber contends, it is through these forms of quotidian support that social living is made workable, efficient, and amicable: we live our lives confident that others will, in myriad small ways, take care of us.[32]

In contemporary artisanship, everyday communism manifests as an ethos of mutual care undergirding craft communities. The commitment to aid one's fellow craftspeople is the most fundamental and pervasive form of practical collaboration. What often distinguishes craft communities from the general societies in which they emerge, particularly those societies organized by capitalistic socio-economic values, is how thoroughly, openly, and self-consciously the spirit of everyday communism is woven into the practices and structures that animate and organize artisan industries. Sparing twenty liters of milk for a neighboring cheesemaker in need, or posting notes on an experimental fermentation to an online forum, craftspeople frequently engage in behaviors that appear counter to the overtly competitive spirit of the free market, willingly supporting potential rivals ostensibly at the cost of their own edge. Yet it would be difficult to imagine what the craft landscape would look like, how it would even function, without the ready camaraderie and open-handed sharing of labor, materials, and ideas. It is the myriad small considerations and favors, the minutiae of care, that make the craft world go round.

Craft everyday communism is distinct from other expressions of practical collaboration in that it is performed without expectation of immediate reciprocation. Whereas

---

31 Graeber 1014:100

32 Graeber 2014:98-9

participants in production collaborations anticipate collaborators will act as team players throughout the process, and transactions on the informal market demand recompense, craftspeople who share equipment or ideas generally do not imagine that they will be directly reimbursed by those they benefit. Rather, I've found that craftspeople take a more circuitous perspective on mutual care: to support one brewer in the state or one artisan on the island is to support the whole community. These craftspeople hold that participants in craft are all in it together, and that caring for your neighbor ultimately builds a stronger community for everyone. An expectation to reciprocate prevails, but as a more indirect obligation to pay it forward to the next in need when you're able. Care *ought to* beget care, and very often *did* in practice.

A common thread linking the North Carolina brewing community and the Okinawan artisan community was the ready availability of assistance, with craftspeople freely providing hands-on support or sharing expertise (practices that often went hand-in-hand). The craft communities I observed functioned as living open-source databases of specialized knowledge. Either via forum or social media, by phone or in person, community members had the ability to ask questions and seek advice about anything from production facility construction to recipe trouble-shooting. This resource was often critical to new start-ups, and especially when helmed by inexperienced owners or former amateur artisans attempting to make the jump from their garage to a professional space. As I've noted in previous chapters, brewing a beer or pressing a cheese is a complex process with considerable room for error and a lot that can go wrong, sometimes catastrophically. A timely skilled hand here or a seasoned eye there could often turn the tide of disaster.

The commitment to care was echoed in the personal philosophies of my collaborators. Dave the cheesemaker treated his tiny farmhouse workshop as an open classroom for professional and enthusiast alike. Fellow artisans regularly called on Dave's shop as a source of quality dairy products – cheese, butter, yogurt, cream, whey – to complete their own projects, confident that Dave was honest and fair with his prices (on the occasions he actually charged). More so, Dave, confidently conversant in Japanese, was a valuable resource for the island's expat artisan community in making introductions to Japanese-speaking patrons, facilitating connections to island businesses, and wading through the local bureaucracy. It was rare for a week to pass without Dave arriving in the middle of the workday, wide-eyed local or tourist in tow, to run through the production process and break out some samples. Anyone who wanted to learn a little practical cheesemaking was welcome, even if that person was a potential rival. Why buy mozzarella at the shop when you can learn how to do it at home? Or you can figure out how to make a proper cheddar? Come by the workshop and we'll run through a demonstration. Dave did not see anyone as a competitor, or if he did, he didn't fret about their possible impact on his business. There was enough money to go around. What was really important was diffusing education and spreading appreciation for quality, honest artisanal food.

Thousands of miles away, head brewer Brian worked with a similar philosophy. Most weeks with Brian were punctuated by small acts of generosity. When a neighboring brewery's draft line burst hours before opening, Brian rushed over to help the inexperienced staff replace the line. On another occasion, he taught a colleague a simple yet potent and cost-effective technique for clarifying beer, saving the brewer from purchasing a thousand-dollar industrial filter. Word spread, and Brian subsequently taught a string of that brewer's

friends. With ten years professional brewing experience, a veteran in the relatively new craft industry, Brian was a repository of technical information and empirical data (though he was either too self-conscious, or not self-conscious enough, to admit it). Brian believed that experience ought to be shared open-handedly, without expectation of remuneration (outside perhaps a beer), to those who asked for it. North Carolina brewers were in competition, Brian noted, but not *that kind* of competition. "It's not cut-throat." This was made evident to me when Brian turned over his brewery recipes, stating that he didn't mind if I saw them and didn't care if I published them. Even if another brewer copied his English IPA, they didn't have his house yeast, his equipment, and his history making the beer. It wouldn't be the same, so it wouldn't really compete with his taps, but it might stoke customer interest in the style, so why not just share it?[33] The biggest issue facing the sustainability of the contemporary craft beer movement was not competition, in Brian's opinion, but a lack of technical skill and knowledge. So many well-meaning, ambitious, and smart people had jumped into the industry, but they didn't have the training to make good beer and good business. He was fortunate, having been personally trained for years by an actual brewmaster with decades of practice. Brian believed that raising the average level of expertise was good for everyone, as better beer all around would better serve to grow and sustain public interest

[33] Admittedly, Brian's nonchalance in regard to sharing his recipes hints at a measure of professional bravado, a similar streak I noted in Ellen the cheesemaker, who also openly shared her recipes with me, and with other craftspeople in the US and elsewhere. As Brian noted, even someone with the same recipe wouldn't be able to replicate his proprietary yeast – a collaborator he worked tirelessly to cultivate and maintain –, his seasoned equipment, or his experienced feel for the recipe. Try as you like, you can't make my recipe as good as I can. This sentiment was echoed by Ellen and others I spoke to on the matter. It reminded me of something a professor once told a professionalization seminar when students expressed concerns over sharing their unpublished work with other academics lest it be plagiarized. The professor noted that, sure, someone could poach the idea for your project or a cool turn of phrase you coined, but they couldn't steal the time and effort you put into your research. They could mimic you, but you were the actual expert.

in craft beer; quality beers brewed with passion backed by skill were the heart of the movement.

Brian's perspective points to an important rejoinder to the practice of everyday communism in a mercantile, predominantly capitalistic context: the tension between communistic ethos of mutual care and market competition. While craft's collaborative ethos may eschew more overt performances of competition, as Brian acknowledged, craft industries are nevertheless competitive. All but the most golden-parachuted of craftspeople must struggle to survive in volatile marketplaces. Craft breweries do compete with other craft breweries (and craft wineries, distillers, meaderies, etc.) for market share, and brewers scour consumer trends to find some means of distinction over their colleagues. Rather, to Brian's point, it's that craft businesses are competitive, but typically only up to the point of directly and intentionally impeding on a rival's ability to survive. It's not cut-throat. Even so, customers are a finite resource, and one brewery drawing a large number of customers can indirectly exert pressure on a neighboring brewery, especially in small communities. That can't really be helped. But the craftspeople I've collaborated with refrained from doing anything that could be considered an attempt to intentionally undermine another's livelihood. Indeed, my colleagues would often point customers at their own breweries toward other local breweries, even when they didn't think their beer was particularly good - "I don't want to talk bad about another brewer," was the common excuse - out of desire to spread the wealth and further educate the customer on the diversity of craft beer.

Industry leaders and analysts have previously suggested that the craft brewing industry's concern with collective well-being is due to craft's antagonistic rivalry with macro-brewing, corporate behemoths that have time and again used their industry clout and

political connections to stymie the progress of small brewers.[34] Mutual care is a natural reaction to coming up perpetually under attack, the Davids banding together to defend against the Goliath. There is much truth to this. Yet, I also feel this interpretation only reflects a part of the story. From working with numerous craftspeople struggling to make their way in various precarious socio-economic and geographic contexts, I find this ethos of mutual care has more to do with a shared empathy for vulnerability. At one point or another, most craftspeople - I would dare say all craftspeople - have felt vulnerable, and experienced the anxiety, frustration, and fear that goes with it. It is scary to leave a career for a new profession, painful and frustrating to learn a new set of skills, intimidating to set up shop and risk it all. The contemporary craft industry is too young, and still too volatile for most to have forgotten how it felt to be vulnerable, and what a difference a little bit of help freely given made, or could have made. Many, I believe, enter a craft livelihood not for the money - salaries and margins are generally not high enough to merit a career change, and few can hope to sell their artisan business for millions - but to live differently. There is a desire to change the world for the better, one pint or wheel at a time. This ethos radiates beyond the workshop, subtly inclining craftspeople to apply the same care to their communities. Having suffered alike, craftspeople are well-appointed to mend their colleagues when things inevitably fall apart.

The Collaborator's Dilemma

In the above sections, I have largely focused on the positives of craft collaboration, exploring collaborative practice from the perspective of net gain. But this is only one side of the coin. Even when collaboration functions optimally, it still presents complications for

[34] See Noel 2018

participants. The net gain obtains, but a comprehensive understanding of collaboration entails also attending to the loss.

In this section, I want to briefly outline a fundamental dilemma of collaboration, namely the potential of collective labor to obscure and erase individual agency. Collaboration, no matter how amicable and productive, is to some degree alienating for participants.[35] Alienation is an unavoidable aspect of collaboration, as sharing work and relying on others necessarily entails surrendering a certain degree of control over one's labor. I experienced the qualitative difference between working alone and working together firsthand on a daily basis, comparing writing a dissertation, an individual project over which I had significant creative control, to brewing, a team endeavor in which agency was asymmetrically distributed across an internal hierarchy. While working together diminishes the stress accompanying sole responsibility for a project, and allows collaborators to pool their strengths and offset their weaknesses – you don't have to have all the answers - there is some degree of pride, sense of accomplishment, or feeling of power lost in relying on others.

When craftspeople collaborate, the work of the individual risks being subsumed by the collective, and the contributions of the collective risk being conflated with the individual. In the former, the uneven, specialized contributions of collaborators are flattened into an egalitarian project owing uniformly to the collective, e.g., a *shop's* flagship cheese or a *brewery's* award-winning beer. Whether one brewer wrote the recipe, or whether one cheesemaker did all the production, is lost. Such simplifications serve to avoid excluding any

[35] Marx (1990) describes alienation as it pertains to labor the social experience of removal, the separation of the worker from the object they produce. Marx characterizes alienation as a form of exploitation, in which the worker invests time and energy into a product, but then has control over that product taken from them. In capitalism, Marx contends, alienation is necessary for the economic system to function, as alienating the worker from their labor allows the labor as product to be sold for a profit. In order to craft collaboration to function, individual craftspeople must be at least partially divested from control over the products their labor helps produce.

one contributor, to celebrate the collective, and to claim collective ownership of the project. But these conventions come at the cost of diminishing the ability of the craftsperson to see their individual effort and skill in the final product, and the potential for their handprint to be recognized by others. In the latter, alienation results when individual collaborators come to represent the work of the whole. There is a marked tendency in the popular imagination to fetishize leaders – owners, master artisans, production leads – as the project itself; the head brewer becomes the brewery. Once again, individual contributions are largely obfuscated. But this erasure is compounded by the collective identity and contribution (to which these individuals can at least claim some partial ownership) - design, production, logistics, marketing, and vision - collapsing into a single persona.[36]

In my fieldwork and professional life, the contours of alienation became most tangible and salient when breweries competed for medals. The craft brewer's calendar is inundated with dozens of local, state, national, and international competitions, in which brewers enter beers to be judged on taste, execution, and adherence to style guidelines, among other criteria. Winning medals is a source of publicity, a means of distinction and indicator of quality in an increasingly saturated market. (Some breweries also base their raises and bonus programs on medals won.) More personally, medals are a source of pride for the brewers who earn them, a valuable line on a resumé, but also a sign of individual skill and accomplishment.

[36] Importantly, individual collaborators are not always silenced, and many breweries and other craft businesses are increasingly recognizing the particular contributions of staff. While the life story of a cheesemaker or the thought process of an assistant brewer generally can't fit on a label or can, social media and "About Us" pages on websites allow craft businesses the platform to share more detailed perspectives on the hands, heads, and hearts that produce craft commodities and communities.

However, while cause for celebration, being awarded a medal inevitably raised a persistent question, sometimes tacitly contemplated, sometimes openly verbalized: Who actually won the medal? Who deserves credit for the win? Medals were awarded at the brewery level, with the beer's creator listed as the brewery, rather than a brewer or brewers. Medals were likewise held at the brewery level, staying with the brewery even as its brewing staff changed. This convention vexed some of my more transitory colleagues; from their perspective, the award was based on the beer, and the beer was more a result of the brewer's skill than the brewery's equipment. Certainly, as long as they stayed at the decorated brewery, they could maintain a connection to the accomplishment. But what if they moved to another brewery? They could cite on a resumé the silver, gold, or platinum medals they helped their brewery win, but they had ultimately put those medals on the brewery's wall, building the brewery's reputation, rather than around their own necks. For all their work and expertise, the brewers couldn't really own their achievements.

Ascertaining merit was even more precarious for brewers in support positions. Brewmasters, head brewers, and other lead artisans were more established in the community, often the visible faces of their businesses, and thus better positioned to claim ownership of a victory. It wouldn't be a stretch to assume that the most experienced artisan was the brains behind the operation. Indeed, some award notices even listed the head brewer's name alongside the brewery. (Entry forms also sometimes asked for "additional brewers," but I never saw these names make the cut.) But what if the beer that medaled wasn't the head brewer's, or wasn't exclusively their work? What if an assistant brewer designed the recipe? What if a support brewer actually produced the beer?

When my brewery entered the first recipe I ever designed into the State Fair beer competition, we won a gold medal in the category (with consideration for Best in Show). While the head brewer and I had brewed the beer together, and while my recipe was a modified version of the head brewer's brown ale recipe (itself a tweak of his mentor's recipe), it was the first beer on which I unequivocally took point.[37] The head brewer messaged me the night of the award announcements to congratulate me. I was excited, I called my dad. I was fired up coming into the brewery the next Monday, and stood proudly next to the head brewer when he informed the owner of our accomplishment. "Great job!" the owner exclaimed, shaking the head brewer's hand and clapping him on the back. "You nailed it again!" The head brewer tried delicately to shift the praise to me, but the owner, a ball of constant motion, had already moved on to other matters.

Credit is certainly not everything, but when you're trying to prove yourself in a field (and when you don't make very much money), it's definitely something. Being denied that credit feels like having a piece of yourself, something you worked hard to polish, stolen. But this, as my colleagues would often put it, was just another cost of doing business. To become skilled, a novice would need the direction of more experienced artisans, collaborations that cost the novice their time, energy, and sometimes their ideas. To get for yourself, you had to

---

[37] I once asked a colleague who was preparing to leave his position to join a new start-up brewery what he planned to brew. "What I already brew here," was his response. He insisted that, despite being his present brewery's fourth generation head brewer, all the beers on tap were his. This was striking, as I knew most of the flagship beers on tap to predate the current brewer. But the brewer dismissed this apparent incongruity, claiming that the tweaks he had made to the inherited recipes were sufficient enough to claim ownership. "They're basically mine."

It's interesting to consider how recipes change hands and, in some cases, authorship. At what point does a recipe cease being derivative and start being unique? In some sense, all recipes that adhere to a recognized style, or even those that intentionally deviate from a style, are inherently borrowed work from an artisan long since lost to the ages. Many of my colleague's recipes were based on his predecessor's, but on what was that brewer's creations based? When are you just brewing someone else's beer, and at what point does the recipe become yours? Can a recipe ever really belong to one person, ever really be the work of one person? Even so, recipes are proudly claimed and zealously guarded; the contributions of many become the intellectual property of the few.

give of yourself, even the occasional gold medal. It wasn't really any different for the head brewers; the brewery provided a platform for them to develop their skills and showcase their creativity, but unless they owned the business, their investment in the brewery was not theirs to keep. Brian and I brewed in the shadow of the former brewmaster, a proper artisan with forty years in the craft who had crossed an ocean at the behest of the owner to design the brewhouse, train the staff, and create the flagship beers that would define the brewery. But in the meager space of fifteen years, he was gone; a falling out with the owner, and all that work left behind in someone else's business. Another five years and all that remained was a name on a plaque, a faded picture on the wall, and a notebook of recipes no longer brewed or modified beyond recognition. A new wind had swept through the brewery, carrying the brewmaster's voice with it.

Therein lies the collaborator's dilemma: the more a craftsperson invests in the *other,* be it a business partner, a business, or a community, the more they divest of themselves and surrender their agency. This is true in collaborations between humans, whether the individual's voice is drowned out by the collective din or subsumed by the loudest speaker. Alienation at some level is practically unavoidable, as the craftsperson, entangled in networks of interlocutors and working through lineages of practice, enters these collaborations the moment they pick up their craft. For better or worse, it's collaboration all the way down. But fellow humans are not the only actors capable of advancing this alienation. As I explore in the following pages, non-human collaborators can just as readily consume a craftsperson's agency.

The Wolf at the Door

My daughter was born on October 6th, six weeks early and weighing only three pounds. Elsie spent the next 79 days in the NICU, giving her lungs extra time to develop. Living and working only a mile from the hospital, Lauren and I visited Elsie every single day of her stay, Lauren from morning to evening and I as soon as I left the brewery at which I was working and conducting research. The milestones trickled by, some happy, some painful. It would be dishonest to say I handled this period well. Initially, Elsie's situation didn't register: I assumed she would be discharged in a matter of days, maybe a week or two. Doctors assured us very early on that Elsie's situation was a matter of "when," not "if," and that afforded a tremendous amount of relief and considerable degree of patience. But as time stretched on, I struggled to maintain my optimism. It was difficult to watch other babies come and go, to explain to relatives and coworkers why Elsie still wasn't home, to smile through the well-intentioned assurances that everything would be okay. To cope, I buried myself in brewing, using craft as an opportunity to switch off for eight hours a day. Most days passed as if I was walking through a haze; and it was in the desire to perpetuate this haze that I first experienced a strong internal pressure to drink.

I met many brewers and other artisans who struggled with some form of substance abuse during my research, but it wasn't until this crisis that I had my own brush with the wolf at the door. I spent most days anxious over Elsie's progress, nursing a sadness that was gradually becoming habitual. Often, the work itself was enough to forget, but some days were harder than others. Like many breweries, my brewery practiced a very liberal policy of unlimited free beer for brewers during and after the workday. The key to oblivion was always readily at hand. Even good days carried the pressure to drink to celebrate a good report or

milestone. I refrained most days, worried that drinking would leave me ultimately more depressed than I already was. But not all days. Drinking was always a double-edged sword: disinhibited and euphoric, I could temporarily escape my anxiety and melancholy. It felt like everything would be okay. Going to the NICU wasn't so scary. But when the euphoria inevitably faded, I was left weary and emotional. I felt guilty for dropping out, especially while Lauren was nursing and unable to pursue the same relief. On several occasions, I left work so tired that I struggled to read Elsie a story, focus on updates from Lauren or nurses, or motivate myself to visit the NICU at all. One evening, having celebrated some small victory at the brewery's bar, I fell asleep at home and almost missed a day, rushing to the NICU at midnight. I didn't go to that hard again, but I didn't swear off drinking either. The solace of a pint was sometimes too tempting.

Elsie was finally discharged on December 23rd. Christmas Eve and Christmas were a blur of excitement and anxiety; we finally had Elsie home, and now we were on our own! I write this now with Elsie, a very healthy, vibrant, and petite nine-month-old, snoozing peacefully on my chest. The blessing and the curse of ethnography is that anthropologists live their research, for better and for worse. The study of life is subsumed in life; we don't get to pick the events that impact that life, nor can we fully control our emotional reactions to them. In the midst of research, my personal life took an abrupt turn, and I encountered the subject of my research in a new, disturbing form. The problem I encountered was not the act of drinking itself, but that something I had done socially, professionally, and for personal enjoyment had, recast by my crisis, slipped into a vice intended to isolate myself from my problems. But it was through this painful conversion that I began to appreciate how the craft

brewers with whom I worked and lived might develop a destructive relationship to what they produced, to something they loved.

I would like to close this chapter by considering an exceptionally potent collaboration, one as powerful in the livelihoods of human laborers as it is contentious: the uneasy alliance between craft brewers and the beer they create. Toward unravelling this relationship, I explore some of the industry conventions and common pressures that facilitate and incentivize drinking. These conventions and pressures help shape the contours of contemporary craft's drinking culture, influencing how industry professionals relate to each other and their craft through alcohol. While these working relationships with alcohol can enhance a brewer's livelihood and quality of life, they can also cultivate corrosive patterns of consumption that ultimately erode the brewer and the industry alike. As I will illustrate, sometimes the things we consume come to consume us.

It may seem immediately obvious why craft brewers drink, and why they might drink so much. If you spend all day making your own beer, of course you're going to drink it. Indeed, one of the most pervasive justifications for drinking, in excess or otherwise, that I encountered in the industry was the expectation that brewers be intimately familiar with – and enjoy - their craft. Drinking on the job was a fairly customary component of professional brewing. With the exception of one head brewer I worked with who staunchly refrained from drinking until he clocked out (perhaps due to the fact that the former head brewer – his mentor – had resigned to enter rehabilitation for alcoholism), and another who only drank off the clock and off premises to disguise his substance abuse from his investors, many of my colleagues drank throughout the day. It was always noteworthy – arguably inhospitable – to walk into a fellow brewery and not be offered a beer. One brewer habitually started the day

by taking a drink from a handle of whiskey kept in his brewery's hop cooler, saying it was to "prime the pump" and get him in the right frame of mind. Brewers sampled beers throughout the day, generally pouring a little more than what was required for quality assurance. Even so, most brewers I knew also did not drink to the point of becoming drunk, at least not while there was work to do. Brewing can be a dangerous and delicate process; intoxication could lead to botching a batch, mishandling equipment, or infecting a yeast culture. But such restraints were lifted after work: brewers regularly came in the next day nursing hangovers (hair of the dog being another reason to drink), and stories of drunken exploits prevailed in idle chatter on the shop floor.

Beyond fun or professionalization, brewers drank for medicinal reasons. Channeling Charlie Papazian's maxim "relax, don't worry, have a homebrew," some brewers would drink to calm their nerves. Like any skilled labor, there is a considerable amount of worry and stress that goes along with brewing. A lot can go wrong during a brew day. Even when things go right, a good deal of uncertainty attends the finished product. Will it maintain quality over time? Will people like it? Will it sell? Producing eighteen barrels of sellable beer is a big responsibility and entails a substantial measure of risk. Brewing can also be an intensely social vocation necessitating daily correspondence, hosting tours, and networking at professional events (see chapter two). A significant number of my interlocuters struggled with chronic anxiety, some from a natural proclivity, but many more from the pressures of running a small intendent business, from being thrust into a social spotlight , and from all the other quotidian demands and uncertainties of their profession.[38] Some took prescriptions to

[38] Journalist and blogger Luke Robertson (2017) writes that, despite scant coverage of the issue, craft beer professionals routinely struggle with anxiety and depression. His informants, brewery owners, brewers, and brewery support staff, share the difficulties of managing these disorders alongside hectic work and social

manage their symptoms, but many regularly reached for the medicine readily at hand for courage and to chill out.

Brewers also drank when they were bored. As one habitual drinker put it, beer was how you turned a boring day into a fun day. Despite what observers might imagine, brewing can quickly become quite monotonous. Trying a new recipe, experimenting with new techniques, wondering how it will turn out can be as exciting as it can be terrifying. But that initial rush depreciates after you brew the beer a dozen times, a hundred times. There was often a lot of downtime in the average workday, what one head brewer called "hurry up and wait" brewing: waiting on the mash to steep, waiting on the run-off, waiting on the boil, waiting on the transfer, waiting on the tank clean. As brewers became more skilled and efficient, this downtime generally increased. There were numerous strategies to pass these idle periods: read a book, play on your phone, go for a walk, do a crossword, write a dissertation, or, the preferred approach, have a beer.

While alcohol in small amounts can help brewers loosen up and shake off the worries of the workday, professional drinking can quickly exceed moderation and brewers can succumb to alcohol's depressant qualities. Some fall into destructive collaborations with alcohol. One brewer, Kyle, had developed into an inveterate drinker after nearly a decade in the craft industry. Kyle was habitually anxious and his brewery, nestled in seasonal tourist community, was very slow six months out of the year. Kyle addressed both these issues with alcohol. Kyle's day usually began with a hangover from the previous day's work, sometimes necessitating an early pint to get going, but generally leaving him feeling drained and nauseous much of the morning. Some mornings his hangovers, complicated by his anxiety

---

responsibilities. These professionals note how difficult it can be to reconcile panic attacks and social withdrawal in an industry that presents and is celebrated as uplifting and laid-back.

over feeling sick, were so intense that he spent hours in the bathroom or on a small couch, delaying that day's agenda. Kyle did most of his work in the late morning; given the size of his operation and skill level, he could generally finish the day's projects in a couple hours. He began drinking in earnest around noon, knocking back beers in the tasting room bar while calculating taxes or waiting on cleaning cycles. Kyle tried to stick to beers with lower alcohol percentages, but if his boredom was particularly pronounced, or if he encountered a complication – a terse email from the owner, an unexpected keg order – he would switch to glasses of wine and shots of liquor to quell his rising unease. Yet the more he drank, the less motivated he became to address these issues, to get ahead on the week's work, or brainstorm ways to improve and innovate business. Inactivity beget more anxiety, which beget more drinking, and so on.

Kyle sometimes wondered aloud in candid conversations as to whether or not he was an alcoholic. Probably, he admitted: he felt he needed alcohol to function, to feel good enough to move around and do his job, to navigate the upsets and uncertainties of his life. He also acknowledged that the drinking negatively impacted his ability to do his job, demotivating him and making him sick.[39] Even so, Kyle claimed that he didn't *need* to drink under normal circumstances. At home, for example, he claimed to only drink socially and would often go the entire weekend without drinking. He also abstained from drinking for

[39] Kyle was an example of what I call functional alcoholism. In the popular consciousness, alcoholism is indexed by withdrawal from the normal patterns of social life and an inability to perform the major functions of one's livelihood (the DSM V does these among its diagnostic criteria for alcohol-related disorders, but the basis for clinical diagnosis is more nuanced). Kyle's quality of life and career, like a number of his colleagues, was negatively impacted by his excessive consumption of alcohol: his chronic nausea interfered with his enjoyment social situations, and his fatigue exacerbated the strain of his routinely physical job. But rather than becoming impossible to maintain, the material and social conditions of his occupation, and the fact that his social life was predominately tied to the brewing community, actually facilitated his drinking. Kyle's case study suggests the need for an expanded understanding of how alcohol or other addictive substances can impact lives, specifically in contexts where the substance and the object of work are the same.

over a month after troubling blood work revealed early liver damage. Rather than a fundamental defect in his nature, Kyle held that his drinking problems were a symptom of his occupation. If he could get out of the brewery, he wouldn't be afflicted. But after nearly ten years committed to brewing, what else could he do? His other occupational training had lapsed, and feared he was getting too old to start over. Whether or not he could quit drinking, he couldn't quit beer.

Alongside facilitating the habitual alcohol consumption, the craft industry's culture also actively incentivized professionals to enthusiastically partake. There are, for instance, incredible social pressures attached to drinking. When brewers get together, they typically drink: their beer, each other's beer, everyone else's beer. Beer is as much recreation as it is profession. To not drink, as my experience at brewing school suggests, was to be left out at best, abnormal at worst. Refusing the offer to drink with another brewer was considered rude, a dismissal of hospitality and indicative of a desire to disengage from the artisan community. I encountered this expectation at the earliest pedological stages of the profession: my classmates in the brewing program, most of whom had volunteered in breweries before attending, routinely drank between classes and into the late hours of the night. My reluctance to match them pint for pint subjected me to regular criticism: if expertise and passion were tied to a capacity and desire to imbibe, how could I claim to want to be a brewer if I didn't love to drink beer, and a lot? On the occasions where I declined to have a beer in my own brewery, frequent while I was writing and staying up late every night with an infant, I was often the subject of light-hearted ribbing from the head brewer and other brewery staff. I never declined when we visited another brewery, or when other brewers visited with their beer, however. My coworkers understood my situation, but colleagues outside the brewery

might not. I have known of brewers who, for various circumstances, can't or won't drink alcohol, socially or otherwise. While most professionals I've met tried to be considerate, the choice to abstain nevertheless arises in whispered conversations at community gatherings. ("Did you hear they don't even drink their own beer? How do they still brew?")

Drinking often took on a performative dimension. As I noted, the craft brewing community is competitive. One of the metrics across which brewers compared their relative expertise was by cultivating and demonstrating the breadth of their knowledge. The most accessible means of expanding one's understanding of craft styles and trends was to drink widely. When visiting a new brewery, there was a compulsion to seize the opportunity to try as much as possible. This was the logic and justification of my Siebel classmates - "when's the next time you're going to be in Chicago?" Comparing tasting notes about various styles and their variants was a common topic of brewer small talk, a way to break the ice and perform one's identity as an artisan.

The incentivization to drink can also be built into the compensation of brewery employees. Brewing is not a highly lucrative career path if measured in terms of annual salary, especially for novices just entering the industry. (As one senior brewer put it, "you won't get poor brewing, but you certainly won't get rich.") Lower pay was offset by the nostalgic charm of being an artisan, the cool factor of making beer, and a number of other fringe benefits.[40] Low pay was also often justified as an opportunity cost; as an apprentice, you were being paid in experience. Salaries were also padded – and employees enfranchised - by open access to house taps: brewery staff were welcome to take a reasonable amount of beer from the brewery. Like 18th century British dock workers carting home "chips" of

[40] Ocejo 2017:133

lumber in deferment of cash wages, beer was contemporary form of being paid in kind.[41] But this had tacit limits. Walking out the door with too much beer each week would likely lead to an uncomfortable conversation with management. Some breweries attempted to address this ambiguity by systematizing the practice: the classified of one brewery in Arizona listed among its benefits a two-sixths barrel (ten gallon) "ration" of beer that could be used for personal consumption or gifts, but could not be resold. Yet such explicit policies were rare. Most breweries opted to err on the side of generosity, and most of my interlocutors claimed that they would never dream of working at a brewery that was stingy with its beer.

"Paying in beer" as an alternative to a formal salary was also a common practice in the craft beer industry, especially when dealing with low-paid or unpaid volunteers. The head brewer of a nano-brewery with whom I collaborated worked many years in neighboring breweries before starting his own place.[42] During that time, he was almost exclusively paid in beer. Within the industry, saying one was being "paid in beer" was a euphemism for working for experience, an inside joke among those compensating and being compensated primarily in transferable skills. But paying brewers in kind was also a viable strategy in an industry where the need for labor and the hunger for hands-on work experience often outweighed cashflow. Handing an unpaid intern, keg washer, or assistant brewer a case or growler of beer at the end of the day - or at least making it clear that one is welcome to such things - had a tangible resonance that helped retain talent and labor power. The beer, like a hand of bank notes, was a physical representation of one's labor, even of one's progress. It

[41] Graeber 2014:352

[42] Nano-breweries are generally defined as breweries that produce three barrels (93 gallons) or less of beer annual. Relatively new concepts, nano-breweries have been made possible by the growing availability of small-scale brewing equipment tailored to craft producers.

was something that could literally be taken home at the end of the day and shown to others - perhaps also to oneself - as justification for pursuing the craft.

Most of my colleagues did not consider open access to beer to be an industry problem or to pose a risk to the community, even when prompted. These brewers, many of whom were unpaid or underpaid assistants early in their careers, felt the beer was something they were owed as part of their salary, an entitlement. After all, it was their labor and knowledge that made the beer. They rejected any attempts to alienate them from the product of their work (Marx would be proud!). Some did concede that the arrangement could be problematic if a brewer let their drinking get out of control. But this was roundly considered a fault in the individual, not the system. If someone drank too much beer, it was because they didn't have their priorities in order.

Even so, my ethnographic research and industry anecdotes I collected revealed how paying in beer, and the craft brewing industry's liberal drinking culture in general, could harm the community of practice by incentivizing overconsumption. The boon of free beer was significant, especially for a novice artisan of modest means. And when beer was framed as a perk, there was significant pressure to make use of that perk lest you forgo a portion of your compensation. One brewery allowed personnel to take as many dented or discontinued cans of beer home as they wanted. An assistant brewer shared that he had already filled a refrigerator with cans, and felt he needed to drink nightly to make room for his weekly haul. When I suggested he refrain for taking anymore cans, he scoffed; "I'm not going to say no to free beer!" Consumption in practice is only limited by the popular conventions of the institution, and one's own biological limits. If every pint or growler consumed represents an opportunity to learn, a professional advantage, or added compensation, what was the

incentive not to drink? Rather, there appeared to be every incentive to drink, even to drink *in excess*. The culture of craft brewing encouraged and facilitated brewers to drink often and in considerable volumes. Some could strike a balance between professional expectations, social pressures, and personal impulses. Others, like Kyle, could not. But the ones who fell prey to alcohol, even when the minority, are very much the issue at the heart of brewer-alcohol collaboration: namely, the point at which the craft's own drinking culture begins to erode craftspeople and the industry itself.

Several years ago, a prominent, well-established North Carolina brewery closed unexpectedly. At least, the closure was unexpected to the general public. Members of the local craft brewing community had observed the storm on the horizon for some time and felt that the brewery's failure was inevitable. The head brewer was a known alcoholic. He drank heavily at industry events and when visiting other breweries for professional or social calls, often to the point of being stumbling drunk. He drank just as much, if not more, at his own brewery. Over the years, the brewer's drinking grew worse, and he began making more and more mistakes on the job. The brewery's flagship beers became inconsistent. The head brewer was forced to dump a growing number of batches down the drain, each failure costing thousands of dollars in materials and tens of thousands in potential revenue. Neglected cleaning eventually allowed a yeast infection to contaminate the brew house. Too addled by alcohol to isolate and remove the source, the infection persisted. Months without turning a profit stretched into quarters, and eventually into years. The co-owners debated in a series of meetings what to do about the toxic situation; the head brewer would have to go. Ultimately, however, his unamicable departure could not salvage the brewery. The business was too far

in the red, its reputation among consumers and distributors too tattered. The venerable institution shuttered its doors less than a month later.

My colleagues occasionally spoke of the failed brewery, and the story of its doomed captain was fairly infamous within the local brewing community. Some fixated on what a shame it was, or how a brewery that established could fail. What were the owners thinking? Why didn't they fire the head brewer sooner? What was the head brewer thinking? How could he throw away that opportunity? Why couldn't he get his shit together? Blame was ascribed to the strategic and moral failings of individuals. But these critics were the same hosts who liberally poured for the head brewer whenever he visited their breweries. The craft brewery - and craft drinking culture broadly - was not a space of alcohol intervention. The brewery was a place to celebrate beer, the product that made the business and the craft movement possible, not stymie it. Certainly, my interlocutors recognized firsthand the compulsion to drink that their profession cultivated; drinking fatigue was common frustration. Nevertheless, they positioned the head brewer's addiction as a personal issue. Whether or not his struggles were symptomatic of craft drinking culture was a matter left unexplored. And even after everything fell apart, brewers, including myself, still offered him a beer or three when he came to call. You could turn away a problem customer, but not a fellow brewer.

The everyday working rhythms of craft brewing illuminate the nuances of human-alcohol collaborations, a complex and precarious entanglement of agencies. Alcoholism and other destructive patterns of alcohol consumption are the wolf at the craft brewing industry's door, one the community threatens to let through by maintaining a culture so uncritical of drinking. Sharing alcohol can be good, healthy even; it enriches the lives of brewers and their

communities, it helps people come together, and helps them fall apart. Craft brewing celebrates this important collaborator, and I think rightfully so. But I think that this celebration should be tempered with a more nuanced appreciation of alcohol's agency, one that puts the good in dialogue with the bad. Beer is delicious and can help brewers and casual drinkers alike navigate the unpredictable flows of a volatile world. But alcohol is also addictive. Alcohol is *active*, possessing a potent capacity to transform craft livelihoods and communities.[43] For all the good that craft industries try to effect in the lives of their members and the communities they serve, the things they create can tear those same lives apart. And the drinking culture of the American craft brewing scene can incubate and obscure these destructive patterns, making them harder to untangle and address. Brewers and anthropologists alike should be wary. But, by confronting our professional and recreational cultures in which we employ alcohol, we may cultivate a more amicable working relationship with our ambivalent collaborator.

Collaboration is both the operative ethos and fundamental working structure of craft production. Craftspeople, their communities, and the things they create are all in it together, for better and for worse, and whether they like it or not. Entangled in these causal threads, craftspeople struggle to create, to innovate, and to survive. While the social, economic, and ecological forces of their working worlds often exceed their individual agencies, craftspeople endeavor their individual and collective visions by asserting their expertise. In doing so, craftspeople shape the ecology of craft as it shapes them, generating rhythms of heart and matter both constructive and destructive. The wheel never stops turning; all craftspeople can

[43] See Bennett 2010

do is work to avert crisis and direct some small measure of this energy toward better beers, better lives, and better worlds.

CONCLUSION: LAG PHASE

Oh all the money that e'er I spent
I spent it in good company
And all the harm that e'er I've done
Alas, it was to none but me
And all I've done for want of wit
To memory now I can't recall
So fill to me the parting glass
Good night and joy be with you all

- *The Parting Glass*, Traditional Scottish Drinking Song

4:00 pm on a Tuesday, an unseasonably warm autumn day in North Carolina. I stand on the brewhouse's central platform, gazing at the copper-plated vessels and tracing the intermittent nicks, dents, and spidery silver scratches, some of my own, and more from brewers past. I reach over and flip a small green LED-lit switch, the steady murmur of the pump winds down, a momentary silence between the hectic bustle of the day and that which will come tomorrow. I jot down a few notes on gravity and temperature, tidy up some loose odds and ends, and make one last inspection of the fermentation vessel in which today's brew now rests. We pitched 30 pounds of our house yeast, and in the coming days it will increase to five-times that volume, eating sugar and creating carbon dioxide and – most importantly – ethyl alcohol in the process. But right now, the tank is as silent as the brewery, no tell-tale bubbling of fermentation. The yeast is in what brewers call the lag phase, in which the yeast microbes acclimate to their new environment in preparation to ferment. Tomorrow, unless something has gone wrong, I'll come in to a puddle of krausen, the foamy head that yeast

produces on fermenting beer, ejected through the blow-off tube on the side of the tank. I'll be greeted by the furious rumbling of an active, hungry culture. Today, a rest.

This conclusion is another lag phase of sorts, a pause between the conclusion of one project and the beginning of another. I have learned as an academic and an artisan, the research never truly stops. But this moment represents a pause, an opportunity to slow down, take stock, tidy up, and consider what has been accomplished.

The underlying conceit of this project has been to explore how contemporary artisans mobilize the specialized practices, philosophies, social networks, and cultural meanings of their craft to navigate moments of personal and collective crisis, i.e., the precarity of 21st century employment. This exploration began with trying to untangle what craft production actually is, what does it signify to identify a producer or product as craft. To that, I have attempted to furnish a distinction between craft in the eye of the outside observer versus that in the hands of the artisan.

As a conceptual market category, craft has several dimensions. First, craft is *hands-on,* produced by skilled and knowledgeable professionals with a dedicated passion for the object and an intimate, visceral knowledge of the product and its constituting elements. Artisans gain this knowledge through hours and years of training and study, moving from apprentice to journeyman to master as their proficiency develops. Craft is about care, the effort put both into a product and into the self.[1] Second, craft is *authentic,* made honestly, with integrity, and without gimmicks (or at least with the right sort of gimmicks). There is an expectation among consumers – one shared by many of my artisan colleagues - that craft products, produced with care by dedicated professionals, are more transparent than

---

[1] Grossman, 2013 Paxson, 2013, Bostwick 2014, Weiss 2016, Chapman 2017, and Ocejo 2017

industrially produced goods; they're made the right way, without shortcuts. The products, be they beer, cheese, or whiskey, are more representative of what these things *should* be; they are more whole.[2] That these commodities are produced in small batches is suggestive of the care put into them, and of their distinction from mass-production.[3] Lastly, craft products are *local*, indexing personal and collective associations with around-here-ness. Craft makes tangible (and ingestible) the environmental, historical, cultural, and social elements that make localities distinct.[4] The alchemy of craft can transform even disparate, imported ingredients into a cohesive taste of place.[5]

But as I have attempted to illustrate, craft can mean something different, considerably more complex and ambivalent, to those who take it up as a livelihood and identity. In practice, craft livelihoods are an amalgamation of struggle and failure, hope and success, control and chaos, skill and ignorance, vision and compromise, community and alienation. While brewing in North Carolina or cheesemaking in Okinawa present different challenges and opportunities, my interlocutors shared a fundamental concern: to keep going. The crisis of becoming an artisan, the pain and joy of apprenticeship, gave way to the crisis of how to maintain one's industry and the identity and everyday life it furnished. Resilience, innovation, and collaboration were the strategies through which my interlocutors strove to navigate this crisis.

---

[2] Calagione 2005, Pollan 2006, Heying 2010, Collinson, P. and H. M. Macbeth (2011), Grossman 2013, Ocejo 2017

[3] Pollan 2006

[4] Weiss 2011, Alexander 2013, Meli 2013, Murphy 2014, Ocejo 2017, Noel 2018

[5] Ocejo 2017

Resilience is the mettle necessary to survive a working landscape characterized by precariousness. In practice, resilience emerges on one hand as embodied techniques and skills, transmitted through historical precedent and honed by personal experience, that orient the artisan to their environment and help them move through it. On the other, resilience is the cultivation of a devil-may-care, desperado attitude to hardship, a means of inuring the mind and soul against the realities of a livelihood in which one can only ever exercise partial control. As I have shown, applications of resilience do not always mesh with craft's reputation as honest and transparent. Cheating, misrepresenting, cutting corners, and manipulating represent the other side of the coin, borne of desperation toward the same fight to persist.

Innovation is the alchemy of continual renewal, the expressions of creativity and the concessions of compromise through which craftspeople evolve themselves and their industry to meet the capricious demands of survival. One part vision and two parts compromise, innovation is the means by which craftspeople translate their creativity through the filters of market economics, community expectations, working histories, and local cultures, endeavoring to still see some glimmer of the project they envisioned. Innovation also enkindles the passion that keeps artisans engaged in their craft, burning higher when newness is realized, and lower when that vision is snuffed out. This anxiety extends to artisan businesses as they struggle to stay fresh, hip, and relevant in a fickle market, to keep up and push beyond, to keep burning.

Collaboration is the state and practice of *working together* that defines contemporary craft. Artisans work within tangled webs of mutual support, obligation, and reciprocation, drawing and maintaining connections with diverse constellations of animate and inanimate

things, socio-economic and political infrastructures, and environments. Such is the inescapable primacy of collaboration to artisan labor; it is so entrenched in every aspect of artisan production, that collaboration obtains whether artisans recognize their myriad collaborators or not. Craftspeople and their working worlds are shaped by collaborators in ways that often exceed expectation and intention. Collaboration comes at the cost of diminished agency, and sometimes the power of collaborators can surmount human control altogether. For better and for worse, craft is collaboration all the way down.

Resilience, innovation, and collaboration form the elemental threads of what I've called a *working philosophy* of craft. This philosophy is not codified as formal pedagogies or certification programs. Nor is it found in overt industry commentary. Rather, this philosophy emerges in the nuances of everyday practice: tried and true techniques and cautionary tales, momentary excitements and habitual worries, off-hand conversations and practiced manifestos, successes and failures big and small. The capacity to collect these constituent fibers was the result of my standing at the intersection of artisan and anthropologist, a craft livelihood parsed through the critical lens of ethnography.

Now, what lies on the other side of this lag phase? What further fermentation is possible? One hope for this project is that it calls attention to and celebrates the complexity of human work. Interwoven in the joy and excitement that craft industries generate – the eye-catching wheels of cheese, the jovial bearded brewers - is the struggle, the cold hard realities of working in a precarious industry. Richard Ocejo suggests that craft industries can fall victim to their own institutional charisma, a compelling glamor generated by overly optimistic industry publications, enthusiastic consumers, and the hype produced by workers

themselves.[6] While institutional charisma can motivate customers, it can obscure the less than ideal conditions under which industry professionals work.[7] This book aims to temper this charisma by encouraging those reaching for a pint or a wedge to consider the forces, environmental and cultural, personable and microbial, that make these artifacts of social life possible.

This book also aspires to serve as a point of reference and commiseration for those struggling through and toward uncertain futures. The road to becoming an artisan, to changing one's identity to anything, is difficult. Sometimes incredibly so. Maintaining that identity can be even harder. I believe I owe a great deal of the candidness with which my collaborators shared their successes and failures, hopes and worries – their lives, blemishes and all – to the fact that, for so many of them, talking about their professions in negative terms was seemingly incomprehensible to industry outsiders. Echoing Ocejo's institutional charisma, my interlocutors' friends and families found it hard to believe that making beer for a living or pressing cheese in tropical Okinawa could be a hardship. But it very much could be. Some artisans, would-be apprentices or veterans alike, grapple with pressures of their chosen profession by burning out. Some self-medicate. I hope that some eventually reach for this book and in doing so realize that their struggles, while personal, are not unique. This book bears witness to the fact that others have gone where they are going, have tried to recreate themselves at various stages in their lives – myself included – and while some have lost, others have not. To the overwhelmed assistant brewer thinking of throwing it in, to the

[6] Ocejo 2017:133

[7] Ibid.

exhausted distiller trying to pay the bills, to the cheesemaker far from home, you’re not alone.

Contemporary artisanship is like Darwin’s tangled bank, a vibrant landscape clothed in a diverse mesh of complex, mutually dependent actors. Humans and microbes, cows and wheat, local clubs and bureaucrats, typhoons and power failures, all contribute to the elaborate tapestry of craft. For the artisans who work through this tangled bank, who cultivate resilience, assert innovation, and draw on the bonds of collaboration, this landscape presents both joys and struggles. But it is through these struggles that craftspeople are able to transform the precarious landscape – and themselves – into something unique: a taste of survival. A taste of hope.

REFERENCES

Acitelli, T. (2013). *The audacity of hops: The history of America's craft beer revolution*. Chicago: Chicago Review Press

Alexander, J. W. (2013). *Brewed in Japan: The evolution of the Japanese beer industry*. Vancouver, UBC Press.

Allen, M. (2002). *Identity and resistance in Okinawa.* Lanham, Md: Rowman & Littlefield Publishers.

Allison, A. (1994). *Nightwork: Sexuality, pleasure, and corporate masculinity in a Tokyo hostess club*. Chicago: University of Chicago Press.

Allison, A. (2006). *Millennial monsters: Japanese toys and the global imagination.* Berkeley, CA: University of California Press.

Allison, A. (2013). *Precarious Japan*. Durham, NC: Duke University Press.

Amcghee (2018, April 23). "Your ultimate list of Asheville's 30 breweries." *AVL Today.* Retrieved from https://avltoday.6amcity.com/beer-city-usa/.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: Author.

Andrews, T. M. (2017, May 5). "'Treachery': Craft brewery Wicked Weed enrages fans by partnering with big beer." *Chicago Tribune*. Retrieved from https://www.chicagotribune.com/business/ct-wicked-weed-inbev-backlash-20170505-story.html

Appadurai, A. (1986). *The Social life of things: Commodities in cultural perspective*. Cambridge: Cambridge University Press.

Bennett, J. (2010). *Vibrant matter: A political ecology of things*. Durham, NC: Duke University Press.

Bernot, K. (2015). "The past – and future – of Japanese craft beer." *Draft Magazine.* Retrieved from https://draftmag.com/japanese-craft-beer-history-future/

Borovoy, A. B. (2005). *The too-good wife: Alcohol, codependency, and the politics of nurturance in postwar Japan.* Berkeley: University of California Press.

Bourdain, A. (2000). *Kitchen confidential: Adventures in the culinary underbelly*. New York: Bloomsbury.

Bostwick, W. (2014). *The brewer's tale: a history of the world according to beer*. New York: W.W. Norton & Company.

Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge, U.K: Cambridge University Press.

Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Cambridge, Mass: Harvard University Press.

Brewers Association (2019, May/June). "Rankings." *The New Brewer*, *36*(3), 125-200.

Brewers Association. (n.d.). *Craft Beer Industry Market Segments*. Retrieved from https://www.brewersassociation.org/statistics-and-data/craft-beer-industry-market-segments/

Brewers Association. (n.d.). *First Look at New On-Premise Sales Price Data*. Retrieved from https://www.brewersassociation.org/insights/first-look-at-new-on-premise-sales-price-data/

Brewers Association. (n.d.). *State Craft Beer Sales & Production Statistics, 2018*. Retrieved from https://www.brewersassociation.org/statistics-and-data/state-craft-beer-stats/

Brodwin, P. (2013). *Everyday ethics: Voices from the front line of community psychiatry.* Berkeley: University of California Press.

Calagione, S. (2005). *Brewing up a business: adventures in entrepreneurship from the founder of Dogfish Head Craft Brewery*. Hoboken, N.J.: John Wiley.

Callon, M. (1986). "Some elements of a sociology of translation: Domestication of the scallops and the fishermen of St. Brieuc Bay," pp.196-223, in J. Law (eds.), *Power, action and belief: a new sociology of knowledge?* London, Routledge.

Chapman, N. G. (2017). *Untapped: exploring the cultural dimensions of craft beer*. Morgantown: West Virginia University Press.

Christensen, P. A. (2015). *Japan, alcoholism, and masculinity: Suffering sobriety in Tokyo*. London: Lexington Books.

Christy, A. (1993). "The making of imperial subjects in Okinawa." *Positions: East Asia Cultures Critique.* 1:3.

Collinson, P. and H. M. Macbeth (2011). "The thirst for tradition: Beer production and consumption in the United Kingdom." pp.89-99, in W. Schiefenhövel and H. M. Macbeth (eds.), *Liquid bread: Beer and brewing in cross-cultural perspective*. New York: Berghahn Books.

Crowell, C. (2017, May 2). "Why do breweries fail? We search for the one true answer (and fail)." *Craft Brewing Business.* Retrieved from https://www.craftbrewingbusiness.com/business-marketing/why-craft-breweries-fail/

Desjarlais, R. R. (1992). *Body and emotion: The aesthetics of illness and healing in the Nepal Himalayas.* University of Pennsylvania Press.

Downey, G. (2005). *Learning capoeira: Lessons in cunning from an Afro-Brazilian art*. Oxford: Oxford University Press.

Figal, G. A. (2012). *Beachheads: War, peace, and tourism in postwar Okinawa*. Lanham, Md: Rowman & Littlefield.

Fowle, Z. (n.d.). "Kveik: The hottest new centuries-old beer yeast you've never heard of." *Draft Magazine.* Retrieved from https://draftmag.com/kveik-the-hottest-new-centuries-old-beer-yeast-youve-never-heard-of/

Furnari, C. (2017, May 3). "Anheuser-Busch to purchase Wicked Weed Brewing." *Brewbound.* Retrieved from https://www.brewbound.com/news/anheuser-busch-purchase-wicked-weed-brewing

Furnari, C. (2018, March 27). "A record number of breweries opened in 2017, but closures are on the rise." *Brewbound*. Retrieved from https://www.brewbound.com/news/record-number-breweries-opened-2017-closures-rise

Gatza, P. (2018, December 18). "Brewers Association board updates: Craft brewer definition, taproom class, political action committee." *Brewers Association.* Retrieved from https://www.brewersassociation.org/industry-updates/brewers-association-board-updates-2018/

Gatza, P., & Watson, B. (2019). Challenges & resilience in 2018. *The New Brewer*, *36*(3), 41-46.

Glenn, A. F. (2018). *Asheville beer: An intoxicating history of mountain brewing.* Charleston, SC: The History Press.

Goffman, Erving. 1951. "Symbols of Class Status." *British Journal of Sociology*, 2(4) 294-304.

Gribbins, K. (2015, November 16). "What are the historic success and failure rates of breweries?" *Craft Brewing Business.* Retrieved from https://www.craftbrewingbusiness.com/business-marketing/historic-success-rates-brewing-abnormal-beer-announces-1-million-expansion-six-months-makes-us-muse/

Grossman, K. (2013). *Beyond the pale: the story of Sierra Nevada Brewing Co*. Hoboken, New Jersey: Wiley.

Hankins, J. D. (2014). *Working skin: Making leather, making a multicultural Japan*. Berkeley: University of California Press.

Harrison, J. (2005). “Spam.” pg. 185-98. in *Fat: An anthropology of an obsession.* In Kulick, D. and A. Meneley. (eds.). Penguin Publishing. New York.

Heath, D. and A. Meneley. (2010). "The Naturecultures of Foie Gras: Techniques of the Body and a Contested Ethics of Care." *Food, Culture and Society* 13, no. 3, pg. 421–52.

Helf, K. (2019, April 10). “Beer notes: Glitter beer sparks controversy (it’s still pretty, though).” *Shore Craft Beer.* Retrieved from https://shorecraftbeer.com/beer-notes-glitter-beer-sparks-controversy-its-still-pretty-though/

Heying, C. H. (2010). *Brew to bikes: Portland’s artisan economy.* Portland, OR: Ooligan Press, Portland State University.

Hindy, S. (2014). *The craft beer revolution: how a band of microbrewers is transforming the world’s favorite drink*. New York, NY: Palgrave Macmillan.

Hindy, S. and T. Potter (2005). *Beer school: Bottling success at the Brooklyn Brewery.* Hoboken, NJ: Wiley.

Hooley, D. (2016, April 11). “’Don’t be mean to people: A golden rule saison’ is the official beer against HB2.” *INDY Week*. Retrieved from https://indyweek.com/food-and-drink/news/don-t-mean-people-golden-rule-saison-official-beer-hb-2/

Ingold, T. (2000). *The perception of the environment: Essays on livelihood, dwelling and skill.* London: Routledge.

Ingold, T. (2011). *Being alive: Essays on movement, knowledge and description*. London: Routledge.

“Is marijuana legalization a threat to craft beer?” (2016, November). *American Craft Beer*. Retrieved from https://www.americancraftbeer.com/marijuana-legalization-threat-craf

Jay, B. (2013, November 25). “Yo-Ho brewing: A window into craft beer in Japan.” *Serious Eats.*

Kawano, S. (2010). *Nature's embrace: Japan's aging urbanites and new death rites*. Honolulu: University of Hawai’i Press.

Kell, J. (2017, May 3). “Anheuser-Busch just bought its 10th craft brewer.” *Fortune.* Retrieved from http://fortune.com/2017/05/03/abinbev-tenth-craft-brewer-deal/

Klein, S. (2011, August 1). "Bottoms up, litigation down: Microbrewers forsake litigation, opt for collaborative blend." *ABA Journal.* Retrieved from http://www.abajournal.com/magazine/article/bottoms_up_litigation_down_microbrewers_forsake_litigation_opt_for_collabor

Knight, J. (1994). "Rural revitalization in Japan: Spirit of the village and taste of the country." *Asian Survey* 34, no. 7, pg. 634-646.

Knoedelseder, W. (2012). *Bitter brew: the rise and fall of Anheuser-Busch and America's kings of beer*. New York: Harper Business.

Kondo, D. K. (1990). *Crafting selves: Power, gender, and discourses of identity in a Japanese workplace.* Chicago, IL: The University of Chicago Press.

Latour, B. (1988). *The pasteurization of France*. Cambridge, Mass: Harvard University Press.

Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*. Oxford: Oxford University Press.

Lévi-Strauss, C. (1966). *The savage mind.* Chicago, Il. The University of Chicago Press.

Loftus, W. R. (1874). *The brewer: a familiar treatise on the art of brewing, with directions for the selection of malt and hops. Instructions for making cider and British wines. Also, a description of the new and improved brewing saccharometer and slide rule ...* London: W. R. Loftus.

McCarthy, N. (2016, November 1). "Which U.S. cities have the most microbreweries per capita?" *Forbes.* Retrieved from https://www.forbes.com/sites/niallmccarthy/2016/11/01/which-u-s-cities-have-the-most-microbreweries-per-capita-infographic/#32b74055e19b

McGovern, P. E. (2017). *Ancient brews: Rediscovered and recreated*. New York: W.W. Norton & Company.

Malinowski, B. (1984). *Argonauts of the western Pacific: An account of native enterprise and adventure in the archipelagoes of Melanesian New Guinea*. Prospect Heights, Ill: Waveland Press.

Marx, Karl. 1978 [1867] "Capital, Volume One, Chapter 1: Commodities" in *The Marx-Engel Reader*, Second Edition. New York: W.W. Norton & Company. Pp. 302-329.

Mauss, M. (1967). *The gift: Forms and functions of exchange in archaic societies*. New York: Norton.

Meigs, A. (1997). "Food as a Cultural Construction." pg. 95-106, In *Food and Culture: A Reader*. Edited by Carole Counihan and Penny Van Esterik. Routledge.

Meli, M. (2013). *Craft beer in Japan: The essential guide.* Yokohama, Japan: Bright Wave Media.

Meneley, A. (2004). "Extra Virgin Olive Oil and Slow Food." *Anthropologica*, 46(2), 165-176.

Mol, A. (1999). "Ontological Politics: A Word and Some Questions." In J. Law and J. Hassard, eds. *Actor-Network Theory and After*. Pp. 74-89. Oxford: Blackwell.

Morales, D. (2016). "Beer essentials: The craft beer boom in Japan shows no sign of running dry." *The Japan Times.* Retrieved from https://www.japantimes.co.jp/life/2016/06/04/food/beer-essentials-craft-beer-boom-japan-shows-no-sign-running-dry/#.XcMnX0VKh24

Moretti, E. (2012). *The new geography of jobs.* New York: Houghton Mifflin Harcourt.

Mori, C. (2017, May 3). "Why Wicked Weed sold out to AB-InBev." *BREW-ed.* Retrieved from https://brew-ed.com/ashevillebeerhistoryblog/why-wicked-weed-sold-out-to-ab-inbev

Mull, A. (2019, April 2). "Millennials are sick of drinking, but they're not giving up booze just yet." *The Atlantic.* Retrieved from https://www.theatlantic.com/health/archive/2019/04/millennials-sober-sick-of-drinking/586186/

Murphy, B. (2014). *Brewing identities: Globalisation, Guinness and the production of Irishness*. New York: Peter Lang.

Myers, E. L. and S. H. Ficke (2016). *North Carolina craft beer and breweries* (2nd ed.). Winston-Salem, NC: John F. Blair Publishing.

Nagata, M. L. (2007). "Apprentices, servants, and other workers: Apprenticeship in Japan," pp. 35-45, in Munck, B. D., Kaplan, S. L., & Soly, H. (eds.), *Learning on the shop floor: Historical perspectives on apprenticeship*. New York: Berghahn Books.

日本ビアジャーナリスト協会 (Japan Beer Journalist Association, eds.) (2015). 日本のクラフトビール図鑑 (*Japan craft beer field guide*). 東京, 日本. 株式会社マイナビ.

Noel, J. (2018). *Barrel-aged stout and selling out: Goose Island, Anheuser-Busch, and how craft beer became big business.* Chicago: Chicago Review Press.

Nordstrom, C. (2004). *Shadows of war: Violence, power, and international profiteering in the twenty-first century*. Berkeley: University of California Press.

Ocejo, R. E. (2017). *Masters of craft: old jobs in the new urban economy*. Princeton, New Jersey: Princeton University Press.

Ogden, L. (2011). *Swamplife: People, gators, and mangroves entangled in the Everglades*. Minneapolis: University of Minnesota Press.

Oliver, G. (2012). *The Oxford companion to beer*. New York: Oxford University Press.

Papazian, C. (2003). *The complete joys of homebrewing, 3rd edition.* New York: Harper Collins.

Paxson, H. (2013). *The life of cheese: Crafting food and value in America*. Berkeley: University of California Press.

Peters, B. (2018, May 28). “Will marijuana industry overtake beer as legalization spurs innovation?” *Investor's Business Daily*. Retrieved from https://www.investors.com/news/marijuana-industry-cannabis-business-threaten-beer-industry-420/

Postell, A. (2017, March 22). “No free lunch.” *Charleston City Paper.* Retrieved from https://www.charlestoncitypaper.com/charleston/constantly-asking-restaurants-to-give-freebies-to-charities-has-got-to-stop/Content?oid=7253353&media=AMP+HTML

Rao, S. (2019). “Baltimore brewers clap back at review culture with ‘2 Stars Not My Style’ sour.” *Baltimore Sun.* Retrieved from https://www.baltimoresun.com/food-drink/bs-fo-two-stars-not-my-style-20191007-20191007-6rlfdt5udjempj7pys2ld4hqyq-story.html

Redfield, P. (2013). *Life in crisis: The ethical journey of Doctors without Borders*. Berkeley: University of California Press.

Reinarz, J. (2007). “Learning by brewing: Apprenticeship and the English brewing industry in the late Victorian and early Edwardian period,” pp. 111-132, in Munck, B. D., Kaplan, S. L., & Soly, H. (eds.), *Learning on the shop floor: Historical perspectives on apprenticeship*. New York: Berghahn Books.

Robertson, L. (2017, November 8). “Where’s your head at? A look at mental health in the beer industry.” *Critical Drinking, Good Beer Hunting.* Retrieved from https://www.goodbeerhunting.com/blog/2017/11/6/wheres-your-head-at-a-look-at-mental-health-in-the-beer-industry

Rogers, A. (2014). *Proof: The science of booze*. Boston: Houghton Mifflin Harcourt.

Shikes, J. (2017, May 4). “Craft beer bars cutting off Wicked Weed, other AB InBev-owned breweries.” *Westword.* Retrieved from https://www.westword.com/restaurants/craft-beer-bars-cutting-off-wicked-weed-other-ab-inbev-owned-breweries-9033019

Sisson, P. (2015, August 5). "A Japanese brewery's zero-waste philosophy goes beyond not wasting beer." *Curbed.* Retrieved from https://www.curbed.com/2015/8/6/9933072/japanese-ecoconscious-brewery

Sparhawk, A. (2019, April 1). "BA names glitter beer 'official' competition beer style." *Craftbeer.com.* Retrieved from https://www.craftbeer.com/editors-picks/ba-names-glitter-beer-official-competition-beer-style

Solt, G. (2014). *The untold history of Ramen: How political crisis in Japan spawned a global food craze*. Berkeley: University of California Press.

Traphagan, J. W. (2004). *The practice of concern: Ritual, well-being, and aging in rural Japan*. Durham, N.C: Carolina Academic Press.

Traphagan, J. W. (2018). "Empty houses, abandoned graves: Negative population growth and new ideas in neo-rural Japan." *Brown Journal of World Affairs* 24, no. 2, pg. 161-174.

Walley, C. J. (2013). *Exit Zero: Family and class in postindustrial Chicago*. Chicago: The University of Chicago Press.

Watson, J. L. (1997). *Golden arches east: McDonald's in East Asia.* Stanford, CA: Stanford University Press.

Weiss, B. (2016). *Real pigs: shifting values in the field of local pork*. North Carolina: Duke University Press.

Wilgus, J. (2019). "An ongoing evolution: 25 years of craft beer in Japan." *The Japan Times.* Retrieved from https://www.japantimes.co.jp/life/2019/08/31/food/ongoing-evolution-25-years-craft-beer-japan/