A PHENOMENOLOGY OF TASTE:

BREWMASTERS AND THE PRODUCTION OF LIVED TASTE

EXPERIENCE

By

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STATEMENT BY AUTHOR

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ABSTRACT

Using a phenomenological account of perception drawn largely from the work of

Merleau-Ponty (1962) and Gibson (1966; 1974), this thesis explores how perceptual

experience is created and modified through practices and discourses. The project

examines how a specific perceptual experience—the taste of beer—is formed through the

practices and discourses of production. It investigates how both the nuanced taste

experiences of brewmasters and the less precise taste experiences of their customers are

cultivated in relation to a set of production concerns surrounding the manufacture of a

consistent brand. Ultimately, it is argued that the production of brands—the urge to

produce products which are identical to themselves—is a characteristic of consumer-

oriented late capitalism which illustrates how mechanical reproduction influences the

formation of contemporary sensory experiences and lifeworlds.

INTRODUCTION:

PHENOMENOLOGY AND LIFEWORLDS OF TASTE

Imagine for a moment that you are at a restaurant dining with friends. The waiter puts a dish of something in front of you that you believe to be a lemon sherbet. You take a bite and for an instant you are confused and dismayed. After the spoon touches your tongue, the intervening sensation is shocking and seems to be without clear quality: the temperature is wrong, the texture is wrong, the taste is wrong. And then, out of the confusion and the indeterminacy, the strange substance is identified and becomes butter. The amount you have eaten may be far more than is usually appropriate, but the overall flavor isn't bad. What initially was a disgusting lemon sherbet has become a decent, if not tasty, butter (Korsmeyer 1999: 90-91).

On the surface it may seem that we live in a world of concrete, fixed and singular sensations. If you eat a bite of butter, it should taste like 'butter' regardless of where you are, who you are with, what the lighting in the room is like, what time of day it is, what you had thought you were eating, or what you had expected it to taste like. Butter should taste like butter. But the fascinating thing about perception, as this example demonstrates, is precisely that this is not the case. Our ability to taste butter—to bring the flavors of butter into being—is entirely dependent on our capacity to recognize and expect it, to focus our attentions on the right sorts of cues that allow butter to become butter.

Taste, like all perception, is heavily influenced by expectation—or, to put it more accurately—occurs through expectations. We don't simply live in a world of foods that

have singular 'tastes'—or for that matter, voices that have a singular 'sound', or images that have a singular 'appearance'—but rather we live in a world of indeterminate sensory information; a world which is dependent on our ability to recreate it at every moment through the channeling and focusing of our sensory attentions. Our experienced world is the result of a strange blending of the physical objective environment available to our senses and the expectations which allow us to draw it into focus.

The astounding thing about our perception is that it is not made up of objective sensations that can be easily taken as facts. If we look at it carefully enough, long enough, and thoughtfully enough, we begin to notice and suspect—in the ways that it takes shape, coagulates and disperses, draws in and out of focus—that the world we are looking at is in part our own production, an active construction of our attention, our own reflection staring back at us. It is through this medium of perception, this strange porous dialogue between self and surrounding, that we come to inhabit a world of our own making.

Understanding how the human being—through the action of her own consciousness—simultaneously becomes herself and sculpts the world around her through her perception, and does so in culturally specific ways, is of paramount importance to anthropology. It is precisely this task that I take up in the following project. Using a largely phenomenological approach, drawing off of the perceptual scholarship and philosophical insight of James Gibson (1966: 1974), Maurice Merleau-Ponty (1962), and others, I propose that the senses are not mere channels through which we decode the

world, but rather it is through the active participation of our own consciousness in perception that we draw both ourselves and our world into being.

In this project then, I explore the problem of perception. I examine how the sensory experiences which surround us are historical and cultural formations which are products of specific discourses and practices. In order to do so, I analyze how a single sensory experience—the taste of beer—is produced materially and discursively by brewmasters in the American craft brewing industry. I argue that the taste experience of beer, both the nuanced taste experiences cultivated by brewmasters and the more general taste experiences of their customers, is historically specific and lays the perceptual foundations for the emergence of consumer oriented late capitalist lifeworlds and subjectivities.

Beer production is a particularly useful site for investigating the cultivation of taste perceptions. One of the central lines of inquiry which this project focused on was exploring the perceptual effects of technological reproduction, and in this regard beer is extraordinarily illuminating. Although it is technologically mass produced, beer is made using yeast, a biological organism which—as I demonstrate in Chapter 2—is exceedingly sensitive and not entirely predictable. In the case of the brewing industry, the need to produce a reliable, consistent and predictable 'brand' is at odds with the inherently sensitive and erratic unpredictability of the yeast. What would seem to be a relatively simple problem of ensuring consistency, for brewers becomes an extraordinarily complicated challenge which involves the cultivation of both brewer and customer taste attentions. The craft brewing industry in particular, due to the varied size of its producers,

and large number of 'brands' they attempt to produce and maintain, is an especially fruitful example in this regard.

The craft brewing industry is a relatively recent phenomenon in the United States. From the 1950s through the 1980s, the American brewing industry went through a period of massive consolidation (Erickson 1989: 39), in which fewer and fewer breweries began to produce more and more of the nation's beer, dominating the domestic beer market with the more easily transportable light 'American-style' pilsners (Vance 2006: 52). As I argue, due in part to the rise of brand based advertising and the invention of the concept of 'beer style', by the early 1980s a number of small producers began to emerge in the United States (2006: 54). One of the hallmarks of this new movement of brewers was their desire to produce, sell, and maintain multiple varieties, or 'brands', of beer. The craft brewing movement emerged alongside and simultaneously with a variety of new institutions and tasting practices which were directed, not only towards helping smaller producers brew consistent products, but also towards cataloguing, mapping, and regulating the newly discovered and continually expanding emporium of beer styles. Although pilsner producing large breweries still dominate the American brewing industry, commanding a market share of over 97% (Vance 2006: 54), the craft brewing industry is growing. In mid 2008, when the research for this project was conducted, there were 1,420 craft breweries in the United States (Brewer's Association 2008b).

The research for this project consisted of nine interviews with active brewmasters from large and small craft breweries in the Western United States. The breweries of the brewmasters I spoke with ranged in size, measured in annual production of beer, from

400 to 500,000 barrels[1] per year, and included small microbreweries, chain

microbreweries, and larger breweries which bottle, keg and distribute their beers. On

average, the brewmasters whom I spoke with had been in working in the brewing

industry for 12 years, including time spent working as assistant brewers under the

supervision of other brewmasters.[2] Additionally, I have supplemented these interviews

with a variety of industry books and articles on the production and sale of beer.

Food, Perception, and Sensation

      While there is much anthropological research which takes up questions and

problems very similar to the one which I take up here, I would like to begin by

differentiating my research from a variety of seemingly similar genres and projects.

      First of all, in certain limited respects, this project is a departure from the

somewhat eclectic and varied body of literature that is placed under the rubric of the

anthropology of food. In general, the works in this genre can be understood as taking one

of two broad approaches to the study of food: a materialist approach or a symbolic

approach. Materialist approaches generally limit their examination of food to a discussion

how a food operates as a commodity or a feature of economic and political processes.

Gereffi et al. (1994) and Goldfrank (1994), for instance, analyze food through the

paradigm of 'commodity chains', or the network of labor and processes which create a

particular commodity. Warman's (2007) discussion of the relationship of international

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[1] One barrel is equal to 31 gallons.
[2] While I use the terms somewhat loosely, in this project the term 'brewmaster' refers to a brewer who is in charge of making production decisions in a brewery. On the other hand, I use the term 'brewer' to refer to an assistant who, under the supervision of a brewmaster, operates and performs the day to day tasks of a brewery. I also occasionally use the term 'brewers' to refer collectively to both brewmasters and brewers.

corn trade to global politics is another example of a materialist approach. Symbolic approaches, on the other hand, move beyond food's existence as a commodity to explore how food takes on meaningful associations, is used to mediate social relationships, or meaningfully fits within a culture's system of categories. The preeminent example of such an approach is Mintz's *Sweetness and Power*. Undertaking what he refers to as an 'anthropology of sugar' (1985: 6), Mintz explores how the meanings and uses of sugar have changed over time, from the perspective of both its production and its consumption. While Mintz addresses the ways in which sugar has functioned as a commodity and is related to material economic processes, he moves beyond a limited analysis of sugar as an economic object to explore how patterns of sugar production and consumption render it into a meaningful object in culturally and historically specific ways. Schivelbusch (1992) takes on a similar problem in his investigation of the changing meanings and uses of spices, stimulants and intoxicants. Another tactic used to address how food is meaningfully incorporated into a cultural context is to associate food, or a particular type of food, with a social identity. Elizabeth Dunn, for instance, in her study on grading and standardization in Poland's meat industry argues that the grading of meat effectively renders its producers and consumers superior or inferior depending on the products they produce or consume (2005: 173-193). Allison James' essay on ethnic identity and food (2005: 372-384); and Jack Goody's work on diet and social hierarchy (2005: 57-71), are also examples. Although symbolic approaches to food, and particularly studies that associate food with a social identity, often argue that subjectivities are being shaped

through a food's consumption, these works generally fail to account for, short of simple

association, how such a shaping of subjectivities might occur.[3]

The project I undertake here is not explicitly concerned with understanding how

beer, or any other food, functions as a symbol or is associated with some sort of identity.

I am not seeking to account for how foods, or their tastes, taken as facts, are attributed

meanings and used to mediate social relationships. I am not interested in how, for

instance, 'the taste of beer' is used as a status symbol or connected to some sort of

identity. Rather, in this project I am attempting to take up a different level of analysis,

one which does not take 'the taste of beer' for granted, but explores how that very taste

comes into focus in particular meaningful, historically specific ways. I am interested in

how, when one takes a sip of beer, a particular taste experience—an array of bubbly,

cold, hoppy, bitter, sweet, infused with associations, memories, and emotions—comes

into being through perceptual attentions, expectations, and focusing. I am interested in

how the very act of perceiving is itself historical, how it is cultivated through discourses

and practices, creating the sensory conditions for shared contemporary lifeworlds. Such a

focus, while unusual for the anthropology of food, is—as I will demonstrate—consistent

with a separate and more phenomenologically influenced line of anthropological inquiry.

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[3] Bourdieu's (1984) research on consumption is a notable exception to this critique. Bourdieu proposes that class is not just an economic phenomenon but a cultivated collection of dispositions and attitudes. He proposes that, out of the sensory experience of consumption, individuals are able to "decipher" (1984:2) a practical logic out of which they develop a habitus, a collection of certain bodily dispositions and attitudes, which effects both their perception of the world around them and their practices (1984: 170). Although Bourdieu's analysis is founded on a faulty model of perception, his account is exhaustive and nuanced and, unlike many other writers who explore the relationship between food consumption and social identity, he provides a theory to explain how the particular sensory experiences of consumption are related to particular subjectivities.

I would also like to differentiate my work in this project from the anthropology of the senses, at least as it is defined by one of its most central scholars, David Howes.[4] "The anthropology of the senses," Howes writes, "is primarily concerned with how the patterning of sense experience varies from one culture to the next in accordance with the meaning and emphasis attached to each of the modalities of perception. It is also concerned with tracing the influence such variations have on forms of social organization, conceptions of self and cosmos, the regulation of the emotions, and other domains of cultural expression" (1991: 3). In the 1970s and 80s, anthropology was dominated by textual and discursive models of culture, such as Geertz's 'interpretive anthropology', which—according to Howes—were problematic insofar as they validated the visual and textual based assumptions of Western epistemology (2003: 17-28). The anthropology of the senses, emerged in the late 1980s and 90s as part of an increasing interest in bodily modes of knowing (2003: 29). It presented an anti-textual / sensual model of culture in which culture could be theorized as a 'way of sensing the world' rather than simply text to be experienced in a visual or auditory format (1991: 8).

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[4] It is important to point out here that the anthropology of the senses, a field of inquiry which emerged in the late 1980s and 90s, is not the only way in which anthropologists or social scientists have gone about studying or accounting for perception. Beginning in the 1930s and 1940s, anthropology and history began to develop approaches to the perception which explored sensory experience as social and cultural in nature rather then merely biological (Howes 2003: 10; Smith 2007: 3). Lucien Febvre's discussion of the historically specific sensory world of sixteenth century Europe (1982: 421-454); Walter Ong's exploration (1967) of the ways in which writing technologies have shaped human perception and thought; and Don Gifford's study (1990) of how the technological innovations of the last two hundred have altered human sensory experience are only a handful of many examples of anthropological and social scientific writing on perception outside of the anthropology of the senses. While many of the concerns which I take up in this project overlap with those addressed by the anthropology of the senses, my approach to sensory experience in this analysis, as I will explain, draws off of a separate and more phenomenologically influenced body of anthropological writing on perception.

So, while Geertzian 'interpretive anthropology' attempts to decode culture from events and situations understood as a visual or verbal text (2003: 18-19); the anthropology of the senses explores the ways in which the other senses can be thought about and decoded as an important part of culture. As Howes explains, "it is only by attending to the ways in which *all* sensory phenomena may be culturally coded that one can have, and relate, a full-bodied experience of culture" (2003: 47). The emphasis in such an anthropology is in understanding how sensations can function as meaningful signs. As a result, the anthropology of the senses is largely focused around the problem of articulating and studying indigenous sensory epistemologies. This articulation generally involves, on the one hand, exploring how the senses of a culture are "ordered into hierarchies of social importance" (2003: 47), and, on the other hand, explaining how sensations themselves operate as signs and take on culturally specific meanings (2003: 49). If we properly understand a culture's own approach to the senses, the anthropology of the senses proposes, then we can decode the meaningful ways in which individuals perceive their world and relate to one another.

The anthropology of the senses is based, I would argue, on what Rodaway refers to as a 'cognitive' model of perception (1994: 17-19). This model is founded on the proposition that perception is the result of sensations, or raw data, which are picked up by the sensory organs and organized by the mind into experience. The sensation based approach to perception makes a number of claims about how the senses operate which are central to the anthropology of the senses. First of all, a 'cognitive' model of perception assumes that perception is passive and that sensations are imposed on the sensory organs.

For Howes (2003; 1991), Classen (1993) and other scholars in the anthropology of the senses the important questions for sensory experience relate to how the senses are organized into culturally dependent hierarchies, how "the sensory channels are weighted" in meaningful ways within different societies (2003: 53). Perception, in other words, does not depend on what is being perceived, but only on the pathways through which that perception occurs. Secondly, insofar as sensory experiences are understood to be socially and culturally meaningful, the locus of that meaning is found within sensations rather than objects themselves. The question becomes not, What is the meaning of 'cocoa beans' within a particular context? but, What is the meaning of 'tastes', 'eaten things', or 'bitterness' within a specific society and how is it that meanings are translated from reality to cognition through the medium of sensations?

While its focus on indigenous sensory epistemologies can provide useful insights about systems of thought in a variety of cultural contexts, the anthropology of the senses is ultimately based on an account of perception which is deeply problematic. This 'cognitive' model of perception effectively ignores some of the most profound, important and interesting questions raised by the problem of perception. It is false to imagine that— if we live in a 'visually dominant society'—we are somehow led to 'see' before we 'hear'. What does that actually mean? Perception, as I will demonstrate, always needs to be perception of *something*. It is significant that the anthropology of the senses approaches 'culture' as a 'way of sensing the world' rather than a 'way of being in the world'. The important questions surrounding perception, I believe, are not related to how the human organism 'senses' his or her world, but how the world, through perception, is

called into existence for each of us in ways which are both cultural and idiosyncratic.

Furthermore, if we are going to examine how social meanings and identities are

constructed through sensory experiences, we cannot simply link the two and assume that

culturally significant concepts are somehow inferred from sensory experiences. Instead,

we need to understand and account for how perception itself occurs through, and is

shaped by, social meanings and relationships. The challenge of studying perception, in

other words, is not so much in understanding how sensations can function as symbols that

carry a meaning, but—following Asad's notion of symbol[5]—in accounting for how the

very relationship between symbols and concepts is created and mediated through

practiced perceptions.

In this project then, I have chosen to draw from a different tradition of perceptual

scholarship which originates, in part, from the critique of 'sensation' as a basis for

perception made by Gestalt psychology in the first of half of the twentieth century (Banks

and Krajicek 1991: 314). Following the work of perceptual scholars James Gibson (1966:

1-2; 1974: 12-14), Paul Rodaway (1994: 16-19) and Maurice Merleau-Ponty (1962: 3-

12), I propose that there is a distinction between 'sensation', or the ability of the senses to

make us feel particular stimuli, and the ability of the senses to detect information about

our surrounding world. While we are able to have sensations, much of our perceptual

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[5] Asad writes that "a symbol is not an object or event that serves to carry a meaning but a set of
relationships between objects and events uniquely brought together as complexes or concepts, having at
once an intellectual, instrumental, and emotional significance. If we define a symbol along these lines, a
number of questions can be raised about the conditions that explain how such complexes and concepts
come to be formed, and in particular how their formation is related to varieties of practice….The conditions
(discursive and nondiscursive) that explain how symbols come to be constructed, and how some of them
are established as natural or authoritative as opposed to others, then become an important object of
anthropological inquiry" (1993: 31).

experience is what Gibson (1966) refers to as 'sensationless perception' in which we perceive the world around us without becoming explicitly aware of which sense organs, or sensory receptors, have been excited. Perception, I argue, does not emerge from sensation at all, but rather is entirely based on the ability of our sensory organs to detect information about the world.

This key distinction, between the senses, on the one hand, providing us with 'sensations' and on the other providing us with information about our surrounding world, is central to this project. In order to articulate this distinction, and the significance of my claim that perception is based entirely on the detection of information, I would like to briefly explore how such claims play out in their accounts of vision. We know that vision occurs through the perception of light, a form of stimulus energy which can be imagined to consist of rays that travel in straight lines. As it travels through the sensory environment, light gets reflected off of surfaces. Depending on their chemical and physical structure, these surfaces will reflect not only more or less of the light that falls on them, but also more or less light of particular wave-lengths. This partial reflection of light allows surfaces to appear to take on 'brightness' and 'color'. Vision occurs when light, that has been structured and encoded by the surrounding environment, falls onto the cornea, passes through the pupil, and is focused onto the eye's rear surface, the retina. The retina is made up of a mosaic of over 125 million photoreceptor cells and supporting neurons. Each photoreceptor cell is capable of reacting differently to different wave lengths and energies of light, and of transmitting impulses through the optic nerve to the brain (Gibson 1974: 44-51; McMillan 2008: 206-211). Now, here is the important part. A

'cognitive' model of perception which takes 'sensation' to be the raw data of sensory experience imagines that vision is the result of a process of cognition. Light, they would say, enters the eye and activates individual photoreceptors, each of which transmit their impulses to the brain. These individual impulses are assembled, through some process of cognition, into the experience of vision. In other words, vision is the result of the mind's ability to assemble the discrete sensations of the millions of photoreceptors in the eye into experience (Rodaway 1994:16-19). Simple, right?

Not exactly. This is precisely the point where I, along with scholars mentioned above, begin to disagree. Vision is not the result of the activation of individual photoreceptors, nor is it merely a product of the eye's sensitivity to sensations of light. It is not simply that isolated points of light enter the eye and are picked up by the retina, but rather the retina receives an entire array: a visual scene of composed of shapes, colors, surfaces, patterns and textures. The mosaic of photoreceptors in the eye takes in, not discrete packages of light which are unrelated to one another, but a collection of patterns and relationships *conveyed through* points of light: light configured and organized into structured relationships which contain information about the world. Our ability to see a chair, for instance, depends not on our ability to sense distinct sensations of colored light but on our ability to discern—through the medium of light—straight lines, edges, surfaces and textures; it depends on our ability to recognize a variety of structures and patterns which make up a chair. Our visual world, in other words, is composed of, not reds, blues and greens, but shapes, textures, and spaces; it is composed of patterns and

structures that form meaningful objects like socks, dirty dishes, streets, star filled nights and the faces of those we love.

To imagine—as the anthropology of the senses does—that human experience must be, for no apparent reason, broken apart into discreet units of 'sensation' only to be reassembled, by the mind, at every moment, through some 'cultural' act of cognition, is to direct us towards a false set of problems. It is to present perception as a question of translation rather than a question of being. It is to leave unchallenged our everyday assumptions about who we are and how we come to engage with our world.

If we acknowledge, as I do in this project, that the stimuli received by our sensory organs are already structured and organized by our environment, that perception is not the result of 'feeling' sensations but of noticing and being attentive to patterns, then a new set of problems comes to the fore. We no longer need to look towards how we or strangely bounded 'indigenous' cultures attach something called meaning to sight, smell or bitterness to explain human cognition and experience. We no longer need to wonder about how we translate the world to ourselves and ourselves to the world. Instead, the set of problems we are faced with relate to how the human being selectively perceives and interacts with environments through already patterned stimuli. They relate to how we pay attention to, focus on, and exist through the patterns that compose our world. Drawing largely on the influential work of James Gibson (1966; 1974)—whose accounts of perception continue to serve as the foundation for the 'ecological school' of perceptual scholarship (Banks and Krajick 1991: 314; Goldstone 1998: 586)—I will now outline

how sensationless perception comes to compose our experience, before moving on to some of its philosophical implications.

One of the basic characteristics of the sensory environment is that it contains more patterned stimulus energy than can be perceived (Gibson 1966: 309). In order to perceive and navigate the human body through such an environment, Gibson explains, each of our sensory organs is geared towards providing us with two different levels of sensitivity: on one hand our sensory organs are capable of passively receiving the stimulus energy which is imposed on them, and, on the other hand, they are capable of actively searching out for information and patterns available within an array (1966: 2, 32-33). If we consider the example of vision, we will notice that our visual field—the actual image that our eyes receive—contains a gradient of clarity. At the center of our visual field, the image that we receive is sharp, detailed, and clear, while near the edges the image is vague, blurry, and less detailed. When we 'see', our eyes scan over our environment in the same way that a searchlight moves over the night sky. Sight, and the impression that our visual world is in focus, is the result of these saccadic eye movements in which the clear center of our vision moves across a scene drawing particular things into focus (Gibson 1974: 29).[6] While vision may be the most obvious example of active perception, active perception also occurs through our other sensory organs. We are able to listen for particular sounds, to sniff out certain odors, and concentrate on specific textures and tastes while reducing others to the background. Perception therefore, is not

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[6] Reading this page, for instance, does not involve just looking at it and 'taking in' all the words. Rather, the act of reading is an active process in which you move your eyes through the text, focusing the relatively narrow center of your clear perception on individual words and sentences.

merely imposed on the human perceiver, but rather it is obtained through an active

process of being attentive to, gathering, and seeking out particular pieces of relevant

sensory information.

Perception, in this formulation, occurs through cues. Since there is more stimulus

information available to our senses than we can perceive, more things to focus on than we

can focus on, the challenge of perception is learning which features and characteristics

we need to pay attention to in order to understand, interact with, and navigate through our

environment. When we learn to perceive, we learn to recognize the patterns that already

exist in our surroundings and to perceive our world through those patterns (Gibson 1966:

55). By isolating invariant sensory information (1966: 284-285), we become able to

associate larger and larger 'chunks' of that information with specific cues (1966: 270).

We see a table, not by meticulously focusing on every detail of its appearance, but by

noticing a few important cues, such as its edges and legs, that allow us to recognize the

table as a table. To learn to perceive, in other words, is to learn to ground one's

perception more and more in expectation. While expectation leads us to actively search

for certain cues, it also allows us to ignore other sensory information, to fill in the gaps of

what we perceive with our own assumptions. Our perception of the precise color, shape,

and size of objects, for instance, is often more a property of our expectations than the

sensory information itself (Merleau-Ponty 1962:19-20). In other words, we often

perceive in objects the characteristics that we expect to find in them (1962: 5). Much of

our perceptual consciousness of the world is not based on a focused attention to stimulus

information, but rather is inferred and extrapolated from particular sensory cues. In some

pivotal ways, our surroundings and the objects which compose our lived world are only a schema or caricature of what they would be if they were focused on more attentively. [7]

Often the stimulus information which we perceive is multisensory; it has patterns and cues that appeal to multiple sensory organs. Perception of such stimulus information requires us to learn to draw equivalences between certain stimuli (Gibson 1966: 55), to shape our visual attentions and discriminations according to things that we have heard, or notice certain smells because of something we have seen. If I smell a fire, for instance, I may begin to look for its smoke and listen for its crackling. It is not just that I am able to associate the smell, smoke and crackling noises with 'fire', but that the stimulus information available to me in one sensory realm triggers my hunt for sensory cues in each of the others (1966: 55). Perception is not the product of information taken from the specific attentions of each of our sense organs, but rather it can be more accurately imagined as a bodily awareness which takes shape within the fields of our senses.[8]

Language also plays a major role in the learning how to perceive. Gibson argues that language is not merely a code or an association of words, or auditory stimuli, with things, but also embodies stimulus information, and particularly invariant stimulus information, about the environment (1966: 281). When a child learns a language, he not only learns a system of naming or labeling impressions from the world, but also learns a system of distinctions, cues and critical features which help to inform and tune his

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[7] As I write this sentence, I have no idea, for instance, what the handle of my bathroom door looks like, or what sort of pattern I have on my silverware. These objects are things which I interact with everyday, and as a result, they are things which I don't really need to notice. Their details are vague and hazy, like something seen out of the corner of my eye, full of potential and still awaiting focus.

[8] That is not to argue, of course, that seeing, hearing, or tasting something results in the same sort of experience, but rather that the act of seeing, hearing, or tasting is itself a multisensory encounter. I will address this point in greater detail later on.

perception. Learning to talk and learning to perceive are interrelated processes which influence and inform one another (1966: 281-282).

We perceive the world around us, not by absorbing the raw data of individual sensations and assembling them into conscious experience, but by picking up patterned stimuli which have been already structured by our surroundings. Perception then is an active and conscious act of seeking out and searching for cues within the stimulus information available to us. It is an act of assembly. The sorts of cues that become significant and the ways that we reach for them through our sensory expectations, are not monolithic; but rather, in the act of perception, both perceived objects and perceiving subjects are plural. They bring into being, in the moment of perceptual completion, a field of possibilities which have been cultivated through specific discourses and practices.[9] I will now turn to examining the philosophical implications of such an approach to perception.

The Phenomenology of Perception

One philosophical tradition which is useful for thinking through the issues posed by perception is phenomenology. Phenomenology, 'the study of human experience', addresses the ways in which things present themselves to us in and through our experience, and as a result is particularly well adapted to thinking through the problems posed by perception (Sokolowski 2000: 2-3). In his *Phenomenology of Perception*, Merleau-Ponty—one of the most influential thinkers in both phenomenology and

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[9] This is a point also made by Charles Hirschkind (2006: 20), in his ethnography of cassette sermons in Cairo.

perceptual scholarship—takes up this task. From the point of view of phenomenology, Merleau-Ponty makes many of the same arguments about perception that I articulated above. He begins his account with a critique of the concept of 'sensation', which, as I have explained, presumes that we perceive by breaking up our perceptual field into artificial units of pure impression and then reassembling those units into experience (1962: 5). Instead, he writes, we should recognize the role that the structures and patterns of the wider sensory field play in our perception (1962: 13).

Merleau-Ponty goes on to critique what he refers to as the 'consistency hypothesis', or the assumption that there is "a point-by-point correspondence and constant connection between the stimulus and elementary perception" (1962: 7). The idea behind the 'consistency hypothesis' is that perception is objective, that the world around us contains a limited collection of particular stimuli that can be perceived in exactly the same way (1962: 26). In place of such an assumption, Merleau-Ponty proposes that our sensory experience of the world is indeterminate, that the world around us contains more stimulus information than we are able to actively perceive (1962: 26-27; Csdoras 1990: 8-9). That is not to dispute, of course, the existence of an objective world (1962: vii; Csdoras 1990: 36), but rather, it is to point out that there is more of that world available to our senses than we can experience.

As a result, the central question of sensory experience for Merleau-Ponty, like Gibson and other critics of sensation based accounts of perception, is one of attention. Merleau-Ponty proposes that the human perceptual apparatus is capable of both a general passive and a focused active perception. With respect to vision, he writes that "to see an

object is either to have it on the fringe of the visual field and be able to concentrate on it, or else to respond to this summons by actually concentrating upon it" (1962: 67). However, unlike Gibson, Merleau-Ponty takes the problem of attention one step further. He proposes that attention is a two-stage operation. First, perception occurs passively. A perceiver creates by looking, feeling, or tasting, a field to be surveyed (1962: 29). What is significant for the first operation of attention for Merleau-Ponty is that it contains no objects. The sensory information which is perceived is blurry and indeterminate. It is a space which is vague and 'pre-objective' (1962: 29; Csdoras 1990: 9). Then, out of a pool of confusion and indeterminacy, the second operation of perception occurs: something is focused upon. But, in this act of focusing, an extraordinary event takes place: an object is formed. Merleau-Ponty explains that "attention is neither an association of images, nor the return to itself of a thought already in control of its objects, but the active constitution of a new object which makes explicit and articulate what was until then presented as no more than an indeterminate horizon" (1962: 30). Merleau-Ponty is proposing that, out of a pre-objective field, an array of confused and indeterminate sensory information, we as perceivers are continually distilling meaningful objects and spaces by means of focusing our attention. The central problem of perception which Merleau-Ponty explores is how it is that the attention inherent in perception creates its own objects, how perception is able to 'place' us within a world of our own making, and what sort of implications these conclusions imply.[10]

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[10] Merleau-Ponty's focus on attention here is very consistent with phenomenology. The central thesis of phenomenology, according to Sokolowski, is the doctrine of 'intentionality', or the postulate that all consciousness is always consciousness of something; that all awareness is necessarily directed towards an object of some sort. We are never simply 'aware' or 'conscious' in the abstract; but rather we are always

Additionally Merleau-Ponty argues that perception is learned and perfected through a process of habituation in which we develop a relationship with certain cues, cues which allow us to pick up larger and larger 'chunks' of information from our surroundings. Learning to perceive is not learning to pick up more and more stimulus information from the environment, but rather it is the process of learning to identify—or rather 're-create'—objects from fewer and fewer cues. He explains that perception "gets more or less from things according to the way in which it questions them, ranges over or dwells on them. To learn to see…is to acquire a certain style of seeing, a new way of using one's own body; it is to enrich and recast the body image" (1962: 152-153).

Perception, for Merleau-Ponty then, is a process whereby "consciousness…in the course of time, modif[ies] the structure of its surroundings" (1962: 22) and does so in ways which are inherently meaningful. Through a system of expectations, and modes of cultivated attention focused on particular cues, objects are distilled—identified, 're-created'—out of an indeterminate field of sensory information. Perceiving something involves already knowing, in a certain respect, what that something is, and how to perceive it, what cues and critical features to look for, and how to assemble it from pre-objective sensory information. This is an inherently meaningful act. Simply "because we are in the world," Merleau-Ponty writes, "we are *condemned to meaning*" (1962: xix)

This theory of perception carries with it one significant philosophical implication. Merleau-Ponty points out that, if his theory is accurate, if we acknowledge the ambiguity

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aware of, conscious of *something*. Through a process of 'intending', or focusing our consciousness on (and thereby brining into being), objects, we create our experience of the world. The task of phenomenology is, in a certain respect, to sort out the different intentionalities, or forms of intending, and the specific objects correlated with them. I will explore the implications of 'intentionality' in greater depth in a moment. (2000: 8-16).

and indeterminacy inherent in perception and our active role of re-constituting objects out

of that indeterminacy, then we will need to abandon the long held philosophical

dichotomy between the subject and the object (1962: 174). As Merleau-Ponty explains,

"the world, in the full sense of the word, is not an object, for though it has an envelope of

objective and determinate attributes, it has also fissures and gaps into which subjectivities

slip and lodge themselves, or rather which are those subjectivities themselves" (1962:

333). Rather than imagining that human beings think *and also* perceive the world around

them, Merleau-Ponty is suggesting that thinking and perceiving are themselves part of a

single complex process of being, that our ability to think is founded on our ability to

perceive (Descombes 1980: 59). "There is no inner man," Merleau-Ponty emphasizes,

"man is in the world, and only in the world does he know himself" (1962: xi).

The point that Merleau-Ponty makes here is one which is extraordinarily

significant for this project. When we speak about subjectivity, we are not speaking about

something which exists merely in the body, something which is shaped through the

distillation of a logic from practices or in the cultivation of particular cognitive

'dispositions' (Bourdieu 1984; 1990). From the point of view of perception, subjectivity

is not only located in the body, but it is also around the room; it is located in the trees that

form the furthers reaches of the horizon, in the foods we eat, in the sounds of words, and

in the ground beneath our feet: subjectivity is located in the way that the world around us

assembles itself before our eyes. If we are interested in understanding subjectivity, in

exploring the ways in which human beings are shaped through practices and sensory

experience, then we must focus our attentions on *lived experience*, on the ways in which

the world around us, as well as our own bodies, is continually being constituted, and

constituted in individually and culturally specific ways.

What Merleau-Ponty's account of perception does—as well as other accounts by

scholars who abandon the concept of 'sensation', such as Gibson (1966; 1972) and

Rodaway (1994)—is to escape what phenomenologists refer to as the Cartesian or Ego-

centric predicament. "In the Cartesian, Hobbesian, and Lockean traditions" explains

Sokolowski, in his *Introduction to Phenomenology*, "we are told that when we are

conscious, we are primarily aware of ourselves and our own ideas. Consciousness is

taken to be like a bubble or an enclosed cabinet; the mind comes in a box. Impressions

and concepts occur in this enclosed space, in this circle of ideas and experiences, and our

awareness is directed towards them, not towards the things 'outside'" (2000: 9).

Consciousness (or we could say 'subjectivity'), in other words, is imagined to be

reflexive and internal, to be hermetically sealed inside a mind, and not directed towards

objects. It is imagined that human thought, cognition, awareness and consciousness takes

place in a realm which is necessarily abstracted and distant from material sensory

experience. If one follows a 'sensation' based approach to perception such a conclusion

seems inevitable. The mind, like a computer, receives 'inputs' which it somehow

processes into experience. But, as Merleau-Ponty, Gibson, and others have shown us, this

is not the case. We do not receive the world through 'sensations' nor do we receive it

passively. Instead, as we have seen, perception is an active process, a process in which

we perceive patterns by identifying their cues, a process whereby we, out of a maze of

potential and indeterminacy, bring the material world into being through the activity of our own consciousness.

Ultimately, what Howes and the anthropology of the senses do, through their sensation based approach, is to lock us safely within the confines of the Cartesian predicament: to present the world such that we do not need to call any of our basic assumptions into question. But in doing so, they suppress and ignore the very features of the problem of perception which make it most interesting. Perception is not a translation from the pure objectivity of the world to the pure subjectivity of the mind; it is the very process through which consciousness creates its surroundings. Perception is fascinating because is located at precisely that juncture where the perceiver and the perceived blend into one another. As Seremetakis writes,

> The sensory is not only encapsulated within the body as an internal capacity or power, but it is also dispersed out there on the surface of things as the latter's autonomous characteristics, which then can invade the body as perceptual experience. Here sensory interiors and exteriors constantly pass into each other in the creation of extra-personal significance (1994: 6).

Through the senses, the mind spreads itself out on the world; it imbeds itself in the dry leaves just outside our front doors, it grows in foods we eat, and it echoes through the words of our favorite songs.[11] "An inquiry into the senses, in this light," explains Charles Hirschkind, in his ethnography of the Islamic soundscapes composed by cassette sermons, "directs us beyond the facilities of a subject to the transfers, exchanges and attachments that hinge the body to its environment" (2006: 29). Understanding how these transfers and exchanges work, how they come to place us in the world in particular

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[11] Taussig (1993) makes a similar point.

historically and culturally specific ways is essential to the anthropological project. A
number of anthropologists have taken up this task, and it is to their work that I now turn.

Phenomenological Anthropology

Phenomenological anthropology in a sense may seem like a contradiction in
terms. Anthropology deals with social phenomena which are collective in nature, while
phenomenology attempts to understand how our experienced world is presented to us
through the action of our particular consciousness (Sokolowski 2000: 2). It has been
assumed by some scholars that phenomenology, in providing a detailed account of how
the world is experienced, is unable to reach beyond the perspective of the individual
perceiver to explore how certain lived experiences or lifewords could be held in
common.[12] Such critiques seem to imply that a return to the Cartesian predicament is the
only way that collective knowledge and behavior can be come about; that knowledge
must be, in a certain respect, abstracted, decontextualized, and severed from its objects in
order to be collective at all. I think that this is not the case. As Sokolowski explains,
phenomenology provides two methods for theorizing the ways in which collective
experiences could be given to us through our particular consciousness, both of which
have been successfully used by anthropologists. The first method is by studying
'intersubjectivity', or the ways in which we come to experience and perceive other
human beings and, in doing so, recognize them as embodiments of a consciousness

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[12] Pierre Bourdieu makes this point in his critique of what he calls 'subjectivism'. Subjectivism—because it
fails to break away from individuals' immediate experience of the world around them—he argues, is unable
to account for knowledge of the world which is not reducible to the 'practical' contextual knowledge
possessed by its actors (Thompson 1991: 11).

similar to ours. The second method, and the method which I take up in this project, explores how our 'lifeworld', or the lived experiences of our surroundings, is collectively cultivated through participation in shared discourses and practices (2000: 152).[13]

This first method of studying collective experience through intersubjectivity is taken up by the two phenomenologically-oriented anthropologists, Michael Jackson and Thomas Csordas. Both Jackson and Csdoras begin their respective approaches with a critique of the way that anthropology has taken the human body as "simply an object of understanding, or an instrument of a rational mind, a kind of vehicle for the expression of a reified social rationality" (Jackson 1983: 329). The human body, they argue, is not simply an object through which humans express the abstract structures of their culture, but the body "is to be considered as the *subject* of culture…as the existential ground of culture" (Csordas 1990: 5). Culture, in other words, is not a transcendental assemblage of meanings or structures that are somehow distant and decontextualized from daily human experience, but rather culture is something that is lived in the perceiving experience of conscious bodies, something that is more akin to a collection of motor skills than abstractions. Both Jackson (1983) and Csdoras (1990; 1993), drawing on Bourdieu, propose using the concept of habitus to think through the ways that bodily knowledge, perceptions, dispositions and behaviors are cultivated and shaped through practices. Jackson (1983) examines the ways in which individuals ritually use and manipulate their habitus, from imitating the habitus of others to exporting the habitus from one field to the

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[13] Although Paul Stoller's (1989) *Taste of Ethnographic Things* is in some ways a phenomenological analysis, I have chosen to exclude it. The primary purpose of Stoller's account is to provide a critique of the position of the anthropologist vis-à-vis his subject, as well as certain peculiarities of the ethnographic genre, not to provide a careful phenomenological analysis.

next, in the initiation rites of a Kuranko village of northern Sierra Leone. Csdoras (1993)

uses the concept of 'somatic modes of attention'—or "culturally elaborated ways of

attending to and with one's body in the surroundings that include the embodied presence

of others"—to explore the role of intersubjectivity in religious and non-religious healing.

In particular, he comparatively examines the ways that Catholic Charismatic healers,

Puerto Rican spiritist mediums, South Asian practitioners of Siddha medicine and

Western psychotherapists learn about the afflictions and emotions of their clients through

sharing with them certain parallel bodily states.

　　While such an inquiry is interesting and informative, one of the downsides of the

intersubjective analyses of Jackson and Csdoras is that, while they may account for a

particular way of interacting with and being attentive to other human beings, they don't

contextualize such attentions in the larger lived world. Our experience of the world is not

collective only in those moments when we happen to be looking, feeling, listening, or

perceiving other conscious human beings; but rather our entire lived experience—with its

perceptions, memories, emotions, feelings, dispositions, temporalities, moods, and

landscapes—is collective and historical: it is part of a giant snowballing cycle of being

which, fueled by historically specific practices and discourses, tumbles us into

consciousness. Another group of anthropologists have take up this assemblage of

experience, what phenomenologists refer to as a 'lifeworld' (Sokolowski 2000: 146), as

their unit of analysis. These thinkers propose that the senses, memories, emotions, and

dispositions are "not a stable foundation upon which a singular and unassailable truth can

be erected" (Hirschkind 2006: 20), but rather are indeterminate, heterogeneous and open

to possibility.[14] How is it, they ask, that particular lifeworlds are created and maintained through the use of specific practices and discourses, and in what ways might these lifeworlds be historical? Charles Hirschkind takes up exactly this problem in his ethnography of the production and use of cassette sermons in Cairo. Hirschkind argues that his informants use the activity of listening to cassette sermons to "create the sensory conditions of an emergent ethical and political lifeworld, with its specific patterns of behavior, sensibility and practical reasoning" (2006: 8). Through the somatic learning of listening to sermons, pious listeners hope to structure and attune their sensorimotor processes in specific Islamically pious ways. "Listening," Hirschkind writes, "invests the body with affective potentialities, depositing them in the preconscious folds of kinesthetic and synaesthetic experience and, in doing so, endows it with the receptive capacities of the sensitive heart, the primary organ of moral knowledge and action" (2006: 79). Another anthropologist who explores the problem of lifeworld is C. Nadia Seremetakis. Seremetakis is interested in how memory is tied to the sensory experience of particular material artifacts. How is it, Seremetakis asks, that the disappearance of material artifacts or sensory practices changes our lifeworlds? "The capacity to replicate a sensorial culture," she explains, "resides in a dynamic interaction between perception, memory, and a landscape of artifacts, organic and inorganic. This capacity can atrophy when that landscape, as repository and horizon of historical experience, emotions, embedded

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[14] Although not explicitly phenomenological, Paul Rodaway's (1994) *Sensuous Geographies* takes a somewhat similar approach to the scholars I discuss here. Rodaway, a geographer, uses Gibson's model of ecological perception to explore how the experience of geography and space can be culturally dependent and cultivated.

sensibilities and hence social identities, dissolves into disconnected pieces" (1994: 8).[15]

Seremetakis uses the extinction of a Greek variety of peach, the 'Breast of Aphrodite'

(2005), as well as the disappearing sensory practices of rural Greek grandmothers (1993),

as an entry point to explore how memory and lifeworld are altered through the

disappearance of material objects or sensory practices.

In this project, I take up the second method of phenomenological inquiry noted

above to investigate the ways in which lifeworlds are collectively cultivated. While

Hirschkind addresses how the materiality of sound is used to shape emotions and

dispositions in pious ways, and while Seremetakis explores how memories are connected

to our sensory experience of material objects, in this project I take up a much simpler and

more fundamental problem. How is the very basis of our lived experience and

lifeworld—our sensory perceptions—shaped by historical processes? How are our

perceptual experiences cultivated by discourses and practices? And in what ways do

those cultivated perceptions lay the sensory foundations for the potential lifeworlds,

subjectivities and snowballing cycles of being characteristic of consumer oriented late

capitalism? To phrase the problem differently, I seek to explore how the very

obviousness of the way that we have come to perceive our world is historical; how is it

that we instill and sculpt those sensory perceptions which are the very conditions of our

consumer oriented late capitalist world. In order to address this vast problem, in this

project I undertake a careful examination of how a single sensory experience, or what

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[15] Howes, demonstrating his 'cognitive' bias, critiques Seremetakis for locating memories in the sensory experience of material objects rather then in cognition. "Objects," he writes, "may well be multisensory mnemonic devices. But the memories and meanings they invoke are always embodied within *persons* and are therefore always part of dynamic living processes." (2003: 44)

phenomenologists would call an 'intention'—the taste of beer—is produced both

materially and discursively by brewmasters in ways which are characteristic of consumer

oriented late capitalism.

It may seem that 'taste', at least at first glance, is an exception to my claim that

perception is geared towards receiving patterns and stimulus information rather than

'sensations'. It may seem that tastes, more than other sensory experiences, do not so

much provide us with structured stimulus information about our world, as they provide us

with pleasurable 'sensations' and 'feelings'. While tastes can undoubtedly be pleasurable,

taste—like the rest of perception—is geared towards picking up patterns by means of

cues, is multisensory, and occurs through perceptual expectation.

If one were to study 'taste' in a laboratory, to explore the physiological

capabilities of taste as a sensory organ[16], one would discover that taste, by itself, is

capable of picking up a extraordinarily limited number of flavors. It is generally agreed

that the sense of taste, by itself, is capable of detecting only the four flavors of sweet,

salty, sour and bitter; although a handful of other flavors, such as metallic, alkaline,

savory or umani[17], have periodically been proposed to be perceived by 'taste'

(Korsmeyer 1999: 76). The physiological sense of smell, on the other hand, is generally

estimated to be capable of perceiving around 10,000 different types of molecules

(Bartoshuk and Duffy 2005: 26). The extraordinarily complex flavors of taste are

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[16] Physiologically speaking, taste and smell are chemical senses, meaning that they are sensitive to chemical stimulus energy: they operate by detecting specific molecules of dissolved or vaporous substances. The common difference between the two is that 'taste' detects molecules which are dissolved in liquids, while 'smell' detects molecules which are suspended in air (Gibson 1966:136-145).

[17] A taste 'sensation' resembling savory which is found in some meats, cheeses, a variety of brown alga known as kombu, and—in its purest form—MSG (McGee 2004: 342, 806).

possible in part because the experience of eating is not simply limited to physiological taste but is, as Gibson (1966) argues, a multisensory process focused on picking up stimulus information about particular objects.

Eating produces not only molecules dissolved in liquid to be perceived by taste buds in the mouth, but it also produces vaporous molecules which pass behind the soft palate into the nasal cavity. Much of the sensory information we obtain when we eat is actually produced by the olfactory organ in the nasal cavity, not by taste buds in the mouth (Bartoshuk and Duffy 2005: 27). Additionally, the haptic, or the physiological sense of 'touch', plays a large role in the creation of a taste experience. A number of flavors, such as spiciness, onions, garlic, horseradish, menthol, and mustard involve a burning or tingling which is picked up by mechanoreceptors in the mouth rather than by the chemoreceptors of physiological taste (Korsmeyer 1999: 81; Gibson 1966: 139). The mouth itself is also an extraordinarily sensitive haptic organ which—although not usually used by adults for exploratory touching—retains the ability to discriminate the size, shape and geometry of objects without the aid of vision (Gibson 1966: 143-144). This ability to analyze the shape, texture, viscosity, and consistency of foods, as well as their temperature, is an integral part of the experience of taste (1966: 138-139).

But of course, when we eat, we don't only taste four flavors or some combination of four flavors; we taste *foods*, we taste things like cake; butter; roasted chicken; and Budweiser. We gather stimulus information from the 'taste' of sapid molecules dissolved in liquids, the 'odor' of vaporous molecules, as well as temperatures, textures and consistencies of the foods we are eating (Gibson 1966: 138). The perception of *foods*,

rather than 'sensations', is the result of an active attention to patterns, which involves, not only the exploratory movement of the tongue, but also the ability to be attentive to and concentrate on particular aspects of multisensory stimulus information (1966: 138-139).

A second potential confusion I would like to forestall in regard to 'taste' is the simplistic assumption that—if each of our sense organs is engaged in the multisensory task of perceiving structured information about the environment—we can abandon the distinction between tasting, feeling, or smelling entirely and assume that we are simply engaged in a unified synesthetic experience of being. Such a conclusion would not be warranted. We know that there is a difference between looking at, smelling, and tasting a piece of cake, even if the experiences of looking, smelling and tasting are themselves multisensory. Our perception, in other words, while it may be multisensory, does occur within distinct fields. While Gibson (1966) argues that we can do away with the concept of the 'senses' as channels of sensation, he proposes that our perception can be divided into fields, or modes of attention, which he refers to as 'perceptual systems' (1966: 47-51). When I refer to 'taste' in this project then, I am referring to a multisensory experience, perceptually located in the mouth, which operates through recognizing patterns by attentively focusing on cues.

The question which I take up in this project then is how is it that a particular lived experience[18]—the taste of beer—is created by its producers, brewmasters, through

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[18] Although I use the word 'experience' or 'lived experience', my approach in this project should be differentiated from Turner and Bruner's 'anthropology of experience'. Drawing on the German thinker Wilhelm Dilthey, the 'anthropology of experience' proposes that there is a distinction between 'reality' (the real objective world); 'experience' (the translation of the objective world into individual consciousness); and 'expression' (the way experience is framed and articulated) (Bruner 1986: 6). The goal of the 'anthropology of experience' then is to understand how people *translate* 'reality' into 'experience' and

discourses and practices in historically specific ways. In Chapter 1, Expert Tastes, I

examine the taste attentions and experience of brewmasters themselves, and how those

taste attentions are cultivated in response to specific production concerns, namely

ensuring that they produce a product which is both 'consistent', and 'to style'. I describe

how brewers, in order to produce a consistent product, require a nuanced and sensitive

palate capable of detecting subtle flavor differences; I go on to explore how such a palate

is institutionally cultivated through the use of standardized flavor terminology; and I

outline how a concern for consistency is concretely implemented in the tasting

procedures of a few of the specific breweries I visited. Secondly, I investigate how the

tasting and judgment of beer occurs through beer style guidelines, and I explain how

those style guidelines are created and maintained by institutions. In Chapter 2, Tastes for

Sale, I examine the ways in which brewmasters attempt to create a specific taste

experience for their consumers; in particular, I address the experience of 'consistency'. I

begin by describing how beer is made, focusing on how that process is dependent on the

inherently unpredictable behavior of yeast, a biological organism. Explaining that beer is

not entirely reproducible by technological means, I argue that consistency is a significant

challenge for the brewing industry, and then describe how brewers respond to that

challenge technologically. Finally, I explore how brewmasters socially cultivate the

experience of consistency in their customers through branding, advertising, and the

public presentation of their beers and brewing methods. In the Conclusion, I consider

how the problem of producing a consistent product is historical. Outlining a few of the

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'experience' into its 'expressions' through indigenous categories, and as a result it—like the anthropology
of the senses—imbeds itself in the Cartesian predicament.

major changes in beer and the brewing industry since the renaissance, I argue that the deep seated concern for consistency is a relatively recent phenomenon; an effect of the brand focused advertising of the twentieth century. Such advertising, I suggest, not only encourages consumers to think of brand names as cognitive/sensory cues, but also encourages producers to produce products which are consistent: products which appear to be mass produced. I then go on to examine how the rise of brands the emergence of the concept of 'beer style' in the late 1970s lead to the development of the craft brewing industry. Using the work of Jean Baudrillard, I propose that the contemporary obsession over consistency is a feature of consumer oriented late capitalism, a feature which radiates subjectivities and lifeworlds.

Ultimately, in this project, by attempting to account for the indeterminacy and ambiguity inherent in perception itself, for the way our world comes in and out of focus, takes shape and constitutes itself before our eyes, I propose that we are continually cultivating subjectivities and constituting the minutest details of our lifeworlds through the aid of our discourses and practices, through the production and consumption of objects. Such subjectivities and lifeworlds are no doubt historical—products, in this case, of a specific production concern—but are also plural. A focus on consistency, and the practices which surround it, gives rise not just to expert nuanced brewmaster tastes, but also to the inexpert and relatively unaware tastes of general consumers; through a system of practices and discourses we see the creation, not only a particular form of expertise, but also a particular related form of ignorance or guided imprecision.

CHAPTER 1:

EXPERT TASTES

Just as professional truck drivers need to develop a particular set of collective

perceptual-motor skills that allow them to successfully navigate a truck down the

highway, brewmasters must cultivate a particular habitus, an assemblage of modes of

attention directed toward taste experiences that allow them to perform the tasks of their

profession. These cultivated tastes are not random or groundless, but rather they are

historically and culturally specific, grounded in and emerging out of a set of problems

that surround the production of a particular sort of commodity. If we are to understand

the lived sensory experiences of brewmasters, and how these sensory experiences form

the perceptual foundations of contemporary lifeworlds, we must first understand how

brewmaster tastes are cultivated in response to a specific collection of questions and

needs inherent in the cultural product they produce. In this chapter, I undertake this task

through an examination of two related production concerns—the desire to produce a

consistent product, and the desire to produce a product which is 'to style'—and the ways

in which these concerns, through institutionally maintained standards, cultivate within

brewmasters particular taste experiences.

But before I begin, I would like to first emphasize the point that brewmasters do

need to learn how to taste. One of the themes which runs through the literature of the

brewing industry is that untrained customers are simply unqualified to offer serious

analytical evaluations of beer flavor or quality (Guinard and Robinson 1993: 59-60).

Although customer evaluations are common in the industry, they generally are used to

produce information about the consumers themselves rather the products they consume:

to explore the response of consumers to product changes, to test the impact of new

products, or to assess market potential, for instance (Meilgaard and Brew 1993a: 180-

181). It is not that customers are imagined to be oblivious to the flavors of beer or less

able to perceive them; on the contrary, customers are acknowledged to have the ability to

detect minute taste differences, often rivaling the acuity of expert tasters (1993a: 191).

However, customer taste experiences are inadequate because they lack standardized

flavor concepts and vocabulary, and as a result, tend to produce evaluations which are

inconsistent and non-reproducible (Meilgaard and Brew 1993b: 18-19). For instance,

Papazian argues that 10-15% of American consumers confuse the flavors 'sour' and

'bitter' (1993: 9). While identifying 'sour' and 'bitter' may not be critical to the daily

experience of many, having such confusion when attempting to evaluate a beer may lead

to dramatic consequences and evaluative inconsistencies. Furthermore, a customer's

ability to taste and evaluate beer is also recognized to be heavily shaped by outside

influences, advertising and marketing campaigns, or—for home taste tests—the context

in which the beer was consumed (Meilgaard and Brew 1993a: 192). It is not then that

customers are less able to taste beer than trained tasters, but rather that they have

cultivated concepts and modes of sensory attention around different nodes, nodes which

are less nuanced and potentially more idiosyncratic than those required of the

brewmaster. We will examine the technological and social methods that brewmasters use

to shape the sensory experiences of customers in Chapter 2.

In general, brewmasters need to be familiar and comfortable with two separate but interrelated modes of flavor perception, each of which are cultivated around a separate set of problems. For the daily operation of the brewery, brewmasters need to know and use an array of tasting attentions and practices in order to produce a consistent product, a product which changes as little as possible from batch to batch, and from year to year. The desire to produce a consistent product requires brewmasters to develop taste experiences of their beers which are extraordinarily sensitive, nuanced, and discriminating. Secondly, beyond the day to day operation of the brewery, brewmasters also need to be familiar with the ways in which their beer is professionally judged and evaluated, which means knowing, understanding, and using beer styles as tasting concepts. Both of these tasting experiences occur through systems of practice and sensory training which are mediated by an assemblage standards and institutions which developed simultaneously and alongside with the emerging craft brewing industry. An analysis of brewmaster tastes then is also necessarily an analysis of these emergent systems and institutions that allow for the cultivation of taste experiences. I will examine each of these two modes of flavor perception—tasting for consistency, and evaluative tasting—in turn to explore the ways in which brewmaster taste experiences are cultivated through standards and institutions.

Consistent Tastes

The first and most significant concern of brewmasters—and a theme which runs through this project—is the production of a consistent product for customers.

Brewmasters must be able to taste their products and recognize 'off flavors', slight variations in usual tastes, changes in bitterness or maltiness, anything that might lead acute customers to perceive a flavor difference. Although it may sound simple to taste a beer and identify—with a degree of objective or repeatable clarity—a beer's flavor components or the presence of 'off flavors', in reality this is an enormously complex and difficult task. Perception, and in particular the perception of flavors, is indeterminate. To begin with, the sensitivity to smells and tastes of even trained expert tasters is known to vary by as much as 30-40% from one taste to next (Meilgaard and Brew 1993b: 18). The sensory experience of taste is further affected by a host of physiological and psychological factors; it is heavily influenced by the expectations of the taster, the categories of flavor that they look for; the pattern that taste samples are presented in; and the conditioning of the taster's palate by flavors they have recently consumed (1993b: 17-21). Furthermore, taste experiences can also be affected by a multitude of environmental factors, such as lighting conditions, temperatures, background smells, noises, and other distractions (Merle-Smith 1993: 166). Tasting for consistency then requires brewmasters not only to cultivate modes of sensory attention which are nuanced and accurate, which are directed towards detecting the sorts of 'off flavors' that are common side effects of the production process, but also to manage spaces and distractions, to materially create physical environments that compliment their trained sensory expectations and allow for the careful and nuanced operation of their own consciousness. In other words, for brewmasters, the problem of accurate taste perception is not one of drinking a beer and passively absorbing the sensations it provides, but of acknowledging that perception is a

multisensory and active process, a process which is impacted and shaped by the surroundings and sensory environments in which the taster is immersed as well as his or her own cultivated attentions. What is being created, through the shaping of physical environments and the standardization of sensory attentions, is a particular culturally and historically specific lived experience.

As the wine connoisseur Emile Peynaud points out, one of the difficulties of taste evaluations is that tastes and odors cannot be quantitatively measured outside of the subjective act of perception (2005: 272). One may inspect foods chemically, to examine the presence and quantities of particular flavor compounds, but ultimately "there is no simple proportional relationship between the concentration of any sapid or odorous substance and the sensation [or, in this case, 'experience'] it provokes" (2005: 273). Flavors, in other words, do not exist as discreet units to be perceived outside of an array, but rather compose patterns and assemblages which have their own properties; certain flavor patterns can enhance the experience of some tastes while masking others in ways which are not predictable through a simple analysis of chemical compositions. Bitterness, for instance, tends to mask oxidation flavors while amyl alcohols in beer tend to enhance the perception of rose like flavors (Meilgaard and Brew 1993b: 20). Thus, in the end, brewmasters must rely on the accuracy of their own cultivated taste perceptions rather than on chemical analysis to produce a consistent product for their customers. Additionally, tastes are extraordinarily difficult to describe and define outside of their actual experience; their description often requires appeals to equivalent or alternative stimuli (Peynaud 2005: 273).

In order to taste beer in a nuanced, accurate, and collective way, brewmasters then need to have a system of standardized taste concepts that allow them to perceive and identify flavors, as well as to think and talk about their beer. In 1979, Dr. Morton Meilgaard of the Stroh Brewing Company, in conjunction with American Society of Brewing Chemists and the European Brewing Congress, addressed this problem through the establishment of the standardized Beer Flavor Terminology System (Papazian and Noonan 1993: 199). The Beer Flavor Terminology System consists of 122 separately identifiable flavors, arranged in tiers and organized into 14 classes. The broad flavor class 'caramelized, roasted', for instance, includes flavors such as 'caramel', 'bread crust' and 'roasted barley' (1979: 48-50). Such a system allows tasters to taste broadly to recognize the wider array of flavors present in a beer, and then hone in on particular flavor notes through successive tastes. Only about 40 of Dr. Meilgaard's flavors are common in most beers, while the other terms describe unwanted 'off flavors' or rare and unique characteristics that are found in a few specialty beers (Meilgaard and Brew 1993b: 17). Arguing that "flavor terms cannot be adequately defined other than by use of reference standards" (Meilgaard, et al. 1979: 47), Dr. Meilgaard connects each of his flavor terms to an easily reproducible sensory standard. These standards are recipes which, by carefully following a set of procedures, allow the taster to re-create a specific standardized aroma and flavor to ground his or her perception. For instance, one of Dr. Meilgaard's proposed beer flavors is 'cheesy'. The flavor standard of 'cheesy' is recreated by mixing 'a few crumbles of feta cheese' into a 12 ounce bottle of a commercially light 'neutral beer', recapping it, refrigerating it at 10 degrees C or cooler

for several hours, and then pouring the mixture out into a glass. The resulting aroma and flavor is the sensory standard of 'cheesy' (Guinard and Robinson 1993: 70-73).

Not only does having a system of flavor terms help brewers to carefully taste and determine whether or not they are producing a consistent product, but it also allows them to track down and isolate the source of any inconsistencies. The presence of specific 'off flavors' in their beer can often indicate what went wrong in the production process. A brewer tasting a moldy or musty flavor, for instance, should examine his brewery's water source, water hoses, and filters. On the other hand, diacetyl, a taste and smell resembling rancid butter, is likely the result of either a fermentation temperature which was too high, or too much oxygen coming into contact with the fermenting beer (Konis 1993: 99-103).

One example of how the Beer Flavor Terminology System is used in practice is at the daily tasting sessions included in the curriculum of the Siebel Institute of Technology in Chicago, one of the top brewmaster training academies in the country. These daily sessions are designed to familiarize brewing students with the sorts of flavors that can be present in beers, and to aid them in cultivating their sensory attentions towards these flavor attributes (Shelton 1993: 105-106). Tasters are taught to take one or two small sips and then pause and recognize the most prominent and intense flavors. Ilse Shelton, an instructor of sensory evaluation at the Siebel Institute, explains that the human "brain can analyze only about eight to ten attributes before it gets extremely confused" and as a result, students are encouraged to take pauses of at least twenty seconds between sips to allow their senses a chance to readapt (1993: 107-108). Once a student has gotten an overview of the most prominent flavors present in a beer, he or she is encouraged to look

at 'the flavor wheel'—a visual chart and memory aid of Dr. Meilgaard's Beer Flavor Terminology System—and retaste the beer in order to pick out which of the possible flavor attributes he or she is perceiving. (1993: 108-109).

What brewers and brewing students are effectively doing, when they learn and use the standardized Beer Flavor Terminology System, is cultivating a particular sensory habitus geared towards the perception of specific cues. The first tastes are directed towards a macroscopic perception of cues that allow them to take in the predominate flavor patterns present throughout the beer's entire sensory array, and subsequent tastes are directed towards examining specific patterns in more detail, honing on cues that would indicate the existence of certain flavor characteristics. By learning how to taste through the Beer Flavor Terminology System, students and brewers are effectively learning how to manage indeterminacy and shape their perceptual attentions in collective institutionally standardized ways.

While producing a consistent product was recognized as important by all the brewmasters I spoke with, in general smaller microbreweries tended to have less rigorous tasting programs than larger breweries that produced beer for wider distribution. Most of the microbrewery brewmasters who were interviewed regularly tasted their beers throughout the brewing process, including the raw ingredients, the beer at each stage of the production process, the final beer, and the evolution of that final beer on the taps in their microbreweries. Two of the microbrewery brewmasters who were interviewed were graduates of the Siebel Institute and were likely to have learned the tasting techniques and systems outlined above. Several more learned their brewing and tasting techniques

by working as apprentices or as assistant brewers in another brewery, while only one of

the microbrewery brewmasters claimed to be entirely self taught. One relatively

inexperienced brewmaster at the Peacock Brewery,[19] for instance, described periodically

joining a brewmaster from another brewery to taste and assess the quality of both of their

beers. Such tasting sessions would likely serve, not only to ensure that the beer of both

brewmasters remained consistent, but also to allow for the collective cultivation of modes

of taste attention.

Medium and large breweries which produced beer for wider distribution tended to

have more rigorous tasting procedures. At the Kamori Brewery, for instance, which

produces about 40,000 barrels of beer per year to be sold and distributed in both kegs and

bottles, a multi-person taste panel is conducted at 11:00 am everyday. As the wine

connoisseur Emile Peynaud points out, our daily physiological rhythms have a significant

influence on the sensitivity of our perception, and particularly our ability to taste.

Peynaud proposes that the best time for tasting is at the end of the morning just before

lunch (2005: 274-274), so the decision to have a regularly scheduled tasting panel may

allow for tastings at the Kamori Brewery to be more discriminating and consistent from

day to day. Occasionally, these taste tests take the form of a 'triangle test' in which a

glass of beer from one batch and two glasses of beer from another batch of the same

product are tasted together. Tasters on a taste panel then try to guess which two beers are

from the same batch. While this taste test is useful for comparing different recently

brewed batches of the same beer, brewmasters generally agreed that the flavor of beer

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[19] In order to protect the anonymity of the brewmasters I spoke with, I have replaced the names of their breweries with pseudonyms (which happen to be based on the names of various breeds of goat).

changes as it ages, so such comparative taste tests are helpful only when one is trying to compare batches of beer that were brewed in a relatively short time frame.

Larger breweries tended to have the most extensive brewmaster training and tasting procedures. The Bilberry Brewery, for instance, with a production of roughly 500,000 barrels annually, maintains a 'sensory lab', with individual tasting booths, in order to provide a consistent and controllable environment for beer tastings. Brewmasters and brewers are required to attend weekly training sessions on beer evaluation in which they are presented with seven samples of beer each spiked with a different compound. The tasters must identify which samples contain what compounds, and a record is kept which specifies which tasters are good and bad at tasting which compounds. Over what an assistant brewmaster described as "years and years of training," brewmasters and brewers rise through three different 'levels' of officially recognized taste acuity. All brewers are trained to 'level 2' which permits them to 'taste release' batches of beer, meaning that they are able to approve the beer to be packaged and shipped. Usually each batch of beer must be tasted and approved by two separate 'level 2' tasters, while brewmasters trained to 'level 3' supervise the process through a daily taste panel, also conducted in late morning from 10:30 to 11:30 am, and give input for product improvement and development. Additionally, the Bilberry Brewery has an annual taste competition for its employees. Each year three of the brewery's different products are mixed together in different proportions, and the concoction is tasted by all of the brewery's employees. The winner of the competition is the individual who is able to guess which three beers have been mixed together in what proportions, and—as a prize—

gets to design and produce a batch of his own beer with the assistance of the head brewmasters. In such a brewery, the continual cultivation of collective modes of taste attention plays a major part in the activities and duties of the brewmasters and brewers.

One point I would like to highlight about the tasting procedures of, at least the medium and larger breweries I visited, is the tremendous attention and emphasis which is placed on controlling the sensory and physiological environments within which attentive tasting occurs. Ron Siebel, in an essay describing the tasting procedures at the Siebel Institute, stresses the importance of managing sensory environments in beer tasting. Beer tasting, he suggests, should occur in a space which is clean, well lit, quiet, odor free, and uncluttered. Siebel proposes using red beer glasses so that the perceived color of the beer will not impact the taster, and, if multiple people are tasting a beer together, laying out specific rules—such as no smacking of lips, comments, or retching—to ensure that tasters do not influence one another. Furthermore, special care should be taken to ensure that tasters are healthy, motivated and attentive (1993: 75-89). In a number of the breweries described above, we see that taste tests are also conducted at specific times during the day, and—at least in the Bilberry Brewery—in a 'sensory laboratory', a specific room set aside to provide a controllable environment for tasting beer. What is being managed through these efforts is not just the sensory attentions of the tasting brewmaster, but an entire lived physiological and environmental perceived experience. Accurate tasting, in other words, doesn't just involve knowing and habituating the taste concepts of the Beer Flavor Terminology System, it also involves creating and managing spaces within which carful nuanced taste experiences can occur; it involves understanding taste experience as

a multisensory phenomenon related to physiological states, meaningful categories, brewmaster attentions, and surrounding environments as well as the flavors which are actually present in the beer. Through the cultivation of a perceptual habitus around the categories of the Beer Flavor Terminology System, and the management of physical environments, brewmasters are able to create for themselves nuanced and accurate lived taste experiences which are essential to the production of a consistent product.

Beer Style

Beyond the day to day operation of the brewery, brewmasters also need to be familiar with the way that beer is professionally judged, and the tasting concepts that inform these judgments: beer styles. While a wide variety of beers have been produced in different places and times, the concept of 'beer style'—the idea that historically and regionally specific beers can be mapped, quantified, reproduced, and connected to officiated standards—is a very recent innovation, first appearing Michael Jackson's 1977 *World Guide to Beer* (Eckhardt 1989: 35). A beer style then is an officially sanctioned category of beer, defined by a range of color, bitterness, clarity, flavor, aroma, and yeast characteristics, which is associated with a particular historic and geographic origin. While beer styles may in some cases reflect the beers historically present in certain locales, it is important to recognize that beer style; the desire to discover within history mass producible products for our consumption; and the urge to regulate those products based on their authenticity to an official standard, is extraordinarily modern phenomenon and a

product of consumer oriented late capitalism. This is a point that I will address at greater depth in the conclusion.

The brewmasters I interviewed identified two organizations in particular as the official origin of the beer style guidelines: the Brewer's Association and the Beer Judge Certification Program. The 2008 Style Guidelines released by both of these organizations, while in different formats, each contain similar information. Each style listing consists of a collection of standard brewing measurements—including beer color, 'bitterness', and specific gravity—within which the beer in question is supposed to fit, and a description of the proper characteristics of each beer style. The Brewer's Association guidelines contain a general description of the style which explains what should be present, what can be present, and what should not be present in the beer for it to be within the style category. The BJCP style guidelines, on the other hand, contain a more thorough explanation of each style, with separate descriptions of the proper aroma, appearance, flavor, and mouth feel of each style; as well as descriptions of the style's overall impression, history, typical ingredients, and commercial examples (Brewers Association 2008a; Beer Judge Certification Program 2008).

An important point to make about the style guidelines is that they are directed towards standardizing not the process of beer making, but the sensory experience of the final product. As the introduction to the 2008 Brewers Association Style Guidelines explains, "as much as it is possible, beer character is not described [in the guidelines] in terms of ingredients or process. [Instead,] these guidelines attempt to emphasize *final evaluation* of the product and try not to judge or regulate the formulation or manner in

which it was brewed, except in special circumstances that clearly define a style" (Brewers Association 2008a; emphasis added). Beer styles then are standards which regulate not the way beer is produced, but the way that it is *tasted*; the flavor, aroma, color, bitterness, and body that are expected and looked for within a final product. One microbrewery brewmaster I spoke with, for instance, described mixing two failed batches of what were supposed to be different kinds of beer together to form a stout (Fainting Goat Brewery). As long as the final product has the characteristics which define a stout, then it is a stout, regardless of the initial intentions of the brewer.

Grosvenor Merle-Smith, a beer evaluation instructor and founder of the Beer Judge Certification Program (Brewers Publications 1993: 229), proposes an interesting method for evaluating beer. Rather than removing the bias of perceptual expectation from beer tasting, Merle-Smith encourages the taster to use and cultivate their perceptual expectations through the experience of tasting. The first thing a taster needs to know is the style of beer that they are going to taste; this should give him or her a set of parameters within which to decipher the characteristics of the beer. After taking a variety of measures to ensure that their perception is not biased by other factors, such as ensuring the table cloths are white, the room is odor free, the judge's mouth is clean, Merle-Smith advises that tasters begin their evaluation by pouring the beer and smelling it. When he smells the beer, Merle-Smith attempts to, as he puts it, "confirm the perceptions [he] had in mind when [he] poured it" (1993: 167). Secondly, Merle-Smith analyzes the beer's appearance, whether or not it clear, and if the color is appropriate to the style category which the beer claims to be a part of. The tasting of the beer itself, Merle-Smith argues,

should be a process of confirming the expectations which were cultivated through smelling it and observing its appearance. When tasting, Merle-Smith encourages the taster to determine if the flavors and ingredients—as well as the beer's 'mouthfeel' and aftertaste—are appropriate for the beer's style, and finally to assess the overall drinkability of the beer. Tasting, for Merle-Smith, is a process of using sensory perception and the official categories of the beer style guidelines to develop and then confirm or deny expectations in taste experience (1993: 165-171). Charlie Papazian, the compiler of the Brewer's Association style guidelines, has a similar approach to tasting beer. Papazian encourages tasters to attempt to taste beer through style, focusing first on appearance, then aroma and finally taste. A British Bitter, in other words, should be tasted as a British Bitter, meaning that it should be a pale to dark amber color, possibly with some chill haze; it may have a hoppy aroma; and it should be very bitter, not at all sweet, and should possess a degree of fruitiness (1993: 146-147).

Most of the brewmasters who I interviewed did not put a great deal of faith into the comparative judgment that their beer receive in competitions, pointing out that it was subjective and often based more on the personal preferences of the beer judges than the officially sanctioned style guidelines. As the brewmaster in the Golden Guernsey Brewery explained, one beer might be preferred because "it is cleaner tasting, [and] has less off flavors; but the style guideline says, this is an 'English beer' and everyone knows that English beers have a lot of off flavors and they are [stylistically] acceptable. [But judges] are always going to pick the cleaner beer over the [less clean] beer".

From the point of view of perception, style guidelines then are collections of institutionally mandated perceptual expectations. A trained taster and brewmaster should be able not only to taste accurately, recognizing within a beer the subtlest hints and flavor notes, but also to taste through the expectations of a particular style, to know that they are tasting an 'English beer' and that means that they are looking for particular cues while ignoring others; it means that their perceptual attention and indeterminacy must be managed in a way specific to a particular style. What the brewmaster of the Golden Guernsey Brewery seems to be putting forward in his critique of brewing competitions is that the judges lack the necessary perceptual habitus; their ability to judge was weakened by the fact that they focused on the wrong sorts of perceptual cues.

The mechanisms which I have described throughout this chapter—while intended to produce standardized, accurate, and nuanced sensory experiences—are not designed to produce unbiased or objective tastes. Instead—whether we refer to the development of a shared system of flavor concepts; or beer style guidelines—the goal seems to be to instill in the lived body of the brewer the right sorts of biases: the knowledge of standards, the proper modes of attention, the ability to concentrate on the rights sorts of cues. Furthermore, the techniques which brewmasters use to cultivate their lived experience of taste are very much phenomenological. Brewmasters do not simply taste beer by sipping it and seeing what flavors, objectively present, are passively received by their taste buds. Rather, as part of a production process focused on consistency, a production process in which the quality of a brewery's product rests on the taste experience of the brewmaster, the taste experience itself becomes a complicated and problematized terrain. Because

perception is multisensory, tasting spaces and environments need to be built and maintained, brewmasters need to be healthy, and attentions need to be cultivated through official flavor concepts, standards and training. The problem of brewmaster taste is one of ensuring that the brewmaster, through the subjective activity of his own consciousness, notices the right sorts of patterns, and pays attention to the correct cues.

In this chapter, I explored the ways in which brewmasters cultivate their lived taste experiences of beer with the aid of institutionally maintained standards. I examined two nodes around which that cultivation occurs, each focused on a particular set of concerns. First of all, I investigated the ways in which brewmasters cultivate accurate, nuanced, and sensitive taste attentions around their daily need to ensure that the products that they are producing are consistent. By habituating their taste attentions around the patterns and sensory cues present in the Beer Flavor Terminology System, brewmasters are able to effectively cultivate their taste attentions around perceiving those sorts of flavors, both positive and negative, which are likely byproducts of the brewing process. Secondly, I considered the taste attentions which are cultivated around the evaluation and judgment of beer, and in particular the concept of beer style. I pointed out that beer styles are not sets of production criteria, but rather are an institutionally maintained collection of cultivated sensory attentions which should inform the perceptions of the beer taster. Both modes of brewmaster taste experience which I examined here were cultivated around particular sets of institutionalized standards which emerged, along with the craft brewing movement, in the late 1970s. The subjectivities and lived experiences of brewmasters created through these institutionalized standards, as I will go on to argue,

are historically specific and contribute to the sensory foundations of consumer oriented

late capitalist lifeworlds.

CHAPTER 2:

TASTES FOR SALE

This project explores the cultural formation of a particular sensory experience, the

taste of beer. As we have seen, this sensory experience—and perception in general—is

indeterminate: when we perceive we are presented with far more stimulus information

than we are able to pay attention to. As a result, the taste of something like beer is the

product of two sorts of processes. On the one hand, it is the product of the barley, yeast,

and hops that provide a potential set of sensory information for our senses to focus on.

On the other hand, it is the product of social processes that cultivate our sensory modes of

attention in collective ways that lead us to notice the same sorts of flavors when we taste

beer. In the last chapter, I explored the ways in which the expectations and tastes of

brewmasters are cultivated collectively through institutionally maintained standards.

While such an analysis is important, it only tells half of the story. Brewmasters not only

produce and taste beer, but they are purveyors of sensory experience; they create, modify,

manage, market, and sell these experiences to the general public. In this chapter, I will

explore the ways in which brewmasters accomplish this task, the ways in which they

attempt to create, cultivate, and instill a particular sensory experience for their customers.

This is a cultural and collective process which is at once technological and social, which

deals just as much with the mixing of barley and hops to produce a set of potential

stimulus information as it does with cultivating the expectations and sensory attentions of

the consuming customer. The purpose of this chapter then is to explore how brewmasters

attempt—through the mixing of ingredients and the creation of customers—to make the taste of beer.

The social and technological production of particular sensory experiences in the mouths of customers is a tremendously complex process, and a process which contains idiosyncrasies as well commonalities between brewers. In this section, I will specifically take up the formation and implications of a single element of taste experience important to all the brewmasters I spoke to, as well as in the industry as a whole: the production of consistency. Customers, it is believed, always need to feel like they are getting the same beer, day after day, year after year. As one brewmaster explained it, customers don't want to think, "I wonder if I'll like the pale ale this week." They want to have beers that they like and can rely on: beers that they can order without worrying that it might be a 'gamble' each time (Jonica Brewery). While each of the brewmasters I spoke with may use an array of different technological and social mechanisms to produce the specific taste of each of their beers, fundamentally these taste experiences are founded on the colossal and collective task of producing a consistent product.

What is beer?

Beer is a drink made from the seeds of a number of edible grasses, which are collectively known as 'cereals' or 'grains' (McGee 2004: 739, 461). Unlike grapes, which contain sugars and can be directly fermented into wine by simply adding yeast, grains are composed of starches that are too complex for yeasts to ferment by themselves. Beer then is a drink which is the result of two processes of 'fermentation': an initial

process in which the long chains of starch are converted into fermentable sugars; and a second process which uses yeast to convert fermentable sugars into alcohol and flavor components (2004: 739-748). The first step in the production of beer is 'malting', a process in which grains, or seeds of grasses, are germinated and sprouted. The sprouting process activates hormones within the barley grains which produce enzymes that are able to break down the complex starches in the barley into usable and fermentable sugars. After several days of germination, the sprouting of the barley grains is stopped by kilning, a process of drying them out in an oven. Dark and amber beers are the result of kilning processes that leave the barley—or often a small portion of the barley—more heavily toasted, and in some cases burnt until nearly black. These toasted, burnt, caramelly, roasted grains provide the color and a portion of the flavor in the final beer (Bamforth 2002: 151-158).

After the kilning process, the malted barley grains—even though they have been sprouted and contain active enzymes, are still composed of starches that are too complex for the yeast to consume in fermentation. The next step of brewing, called 'mashing', converts these starches in the grains into fermentable sugars. The malted barley grains are crushed and placed in water, where they are heated to a specific temperature which reactivates the enzymes in the barley to complete the starch conversion process that they began in germination. The starches of the grain dissolve into the water and are converted into a sweet tea of fermentable sugars. When the conversion of starches to sugars is complete, the sweet barley tea—called the 'wort'—is separated from the grains and boiled for about an hour, which sterilizes the wort and allows for many of the unpleasant

grainy flavors of the barley to evaporate (Bamforth 2002: 158-162). During the boil, hops—a seed bearing 'cone' of *Humulus lupulus* (McGee 2004: 420)—are added, which provide bitterness and help to prevent other organisms from infecting and growing in the fermenting beer. Hops contain two components which are useful in brewing: resins which give the beer a generic bitterness and essential oils which give the beer hoppy aromas and flavors. By changing the point at which hops are added during the boil, the brewer can control the relative quantity of resins and essential oils—or bitterness and aroma—that the hops contribute to the beer (Bamforth 2002: 162-163). After the boil, the wort is cooled and yeast—a single celled fungi (Guinard, et al. 1989: 15)—is added. Although nearly 500 species of yeast are known, most beers are produced with various strains of ale yeast—*saccharonmyces cerevisiae*— or lager yeast—*saccharonmyces uvarum*. Once added to the wort, the yeast reproduces until its population stabilizes; it consumes sugars to produces alcohols, carbon dioxide, and other compounds; and eventually, when the sugars can no longer support the yeast population, it goes dormant and flocculates—or drops out of solution—at either the top (for ale yeast) or the bottom (for lager yeast) of the fermenting beer (1989: 16-19). At this point the fermentation of the beer is complete, although, most beers generally are conditioned though a period of aging and carbonated through the reintroduction of a small portion of fermentable sugars for the yeasts to consume and convert to carbon dioxide (Bamforth 2002: 164).

In this brief outline of the brewing process, I would like to highlight a number of significant points. To begin with, while some beers are produced with supplementary ingredients, or 'adjuncts', such as rice, corn, rye, wheat, fruit, coffee, chili peppers, and

spices, most of the styles and varieties of commercially produced beer—from stouts and

porters to IPAs and Pilsners—are produced using the same four ingredients: barley,

water, hops, and yeast. The barley may be toasted to different degrees or grown in

different locations, the yeast might be different strains, the water may contain different

minerals, and different varieties of hops may have different aromas, but in general,

almost all the flavors and characteristics that we associate with beers emerge out of these

four ingredients. This is possible because, making beer, unlike preparing a curry or

baking a cake, is a biological rather than a chemical process.[20] Yeasts are capable of

producing a wide variety of compounds. Although most of the fermentable sugars in beer

are converted into alcohol and carbon dioxide, in a typical fermentation around 5% of the

available sugars are converted into other flavor compounds (Guinard, et al. 1989: 18).

These other flavor compounds, as well as the fermentation itself, are thought to be

affected by three factors: (1) the yeast, its variety and condition; (2) the wort, its chemical

and physical characteristics; and (3) the outside conditions imposed on the fermentation,

such as its temperature, pressure, and the shape of the fermentation vessel (1989: 19-20).

In general, the process of fermentation is exceedingly sensitive. The brewer is not so

much mixing ingredients as he is creating an ecosystem and managing a population; his

goal is to create a miniature world such that, when it exhausts itself, it leaves behind the

right sorts of byproducts. Seemingly insignificant details, such as the minerals found in

the brewing water, the precise temperature of fermentation, or the plumpness of the

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[20] Cakes are generally not made with yeast. Most cakes are unleavened, gaining their texture from a process of aeration in which air bubbles are beaten into the batter during the mixing process. Cakes which are leavened typically use small amounts of chemical leavening, such as baking soda and baking powder, rather then yeast (McGee 2004: 556).

grains of barley, change the environment available to the yeast and hence come to play a major role in composing the flavor characteristics of the finished beer. Over 900 separate chemical compounds are known to have been produced in beer (Meilgaard and Brew 1993: 16), and while the brewer can watch and monitor most conceivable factors, ultimately, brewing is based on biological entities which are inherently variable and unpredictable (Bamforth 2002 :138).

The Technological Reproducibility of Beer

One point that was brought up repeatedly during my interviews with brewmasters is that, because brewing is a biological rather than a chemical process, beer is not entirely technologically reproducible. First of all, the production of any specific beer is not reducible to a recipe or a system of directions. Although the brewmasters I spoke with regularly 'design' beers, come up with recipes, and keep careful records of their procedures in the form of 'brewlogs,' in general, a beer's recipes and brewlog are considered to be indeterminate. As one brewmaster explained it, if you "give [a recipe] to ten different brewers…you would come up with ten different beers" (Fainting Goat Brewery). This is the result of a number of different factors. First of all, as several brewmasters explained, each brewery has a 'brewhouse flavor', or a particular sort of taste that emerges from the idiosyncratic characteristics of the brewery itself. For instance, as the brewmaster at the Beetal Brewery explained to me, individual characteristics of the boiling vessel—such as its size, shape, material, conductivity, and condition—can impact how the wort boils and thus change the fermentation process and

the flavors of the final beer. Additionally, the mineral content and characteristics of the local water available to breweries can have a dramatic impact on the flavors of the final beer (Golden Guernsey Brewery). In a certain respect, beer is always a product of a place and a time, of the conditions set by the locales in which is it is produced. As a result, the majority of the brewmasters with whom I spoke with maintained very little in the way of proprietary information or trade secrets; they appeared to be largely unconcerned about individuals attempting to copy their products. One brewmaster actually published a recipe in a brewing magazine, another acknowledged the accuracy of 'clone' recipes of their beers that could be found for sale in home brewing stories, and most brewmasters were happy to share their recipes and details of the production processes with other brewers and members of the general public. While the brewmasters with whom I spoke were generally unconcerned about being copied, many of them acknowledged that it would be possible for a good brewer to produce a copy of a beer. However, they were quick to point out that such a process is not technological one; rather, if one wanted to copy a beer, one would need to do so through *taste*. A brewer, they proposed, would have to begin with a recipe, and then taste his product against the original, assess its differences, and work on eliminating them through a series of successive batches. While potentially effective, such a process is subjective rather than technological; it is grounded in the thought, experience, and bodily attentions of the brewmaster rather than in impersonal measurements and objective obedience to a recipe.

Not only is beer not copyable through technological means, or reducible to a list of ingredients or a set of directions outside of the site of the brewery, but the precise taste

of the beer produced often varies from batch to batch even within a single brewery. Many

of the brewmasters with whom I spoke pointed to the fact that raw materials used to make

beer—in particular the water, the malted barley and the hops—change over time. The

alkalinity of a brewery's water fluctuates throughout the course of the year; the malted

barley changes as it is stored and ages; and hops, which are generally harvested once a

year and stored, tend to loose their bittering characteristics the longer that they are kept

(Jonica Brewery). For the majority of the brewmasters with whom I spoke, making a

consistent beer was a process not of a following the same recipe or procedures, but—as

one brewmaster put it, a process of "constantly changing beer to make it taste the same"

(Jonica Brewery). "Maintaining a brand is sort of like driving a boat," another

brewmaster explained, "if you just held the steering wheel straight, it wouldn't go

straight, because the raw materials fluctuate; so you have to make little adjustments over

time to try to keep the beer the same. You actually have to adjust the recipe" (Bilberry

Brewery). Usually these adjustments are made based on the measurement and analysis of

the raw ingredients, a process that I will explore in greater depth in a moment. Although a

few brewmasters did claim to produce identical batches of beer after taking into account

the fluctuations in ingredients, most of the brewmasters with whom I spoke

acknowledged that in spite of their best efforts, the taste of their beer fluctuates, not only

from batch to batch, but also from year to year. While one can brew beer and do so in

ways which are incredibly technologically sophisticated, the challenge faced by the

brewmasters I spoke to is that beer is never entirely predictable or technologically

reproducible; instead, it contains untamed erratic excesses which tie it intrinsically to the particular sites and moments within which it is brewed.

If consistency is the goal, brewers are faced with a tremendous problem. As the brewing scientist Charles Bamford points out, while wine can fall back on the concept of 'vintage' to explain the idiosyncratic flavors of particular batches or years of production, brewers face many of the same challenges and crop variations, and yet are expected to produce a product which is consistent irrespective of the site or the momentary conditions in which it was produced (2002: 2-3). Out of the wild, inconsistent, and extraordinarily sensitive behavior of yeast, crops, and weather, brewers need to make something—a sensory experience—which is consistent and predictable. As we will see, their ability to successfully create the impression of consistency relies both on their use of technological and social means.

Technological Means of Consistency

In spite of the impossibility of technologically reproducing beer, the brewmasters with whom I spoke go to great efforts to ensure that their customers receive the same taste each time they drink a product. The first aspect of this taste experience is physical and technological: brewmasters shape and watch over their products in order to make sure that their beers contain, to the extent possible, a consistent array of potential sensory information. Due to the sensitive nature of fermentation, when a beer is brewed the natural inconsistencies inherent in the raw ingredients themselves are magnified. So the challenge for brewers of producing a consistent product lies largely in finding ways to

determine, account for, and overcome the inconsistencies of the raw ingredients themselves. Charles Bamford, a professor of brewing science and a former brewery Quality Assurance manager, points out, for instance, that consistency is achieved in a brewery not merely by producing a beer and tasting or chemically testing the final product to ensure that it is on track, but by actively monitoring and controlling the entire production process through the use of measurements (2002: 12-14). Brewers should, he argues, take measurements early on, at 'critical points' in the brewing process or in the ingredients themselves which, if preventative actions are taken, can allow the beer's measurable properties to fall into line 'downstream' (2002: 39-42). From a practical standpoint, this generally means taking a collection of measurements of the specific properties of the raw ingredients themselves and adjusting the composition of the recipe accordingly.

The number of measurable qualities of the raw ingredients which may affect the outcome of the fermentation is enormous. Although beer is generally brewed with only four ingredients, one brewmaster interviewee estimated that beer and its ingredients contain well over a thousand measurable characteristics (Fainting Goat Brewery). Malted barley, for instance, can be measured for its moisture content; its nitrogen content— which indicates the quantity of foam retaining proteins—; its variety; the size and homogeneity of kernels; the 'degree of modification' of starches in the barley to sugars during the malting process; the acidity that it will bring to the beer; the degree of toasting and color that the barley will contribute to the beer; the presence of the flavor compounds in the barley itself, to name only a few of the many measurable variables in barley that

affect the final beer (Bamford 2002: 51-81). Hops can be examined for its aphid content; the presence and make of its resins and essential oils; its cone size; the health of the hops; and the degree of deterioration of hops during storage (Bamford 2002: 93-97). While water quality is usually monitored by the water company, brewers commonly measure their water for its pH, and may further send periodic samples to a water analyst to assess its microbiological content; its mineral content and its turbidity (Bamford 2002: 85-88). Yeasts need to be periodically tested to ensure that they are contaminate free, of the correct strain, healthy, and have a sufficient populations to take over the beer (2002: 113-118). Each of the many measurements performed on raw ingredients is connected to changes and adjustments in the brewer's recipe and procedures which allow for a more consistent product. The moisture content of the malted and kilned barley, for instance, changes its ability to absorb heat. When the barley is mashed, or added to warm water to allow the grain's enzymes to convert the starches to fermentable sugars, it is extraordinarily sensitive to temperature. Certain mashing temperatures favor the activity of certain enzymes which in turn produce certain sugars; a temperature difference during mashing of even a few degrees can change the character of a beer completely (Papazian 1991: 298). Since the mashing process requires the brewer to combine the barley and the water to achieve a mixture of a certain temperature, the moisture content of the barley, and thus its ability to absorb heat, changes the required temperature of the water (2002: 104-105). As the measured characteristics of the ingredients fluctuate, the brewing quantities, temperatures, and times are adjusted in order to compensate. The goal of the

brewer then is to produce a product which is more consistent than would be possible only by following a static recipe or a fixed set of directions.

After the measurements are performed on the raw ingredients, brewmasters frequently use control charts and computer programs to calculate what changes to their brewing times, temperatures, and ingredients are needed in order to ensure that the measurable quantities of the final beer are within its target specifications. Once these calculations are made, and the adjusted recipe is composed, the focus of the brewer changes from producing measurements to ensuring that the newly calculated recipe is accurately executed. In particular, to the brewmasters with whom I spoke this means ensuring that the times, temperatures, and ingredient quantities specified in the adjusted recipes are carefully followed. In larger breweries with multiple brewers, this process also involves ensuring that everyone is following the same procedures. One brewmaster with who I spoke at the Fainting Goat Brewery described his surprised when he discovered that one of his brewers was using different brewing procedures and thus 'invalidating' the recipe composed by his brewery's computer. As he explained, "we don't have any opinions when it comes to temperature. We don't have any opinions when it comes to how to clean things. We don't have any opinions—all we have are procedures, and either you follow them or you have got to move on." An important part of producing a consistent product is thus ensuring that all the brewers are on the same page when it comes to brewing procedures.

When a beer has completed its fermentation, its characteristics are analytically measured to ensure that the final beer is within its target specifications. In particular, the

brewmasters brought up measuring the specific gravity—which indicates whether or not a beer has fermented properly (Bamforth 2002: 124)—; the color; and the 'bitterness'—or alpha acid content—of the beers they produced (Bilberry Brewery). While each of these analytical measurements is designed to ensure that the final beer is consistent with its expected technical specifications, the final decision about whether or not to release a particular batch of beer is made based on trained sensory analysis of the beer rather than on its analytically measurable qualities. As we have seen in the first chapter, the sensory attentions of the brewer should, at least ideally, be cultivated around picking up the specific flavors that should and should not be present in a particular beer (Bamford 2002: 132).

The set of problems faced by the commercial brewer are not simply those of inventing a recipe and following directions to produce a consistent product, but of carefully measuring raw ingredients and compensating for variations by continually adjusting their recipes and procedures. In spite of all of these efforts, the beer produced by brewmasters continues to be a fundamentally unpredictable biological process which is not entirely consistent from batch to batch. While the variation between batches of beer can be greatly reduced by measuring precisely the characteristics of raw ingredients and adjusting the recipes and procedures accordingly; ultimately, the brewer needs to come to terms with the fact that a certain degree of variation is an inevitable and inescapable part of beer production (2002: 138-141).

Social Means of Consistency

Customers not only expect a consistent product, but—even when beers ordinarily differ from batch to batch—they *taste* a consistent product. As one brewmaster explained, assuming that, "in the parameters that we can brew a beer, [our beer is] 6% different each time. The average person doesn't have the ability to [recall the] last beer [in such detail] that they are going to [taste a difference between the two beers] or think that [one beer] is absolutely…6% weaker or stronger" (Fainting Goat Brewery). Beer is consistent, not merely because it is measured, monitored, and produced to be as consistent as possible, but because it is tasted as consistent; because the sorts of idiosyncratic differences that may exist between batches of beer are largely below the radar of customers. However, it is not that customers are incapable of tasting or noticing the difference between batches of beer, but that the sensory attentions of customers are molded—through a variety of techniques employed by brewmasters and breweries—around specifically *not* tasting difference. In the previous chapter, I pointed out that customer taste tests are notoriously inaccurate for evaluating beer, not because the customers do not have the taste acuity of expert beer tasters, or because their tastes are somehow wild, unpredictable, and uncultured, but because customers have cultivated their sensory attentions around other concepts than those of the standardized Beer Flavor Terminology System. The most important of these concepts, at least for understanding the social and technological production of consistency, is the 'brand'.

While customers generally lack a detailed flavor vocabulary, one concept that they do have when drinking a beer is that of the 'brand'. A variety of experts on beer evaluation have suggested that customers generally 'drink the label and not the beer'

(Meilgaard and Brew 1993: 192; Weiner 1977: 21); that the very knowledge that a beer is a particular brand actually changes the beer's perceived flavor characteristics, through shaping the sensory modes of attention of the customer. One famous marketing study conducted by the Carling Brewing Company tested this hypothesis. In the study 326 beer drinkers were given 2 six packs of a variety of beers—presumably common pilsners—to taste and evaluate. The first six pack received by each participant had its labels removed, while the second six pack—delivered a week later—contained the same beers as the first but with the labels intact. It was found that participants, while largely unable to distinguish taste differences among the brands of beer sampled in the blind taste test, in the labeled taste test not only consistently gave 'their' brand of beer the highest rating, but they generally assigned higher ratings to those beers with labels (Allison and Uhl 1964). Such a study demonstrates the extent to which brand recognition, and consumer expectations, can shape the modes of the attention of the customer.

One of the most compelling accounts of this phenomenon comes from Irving White's work on advertising. White proposes that advertising not only informs potential customers about products, but "helps to organize and modify the *basic perceptual processes* of the consumer, so that he is guided towards *seeing* and *feeling* a product in a given predictable way" (1959: 8). In other words, advertising—and, I would argue, the public presentation of products—prepares the consumer for consumption; it sets up particular sensory modes of attention through which consumers experience products. As White explains,

> in a sense, the customer is not fully open to his experiences and is not likely to
> perceive all the stimuli of a product. His own needs, in conjunction with the

social conceptions reinforced by the imagery surrounding the product, emphasize certain aspects of the direct experience and weed out others [White 1959: 13]

In White's formulation, advertising seems to perform a number of tasks. First of all, advertising helps to stabilize a product by cultivating in consumers a *consistent* sensory experience of a particular good (1959: 8). This experience of consistency allows products to accumulate associations that give them a distinctive 'character', or brand image, that customers come to know, relate to and interact with (1959: 8-9). White cites the example of different makes of cars. While 'Lincoln' and 'Jaguar' may produce models of cars that are functionally similar, each make carries with it a collection of associations that are not reducible to the simple physical or useful difference between the two (1959: 12). This 'character', or brand image of a product is created and cultivated, in part, through advertising, and allows the consumer to organize and shape his sensations. "The brand image" explains White, "is the major organizing concept through which the customer is guided toward perceiving unified patterns of stimulation" of particular products (1959: 12).

Many of the brewmasters who I interviewed brought up the fact that, regardless of how much each batch of beer may differ from the next, efforts should be taken to ensure that customers do not begin to ask themselves, as one brewmaster put it, whether or not this beer "is…different from last time?" (Fainting Goat Brewery). As long as customers do not start to wonder whether or not the beers they are drinking are consistent, they will, more likely than not, taste the beers they are consuming as consistent. Brewers then need to take a number of steps to make certain that the beer they produce is tasted as a 'brand': that their customers taste it with the assumption and expectation of consistency. One of

these steps is marking changes to beers through changes in their name. The brewmaster at the Fainting Goat Brewery pointed out that, while he may occasionally change and produce variations of his beers, he also changes the name of his beers so that the potential change in taste experience is marked by definitive change of product. Conversely, several other brewmasters with whom I spoke, all at microbreweries, described intentionally changing the taste of their brands over time, but doing so slowly, over a long period of time, through small incremental changes so that the customers would not pick up on the changes. The brewmaster at the Jonica Brewery, for instance, explained that when he started working for his brewery, he 'hated' the brewery's pilsner. He did not like the hops, the variety of malted barley that was being used, and the beer's 'design' in general. So, through small incremental changes over the course of two years, the brewmaster changed the beer into something that he liked, but was able to do so without his customers noticing. "To the customer, I think every beer is stagnant," another brewmaster from the Golden Guernsey Brewery explained, but my "beers are constantly evolving. [I] just…do it slow enough that the customer drinking it isn't going to think 'that changed'. No one likes change. If you have a favorite beer, you want to drink the same beer every time."

Furthermore, brand images themselves reinforce consistency. The very fact that a brewery can speak of, advertize, or serve 'its IPA' presumes that the brewery is producing a product which is consistent over times and spaces, that the customer is receiving an object that is the same as what has been advertized. As a result, the discourses and mechanisms that breweries use to promote particular brands are also

discourses which create the impression of consistency. One such technique is to develop

an association between a beer and a particular feeling or atmosphere. The brewmaster at

the Bilberry Brewery, for instance, told me that, even more than the ingredients of the

beer, he wanted his customers to understand the 'mood' or 'spirit' of each of his beers. A

particular beer might be, he explains, "a lawnmower…summertime, backyard kind of

beer, or…a night out with your friends kind of beer." Although most brewmasters I spoke

with were critical of the results of brewing competitions, another technique used by a

number of brewmasters to develop a brand image was to advertize or announce the

success of their beers in various brewing competitions. The fact that a beer has received

expert validation not only allows customers to drink a beer that he knows is good, but

also allows him to taste the beer as good: to taste the 'same' beer that won the

competition and was praised by experts. Meilgaard and Brew additionally point out the

importance of 'product image'. A beer will 'taste better' when the drinker knows that it

was difficult or expensive to brew, or if it is poured from a bottle or can with an

appealing design or label. Some breweries may even choose to use processes which are

more expensive and difficult in spite of the fact they produce no perceivable difference in

the final product (1993: 192).

One of the most curious aspects of brand image creation (and consistency) for the

brewers I spoke with is the mass production of consumable information and facts about

their beers. More and more customers, as Meilgaard and Brew explain, "want beers that

make a statement about the drinker's product knowledge and his or her feel for fashion,"

requiring modern brewers to produce, not only more and more different brands, but also

more and more bits of consumable information about their products (1993: 36). Several

of the larger breweries I visited had public tours or beer schools in which interested

members of the public could walk through the brewery, and learn about the production

process, including the ingredients that go into beer and the flavors they contribute. A

number of the smaller microbreweries I visited additionally contained large glass

windows which connected the dinning areas with the brew house, allowing customers to

literally watch their beers being brewed. In these contexts, the very act of brewing itself,

as well as the overt presence of technology, the polished stainless steel fermenters and

carefully cleaned tools, becomes a performance involved in the production of consumable

product knowledge, the cultivation of consumer sensory expectation, and the

strengthening of brand image.

In this chapter, through the examination of the theme of consistency, I have

attempted to explore beer production as a process which is at once social and

technological; which uses computers and analytical measurements to mass produce

subjects just as it uses advertising and discourses to mass produce tastes. In doing so, I

hope to have highlighted the ways in which the manufacture of objects and the discursive

cultivation of attentions can be simultaneously involved in the joint project of the

invention of lived experience; a lived experience which is not only 'in the world'—

incorporating particular contexts, tastes, and moments—but also inherently cultural and

historical insofar as it is grounded in and made possible by a specific social historical

moment. In the conclusion, I will examine this social historical moment, and the ways

that it has underscored the lived experiences of taste of the brewmasters I spoke with, and

the customers of their consistent, 'authentic' beers.

CONCLUSION:

HYPER-REAL TASTES

In this project, I have taken up a seemingly very simple question: how it is that a single sensory experience—the taste of beer—is produced by brewmasters. But in doing so, I have also explored a much larger problem, how it is that we as human beings come to know, perceive, experience, and feel the world around us in particular culturally specific ways; how it is that those ways of knowing the world around us are ways of knowing ourselves; and how it is possible for us as human beings to be products of this strange porous interaction of self and the world we call perception. I have attempted to do so not by examining what flavors are present in beer, how those flavors are related to various social phenomena or are somehow organized into larger structures, but— following Merleau-Ponty (1962) and Gibson (1966; 1974)—by attempting to account for the indeterminacy and ambiguity inherent in perception itself; by exploring the ways in which tastes are not merely facts to be taken for granted, but are continually taking shape, moving in and out of focus, assembling and disassembling themselves in our mouths in particular meaningful ways.

The point of this project is not simply to unravel the ways in which the taste of beer is created but to understand the ways in which these processes and sensory experiences are born out of and crucial to our contemporary social-historical framework of consumer oriented late capitalism. If subjectivities are indeed formed in the world, if our consciousness is indeed a product of continually learning to tame the wild

indeterminacy and excesses inherent in perception itself, then we should be able to

understand the ways in which these discourses and pedagogical practices, as well as

physical methods of, in this case, beer production, are embedded in processes that allow

for the creation of modern selves.

The primary concern of the brewmasters interviewed for this project, both in

cultivating their own nuanced taste attentions and in shaping a sensory experience for the

consumption of others, is the production of a 'consistent' product. As we have seen,

consistency is believed to be very important to customers. Consistency allows for

products to become nodes around which knowledge, moods, feelings and brand image

can accumulate. Brewing textbooks even go so far as to suggest that the survival of

brewery depends "above all else" on the production of a consistent product (Grossman

2002: ix). But consistency has not always been a concern among brewers; rather, this

peculiar obsession is the product of a collection of technological and social changes that

have taken place over the last 200 years. In this conclusion, I describe these changes and

argue that consistency, along with the perceptual experiences it creates and the

subjectivities and lifeworlds it forms a part of, are a product of consumer oriented late

capitalism.

In order to account for the technological and social changes that allowed for

consistency to become a prominent concern among brewers, we should recall the

transformations which occurred to make beer the drink that it is today. In medieval

Europe, the drink known as beer was extraordinarily different than the beer which is

produced by contemporary brewers like the brewmasters I spoke with. To begin with, the

beers of the middle ages and renaissance tended to become sour and undrinkable very

quickly (Sparrow 2005: 29-30). Although the introduction and widespread use of hops in

the sixteenth century helped to partially alleviate this problem, as hops acts as a

preservative, the comparatively short lifespan of most beer was a major strain on the

industry (Unger 2004: 143-151). Even when beer did not go bad, as the brewing author

Jeff Sparrow points out, beers that predate modern brewing technology would have

almost certainly had a sour, tart and acidic character (2005: 4), that beer drinkers would

likely find unpalatable today. Additionally, since the malting and fermentation processes

are very sensitive to temperature changes, pre-modern European beer brewing also

experienced large seasonal fluctuations, not only in terms of quality, but also in terms of

quantity of beer produced (Unger 2004: 150).

While the beer produced in specific locals varied tremendously, there wasn't

really anything in the renaissance and middle ages which approximates the contemporary

concept of 'style'. In the sixteenth century, brewers in Europe generally produced only

two or three varieties of beer, usually a 'strong' or 'good' beer—a premium higher

alcohol beer produced with more grains per liter—a 'small' beer—a cheaper and much

weaker variety which was drunken more for refreshment than for its inebriating or

nutritional qualities—and a third which was often a mix between the two (2004: 184-

189).

Although beer was extraordinarily popular during the renaissance and Middle

Ages, during which average urban consumption levels reached more than twice those of

today (Unger 2004: 126; Schivelbusch 1992: 22-23), by the beginning of the eighteenth

century beer had begun to fall into decline. The brewing industry had grown accustomed to a stable export market for premium strong beer, which—with the invention of the corkscrew around 1700 and the growing popularity of distillation—began to give way to wine, brandy and spirits which were more stable and less costly to transport (2004: 233-239). The heavy tax burden on beer additionally left it less able to compete against the growing popularity of other alcoholic drinks, as well as coffee, tea, and cocoa (2004: 239-244).

It was not until the nineteenth century that a series of technological developments began to revive the brewing industry. Steam engines, used to grind the grain, pump water, and stir the mash, began to be used to allow for less expensive beer production (Unger 2001: 353). The invention and the increased use of the thermometer and saccharometer in brewing gave brewers more control over the brewing process (2001: 380). Additionally, ice machines and mechanical refrigeration developed during the second half of the century, giving brewers, not only more control of the production process, but also the capability of removing themselves from the seasonality that had formerly dominated the industry (2001: 354-355). While these strides were significant, potentially the greatest innovation of the nineteenth century for the brewing industry was Louis Pasteur's 1876 publication *Études sur la Bière* [Studies on Beer]. Pasteur introduced a collection of technological and chemical procedures that gave brewers the ability to identify, select, and purify their yeasts, as well as a variety of other methods to improve their brewing (2001: 357; Bouckaert 2005: viii-ix). The ability to produce beer using only particular strains of *Saccharomyces* yeast would have allowed brewers to largely eliminate the

acidic and tart flavors of beers (Sparrow 2005: 4-6), as well as decreasing the quantity of beer lost to spoilage (2001: 357). The development of refrigeration and procedures for isolating and caring for the yeast also allowed brewers to brew Bavarian or 'pilsner' beers, which were made with a bottom fermenting yeast that operates at low temperatures. The lager yeast found in these beers produces chemicals which inhibit the acidification of beer, making it more stable, easier to store and easier to transport (Unger 2001: 353; Vance 2006: 16). The development of railroads and new transportation networks additionally allowed for these new durable beers to be mass-produced and shipped throughout Europe (Unger 2001: 359). As Richard Unger points out, due to the increased use of technology in the brewery and Pasteur's innovations, by the 1890s, brewers were producing beer which was "more reliable and of higher quality" than at any previous point in history (2001: 370).

The technological changes that were sweeping through the brewing world in the nineteenth century had begun to be incorporated in the American brewing industry as well. Before prohibition came into effect nationally on January 16, 1920 (Erickson 1987: 35), brewing in the United States was primarily dominated by small local producers (Vance 2006: 14). Among these breweries were a growing number that were able to take advantage of artificial refrigeration to brew and sell the Bavarian 'pilsner' beers, which could be transported on railcars and sold in markets far from the brewery. The Anheuser Busch Brewery, founded in St. Louis in 1852, was the first to introduce a system of ice-houses along railway lines that allowed their pasteurized beer to be shipped nearly anywhere in the country (Vance 2006: 21-22; Anheuser-Busch Companies, Inc. 2007).

While the innovations of the nineteenth century transformed beer from a unpredictable seasonally variant beverage largely produced and consumed locally to a product that, with the aid of new technologies, was higher in quality and more reliable than ever before, could be mass produced year round, and could be easily transported and sold far from its site of production, the twentieth century transition in the United States from a industrial to a consumer based economy also lead to dramatic transformations in beer. One of the most salient changes in the brewing industry in the last hundred years has been a change not in brewing technology but in advertising. William Tyler, in an article published in the October 1957 *Journal of Marketing*, describes a major transformation that was occurring in his era within the world of advertising. "In the early days of advertising," Tyler writes, "there was none of this business about building an image for a brand. Advertising was to sell goods" (1957: 162). This early sales driven advertising was directed towards a "hard-headed buyer who wanted maximum reassurance and complete information before parting with his or her dough" (1957: 162). As a result, early advertisements were often long-winded, enumerated lists of selling points that "said everything kind about the product that was possible to say" (1957: 162). 'Contemporary' advertising, Tyler argues, has begun to be directed towards the consumer "who has to buy a lot of things very fast" (1957: 163). Rising income and a marketplace saturated with more and more products has produced a consumer who is confronted with more and more purchase decisions; who is faced with the challenge of learning a little about many products rather than a lot about a few (1957: 163). "We used to hear a lot about impulse purchases," writes Tyler, but today "almost anything that costs less than a

car is an impulse purchase" (1957: 162). Advertising today, and since at least the 1950s, rather than presenting 'selling points' that convince a customer to make purchase, is directed towards presenting product-specific images or 'feelings' that allow consumers to make quick associations between concepts or emotions and the items they consume (1957: 163). Since many customers "look at our advertising without consciously seeing it," Tyler explains, modern advertisements must be directed towards giving customers a brand that they can feel familiar with, a brand that they can know and trust, a brand which can become "a part of their daily living, one of those familiar talismans on which they can rely rather than making independent decisions" (1957:164-165).

This new form of advertising then is directed not towards providing potential customers with exhaustive information about a product or helping them to make thoughtful and informed purchases, but towards establishing the brand name as certain cognitive cue, a short cut that allows customers to make purchase decisions without careful thought or deliberation. As Jacoby, et al write, "being told 'this beer is Budweiser' conveys much more meaning to the typical beer drinker than being told 'this beer costs $1.79 per six pack,' since consumers can deduce a wide variety of information regarding the beer in question from having only [the] brand (or manufacturer) name which cannot be deduced from having [the] price" (1977: 210). Furthermore, with the aid of these new forms of advertising, brands become capable of cultivating affect and trust among customers (Chaudhuri and Holbrook 2001: 82; McConnell 1968). These feelings allow for the creation of 'brand loyalty'—or the perception that a particular brand offers some sort of unique value that no alternative can provide—among customers. A 'brand

loyal customer' is a customer who will purchase products repeatedly, often irrespective of situational constrains such as price (2001: 81). By encouraging customers to develop brand specific desires, producers effectively establish for themselves a miniature monopoly over a specific product. While a customer looking for a beer could be satisfied with a variety of different products, a customer who is looking for a Budweiser is really only fulfilled when her or she gets a Budweiser. The creation of affect and trust for products, and brand specific desires among customers, is one of the hallmarks of contemporary advertising.

The effects of this development in advertising have been heavily felt in the American brewing industry. After Prohibition ended in 1933, the brewing industry—and small brewers in particular—had a difficult time recovering. In the years that followed a variety of changes—including the development of the interstate highway system; the growing use of expensive television advertising; and the federal excise tax on beer—occurred which favored the larger breweries that produced the more stable and transportable pilsner beers. From 1945 until 1980, the brewing industry in the United States consolidated so that fewer and fewer large breweries began to produce more and more of the nation's beer (Vance 2006: 43-52). While brewers in the early 1900s had generally perfected and produced only one product per company (Meilgaard and Brew 1993: 36), the large breweries that dominated the industry after 1945, likely influenced by the above mentioned developments in advertising, actually began to produce, market and maintain multiple brands, in spite of the fact that these brands were generally all pilsners and often virtually indistinguishable from one another (Vance 2006: 52).

In 1977, the beer journalist Michael Jackson published his enormously influential *World Guide to Beer*. Jackson introduced a concept that was to revolutionize the brewing industry: beer style (Eckhardt 1989: 35). "The few books that could be found on beer talked rather vaguely, often as an afterthought, about different types," writes Jackson in an article later on, "but there was little sense that these were a part of a far wider spectrum. Nor, again, that each style had its own geography and history, mood and moment." (Jackson 1999). Different beers had existed in different places at different times, but never had they been mapped, placed in spectrums, or positioned in particular geographies and histories. Jackson's work inspired a revolution in the brewing industry. By 1979, the Brewer's Association of America issued the first edition of their beer style guidelines (Brewers Association 2008a). In the years that followed, a craft brewing industry consisting of microbreweries and small producers emerged in order to fulfill the new demand for beer that, in the words of brewing historian Del Vance, "was more exciting and rewarding" than the mass produced pilsners that had formerly dominated the beer market (Vance 2006: 56). The defining characteristic of these new breweries was the large number of styles and brands that they were able to maintain. Although "some brewers complain of having to brew and package many products," write Meilgaard and Brew about the emerging craft brewing movement, "I think such a brewer is seriously misinformed: we should be overjoyed. What we see is that the best of our customers delight in acquiring product knowledge and sharing it with their friends" (1993: 36).

With the groundwork laid for the mass production of beer in the nineteenth century, and—with new forms of advertising—the mass production of brands in the

twentieth, we see the craft brewing movement emerging as a historically new and unprecedented phenomenon. For the first time, customers walking into a brewery are presented with an explosion of styles, an emporium of beer from all places and times, all produced and maintained in the here and now as a brewer's different brands. While it may be tempting to imagine that this 'resurgence' of formerly forgotten products is a return to an idyllic past, a step away from the technological mass production that has characterized the development of capitalism, I would propose that this is not the case. The microbrewery is to beer what colonial Williamsburg is to history: the standardization and mass production of a consumable past which is above all else 'typical'.

In order to explain this claim, I would like to turn to Jean Baudrillard's concept of hyper-reality. Baudrillard proposes that, as a result of technological reproduction, contemporary human experience has passed through three orders of signification (Rodaway 1994: 174), or ways of relating to the material objects that compose our world. Before an object is technologically reproduced, it has a unique almost super-natural existence at a particular place and time. Take, for example, the sound of a person's voice: before the advent of sound recording devices, voices would have had—according to Baudrillard's theory—a certain unique and irreplicable existence; they would index the presence of a living thinking person. Baudrillard refers to this first, non-technologically reproduced order as 'natural' (Baudrillard 1994: 121). The second order of signification, what Baudrillard refers to as 'productive', occurs when an object is technologically mass produced, and corresponds to a loss of the object's uniqueness and immanence (Rodaway 1994: 175). The invention of recording devices, for instance, allows for the speaker to be

removed from his voice, for the sound of voice to be played over and over again in a variety of spaces and times. However, after a while, when one listens to a recording of a voice, one begins to notice something strange, a fuzziness, a background noise, the sound of the tape deck's motor running or of cars driving in the background. The third order of signification—which Baudrillard calls 'simulation'—occurs when the one takes that recorded sound and, using the intervention of technology, cleans, clarifies, and synthesizes it to produce a sound that contains no background noise, a voice that is purer, clearer and crisper than the original (Rodaway 1994: 176). Simulation occurs when models, formed when an object was first reproduced, begin to take over its reality, to supplant themselves in the place of the real (Baudrillard 1994: 122). The new, clean digitized voice represents the real world, not simply recorded or copied, but purified: it is a sound which is realer than real, which is hyper-real. In this third order of signification, which Baudrillard believes has come to dominate contemporary consumer society, 'originals' become irrelevant as the real begins to be redefined as 'that which it is possible to give an equivalent reproduction' (Rodaway 1994: 177). For lack of a better word, the 'realness' of things begins to depend, not on their physical presence, but on their reproducibility, on their correspondence to models, on their existence as 'simulacra'—identical copies to an original that never existed (Jameson 1984). In the context of this discussion we could say that hyper-reality is the conquering by brands of human experience.

The salient feature of the contemporary craft brewing industry is not that technological methods are used to mass produce beer, to ensure that less beer is lost to

spoilage or to produce a product which is more durable and transportable, rather it is that

technology is used to produce beers which *appear to be mass produced*. The set of

problems which the brewmasters I spoke with concern themselves—namely the

obsession with consistency, the overwhelming desire to ensure that beers are identical to

themselves—are a direct result of the production of brands. Furthermore, when brands

are organized into beer styles, they "shine in a sort of hyperresemblance (like history in

contemporary cinema) that makes it so that fundamentally they no longer resemble

anything, except the empty figure of resemblance, the empty form of representation"

(Baudrillard 1994: 45). An Oatmeal Stout then is, not so much a copy of a beer brewed at

a particular historical location and time, but a simulacra, a standardized model of a past, a

generic and exactly reproducible form without grounding in an original. It is 'authentic',

not because an Oatmeal Stout claims to be a copy of any other specific beer, but because

it corresponds to a particular standard model that carries with it certain historical

associations. Beer style is not so much the past itself as it is a branding of the past, a

recreation of the past in certain reproducible forms which allow for contemporary

products to take on specific sanctioned brand images. Breweries, rather than producing

'beer' in its simple strong or weak forms, can now produce an emporium of brands to

give their customers an unprecedented array of selections and possible product

associations. The craft brewing industry, and its deep seated concern for brands—as well

as the consistency which makes brands possible—is thus not an escape from the

impersonal mass production of beer, rather it is a next stage of that production; it is the

moment at which the potential of technological reproduction becomes fully realized.

The impacts of the emergence of this new consumer oriented maze of brands and products are tremendous. It is not merely that objects are technologically reproduced and take on brand images, but the existence of brand images invents consumers as well. As individuals begin to become brand loyal, they learn to not only have product specific desires, but to actually define themselves by the brands—and brand images—they choose to consume. As Anthony Giddens proposes, for contemporary consumers, consumption or lifestyle choices become questions, not about how to act, but about what to *be* (1991: 81). One doesn't just drink Miller Genuine Draft, or develop a product specific desire, but rather through the act of drinking, through the choice of deciding what to consume, one becomes the *sort of person who* drinks Miller Genuine Draft. As Baudrillard writes, when people go shopping they

> find and select object-responses to all the questions they may ask themselves; or, rather, they *themselves* come in *response* to the functional and directed questions that the objects constitute. The objects are no longer commodities…they are *tests*, they are the ones that interrogate us, and we are summoned to answer them, and the answer is included in the question. [1994: 73]

In the hyper-real world of brands and brand images the act of consumption becomes for consumers a certain existential test, a continual examination of who they really are, and whether or not they are living up to the self reaffirming images of 'their' brands.

Brands, in other words, are a significant feature of the lifeworld of consumer oriented late capitalism. The taste experiences which are produced by contemporary craft breweries, both for their brewmasters and for their customers are sensory experiences which are historically and culturally specific. Through shaping their consciousnesses

around such perceptual nodes, consumers and brewers come to inhabit a collective lived experience and lifeworld. The craft brewing industry, with its standardized flavor terminology, official beer styles and branding not only produces new flavors, but also necessarily produces new species of tasters—both producers and consumers—who experience these new flavors, not only in culturally or historically specific ways, but in ways that are as new as the flavors themselves.

A number of anthropologists—such as Classen, Howes and Synnott's work on the production of artificial flavors (2005); Haden's exploration of convenience foods (2005); and Rosebury's work on yuppie coffee (1996) —have examined the ways in which the technological reproduction of foods has lead to new hyper-real forms and flavors. While these studies are fascinating, and undoubtedly significant, undertaking such an analysis has not been my intention here. Rather, I have suggested that such studies, which account only for quantifiable changes in flavors or foods, represent only half of the story. We must examine not only the material objects of our world or the systems of meanings that we attach to those objects, but also to the ways in which our consciousness structures the world around us, the ways in which the semiotic systems within which we are immersed are themselves held in place by consciousness—and subjectivity—cultivating discourses and practices.

In this project, I have examined the ways in which a single sensory experience— the taste of beer—is created, both physically and discursively, for both brewmasters and their consumers. In Chapter 1, Expert Tastes, I explored how brewmasters, through institutionalized standards, cultivated their taste attentions and experiences around the

problems of producing a consistent product, and producing a product which is 'to style'.

The Beer Flavor Terminology System allowed brewmasters to cultivate their taste

attentions around flavors which are likely byproducts of the production process.

Brewmasters, in other words, learn to taste their beer suspiciously, keenly aware of the

tastes that should be there and the sorts of 'off flavors' which shouldn't. Secondly, the

style guidelines allow brewmasters and professional judges to taste beer through the

standardized expectations of—what Jameson (1984) refers to as—a 'simulacra'. In

Chapter 2, Tastes for Sale, I examined how brewmasters produce taste experiences for

their customers. Describing the unpredictable nature of the production process, I argued

that beer is not entirely reproducible by technological means, and that the production of a

consistent product is an extraordinarily difficult challenge for brewers. The customer's

experience of consistency, I proposed, is the result of brewmasters both materially and

technologically shaping their products to be as consistent as possible and discursively

shaping the sensory attentions of the customer. In this Conclusion, I have argued that the

problem of producing a consistent product is historically specific. Outlining some of the

major changes which have taken place in the brewing industry since the Renaissance, I

proposed that the concern for consistency is a product of twentieth century advertising,

which not only encourages consumers to experience brand names as cognitive cues, but

also encourages producers to produce products which are consistent. I then described

how the craft brewing industry arose from a combination of the gradual development

brands over the course of the twentieth century and the new concept of beer style.

Finally, I proposed that the current obsession with consistency is a product of consumer

oriented late capitalism which, through producing both brewmaster and customer taste

experiences, produces components of contemporary subjectivities and lifeworlds.

It is has been my contention in this project that technology and material culture

necessarily exist with particular subjectivity-shaping undercurrents of practice,

perception, and lived experience that blur the boundary between us as thinking beings

and the perceivable objects and spaces that surround us, that allow us to make ourselves

through making our world. Understanding how this happens, how the world around us

takes on a character which is simultaneously so obvious and yet so historical, is an

extraordinarily important task. In this project, through a careful examination of how a

single lived experience is collectively shaped and refined through discourses and

practices, I hope to have at least begun to address this vital question. Like the

phenomenological anthropology which has inspired me, I see my work in this project as a

contribution the growing literature on embodiment in anthropology.

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