Wild Dreams: Refashioning Production in Bristol Bay, Alaska

by

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Acknowledgments

At a cocktail party after an academic conference not long ago, I found myself in conversation with another anthropologist who had attended my paper presentation earlier that day. He told me that he had been fascinated to learn that something as "mundane" as salmon could be linked to so many important sociocultural processes. *Mundane*? My head spun with confusion as I tried to reciprocate chatty pleasantries. How could anyone *conceive of salmon as "mundane"*? I was so confused by the mere suggestion that any chance of probing his comment further passed me by. As I drifted away from the conversation, it occurred to me that a great many people probably deem salmon as mundane as any other food product, even if they may consider Alaskan salmon fishing a bit more exotic. At that moment, I realized that I was the one who carried with me a particularly pronounced sense of salmon's significance—one that I shared with, and no doubt learned from, the people with whom I conducted research. The cocktail-party exchange made clear to me how much I had thoroughly adopted some of the very assumptions I had set out simply to study. It also made me smile, because it revealed how successful those I got to know during my fieldwork had been in transforming me from an observer into something more of a participant.

Throughout my research, I was struck by the eloquence with which Bristol Bay fishers, residents, and other industry workers expressed their commitment to and passion for their work, the places they called home, the natural environment that surrounded

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them, and the social relationships that made these sites and activities so meaningful. This not only spurred my intellectual interest in writing about Bristol Bay, but also deeply moved and inspired me on a personal level. I found great joy in working alongside and talking to those involved in the salmon fishery. I was awed by the kindness and generosity I experienced from both friends and strangers. I learned and gained far more than I could ever capture in the pages to follow. Beyond all else, I am grateful to those who shared so much of their lives with me. Despite my concerted efforts to do justice to all that was imparted to me over my years of research, I recognize that I will never be able to adequately represent the full presence and import of the stories, sentiments, ideas, attachments, aspirations, and struggles that I experienced and witnessed. Nevertheless, I still harbor hope that I can convey at least some sense of this and my gratitude for it in my remarks below and throughout the dissertation.

My desire to acknowledge those who have helped me in producing this study is complicated by the fact that it is the outcome of so many years of work, throughout which my ideas were shaped and my spirits lifted by such a large number of colleagues, research participants, and friends. I have no doubt neglected to include innumerable names that belong on these pages. And I likely repeat such regrettable oversights in the dissertation itself. Despite the knowledge and guidance I received from others, any omissions and errors are entirely my own.

I feel extraordinarily lucky to have stumbled upon such a stimulating project, and for the paths along which my academic work has taken me. I thank Guido and Natasha Casciano for first introducing me to life in rural Alaska, which sparked the interests I developed throughout my graduate career. Likewise, I am grateful to all those who

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I doubt that the late Andy Golia of Dillingham had any idea how much his understated assurance furthered my design of a dissertation project centered on the Bristol Bay salmon industry. Like so many others, I remain indebted to him. I was also privileged to have been able to speak with a number of other Bristol Bay residents during my research period who have since passed away, including the late elders Paul Romie, Johnny Nicholson, Joe Clark, and Harvey Samuelsen. The region is no doubt a different place without them, but I am thankful I had the opportunity to meet each of them there. Andy Ruby was also very encouraging of my work during the brief period in which I knew him before his untimely passing.

My choice of Dillingham as a field site was influenced in no small part by the encouragement of Norman Van Vactor. Not only did his help pave the way for my first

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My research was both facilitated and furthered through the support of representatives from many Bristol Bay-area organizations, particularly the Bristol Bay Native Association, the Bristol Bay Economic Development Corporation, and the Alaska Department of Fish and Game office in Dillingham. I am especially grateful to Hans Nicholson and the other members of the Nushagak Fish and Game Advisory Committee for welcoming me to their meetings and into their discussions. The members and staff of the Alaska Board of Fisheries, as well as the Bristol Bay fishers attending those meetings, assisted me immeasurably as well.

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List of Acronyms

ADF&G	Alaska Department of Fish and Game
AFU	Alaska Fishermen's Union
AIFMA	Alaska Independent Fishermen's Marketing Association
ANCSA	Alaska Native Claims Settlement Act
ANLC	Alaska Native Language Center, University of Alaska, Fairbanks
APA	Alaska Packers Association
ASMI	Alaska Seafood Marketing Institute
BBEDC	Bristol Bay Economic Development Corporation
BBNA	Bristol Bay Native Association
BBNC	Bristol Bay Native Corporation
BBRSDA	Bristol Bay Regional Seafood Development Association
BSFU	Bering Sea Fishermen's Association
CDQ	Community Development Quota
CFEC	Commercial Fisheries Entry Commission
IFQ	Individual Fishing Quota
ISER	Institute for Social and Economic Research, University of Alaska
	Anchorage
ITQ	Individual Transferable Quota
NOAA	National Oceanic and Atmospheric Administration
NMFS	National Marine Fisheries Service
NPFMC	North Pacific Fisheries Management Council
NRLA	National Labor Relations Act
MAP	Marine Advisory Program
PAF	Pacific American Fisheries
RAC	Russian-American Company
RSDA	Regional Seafood Development Association
TAC	Total Allowable Catch
UAA	University of Alaska Anchorage
UAF	University of Alaska Fairbanks
WACMA	Western Alaska Cooperative Marketing Association

Introduction

Main Street in Dillingham, Alaska, threads along the banks of the Nushagak River through the fishing community's tiny downtown, past its boat harbor, cannery complex, city dock, and two grocery stores. Although Main Street is paved—not all streets in Dillingham are—the road is dusty from gravel side lots, and pocked with ruts and potholes from seasons of freezes and thaws. It offers vistas of rusty container vans, wave-worn fishing boats, and warehouses constructed from the corrugated metal that enfolds much of the contemporary Alaskan built landscape, one that seems only more drearily utilitarian when viewed against Bristol Bay's sweeping backdrop of mountains, tundra, and waterways.

Main Street in Ann Arbor, Michigan, presents another picture altogether. Set apart from the University of Michigan's central campus, the leafy street is lined by the well-preserved brick buildings of a small but prosperous Midwestern city. Although the thoroughfare is one of the college town's main drags, it features no rowdy sports bars, used record haunts, or pot paraphernalia shops: Such low-rent establishments started to disappear in the 1980s after an urban redevelopment initiative gave control of key retail space to private investors.¹ Today, Main Street in Ann Arbor is a promenade of stately

¹ As Corey Dolgon chronicles, joint public-private development projects initiated during this period determined that retail space in downtown Ann Arbor should be "underpinned with a variety of distinctive high-quality shops (anchor, boutique, and specialty)" (1999: 147). Dolgon argues that these projects reconfigured Ann Arbor "to meet the needs of a new economy and the tastes of the ascendant new bourgeoisie" (1999: 146).

lampposts and neat storefronts housing art galleries, high-end boutiques, and whitetablecloth restaurants.

It was while walking down Ann Arbor's Main Street, my thoughts wandering in the Dillingham Main Street of my research, that I first noticed the sidewalk easel whose changing menu displays I would track with interest, like a favorite movie theater marquee, over the coming months: "Organic Salmon" was the featured special that day. It was soon followed by other salmon offerings, including a colorfully drawn promotion for "Wild Copper River King Salmon—flown in fresh from Alaska!" I had spent the past two years observing Alaskan fishers' assiduous efforts to boost salmon prices and win markets for their wild salmon so as to set their struggling industry on a path toward recovery. I followed diverse producers from the rural Bristol Bay region as they attended conference panels scrutinizing buyer preferences, debated the merits of different industry restructuring plans, and altered their fishing practices to produce the kind of "quality" salmon consumers were said to demand, all amid their work to harvest the fish that surged into area waters each summer in a dramatic ecological spectacle. The easel's chalk scrawls seemed to present a sketchy but suggestive picture of the culinary desires of Ann Arbor restaurant-goers—or, at the very least, an imagination of those desires, or a dream for them. In so doing, they trace an intersection between the forms of knowledge and practice that fashion natural bodies into commodities, the modes of value creation that link production and consumption, and two very different Main Streets.

Wild Dreams

Humanity's collective reliance on nonhuman nature for its own production and reproduction has never been greater (Raven 2000: 5). At the same time, the past few

decades have witnessed significant shifts in the nature of production itself, the means by which material substance is enjoined with human labor in the creation of economic wealth. In this dissertation, I propose that the production of a wild commodity offers an especially revealing window onto these shifts and the capitalist mechanisms that underlie them. The Bristol Bay wild salmon industry is peculiar in certain respects: It depends not only upon the capture of living labor by and for capital, to use Marx's terminology, but also upon an even more literal capture of living nature in the form of an organism whose control is often elusive. In this introduction and the dissertation as a whole, I suggest that this peculiarity provides a critical point of departure for examining how value is produced and reproduced under changing conditions of capitalism. On one level, my study shows how efforts to refashion production in Bristol Bay have spurred striking transformations in labor practices, social relations, forms of personhood, and modes of collective action alike. On another, it reveals the ways in which the heterogeneous materialities and activities that are pursued for capture repeatedly slip from their objectification as factors of capitalist production, both with and as salmon itself wriggles from grasp. In identifying these slippages at the heart of production, I contribute to analyses across disciplines that demonstrate how capitalism is reproduced anew in evershifting forms at the same time it remains internally fissured and always incomplete.

The story I tell in the chapters ahead traces transformations over centuries, but begins at critical juncture not far from the present. The Bristol Bay region of rural southwest Alaska is home to the largest sockeye salmon populations in the world, yet its wild salmon industry has struggled since the early 1990s amid a global seafood market dramatically altered by a host of macroeconomic shifts, most prominently materialized in

the rise of cheaper farmed salmon produced overseas. (Salmon farming has been illegal in Alaska since the late 1980s.) Amid the throes of economic crisis, producers have undertaken efforts to "reinvent" the Alaska wild salmon industry—to draw on the language they themselves often use—and their own participation in it. The study is an examination of these attempts to restore industry profitability along with the aspirations that infuse them and become inflected by them. An ethnography that tacks between historical and contemporary sites of salmon production and policymaking, the dissertation focuses on fishers' ambitions to reconfigure the salmon commodity itself to more closely correspond with perceived consumer preferences. In so doing, it reveals a process punctuated by paradoxes, including those that attend the creation of wildness through human labor, and the remaking of production to mirror consumption through fragmentary glimpses of a very partial picture of it.

Through my examination of crisis and refashioning in Bristol Bay, the dissertation explores questions that have long been central to social-theoretical analyses of capitalism, if ones that have only gained more pressing relevance in light of its contemporary dynamics. It asks after core relationships: of production and consumption; labor and nature to value creation; time and space to accumulation; key abstractions and the processes they would seem to represent. In depicting a system divided in itself on multiple levels, it follows efforts by poststructuralist and postcolonial scholars to think through and rethink Marx's foundational account of capitalism. In delving into the predicaments of rural natural resource producers for changing markets, it reveals contradictory impulses gathered in the so-called new economy. And in exploring the

dreams of wildness that link producers and consumers, it shows the production of contemporary natures to be fraught with visions of both peril and promise.

This introductory chapter is divided into four parts. The first, "Refashioning Production," explores theoretical treatments of capitalist production and scholarly assessments of its present-day conditions. It then describes how Bristol Bay provides a critical vantage for considering questions that emerge from both discussions. The second, "The Production of Wildness," looks more carefully at the different forms of wildness that inhere in Bristol Bay salmon and the broader processes through which it is made into a market good—where wildness is at once exploited, created, and never quite controlled. The third, "Conditions of Production," offers an overview of the research that forms the basis for this dissertation. The fourth and final section, "Chapter Outline," explains the structure of the dissertation as a whole, and gives brief summaries of the chapters to follow.

Refashioning Production

In this section, I describe how production might be examined not as a discrete phase separable from other political-economic moments, such as consumption, but as part of a complex whole. I begin by examining reinterpretations of Marx's influential analysis of production, which I then bring to bear on his discussion of the relationship between production and consumption in the *Grundrisse*. I follow this analysis with an overview of efforts to understand the transformations to production that have emerged in tandem with other features of contemporary economic life. I argue that the unusual position of Bristol Bay producers at the intersection of divergent political-economic currents pushes us to reconsider the ways in which scholarly analysis has delimited

production, and has been limited in turn. Fishers' work to refashion salmon expands the people, places, concepts, and materialities usually thought to participate in production. In this way, I suggest, the changing conditions of the present give us both a renewed appreciation for Marx's interventions as well as a pressing need to bring to the fore the possibilities that arguably simmer under the surface of his still-indispensable account.

Rethinking Production in Marx

In Marx's analysis of capitalism, production is "where capital directly encounters the other it must subsume as its own moment if it is to continue to exist," as Vinay Gidwani describes it (2008: 195). That is, production transforms an endless diversity of material things and human activities into commodities exchanged with one another as equivalents. It is thus the juncture at which capitalism is compelled to both engage with concrete differences in the world and extract from them a common substance of value. But does capitalism incorporate and thus negate all the heterogeneity it draws into production, remaking differences into its own identity? This theoretical question has nagged those who otherwise find Marx's analysis convincing, and has motivated a vast sweep of scholarship. Following Noel Castree (1996-1997: 48), I engage one slice of this scholarship in order to ascertain how "supple" Marxian theory can be in reckoning with what poststructuralist and postcolonial scholars have termed questions of "difference."

Much of the academic work that has been situated under various post-rubrics has not viewed Marxian theory as having much potential in this regard, instead taking it as a prime example of what to write against. From this perspective, it is held as a Eurocentric metanarrative incapable of recognizing the play of difference, whether in the form of textual indeterminacy or the disparate experiences and identities that stem from

subjectivities shaped by culture, ethnicity, place, or gender, among others. Further, such readings tend to find Marx-inspired theory not only lacking in its acknowledgment of actually existing human differentiation, but even more problematic in its totalizing ambitions, a vision of history whereby uniformity is imposed upon heterogeneity as progress heads inexorably "toward a destination where all will become same" (Gidwani 2008: 194 offers a good summary of these objections). Yet there are scholars writing in poststructuralist and postcolonial veins who read Marx not as "complicit with" but "in opposition to totalizing visions of subjectivity" (Amariglio and Callari 1993: 191).

In particular, I draw from and extend the work of a number of theorists who have performed critical re-readings of Marx in order to theorize "interruptions" to capital (e.g., Chakrabarty 2000, Gidwani 2008, Spivak 1987). These interruptions are not merely the frictions through which global capitalism is forged (e.g., Tsing 2005)—though they no doubt reside among those dense interplays. Rather, they are at once moments and mechanisms through which particularities that are not part of capital's "own life process" (Marx in Chakrabarty 2000: 63) flash amid the ongoing objectification of difference for capitalist accumulation. Likewise, these flashes are not resistance necessarily, although they may serve as such. Instead of having "an identity that is merely the negative of 'capital,'" they simply "exceed the plan(e) of capital" (Gidwani 2008: 213), "constantly interrupting" its "totalizing thrusts" (Chakrabarty 2000: 66).

In the paragraphs below, I consider formulations offered by Gidwani (2008), Dipesh Chakrabarty (2000), and Gayatri Spivak (1987). Although their reinterpretations of Marx diverge in a number of noteworthy respects, they all seek to pry open the tightly argued dialectics that would appear to make all forms of difference dependent on, other

to, and ultimately subsumed into capitalism's logic. Each points to empirical evidence to indicate that this presumption is shaky at best. Inspired to varying degrees by Derridean deconstruction, they push on ambiguities or discontinuities in Marx's texts so as to recognize more openness, indeterminacy, and possibility in his theory of capitalist production than is often attributed to it.

Their examinations all locate tensions within the abstractions—like "labor"—that constitute fundamental elements in "the hermeneutic of capital," "how capital reads human activity" (Chakrabarty 2000: 54-58). These tensions derive from the fact that the abstractions are dependent, both textually and in actual practice, on concrete instances of real labor for their basis. Further, each points out, abstract labor, the critical concept that underlies Marx's theory of value, remains generated from *living* labor. In contrast to the dead labor of machines, Chakrabarty argues, this living labor, while stripped of its concrete particularities, is nevertheless contained only in human beings, whose existence and "'many-sided play of muscles," as Marx put it, cannot be fully put into service by capital (2000: 60-61). Chakrabarty posits that the "life" of living labor "is the excess that capital, for all its disciplinary procedures, always needs but can never quite control or domesticate" (2000: 60).

For Chakrabarty, this many-sided excess represents an ever-present strain of opposition to capitalism's singular drive, rather than an interruption per se, which he instead locates in "pasts" that are not forms of capital's "own life process" (2000: 63).²

² This is explained in part by Chakrabarty's intellectual aims. He seeks to set forth a critique of historicizing accounts that would locate resistance to capitalism only in the "survivals" of archaic social forms or cultural others, consigning difference to that which capitalism vanquishes as it expands in space and time. In his view, the sort of omnipresent resistance of living labor he describes does not answer the question of capital's relation to historical difference specifically, the difference that inheres in radically different pasts from those found in Marx's Europe. It is here that he turns to the pages of the *Grundrisse*, where he finds more robust evidence that "Marx's thoughts may be made to resist the idea that the logic of

Nevertheless, this attention to the indeterminacy inherent in living labor is a theme developed further by Gidwani, who claims it as a source of interruption.³ Gidwani examines a passage in which Marx describes labor "for itself"—rather than simply for use by capital—as "immediate bodily existence...not as object, but activity...not itself *value*, but the *living source* of value" (Marx in Gidwani 2008: 196). In his reading, because living labor is the source of value, which capital must capture in order to continue to exist, capitalism remains dependent on embodied activity, which in its open-endedness represents to Gidwani "a kinetic potential for subversion" (Gidwani 2008: 197). Even in text that would seem to suggest only determination, he reads openness in Marx's description of labor as capital's "contradiction *and…contradictory being*"" (Marx in Gidwani 2008: 196, emphasis added). Labor is not theorized by Marx as merely capital's dialectical other, he argues. Rather, "*there is a living, creative potential in labor that is irreducible*; that persistently survives objectification by capitalist social relations" (Gidwani 2008: 225, emphasis in original).

Spivak does not frame her interventions in terms of interruptions per se, and is

considerably less focused on labor's corporeality. But she makes a similar move in

capital sublates differences into itself" (Chakrabarty 2000: 50). He seizes upon a passage in which Marx asserts that capital has as part of it pasts not "established by itself, not as forms of its own life process" (Marx in Chakrabarty 2000: 63). It is these pasts that make for the interruptions he theorizes (Chakrabarty 2000: 66).

³ That Gidwani fuses the critical movements that appear more separately and serially in Chakrabarty's account is perhaps unsurprising given his aims to synthesize critique deriving from poststructuralism and agrarian studies, which, he notes, has long identified natural and cultural elements as "ontologically autonomous of...capital's law of value" and thus bearers of radical contingency (Gidwani 2008: 218). Gidwani appears much less uncomfortable than Chakrabarty in locating limits to capital in sites arguably "exterior" to it. Further, Gidwani (2008: 227-230) rejects Chakrabarty's bifurcated formulations—e.g., dichotomous categories like "History 1" (pasts posited by capital) and "History 2" (other kinds of pasts) (2000: 47-71)—arguing that these are either redundant or, worse, distorted from a perspective that sees capitalism as a "one' that is 'many,'" drawing from Whitehead, and "a time of times," as Althusser suggests. Fernando Coronil makes a similar point, viewing these sharp distinctions as shortcomings in Chakrabarty's argumentation and pushing for "a view of capitalist modernity as a heterogeneous process inexorably entangled in different social formations" (Coronil forthcoming: 10, ix.4. note).

locating a source of radical indeterminacy for the chain of value production as outlined by Marx within "the entire heteroclite world of living labor" (Castree 1996-1997: 72). She does this by examining the dependence of the concept of value on the category of use-value, which as Chakrabarty concurs, Marx leaves largely "untheorized"" (Spivak in Chakrabarty 2000: 272, 68 note). Spivak points out that value is figured in Marx's texts as a straightforward "representation" of labor, "but also as a differential" (1987: 158) that which is the common substance among heterogeneous use-values, but separate and separable from them. Given "the *heterogeneity* of use-value as a private grammar," as she characterizes it, how could it ever be possible to satisfactorily determine what value is separable from, and thus what it definitively is (1987: 162, emphasis in original)?

The scholarly contributions I have reviewed here argue persuasively that the abstractions through which capitalism generates value are inhabited by elements that they cannot fully contain. As Gidwani would have it, these appear as "flashes," often in the form of specific "acts of fabrication," that punctuate but do not negate "the constantly iterated suspension of living, creative, concrete labor and its objectification as abstract labor" (2008: 229-230). The narrative I offer of the contemporary and historical transformations of Bristol Bay production can be read to a significant extent as a chronicle of such iterations. In fact, as is outlined later in the chapter, I propose that the wildness that attends Bristol Bay production can be conceived as a major source of interruption, and thus a rich site for examining interruption more broadly.

At the same time that I draw heavily from these reworkings of Marx, I aim to build upon them as well. The novel ways in which consumption is increasingly, and increasingly conspicuously, present in the self-conscious reconfiguration of production,

as the next chapter section explores, calls out for reinvigorated efforts to theorize the relationship between production and consumption. While Marx's view as presented in a much-quoted section of the *Grundrisse* provides a crucial tool for understanding the interpenetration of production and consumption, his account appears fettered by precisely the same rigid dialectics that Spivak, Chakrabarty, and Gidwani work so diligently to undo. I thus re-read Marx's discussion below in light of their contributions at the same time I show how it can be extended to new terrain.

Marx begins the *Grundrisse* by setting out to disassemble the "obvious, trite notion" that the categories economists delineate as production, exchange, distribution, and consumption constitute a circuit of discrete phases that connect asocial individuals through supply and demand (Marx [1857-8] 1993: 88). In place of a linear "syllogism," he argues for a unity of production and consumption ([1857-8] 1993: 89). However, Marx takes pains to show that these political-economic moments are "distinctions within a unity," rather than simply "identical" in any facile sort of way ([1857-8] 1993: 99).

The argument he presents is, quite characteristically, built in dialectical layers, each complicating the one before. He begins by describing how production and consumption, so often conceived as antitheses, are on one level immediate expressions of one another. Production is where raw materials and human energies are used up or expended, hence consumed; and it is only through consumption that life produces and reproduces itself. But their unity is not simply this. They also mediate one another, in that each one supplies the other with its object. And they "complete" one another insofar as they "presuppose" each other. Marx characterizes this process as each giving the other

its "'last finish,"⁴ that is, "its specificity, its character" (Marx [1857-8] 1993: 92). As he explains, "the object is not an object in general, but a specific object which must be consumed in a specific manner, to be mediated in its turn by production itself" (Marx [1857-8] 1993: 92). There is good reason to question the degree of specificity of consumption this proposition implies, as many scholarly examinations have done in recent years, and as I discuss in further detail below. But Marx's subsequent example at this moment in the text is useful in understanding the thrust of his argument, and exceedingly apropos for my study of a changing salmon industry: "Hunger is hunger, but the hunger gratified by cooked meat eaten with a knife and fork is a different hunger from that which bolts down raw meat with the aid of hand, nail and tooth" ([1857-8] 1993: 92). From this point, he proceeds to argue that in addition to creating one another's objects and manners, so too do production and consumption produce the other's subjects: producers and consumers themselves.

Thus, the account that begins with production is also an argument about the formation of personhood under capitalism, as well as what might be described as a theory of desire, figured in terms of the "motives" of production and consumption ([1857-8] 1993: 92). His argument is that production and consumption at once produce object, manner, and motive for one another. Consumption "needs" do not stem from anything resembling the demand of neoclassical economics, then, but from the particularities of production itself. Thus Marx turns the conventional order of things on its head: "The need which consumption feels for the object is created by the perception of it. The object of art – like every other product – creates a public which is sensitive to art and enjoys beauty" ([1857-8] 1993: 92). And so the reverse is true as well: "Consumption likewise

⁴ Interestingly, this term appears in English in Marx's original notebooks (Marx [1857-8] 1993: 91 note).

produces the producer's *inclination* by beckoning to him as an aim-determining need" ([1857-8] 1993: 92, emphasis in original).

The promise of this analysis lies in its ability to make sense of the relations through which changing tastes, sensibilities, labor practices, property forms, and social identities are refashioned alongside changes in production. Its pitfall is that production and consumption would seem to form a closed system that endlessly reproduces the logic of capital accumulation, as each presupposes and finishes the other. Recall that in Marx's account, it is consumption that *posits the purpose* and *determines the aim* of production, and vice versa. But to what extent is this so? Can there be *other* aims or purposes that are also objects of production? Or are production's objects exhausted, insofar as it remains production, by consumption's beckonings? As our recent foray would suggest, we have reason to be wary of this determinist view. The proposition that both consumption and production manners and motives are smoothly determined by capital is made even more suspect in light of recent work generated under the mantle of consumption, which has convincingly shown its manner to be much more open than the above passages might suggest. In their purchase and use of commodities, consumers transform them in ways their producers never intended, and sometimes even in ways that are subversive to capital (e.g., Burke 1996, Chin 2000, Miller 1987, 1998). Moreover, as Spivak points out, "since one case of use-value can be that of the worker wishing to consume the (affect of the) work itself," the presupposition of labor-power "as calibrated and organized by the logic of capital" is necessarily rendered uncertain (1987: 162). Indeed, there is much to support these points within the dissertation ahead.

In light of these vectors of indeterminacy, might Marx's text be interpreted another way? Is there an opening for re-reading his account in the style we have seen, and in turn adding to others' efforts to build the suppleness of his theory? Let us return to the passage in which Marx describes the production of an art-appreciating public through the art object. Right before this example, he writes, "The need which consumption feels for the object is created by the perception of it" ([1857-8] 1993: 92). In looking more closely, it is clear that consumption needs are not identical to their objects, but fundamentally *feelings* mediated through a *perception* of their objects. Further, production needs are condensed in "images" of an even more "subjective," "ideal," or "internal" variety. Whereas "production offers consumption its external object," he notes, "consumption *ideally posits* the object of production as an internal image, as a need, as drive and as purpose. It creates the objects of production in a still subjective form" ([1857-8] 1993: 91-92, emphasis in original). In my reading, Marx's embedding of these subjective mediations in the dialectical mechanisms he outlines represents another moment of discontinuity in which the particularities of living labor flash back into the very processes that would fuel their abstraction. It is this nuanced attention to the mediation of desire, I suggest, through which Marx creates a loop that actually remains quite open to the possibility of its interruption.

Producing the New Economy

There is no shortage of scholarly attempts to describe the current global economic moment and account for its novel features. Even those who argue most passionately for the ongoing relevance of Marxian analytics nevertheless note that capitalist production has changed markedly in recent decades, along with the markets associated with it.

Across diverse and at times divergent formulations, present-day capitalism has been broadly interpreted as ever more volatile and fast moving as it draws in new kinds of substances, relations, and/or mechanisms for the production of wealth. A proliferation of accounts call attention to a shift in economic significance from goods to services, often in the form of information or knowledge (e.g., Castells 1996, 1997, 1998). Others note a transformation in production from the supply of large-scale mass markets to that of highly differentiated market segments through more flexible arrangements of labor and capital (e.g., Harvey 1989, Lipietz 1987). A vast academic literature addresses globalization, taken in its broadest sense to mean increasingly substantial and rapid flows of people, products, capital, and ideas (e.g., Appadurai 1996), as well as in a narrower sense to refer to the exponential rise in the volume and speed of the circulation of finance capital in particular. The latter has been conceptualized as part of a new strain of "casino" (Strange 1986) or "millennial" (Comaroff and Comaroff 2000) capitalism, characterized by extreme instability and ever more tenuous ties between "real production" and the accumulation of wealth.

Accounts of the so-called new economy also reflect a largely shared recognition that everyday life is being extensively reorganized in response to these emerging conditions. In the face of more frequent and acute capitalist crises, market-driven change has reconfigured everything from individual households, companies, and industries, to whole industrial sectors and national and supra-national economies. As a great deal of scholarly work has argued, both these crises and the restructuring policies they have prompted bear the stamp of an ascendant neoliberalism (e.g., Comaroff and Comaroff 2001, Harvey 2005, Ong 2006), "a theory of political economic practices that proposes

that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade" (Harvey 2005: 2).

Nature, as Cori Hayden shows in her study of bioprospecting, has been an active site for the neoliberal "intensification and expansion of capitalist markets and trade," "one of the many things that has increasingly been treated...as a public good best regulated and managed through market mechanisms" (2003: 48). While some contend that the capitalist exploitation of nature undermines the sustainability of nature and capitalism itself (e.g., O'Connor 1998), nature under neoliberalism is nevertheless channeled into markets for both development and conservation alike. This happens when "landscape elements" are turned into "resources" (Tsing 2003: 5100), and when natural processes are conceptualized as "ecosystem services" with market prices (Foster in Hayden 2003: 49). What do such features of neoliberal globalization mean for the people and places they relegate to the sale of raw materials, as Fernando Coronil argues (2000: 363), including both the stuff of nature and the labor of primary production?

This question only gains complexity given the multiple ways in which production—even primary production, as we find in Bristol Bay—may be simultaneously reorganized to service markets that are themselves rapidly changing. As the above details suggest, at the same time that nature is increasingly driven into capitalist markets as transactable natural resources, often in step with the retreat of state governance and the extension of private property forms, the production of these resources as commodities for sale is a process that is arguably becoming more market-driven as well. In the terminology of those adopting a global commodity chain approach, this entails the

growing organization of production through buyer-driven, versus producer-driven, chains (Gereffi and Korzeniewicz 1994). The resulting bevy of highly differentiated goods calls to mind what Michel Callon, Cécile Méadel, and Vololona Rabeharisoa have referred to as the "economy of qualities." The economy they describe is replete with products that are endlessly "qualified," positioned and repositioned in relation to competing goods, and thus specified a dizzying number of ways. Moreover, the economy of qualities is distinguished by the growing degree to which economic agents themselves work to enact qualification for "the products they design, produce, distribute or consume" (2002: 196).

The increasing involvement of economic agents in the self-conscious transformation of the markets in which they participate has been highlighted by a number of commentators as a key feature of the contemporary economy. It is often discussed in terms of markets' growing "reflexivity" (e.g., Callon, et al. 2002, Slater 2002), echoing other scholarly work that has identified reflexive engagement as a hallmark of modernity (e.g., Beck 1992, Beck, et al. 1994, Giddens 1990). In Callon's formulation, the "reflexive dimension of the economy of qualities" is found in economic actors' intensive qualification of goods as well as in their energies to reshape the governance and organization of these markets more broadly (Callon, et al. 2002: 213).⁵ If the inclinations of Marx's producers and consumers were called into being by one another in their mutual participation in capitalist markets, such beckonings have only become more explicitly enlisted in the formation of present-day markets.

⁵ Notions of reflexivity are also closely associated with albeit competing assessments of the shifting relationship between economics itself and the markets it would presume simply to study (Callon, et al. 2002, Carrier and Miller 1998). These propositions have led some to argue and debate the notion that economics is "performative," as has been theorized in the domain of language—that its representational acts have the effect of bringing things into the world (Callon 1998, MacKenzie, et al. 2007).

Thus, analyzing production and consumption within the same frame—not to mention examining production beyond a narrow focus on the factory floor—is both more important than ever and in some sense becoming harder to avoid. In his pioneering study of the rise of sugar as an everyday commodity, Sidney Mintz (1985) carefully tacks between sites of production and consumption in order to shed light on the formation of modern-day capitalism. But the eighteenth-century workers in the Caribbean cane and English factories whose lives his narrative links were by all accounts only vaguely aware of the existence of one another and their mutual participation in the far-flung chain. In contrast, many present-day Bristol Bay salmon producers attend workshops, read industry journals, join online chat rooms, and at times have casual conversations in which the main topic of discussion is "the consumer," those who buy and eat the fish they make and sell. These producers are not just aware of consumers, but are invited to learn about their tastes, habits, and proclivities. Given the rise of the economy of qualities, as well as that of "ethical consumption" (Carrier 2007), consumers too both seek out and encounter in their shopping activities more and more details about the production conditions of any given item for sale. Further, producers and consumers alike are increasingly employing their newfound awareness of one another to alter their own market engagement in turn.

As Don Slater argues, what is "'new' today" is both the intensification and institutionalization of these reflexive means of forming and reforming particular market goods as well as "the increasing volatility of things – their shorter and more insecure social life" (2002: 103, 111). In this respect, products generally have come to take on what John Frow describes as the "quite different temporality" that accompanies the "rhythms of contemporary aesthetic production": "one in which...the dynamic of change

is so rapid or so routinized as to resemble a vertiginous stasis" (1997: 56). Frow follows "Jameson (but also Baudelaire, who had already in 'Le Peintre de la vie moderne' identified the close connection between *mode*, the fugitive and the transitory, and modernity) in calling this the temporality of fashion" (1997: 56).⁶ If the rhythms of contemporary production in general are increasingly coming to resemble the "vertiginous stasis" of fashion, what are the implications for primary producers? How do natural resources, generally defined by their status as minimally modified raw materials, fit into these new production parameters? And if raw materials are subject to ever more rapid aesthetic "re-finishing," to use Marx's concept, what kinds of finishes do they assume?

Not only are raw materials being drawn into production patterned on the temporalities of fashion, but they are also increasingly remade in tandem with the changing tastes patterned alongside shifting market structures. Business gurus have observed noteworthy transformations in the "mass middle market" in places like the U.S., where, they claim, "America's middle-market consumers are trading up to higher levels of quality and taste" (Silverstein and Fiske 2003: 48). Through concepts like "masstige" (mass prestige), these analysts have sought to understand the increasing popularity of what they call "new-luxury goods," which, unlike old luxury goods, "can generate high volumes despite their relatively high prices" (Silverstein and Fiske 2003: 48). These everyday consumer items partake in what Frow has associated with "designer" products. "Designer clothing and designer automobiles work the same way," he argues—"to build originality, scarcity, and authenticity deep into mass production" (Frow 1997: 62). These efforts, of course, are snarled in paradox in that they depend on the forms of production

⁶ Stephen Greenblatt's (1980) work on self-fashioning and modernity also has bearing on these issues.

what they would appear to eschew, and can even be destructive of the very expressions of authenticity or otherness they would purport to celebrate (Frow 1997: 73, 101).

Given that qualification itself can be understood as a form of singularization (Callon, et al. 2002), these paradoxes are woven throughout contemporary commodity production. In his recent work on brand-name commodities, for example, Robert J. Foster notes that such items are marketed "as singular and incomparable" precisely "in order to enhance their desirability and hence exchangeability" (2008: 9-10). However, the fast-paced production of singularity takes on particular significance with respect to natural resources. As Foster argues, "The problem so clear to Marx – the eternal need of capitalists to secure competitive advantage through constant innovation – is solved not by changing the means of production but by changing how meaning is produced, or how the relationship between persons and things is construed and managed" (2008: 10). Yet what happens in contexts in which meanings and means of production are inextricably bound? At the same time that contemporary production draws upon and among physical and nonphysical properties alike to materialize new market goods in an ever more rapid and reflexive fashion (Callon, et al. 2002, Slater 2002), these joinings have particular consequences for the productive structures of what might be called, following Coronil, "nature-intensive' commodities" (2000: 357).

Take, for instance, the production of new-luxury goods mentioned earlier, a market that is "rich in opportunity, but...also unstable" because, in keeping with the economic moment, any "technical and functional advantages are increasingly short-lived" (Silverstein and Fiske 2003: 56). The "winners" in these markets, business writers observe, are constantly transforming *both* the meanings *and* means of production in a

parallel fashion in order to "render their own products obsolete before a new competitor does it for them" (Silverstein and Fiske 2003: 56). As Jess Jackson of Kendall-Jackson wines, a new-luxury success story, explains: "It used to be that a major advance in wine making came every 50 years or so....That fell to every 20. Now it's every three to four years. Styles in taste and methods of production seem to become obsolete every ten years. We have to keep reinventing ourselves" (Jackson in Silverstein and Fiske 2003: 55). As part of this unceasing process of reinvention, marketing messages, brand identities, corporate cultures, production technologies, harvest practices, vineyard landscapes, and the physical bodies of plants and workers no doubt all become sites for actual and potential reworking. In the case of nature-intensive commodities, such reinventions are most successful when the differentiations that are at once exploited and enacted are naturalized; distinctions of a social nature would seem to inhere in nature itself; and a biological urge like hunger takes the form of a particular configuration of desire—a hunger, perhaps, for a shiraz, or quality wild fish eaten with a knife and fork.

Failure to acknowledge the specificity of resource-based production in this regard deflects attention from both the transformations in material environments that accompany accelerated activities of qualification as well as their attendant naturalizations. Moreover, it obscures the larger conditions under which certain regions and economies are tethered to the exploitation of these material environments themselves. While processes of globalization may have unhinged some aspects of longstanding core-periphery relations, it is nevertheless the case that "the (post)colonies" remain primary "providers of natural resources that continue to be essential for the development of capitalism" (Coronil 1997, 2000: 356). As Coronil has argued, neglecting to recognize that "a commodity is

inseparable from its physical materiality, and that as a unit of wealth it embodies both its natural and its value form" both conceals the constitutive role of the colonies in the creation of capitalism and fails to acknowledge the mechanisms and geographies through which present-day capitalism is reproduced (1997, 2000: 356). Foregrounding the multiple materialities enjoined in contemporary natural resource production enables us to see the often fractious ways in which forms of nature and labor are simultaneously drawn into contemporary markets as both raw materials and highly specified consumer goods.

Exception as Example

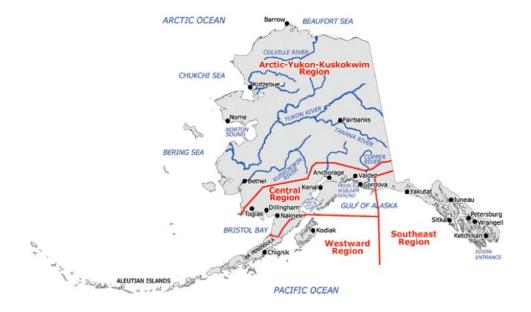
The Alaska salmon industry, and Bristol Bay in particular, offers a productive point of departure for exploring the tensions of contemporary natural resource production because its experience both reflects dominant trends and departs from them at the same time. It thus provides a vantage for rethinking scholarly assumptions about how the multifarious processes conceived of as neoliberal globalization actually work. In so doing, it opens a space for considering the relationship of these contemporary processes to the historical modes through which material nature and human activities have been enlisted for export production.

The industry's struggles in markets now dominated by farmed fish constitute a classic case of capitalist crisis: "one fraction of capital" undermining "the conditions of existence of another" (Gidwani 2008: 184). Further, sinking prices for Alaska salmon during much of the past fifteen years have been fueled by a host of conditions typically associated with globalization. Yet the industry's recent experience cannot itself be comfortably interpreted as a straightforward expression of neoliberal globalization. Its crisis has also been spurred by Alaskan salmon fisheries' *nonconformance* with

neoliberal designs, particularly in the salient role played by government regulation in limiting certain forms of market development. Like many other sites of primary production, Alaskan salmon fishing regions are located in peripheral regions drawn into the orbit of successive empires. However, in contrast to innumerable resource-exporting zones in postcolonial nations, Alaskan salmon fisheries are at the same time situated within the boundaries of a still-strong state. Rather than constituting a site of neoliberalism's simple actualization, then, they in fact represent a political flashpoint around which policies of neoliberalism are defined, debated, pursued, and contested.

An additional feature that distinguishes the heated dialogue surrounding Alaskan salmon fisheries policy is the prominent role played by fisheries participants themselves. While key aspects of the fisheries' organization at present are decidedly non-neoliberal, many of the restructuring measures that have been proposed in the wake of the industry downturn involve neoliberal hallmarks, like the promotion of entrepreneurial initiatives and forms of resource privatization. Yet these proposals for market-driven change are not only developed and debated by state officials and corporate strategists but also by individual fishers as well. This both sets apart Alaska salmon fishery discussions from natural resource policymaking elsewhere—sites in which workers may have little say, if any, as to how the resources they harvest are regulated (or deregulated, as is so frequently the case)—at the same time it evidences emergent forms of market reflexivity, the mechanisms by which market actors are also involved in the deliberate reorganization of markets themselves. It thus enables us to recognize the highly particular conditions required for the exercise of reflexivity, and explore the varied ways in which producers envision and enact their own reinventions.

How are Alaskan salmon fisheries organized so as to support these somewhat unusual arrangements? What human structures of management and property have been formed around salmon to facilitate their capture as a natural resource? Pacific salmon are anadromous, meaning that they are born in fresh water—rivers, lakes, ponds, streams but later migrate to salt water environments, where they spend most of their lives. After some years of maturation in the ocean, the surviving salmon head back from high seas across the North Pacific to the actual fresh waters of their birth to spawn and die. The returning fish comprise annual salmon runs, which occur in Alaska over different periods from about May to September. Sizeable salmon runs are found across most of Alaska, and commercial salmon fishing areas span from Southeast inlets near the British Columbia border to as far north as Norton Sound and Kotzebue above the Arctic Circle, from the reaches of the Aleutian Islands to the Yukon River in Alaska's Interior (Map 1).



Map 1. Commercial Fisheries Management Regions, Alaska Department of Fish and Game (Map source: ADF&G 2008e)

Because most salmon fishing occurs within near-shore waters, as the as fish converge to ascend rivers or enter lakes to spawn, salmon is a resource subject to state jurisdiction in the U.S., where state waters extend up to three miles offshore. Across Alaska, salmon is managed as a natural resource by the Alaska Department of Fish and Game (ADF&G) (see Map 1). Given runs are managed as biological populations for distinct commercial, sport, and subsistence uses by ADF&G fisheries biologists working out of local offices in individual management areas across the state. The legal framework governing commercial salmon fisheries statewide is set by the Alaska Legislature, and the regulations structuring regional salmon fisheries are determined by a seven-member Board of Fisheries appointed by the Governor. The Alaska State Constitution mandates that Alaska's fisheries, along with its other "replenishable resources," are to be "utilized, developed, and maintained on the sustained yield principle" (The State of Alaska 2008b). In practice this means that commercial fishing is monitored to ensure adequate "escapement" in a given salmon population—that is, enough salmon returning to spawning grounds to reproduce the existing run, at least in theory.

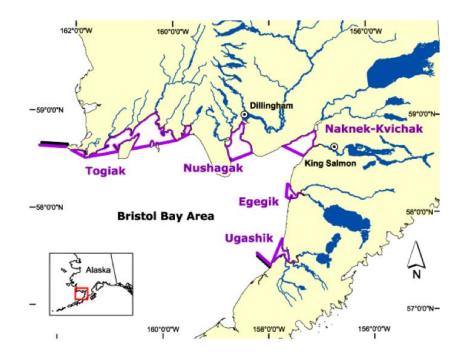
The participation of commercial fishers themselves is organized by the Limited Entry permit system that was established for commercial salmon fisheries statewide in the early 1970s. Permits are issued only to individuals, as opposed to vessels or corporations. What fishing permits actually allow, then, is a given individual's participation in a specific commercial salmon fishing region. These salmon permits can be freely bought and sold. But a number of provisions were put in place along with establishment of Limited Entry to see to it that permit holders are actual working fishers rather than absentee rentiers. As a result, despite considerable variation in the size and

scale of commercial salmon fishing operations across Alaska, fishers are all usually independent owner-operators. Most sell their catch to larger seafood processing companies through what are typically exclusive contracts. That is, once fishers secure "a market," an agreement to supply a particular processing company, they are generally not supposed to sell fish to any other company, at least during that given salmon season. As these details suggest, Alaskan salmon fishers are both owners in a certain sense—as permit holders they have special rights to engage in rent-capture of a state-managed resource, and are thus salmon "stakeholders" in a quite literal way—as well as fundamentally workers dependent on firms for employment.

Like the Alaska salmon industry more generally, which, I suggest, makes a fitting site of study because of all the ways in which it is exceptional, Bristol Bay provides an especially revealing angle onto industry predicaments because it is a "special case" (Crutchfield and Pontecorvo 1969: 105). Bristol Bay is Alaska's largest salmon fishery by a range of measures, including number of fishing permit holders, total pounds landed, and catch value.⁷ It is widely regarded as having the biggest red salmon runs in the world, which is the species for which the Alaska industry is most known. For this reason, the Bay is often considered the state's "flagship fishery" (Troll in Link, et al. 2003a: 24). Yet it is exemplary of broader fishery challenges also because conditions there are relatively unusual. Bristol Bay's experience of the recent economic downturn was so severe because it is the region in which the conditions that have long distinguished the

⁷ Comparative data substantiating these claims is available on the websites of state sources (ADF&G 2007b, CFEC 2007c). Although the total poundage harvested by all Southeast Alaskan areas and gear types is generally higher than that of Bristol Bay, which reflects the higher proportion of more numerous pink salmon in Southeast catches, drift permit holders in Bristol Bay catch more pounds of fish than any other single permit-holding group across the state. Thus, such distinctions depend on the parameters defining an individual "fishery," a concept discussed more in later chapters.

Alaskan salmon fishery as a whole are most pronounced (Crutchfield and Pontecorvo 1969: 106).



Map 2. Bristol Bay Area Commercial Salmon Fisheries, by District (Map source: ADF&G 2008c)

Bristol Bay (Map 2) is tucked in the southwest corner of the state on the Bering Sea, just to the west of the Alaska Peninsula, which extends down from the mainland of Alaska out to the chain of Aleutian Islands. It is approximately 150 miles southwest of Anchorage, and covers 40,000 square miles, which makes it slightly larger in size than the State of Ohio (BBNC 2008). The Bay itself is formed from the outflow of several large rivers, including one that empties from Alaska's largest lake, Lake Iliamna. Commercial fishing takes place across the region in a number of discrete fishing districts located at the mouths of these major rivers. The salmon fishing districts on the Bay's west side, named for the Togiak and Nushagak Rivers, are managed out of an ADF&G office in Dillingham; the eastside districts, located at the mouths of the Kvichak and Naknek, Egegik, and Ugashik Rivers, are managed out of an office in King Salmon.

If Alaskan salmon fisheries are marked by their seasonality, volatility, and unpredictability, particularly in comparison to fish farms, Bristol Bay salmon fisheries are set apart by how extreme these dynamics are. At the same time that the region has among the biggest salmon returns in Alaska, its annual runs appear in a much shorter period and at a more feverish pace than happens elsewhere. In fact, the Bay is a textbook example of what biologists call a "pulse" fishery, as the majority of its run comes in a relatively short burst—tens of millions of fish surging into area waters during a frenzied two-week stretch each summer. As the chart below suggests (Figure 1),

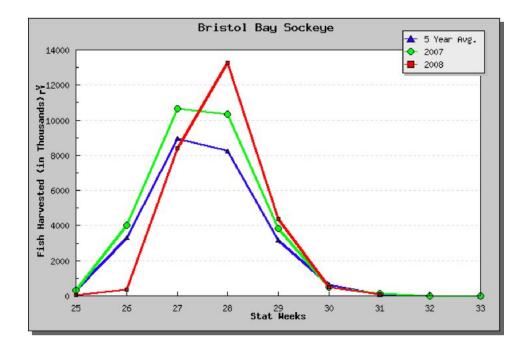


Figure 1. Bristol Bay Sockeye Salmon Commercial Harvest Timing (Figure source: ADF&G 2008a)

commercial harvests in the Bristol Bay sockeye salmon fishery rise rapidly at the start of the season, but are practically over within just a few weeks, largely the result of the timing of the salmon runs themselves. As anthropologists studying the Bristol Bay salmon industry have remarked, these circumstances make for an "atypical" and "extreme" salmon fishery that fishers themselves regard "as novel, chaotic, and downright frantic" (Van Maanen et al 1982: 196).

The Bristol Bay industry is also extreme in other ways. If the Alaskan salmon industry as a whole is hobbled by high production costs in an era of ever-cheaper farmed fish, these soaring costs and the conditions that underlie them are especially evident in Bristol Bay. Like many other coastal salmon fishing communities across Alaska, the Bristol Bay salmon fishery is relatively isolated and not easily accessible. Yet it ranks as "the most isolated major segment of the Alaskan salmon fishery" and has at various points in its history even represented "one of the most isolated fish and fish processing industries in the world" (Crutchfield and Pontecorvo 1969: 106, 80). Like much of rural and western Alaska more generally, Bristol Bay is not connected to the state's main road system. The only way in and out is by air or a multi-day sea journey, as the Bay is separated from more easterly parts of the state and continent by the Alaska Peninsula and the Aleutian Islands (see Map 1). Boats must travel down to Unimak Pass to cut across the Aleutians or travel across the Gulf of Alaska to access an overland portage through a steep mountain pass on the Peninsula to enter Bristol Bay through Lake Iliamna. Either way, the trip is costly and time consuming, and can be dangerous for small crafts.

The commercial challenges posed by the region's geographical isolation are only heightened by a variety of other natural conditions that compound its inaccessibility. Its

waters are not ice-free in the winter, which imposes serious constraints on all-season shipping. Ocean-going transport to or from the region is generally limited to the summer months, and thus the region's barge service, like its salmon, is a seasonal event. Bristol Bay also experiences dramatic tides, movements around which a great deal of salmon industry activity must be timed. Although many of the industrial obstacles posed by such environmental conditions can be mitigated by technological fixes—in recent years the City of Dillingham oversaw the construction of an all-tide dock, for instance, which is accessible from the water at both high and low tide—the major infrastructural improvements these require are often prohibitively expensive by virtue of the region's ongoing isolation and lack of existing infrastructure.

Like other salmon fishing areas across Alaska, Bristol Bay is economically reliant on commercial fishing. Yet this is only more the case than in many other regions, given that the fishing industry is Bristol Bay's primary economic "driver" and limited other employment opportunities exist aside from local government jobs (Duffield, et al. 2007: 5, 10). As much social scientific research has documented, the commercial fishing industry forms the basis for the region's mixed cash-subsistence economy, through which forms of wage work are combined with the hunting, fishing, and gathering of wild animals and plants for household use.

Its "mixed economy" speaks to the area's economic and demographic complexity. Bristol Bay is a predominantly Alaska Native region, with around 70 percent of its approximately 7,600 residents identifying as all or part Alaska Native in the 2000 census (Duffield, et al. 2007: 4). Both historically and in the present, the region has been home to members of several different Alaska Native groups, including Yup'ik Eskimo, Denaina

Athabascan, and Alutiig or Aleut people.⁸ In addition, the commercial fishing industry's long history in the region has contributed to significant contact and intermarriage among a diversity of Native and non-Native individuals, much more so and over a longer period of time than has been the case in other parts of western Alaska (VanStone 1967: 63). The region encompasses numerous smaller villages, which range from a handful of people to several hundred, as well as the hub communities in which most region services are located: Naknek and King Salmon⁹ on the east side, and Dillingham on the west. The better part of the region's non-Native population lives in these regional centers, which nevertheless remain mostly Native, while the outlying villages are overwhelmingly Alaska Native.¹⁰ There are only limited roads in the region, and no roads connect the two sides of the Bay; travel among villages and between villages and centers is generally done by boat or plane, as well as by snowmachine in the winter. Upon the passage of the Alaska Native Claims Settlement Act (ANCSA) in 1971, Bristol Bay became an administrative region for Native land management through the newly formed for-profit Bristol Bay Native Corporation, as well as political coordination among tribal governments and social service delivery through the non-profit Bristol Bay Native Association. Much of the resulting administrative operations are based out of Dillingham, with some in Naknek and King Salmon and others in Anchorage and Juneau.

While a great many region residents participate in the commercial salmon fishery in varying capacities, the industry also employs numerous nonresident fishers and other

⁸ My phrasing here should not be taken to suggest that "Alutiiq" and "Aleut" are synonyms. I discuss matters of identity more in Chapter Two.

⁹ King Salmon is the site of an air force base that was closed in 1993, and its population has decreased since then. It is connected to Naknek by road, however, so together the two communities remain the primary population center on the east side of the Bay.

¹⁰ For example, in the City of Dillingham, 61 percent of residents identify as Alaska Native, whereas 92 percent of residents do in the rest of the census area (Goldsmith, et al. 2004: 2-34).

workers. As in the past, a large component of seafood processing workers are nonresident seasonal laborers brought in by the processing companies for the summer (see Hadland and Laurent 2008). In addition, the better part of the fishery's more valuable permits are not owned by Bristol Bay-area residents.¹¹ More of these permits are held by residents of Alaska living outside the region than by current Bristol Bay residents, and over twice as may are owned by those known as "Outsiders," people residing outside Alaska. (Alaskans often refer to the rest of the U.S. as the "Lower 48" and anywhere outside Alaska as "Outside.") While some of these nonresident fishers have longtime personal and family ties to the Bristol Bay fishing industry, others are more recent entrants since the permit system was established in the early 1970s. I describe the various fishery participants' intertwined paths, histories, and relations more in the chapters to follow. I include these details here to furnish background on the socially complex field, and give some sense of the diversity of kinds of pasts, to reference the source of the interruption to capital that Chakrabarty identifies (2000: 66), that inform the industry's operations in the present. In the same way that Bristol Bay offers a prime window onto neoliberal globalization because of the ways in which it is extreme, the social landscape of its salmon production presents only a more vivid picture of how we might interpret the economy and social life more broadly: "woven by many, many strands that are discontinuous, that come from way off, that carry their histories with them, and that are not within our control" (Spivak in Castree 1996-1997: 69).

¹¹ By these I refer to permits for the Bristol Bay drift gillnet fishery, as opposed to the set gillnet fishery. I clarify these distinctions in the section to follow. Based on data from 2004, 423 drift permits were in Bristol Bay residents' hands, while 480 were held by those living elsewhere in Alaska, and 957 were owned by "nonresidents" of Alaska (Carlson 2005: 9). These numbers do not give a sense of how many of the current permit holders living outside Bristol Bay are former area residents who have moved away.

The Production of Wildness

In this section, I suggest that the concept of wildness can be seized upon to thematize the multiple ways in which the cultural-natural forms attending salmon production in Bristol Bay exceed and punctuate capitalist accumulation even as they form the basis for it. I begin my case by more carefully considering the salmon that the Bristol Bay industry is assembled around, and that are in turn assembled through their joinings with the industry. What exactly is produced in the production of wild salmon, and its reproduction for shifting markets? In "The Production of Nature," geographer Neil Smith offers a close reading of Marx to make an argument that at first glance would seem paradoxical: that what "is generally seen as precisely that which cannot be produced," as merely "the material substratum of social life," is "more and more the product of social production" (1984: 32). In what ways are salmon natures produced through their interactions with humans? In what ways are they not produced? The following section shows a history of human manipulation embodied in the wildest of fish. Yet it also notes that at the same time that wild salmon are produced, they are never only produced. It thus demonstrates that wild salmon simultaneously exist as a force of nature, an artifact of culture, and ultimately a natural-cultural hybrid that is nevertheless fundamentally unruly. For this reason, I argue for the analytical usefulness of conceptualizing wild salmon in terms of wildness, drawing on the newfound identity now seized upon for marketing purposes at the same time that I seek to redeploy its meaning.

Wild Salmon as Hybrid

Bristol Bay, like Alaska more generally, is home to all five species of Pacific salmon that inhabit the western hemisphere: king (or Chinook), red (or sockeye).¹² silver (or coho), chum (or dog), and pink (or humpback) salmon (Figure 2).¹³ While each of these species has a somewhat different appearance, physiology, and life cycle, they are all are anadromous, and as adults migrate back from the high seas to the fresh waters of their birth to spawn and die. There is something incredible about the annual reappearance¹⁴ of the salmon from somewhere else far away, not to mention the animals themselves. Fishers often talk about salmon as being "beautiful," especially particular salmon that appear as if a material realization of the Platonic form of a given species as represented on illustrated diagrams (see Figure 2). But their reactions likely reflect more than classificatory zeal for natural kinds. The salmon they call beautiful glitter in the light, their slivery scales refracting the sun like crystals. Their bodies are firm and muscular; their pink gills are intricately feathered; their eyes are luminous like glass beads. They are aesthetically arresting in the same way that a human manufacture is fabricated to be, and yet they come from nature. They are varied too-beautiful specimens can be quite different one from another given the heterogeneity within and among species. King

¹² I use the two common species names for red salmon almost interchangeably in the chapters ahead. Richard Cooley indicates that red salmon is the species term used in Alaska, whereas sockeye is used in Canada (1963: 4). Based on my experience, sockeye is used in present-day Alaska salmon contexts, if perhaps not as frequently. It seems to have a more formal or technical gloss. Although "blueback" is considered another term for sockeye or red salmon by some sources, I never heard or saw it used. ¹³ Pacific salmon are members of Salmonidae family (which also includes Atlantic salmon and trout) and

the Oncorhynchus genus (derived from the Greek "hook nose").

¹⁴ Paul Nadasdy (forthcoming) makes the point that for many First Nations people of the Yukon Territory, the return of salmon and other animals is indeed a re-appearance. He draws upon Alfred Gell's distinction of the different topologies between cyclical (a recurrence of an event of the same type) and circular (the recurrence of the same event) time to argue that the reappearance of renewable resources is circular, not merely cyclical, for the Kluane people with whom he has conducted fieldwork. According to Nadasdy, this speaks to ongoing social relationships between hunter and prey, and underscores the differences between the spatiotemporal topologies of First Nations people and those of resource managers. I consider the significance of salmon temporalities for both Native and non-Native fishers in the chapters ahead.

salmon can be up to several feet long and well over fifty pounds (though they average around twenty pounds in Alaska, according to ASMI 2008b), whereas pink salmon, which only return to Bristol Bay every other year, are usually just a few pounds, often with bodies narrow enough be encircled by a human hand. The red salmon that comprise the majority of the Bristol Bay run are somewhere in between, each with an average weight of around six pounds (Salomone, et al. 2007: 105).

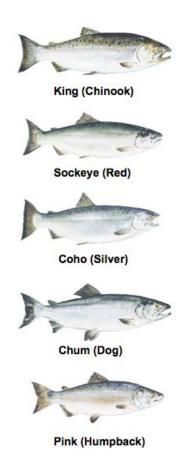
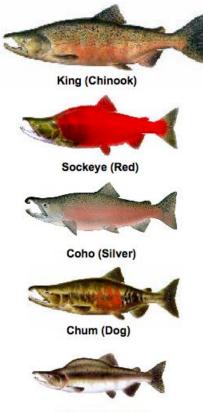


Figure 2. Pacific Salmon Species, Ocean Phase (Images compiled from ASMI 2008b)

The appearance of salmon, both in the timing and rhythms of their annual arrival and in their physical features, reflects a deeply embodied temporality that humans can seize only when it flashes before them, rather than generate or dictate. The bright silvery-ness of the fish admired by many is, as Robert Frost might have it, a hard hue for nature to hold. As Pacific salmon make their way from salt to fresh waters in preparation for spawning, their physiology changes radically. They stop eating, and their bodies begin to decay. They don't merely waste away, however, even if towards the very end of their lives their skin is literally peeling off them in rotting tatters. Death is prefigured by a period of metamorphosis. Their silver sides begin to show the blush of other colors, while their firmness softens. The process has a different character in each species and between sexes, which makes for a parallel diagram of late-in-life salmon types (Figure 3).



Pink (Humpback)

Figure 3. Pacific Salmon Species, Spawning Phase (Images compiled from ADF&G 2008f, Alaskan-Adventures 2008) Pink salmon develop an exaggerated hump on their backs (thus their humpy moniker); male chum grow an elongated, hooked snout with sharp, protruding teeth (thought to be the most likely reason they are also known as dog salmon); sockeye become a deep red on the outside (hence red salmon) as the brightly colored flesh within them pales. Although the pale meat of these red reds is eaten in Bristol Bay in the Yup'ik Eskimo preparation of "red salmon," "bright" fish without too much of a blush are preferred for production by processing companies. Yet the blushing of wild salmon and the larger disintegration it signals can only be halted, never forestalled, by human intervention, and even then only in death, when fish are plucked from the water for human uses.

Before the rise of farmed salmon, wild salmon did not exist in any meaningful sense, in Alaska or anywhere else. The ancestors of the salmon that swim in Bristol Bay today existed, to be sure, but until quite recently there was no not-wild salmon from which they could be distinguished. All salmon were wild salmon, even as they were simultaneously produced. That is, despite their manifest and resolute naturalness, salmon populations in Bristol Bay and across the North Pacific have been shaped by their interactions with humans for millennia. Long before the establishment of the commercial fishing industry, the human capture of salmon by Bristol Bay's aboriginal residents arguably affected the size as well as the composition of fish populations.¹⁵ Wild salmon thus has a deep cultural as well as a natural history.¹⁶ Indeed these are much more

¹⁵ The ethnohistorical research of Gordon W. Hewes indicates that the impact of aboriginal residents' fishing on Bristol Bay salmon populations was far from negligible in the years prior to the establishment of the commercial fishery. Hewes suggests that the only reason it was at all possible for developers of the early canned salmon industry to perceive the resource as virginal in the first place is likely due to decreased fishing effort by Native people in the years immediately preceding their arrival, a result of the epidemics that decimated communities across western Alaska at the time (Hewes in Cooley 1963: 16-19).

¹⁶ One thread of this history is evident in the scientific names applied to salmon: "The Pacific salmon were first classified by Russian scientists, and their scientific names—*Oncorhynchus tschawytscha*,

difficult to disentangle from one another, as it turns out, than are salmon themselves from the human nets that have long furthered various processes of natural selection.

The work of environmental historians, geographers, and scholars of science and technology studies in particular has questioned the ways in which untenable separations of nature and culture are smuggled into commonplace ideas of nature. Environmental historians have done much to show that landscapes and phenomena that appear "virginal" or "untouched" actually have been created through a great deal of human engagement. In his history of the Columbia River, Richard White argues quite explicitly that, "we cannot understand human history without natural history and we cannot understand natural history without human history" (1995: ix). The reason? "The two have been intertwined for millennia" (White 1995: ix). Much of the project of environmental history as typically practiced involves discerning and reading the presence of the human in the natural, where it would seem to be most absent. This has led certain practitioners to challenge notions like that of wilderness, which is often used to promote an evacuation of humanity from the environment (e.g., Cronon 1996). These interventions have been of critical intellectual importance for studies of nature, and they inform my discussion of wild salmon here. However, in their efforts to characterize the "relationship" (White 1995: x) between nature and culture, or human and natural history, many analysts writing in this vein often wind up reproducing the binary terms that structure the constituent units of their accounts, even as they seek to complicate them. The bodies of wild salmon, as sites in which elements of human and nonhuman are together congealed, demand a more thoroughgoing model of mutual constitution.

Oncorynchus gorbusca, etc.—are primarily derived from Russian or from local Siberian native languages" (Cooley 1963: 4).

As Bruno Latour (1993) has argued, the mutually exclusive categories of nature and culture can themselves be interpreted as symptoms of modernist impulses to separate and contain the human and nonhuman mixtures he terms "hybrids." I introduce the concept here in order to theorize wild salmon not merely as a participant in relationships with humans and other actants, to use the actor-network terminology, but also as a product of them at the same time—simultaneously enlisted in and recomposed through an array of what Gidwani (2008) discusses as "human and nonhuman joinings." Although I retain a concept of nature in my analysis, I press for a hybrid understanding of its constitution so that I can reconstruct a notion of wildness that does not uncritically reproduce popular imagery by which wild salmon are portrayed as uncontaminated nature while farmed salmon are mere fabrications. I do this so as to avoid a dichotomy that obscures key features of the albeit different networks that underlie both farmed and wild salmon production. In keeping with Latour's suggestion that hybrids have long proliferated, I resist attributing the quality of produced-ness strictly to the products of technoscience; I conceptualize wild salmon's current transformations as the most recent moment in an ongoing process of reproduction. I do so in order to comprehend Bristol Bay salmon as "organic machines" akin to the way White argues for the Columbia-a phenomenon shaped by, but not in the remotest way reducible to, human designsthough with the important caveat that salmon nature is more than merely "modified" by human influence (cf. White 1995: ix).

Even before it enters processing plants, wild salmon is produced through its human harvest, and today only more so than in earlier eras given the fishery's extensive biological management. How does fishing happen, and how are fish managed, in Bristol

Bay? On the basis of various laws and regulations, salmon fishing statewide is conducted under a "derby"- or "Olympic"-style framework, in which the entire fleet of any given fishery competes against one another to harvest as much fish as they can during limited time periods, or "openings." ADF&G fisheries managers in particular districts establish the duration of these commercial fishing openings as well as their frequency and scheduling. They do this with reference to annual "escapement goals," calculations based on their pre-season salmon return forecasts, as well as ongoing in-season estimates of commercial catches and upstream returns. The fishing schedule is thus continually updated throughout the season, with announcements made on the radio at regular intervals about when and for how long the next open periods will be.

Salmon is harvested commercially by methods that vary between different management areas. Although other fishing methods are used elsewhere, only gillnetting is permitted in Bristol Bay. Gillnets resemble volleyball nets suspended from the water's surface¹⁷ (Figure 4). They are designed to ensnare fish by their gills as they try to pass through the net while heading upstream. Gillnets can target certain types of salmon to the extent that they vary in mesh size, the size of the openings of the net holes. Fish with heads about the size of the opening can enter to a point, but are prevented from passing through by their bigger bodies. As they attempt to wriggle backwards out of the net, the mesh becomes caught underneath their gills. Fish whose bodies are smaller than the mesh of a given net can swim right through, while fish whose heads are too big to enter the holes at all are unlikely to be ensnared. Since salmon vary in size by species, age, and sex, among other variables, gillnets constitute a technology that can exert significant selective pressures, as they no doubt did in their extensive aboriginal use across Alaska

¹⁷ As they are very aptly described on the Trident Seafoods (2008) website.

(Cooley 1963: 19). The nets are positioned either off a drifting boat (drift gillnetting) (see Figure 4), or anchored along the shore (set gillnetting). Both drifting and set netting are practiced in the Bay, though the majority of fish are caught in drift operations, which are both greater in number and tend to be higher volume and more capital-intensive.

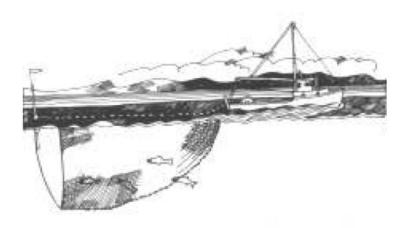


Figure 4. Salmon Drift Gillnetting (Figure source: ASMI 2008a)

The details of contemporary salmon management in Alaska evidence an extensive apparatus—technologies, regulations, institutions, personnel, equipment—whose express purpose is to mold and direct salmon's nonhuman being to human ends. Yet, as coming chapters explore in detail, key elements of wild fisheries remain largely outside human attempts to regulate, manage, corral, or control them. Among the many spatiotemporal properties that distinguish wild from farmed salmon, one bears closer examination here: Wild salmon must be caught.

Wild Salmon as Object of Labor

That wild fisheries depend on different forms of human labor than do farmed fisheries is manifest in their frequent categorization as "capture fisheries" in the technical literature. Reliance on this term speaks to the difficulties of defining "wild" as any bounded or stable thing, as various propagation strategies for salmon "enhancement" can be incorporated into fisheries called wild, just as they can be used to question a given fishery's wild status. Referring to wild fisheries in terms of the capture activities they require highlights the especially critical way in which they remain qualitatively different from industrial fish farming, where there is no fishing per se. As the following chapter will detail, salmon on fish farms are literally penned. In Bristol Bay, on the other hand, the salmon persist in their longtime identity as a "fugitive resource," a category they occupy along with other natural resources like migratory waterfowl, oil and natural gas, and, in some cases, groundwater (Cooley 1963: 11 and 11 note). But unlike most other commercially exploited forms of material nature (like grapes in a vineyard), or fugitive resources more specifically (such as oil), salmon are sentient beings that can actively move to escape capture. Gillnets, for instance, only tend to be effective in silty waters like those of Bristol Bay, where fish are less likely to see them.

In part for this reason, fish have long evaded objectification as property and thus capture by capital as wholly owned production input. The history of the Alaska salmon industry in general and Bristol Bay in particular reveals a great many attempts to control the resource through the establishment of some kind of private property right over it. Yet, as Richard Cooley (1963: 11) explains, these efforts tended to be stymied because of the position of salmon in a legal order that dates from English common law and the Magna Carta, by which fish are classified as *ferae naturae*, "nature (or wild) animal":

Salmon along with most other fish in public waters are classified in the law as animals *ferae naturae*. Ownership while they are in a state of freedom is held by the government for the benefit of all, and no individual property rights can be claimed in the fish so long as they remain wild—unconfined and in a state of nature. Under this doctrine, fishing is considered a public right to be enjoyed by all. Hence, there is free access to the fishery, and private ownership in the resource can be established only after reducing it to possession through capture.

As this passage reveals, the freedom of fish as posited legally, and thus their freedom from private human ownership, is located in their roving mobility, expressed here as constitutive of their wildness. These details give some sense of why the literal enclosure of salmon in farms, to be cultivated like an agricultural product, would so dramatically change the property structures through which they are factored. With respect to wild fish, possession is dependent on capture. And so the capture of nature for purposes of production requires the capture of labor. Although aboriginal fishers and, later, large fish processing companies operating in Alaska sought to lessen the human work entailed by fishing through the development of certain technologies—most notably fish traps-these managed to reduce but never eliminate the basic need for human labor. and even then only in felicitous environments. In Bristol Bay, the need for labor-in particular the human energies required for catching and processing salmon under a system of industrial production—was answered through a heterogeneous assemblage of people and arrangements. Through their conjoint work, these people gained a collective identity as labor at the same time they expressed and assumed the differentiations through which fragile solidarities would be both built and fractured: locals and Outsiders, Natives and non-Natives, drift netters and set netters, eastsiders and westsiders, to name but a few of the most prominent distinctions that transect the industry and the region. Yet amid the vast array of difference brought together for production, of which these often

oppositional identities are but one facet, there exists a multiplicity of pasts and private grammars. This open-endedness in living labor is of course a prime site for the kinds of interruptions described earlier—and indeed another form of wildness at the heart of wild salmon production in Bristol Bay.

Wildness as Difference

The wildness I analyze throughout the dissertation is centered in the salmon's wildness, but also rises out to include the cultural-natural specificities attending the production of Bristol Bay salmon more broadly, and the varied motives that animate them. It is these nested forms of wildness, I suggest, that represent precisely the kind of difference that capitalism harnesses in its relentless pursuit of equivalence, as well as what interrupts, deflects, resists, or merely exceeds its motive force. Given the rapid rise of farmed salmon, the not-farmed quality of Bristol Bay salmon is fast becoming its most salient differentiating feature in a wide swath of salmon markets. In turn, to many involved in the fishery, this wildness seems to be the most promising avenue for product differentiation, and thus economic recovery for the still-struggling industry. But as the fugitive resource is reworked to keep up with fugitive fashion, and its highly perishable substance made into products that are themselves increasingly short-lived, the very conditions that make Bristol Bay salmon wild are becoming fishers' greatest hurdles. Moreover, the new market goods they aim to generate may foreground some of the concrete particularities surrounding salmon production, yet they do so primarily through the objectification of new forms of matter and action into familiar capitalist abstractions.

Nevertheless, these processes of objectification are interrupted as production simultaneously seeks to exploit, refashion, and hold wildness at bay. As the dissertation

demonstrates, the visions of the wild that motivate both producers and consumers propel the creation of new commodities, with great consequence. But these highly mediated motives remain fraught with diverse impulses and assumptions that are never aligned. In this respect, wildness as broadly conceived becomes less a fact of life and more a puzzle. It encompasses both the heterogeneous differences that motivate production and those that production seeks to overcome. It is at once production's condition of possibility and also an outcome. It simultaneously fuels and challenges production, and also refuses to configure itself in relation to production at all. A knotty concatenation of contradictions and contradictory beings, wildness ushers in challenges for both Bristol Bay producers and social theorists alike. The chapters to follow represent an attempt to trace the formation and interruption of these contradictions, and explore the practical and intellectual challenges that ensue.

Conditions of Production

As the very opening pages of this chapter might suggest, this dissertation does not attempt to present a view from nowhere, but rather narrates a far more situated account. Despite my concerted efforts to strive for representativeness in my depiction of an industry amid transition, my own perspective on the material I relay has been irretrievably molded by both place and time, as well as a host of other particularities of my own experience and the way in which I was experienced as a researcher. The bulk of my research was conducted during a two-year primary fieldwork period from 2002 to 2004. As the next chapter explores, I began the project at what would prove to be the lowest point for the Alaska salmon industry in decades. The reverberations of the mood that prevailed during this time are evident throughout the dissertation. Yet I returned to

Alaska annually for follow-up visits, which ranged from several weeks to several months. As a result, the material presented here was gathered over an ongoing six-year period. My findings are thus informed by the study's longitudinal dimension.

In setting out to track salmon production as outlined in this introductory chapter, I moved between sites of fishing, processing, and policymaking. These are far from the only locations in which Bristol Bay salmon production takes place. But given the exigencies of my fieldwork and the fundamental impossibility of bounding the sprawling networks through which commodity chains are forged, I chose to start from the salmon itself and follow key routes that spiraled outward.

The dissertation draws upon both ethnographic and archival research, which I conducted by dividing my time between Bristol Bay and Anchorage, where a great deal of Bristol Bay and Alaska salmon fisheries discussions and decisions take place, with additional research trips to Seattle, which has long served as the corporate headquarters for much of the Alaska salmon industry. The historical documents I examined were held at the Sam Fox Museum and in private collections in Bristol Bay, as well as in the Anchorage library system, the National Archives office in Anchorage, and in the Archives and Special Collections Department of the University of Alaska, Anchorage. To gather ethnographic data, I relied on methods of participant-observation and semi-structured interviews. My research entailed daily activities like work in fishing operations and attendance of regulatory meetings, as well as conversations with and interviews of fishers, processing workers and managers, and political representatives.

I spent about half of my primary research period in Bristol Bay, based in the community of Dillingham (see Map 2 and Image 1), a town with a year-round population



Image 1. Dillingham. (Image source: BBAHC 2008a)

of about 2,400. Dillingham serves as the regional center for outlying villages on the west side of Bristol Bay and beyond, given that it houses the offices of a number of different region-wide organizations and the area's only hospital. Its population is said to double in the summer months with the approach of the salmon season and the annual influx of fishers and other industry workers from around the region, state, country, and world. Dillingham is located on the Nushagak River, and serves as the base of operations for those commercial fishers who tend to concentrate their efforts in the Nushagak district not far away. It has a harbor, boatyard, seafood processing plant, two supermarkets, a handful of restaurants, several fishing supply stores, and an array of other services.

Dillingham provided an ideal site for my study, given its status as a crossroads both within the region, and between the region and the other locales significant to the salmon industry and fisheries policy. Yet it also presented a very particular picture of Bristol Bay at large. As a result, this study is not primarily a view from a village. Nor does it equally represent the somewhat different history and present-day conditions experienced on the east side of the Bay. Although my research took me to Bristol Bayarea villages and eastside population centers, the choice of Dillingham as my primary field site has meant that I offer a view of the complex whole that is Bristol Bay through a detailed account of production in one highly specific, if richly textured, part of it.

I spent two full summers at work along the Nushagak. During this time, I joined the crews of a series of different fishing operations, was an employee at the local cannery, and worked on a tender, the vessel that transports salmon from the fishing ground to processing facilities. I gained experience fishing drift boats (such as Image 2) and set net operations (Images 3 and 4), in which nets are anchored along the shore.



Image 2. Drift Fishing on the Nushagak. Photo by Karen Hébert.

While the number and variety of fishing stints I was able to perform was not, and indeed could not have been, exhaustive of the industry's many axes of social difference, I did



Image 3. Anchoring the Set Net on Shore. Photo by Donna Stewart.



Image 4. Commercial Set Netting in the Nushagak. Photo by Donna Stewart.

work on operations that spanned the gamut of the local distinctions and antinomies detailed earlier. In addition, the boats I joined were among those in several different radio groups (groups of fishers who share information and assistance with one another via a private, scrambled radio channel); were comprised of crews of diverse composition, from relatives to friends to virtual strangers; included both "highliners" known for their fishing prowess and others; and were captained by individuals with decidedly different socioeconomic backgrounds and economic interests in the fishing seasons at hand. My experience out on the fishing grounds facilitated conversations and interviews about fishing and fishery policy, both during the season and in the off-season as well what local politicians dub the "meeting season." Along with the Bristol Bay residents whose policymaking paths I followed, I became a fixture at the public forums and regulatory arenas in which salmon matters are pursued, which took place in Bristol Bay, Anchorage, and even outside the state. Across these different sites, I was on hand for a wide variety of meetings and discussions: In Dillingham, for instance, I took part in local fishery advisory committee meetings, conferences on fish processing, and public hearings about economic development initiatives; in Anchorage, I sat in on Board of Fisheries meetings concerning Bristol Bay and other regions, as well as a wide assortment of fishery conferences, workshops, and task force sessions; in Seattle, I had conversations with processing industry executives and attended the annual fishing trade show in which much Alaska salmon industry strategy is developed and debated.

In all of these contexts, I was marked to varying degrees by my social identity as a young, white woman (or "girl," as it was more often expressed). This is not to say that women are uninvolved in the Bristol Bay salmon industry. In contrast to some other fisheries, women regularly participate in both fishing and processing sectors in Bristol Bay—not to mention perform crucial work outside them that makes others' participation in them possible. While women drift boat captains may be more the exception than the rule at present, a great many women run their own set net operations, serve as crew on drift boats, work in processing facilities, and participate in fishing industry meetings. Yet maleness nevertheless remains the unmarked term and implicit point of reference, as the ubiquitous use of the identification "fisherman" might suggest. All of the women fishers

with whom I have ever spoken, for instance, refer to themselves as "fishermen." I use "fisher" throughout as a means of establishing an analytic category distinct from the emic concept, and to interject a reminder that not every fisherman identifies as a man.

As with any social persona formed by dint of essentialist categories, my own gave me certain forms of access and insight at the same time it foreclosed others. The research doors that were shut to me because of my gender were often quite literal—like those of the nightly single-sex steambath, the Yup'ik *maqi*, a widely popular ritual across Bristol Bay, and the venue for a great deal of fisheries politicking among men, or so I have been told. At the same time, others were opened, like that of the women's session in the *maqi*. Across a variety of settings, I got the distinct impression that I was often perceived as non-threatening and approachable by virtue of my age and gender, a stereotype that nevertheless facilitated open and engaged research conversations. Like the diversity of identifications and perspectives brought by salmon industry workers and remade over the course of their interactions in Bristol Bay, such traces of my own experience and others' experience of me are inextricably woven into the fabric of the chapters to follow.

Chapter Outline

Like Marx's account and so many others, this analysis of production begins with an examination of the commodity—in this case, the salmon caught and processed in Bristol Bay for export to distant shores. The dissertation then expands outwards in space and time to situate contemporary commodity production in a longer series of iterative transformations before zooming back to the reconfigurations of the present. Through these textual shifts, other movements are thrown into relief: the recurring transformation

of diverse activities and substances into inputs for capitalist production, like labor and property; industry participants' grapplings with the unexpected possibilities both furnished and foreclosed by such processes of objectification; and the repeated interruptions that punctuate them and render them incomplete.

Chapter One, "Product Collapse," gives a comprehensive account of the salmon industry crisis that grounds the dissertation, as well as how it has been interpreted and experienced by a range of actors. It shows how the collapse rests upon the entailments of salmon as a particular sort of product. The chapter presents the economic data and analysis that have been marshaled to explain the downturn, and critically examines the underpinnings and lived effects of these models. It ultimately suggests that along with generating acute hardship and pervasive anxiety, participants' perceptions of crisis have kindled a range of other responses—include Bristol Bay residents' disinclination to understand their position as precarious, as well as fishers' ambitions to "reinvent" the local industry and their own fishing practice. On the basis of these multiform responses, the chapter argues that at the same time salmon is produced as a commodity for export, this process is simultaneously experienced and shaped through other relations and pasts.

Chapters Two and Three form a two-part whole, entitled "Capturing the Return," which considers the historical coming into being of labor in Bristol Bay. Together, the chapters chronicle the strategies through which diverse human energies have been harnessed over centuries by shifting configurations of capital in order to secure profits through the literal capture of nature. They draw together recent scholarship on capitalism and imperialism in order to examine the making of labor in the region as a changing imperial formation composed through processes of transculturation. In so doing, they

show how commercial salmon production effected a more extensive and intensive control over workers' collective activity than had existed before, as these energies were remade into a labor force. At the same time, the chapters demonstrate how this process was never total or complete precisely because of the heterogeneity of people, relations, and substances it joined.

The first part of the two-part chapter, Chapter Two, examines the Russian period in Bristol Bay and the relations that accompanied the fur trade. It describes the region's cultural diversity even before its incorporation into Russian imperial rule, and also details the changes that resulted as people and nature came to be pursued for export production. It documents the imposition of categories intended for the control of a far-flung periphery, alongside the transformation of imperial baptisms through the continual negotiations and adaptations that characterized everyday practice in the cultural borderland.

Chapter Three, "Capturing the Return, Part II," looks more closely at the period following the purchase of Alaska by the U.S. in 1867, and the growth of the salmon industry in Bristol Bay from the 1880s. It describes the remarkable diversity of workers that converged on Bristol Bay shores to greet its massive salmon runs, as well as the means by which their energies were harnessed for production. While it draws comparisons between the capitalist strategies employed during this period and the Russian era before, the chapter more pointedly highlights the persistent racialization of difference that came to mark salmon industry practice during this time—and shape relations and identities in the region to this day. It argues for an understanding of production as a site of intimacy in which relations are forged that, at moments, can

interrupt the objectification of work into labor, and even undermine the partitions of activity and belonging through which such distinctions are drawn.

The subsequent chapter, Chapter Four, is entitled "Properties of Restructuring." It shows how the discussions spurred by the downturn in the Alaska salmon industry reflect the play of broader pressures of market-driven economic restructuring, which have been increasingly experienced across fisheries worldwide in the form of rationalization. The chapter argues that Bristol Bay salmon fishers occupy a unique position amid contemporary policymaking currents, however, largely as a result of a particular series of historical contingencies. In detailing these circumstances, the chapter demonstrates the significance of property forms for fishery organization and fishers' self-understanding. It suggests that while property has endowed fishers with power as permit holders, the reconfigurations of relations in terms of ownership has added new dimensions to differentiations within communities. Moreover, while ownership has fueled the participation of fishers in policymaking arenas, I argue that it has also come with risks, and situates fishers complexly with respect to the restructuring initiatives of the present.

Chapter Five, "The Quest for Quality," explores the transformation of fishing labor prompted by fishers' attempts to remake Bristol Bay fish into quality salmon suitable for sale in specialty niche markets. Although promoting quality is often understood by industry participants as a way to simply "make more money with the same raw material," the chapter shows that it entails substantial transformations. Specifically, the chapter demonstrates how quality initiatives—which promote fishing practices like gentle handling, bleeding, and chilling—push and pull fishers to think of their catch no longer as a weighty mass of undifferentiated poundage, but as singularities. Yet the

production of singularity rests upon the increasing regimentation of new sorts of human activities and heterogeneous wild natures. Moreover, the extreme attentiveness required to produce quality is ultimately mobilized so as to make its own work invisible.

Chapter Six, "Signifying Substance," examines the representations through which Alaskan salmon producers position themselves and their products to consumers, including the conditions and consequences of what are often quite contentious battles over labeling. By tracing the composition of categories through which the fish comes to be known in the market, the chapter demonstrates how salmon exchange is enacted through efforts to make legible the places and practices of others. Further, it shows how such categories do not merely rename an already existing thing. Through their circulation as objects of talk and action, product descriptors work to shape the natural bodies and social relationships they would seem merely to represent. At the same time, however, the chapter shows how their movement across contexts of production, exchange, and consumption creates gaps of meaning and status as much as it builds shared referents and solidarities. The chapter's focus on the semiotic work entailed by product positioning expands the scope of the concept of labor developed by the dissertation, as well as the multiple senses of materiality involved in salmon industry transformation.

Chapter Seven, "Other People's Plates," considers the emergence and implications of producers' efforts to imagine their end consumers (and specifically their consumers' consumption habits) as a means of reorienting industry production to service specialty markets. It outlines fishers' perceptions of distant consumers, and explores how their simultaneous identification as producers and consumers influences such

interpretations. Through an analysis of the ways in which fishers' ideas and practices recursively inform their work in production, the chapter confirms the significance of what other scholarly work has theorized as the growing reflexivity of contemporary markets. It diverges from other accounts, however, in interpreting these developments as neither forms of cooperation between producers and consumers in the construction of markets or meanings, nor the straightforward imposition of consumers' sensibilities onto producers. Rather, the chapter argues that the endless refractions of perceptions of presumed desires that underlie the forms of reflexivity characteristic of contemporary markets serve to maintain and even amplify disjunctures and inequalities among the divergent interests and viewpoints of those along commodity chains.

Chapter One

Product Collapse

At first glance, the cannery that the town of Dillingham has grown up around does not call to mind cutting-edge technology or organization. This was even more the case back in 2003, when I began my research in the Bristol Bay region. The century-old cannery complex had not long before been deemed a prime candidate for national historic preservation status, and except for the new fresh-frozen room and a few bunkhouse outbuildings, the entire assemblage seemed stuck in time, oddly unchanged by the intervening decades. Aerial photographs of Dillingham taken in the mid-1900s mark innumerable transformations over the years: Several major town landmarks, buildings prominent in the images, have long since burned to the ground; erosion has taken away whole sections of bluff along the Nushagak River; and the construction of new roads and a boat harbor has altered the townscape considerably. But the long, rectangular cannery buildings visible in the photos are instantly recognizable as the same ones that anchor the local salmon industry to this day. According to the processing company that runs the facility at present, which I call Mermaid Cove, it remains the oldest continually operating cannery in all of Alaska.¹⁸

Most of the cannery structures are suspended atop pilings over the muddy tidal flats of the Nushagak, with small-paned windows and creaking floors built from wooden planks so hefty and worn that they immediately announce themselves as the products of

¹⁸ Unless otherwise noted, I use pseudonyms for the names of people and local businesses.

an earlier age. The canning lines themselves rely on certain equipment and technologies that are nearly as old as, or even older than, the buildings themselves: steam retorts that cook the canned salmon, an innovation borrowed by Pacific salmon processors from eastern vegetable canners in the mid-1870s, as well as the "Iron Chink," the fish butchering machine whose name derives from the assumption that it would eliminate processing labor, then performed mostly by Chinese contractors, when it was introduced to the industry in 1903 (O'Bannon 1982: 28, 1987, Sylvia, et al. 2000: 397).¹⁹ The name is still used unblinkingly to refer to the machines in the cannery today, at least by the seasonal machinists who must now fashion their own parts in order to get the aging equipment up and running each summer.

I spent a good deal of time in and among these cannery structures over the course of my fieldwork, particularly during my first summer in Dillingham, when I joined crews readying the facility for operation before the start of the salmon season. Once the season got underway, I performed stints in a variety of processing jobs between trips out fishing. It was during my period of work at the Egg House, where roe is processed, graded, and

¹⁹ According to historian Patrick W. O'Bannon, the butchering machine invented by Edmund A. Smith "acquired its common name, the 'Iron Chink,' as early as 1903, only a month after it began operating. It is unclear who coined the term, though Smith is generally considered responsible" (1982: 157). O'Bannon notes that the moniker "Iron Chink" was stamped on machine nameplates and displayed prominently in advertisements, and reflected the widespread racist sentiments toward the Chinese at the time; the device's largely realized promise to reduce the number of highly skilled, better paid Chinese butchers on cannery payrolls proved its most popular selling point for processors (1982: 157-158). As O'Bannon (1982, 1987) documents, the invention dramatically increased the productivity of salmon canning, eliminating bottlenecks caused by the faster pace of other, already-mechanized production steps involving can handling, like the steam retorts. Even as the Iron Chink eliminated butchering labor, however, it did not do away with the need for labor on canning lines more generally; Bristol Bay salmon industry historian Bob King points out that increased mechanization and productivity only fueled cannery expansion and increased demand for low-wage workers (King 2003: 6). However, Chinese participation in the U.S. salmon industry progressively waned following the passage of the Chinese Exclusion Act of 1882 and its subsequent renewals, a drop that both prompted and was furthered by canners' adoption of the Iron Chink (O'Bannon 1982). The following chapter examines the contract labor system itself in greater detail.

packaged for shipment, that I happened to be on hand for one of the more dramatic occurrences to befall the cannery that summer.

I was standing on one end of a long warehouse that runs parallel to the cannery building, putting plastic pails of roe into carton boxes and assembling them onto pallets, as I'd been doing for most of the previous fourteen hours or so. Besides the pallets of roe that surrounded me, which were clustered toward the far end of the structure nearest the Egg House, the warehouse contained row after row of towering stacks of the cannery's primary output: canned Bristol Bay red salmon. These shrink-wrapped pallets of "product," as the salmon manufacture is called in cannery lingo, appeared as a gleaming edifice that extended far into the distance. It wasn't quite the height of the season, but by that point all four canning lines were already humming, and operations continued late into the night. The walls of product were rebuilt as fast as the individual pallets could be forklifted into shipping containers. On that evening, like any other at the time, the dark recesses of the warehouse were filled by the seemingly endless repetition of hefty blocks of identical gold cans, which would not be individually labeled for final sale until they passed through yet another facility in Washington State.

I had gotten into a rhythm with my boxing task that night, sliding one sticky set of pails after another into the plastic-lined cartons I had prepared. I was no longer perturbed by the orange goo that seeped from the pails, which had come to coat my clothes and slick the warehouse floor, or even by the conversation of my coworkers, a group of women in their late teens and early twenties who made up code names for their summer crushes and held impassioned debates about the hottest men on television. The boxing cadence of rustlings, thuds, and giggles continued, regular and uninterrupted, until an

unfamiliar rumble sounded from the other end of the warehouse. A few thunderous moments later, an explosion of cans, a forklift, and a substantial area of the warehouse floor lay in a twisted heap of sheet metal, rusted supports, glass shards, and splintered beams. An entire section of the warehouse had caved in, crashing through to the flats below (Image 5).



Image 5. The Warehouse Collapse at Mermaid Cove, 2003. Photo by Karen Hébert.

The two Egg House employees who had been stationed at tables close to the fall, stamping cartons with roe grades, were ashen and agape. So was I, for that matter, as I tore around to the outside of the warehouse to see if anyone might be trapped in the yawning pit of debris. In the pale light of the midsummer Alaskan night, a group of stunned cannery workers gathered around the ragged opening, which was just steps away from the canning lines and the coffee break area. Very fortunately, and somewhat surprisingly, no one had been injured in the fall.

What had caused the collapse? The wooden pilings supporting the floor, erected at some point in the distant past, had rotted through after so many seasons of storms, tides, tremors, freezes, and thaws. They ultimately had buckled and given way under the product's heavy weight. The pilings had been in need of repair or replacement for years, or so the rumors said, but the work was put off due to the cannery's shrinking operating budget. Rather than sinking money into their facilities, processing plant managers across the Bristol Bay region and Alaska more broadly were doing what they could to shave expenses.

At the Mermaid Cove cannery, for instance, fishers and processing workers reported that the company was whittling down longtime bastions of largesse: The latenight meals provided to employees during the peak season had been reduced to the paltry pickings of a sandwich bar, and the office had become tight-fisted with pre-season "POs," or purchase orders, advanced to fishers to help them pay for supplies. In fact, it was whispered that "Seattle," the site of the corporate headquarters, a wholly owned subsidiary of a Japanese food conglomerate, had long considered closing down the Dillingham plant altogether. Cannery workers and managers alike murmured that the plant could have easily been shuttered if Mermaid Cove's parent company had lost a major price-fixing lawsuit that had been tried in Anchorage earlier that spring. While the closure of the facility at that point would have undoubtedly been a blow to the region, it

would not have seemed outside the realm of possibility: Many of the major fish buyers on the Nushagak had come to operate solely with "floaters," large ships equipped with onboard processing facilities, which anchored in area waters only for the summer salmon season; and of the five or so land-based processing plants on the Nushagak through the early 1990s, only the Dillingham Mermaid Cove cannery was still running in 2003.

When I witnessed the cannery collapse during that first summer of fieldwork, and for quite some time to follow, it seemed to me a striking symbol for the much-lamented collapse of the Alaska wild salmon industry more generally—or at least how it had been represented at the time by many producers and policymakers alike in the flurry of discussions that surrounded its downturn. Yet as my fieldwork continued, I was confronted with both incidents and non-incidents that unsettled this initial interpretation, as well as some of the underlying assumptions that had informed this assessment.

In this chapter, I provide an account of the downturn in the Alaska salmon industry that grounds my investigation, along with an analysis of how the crisis has been understood and experienced by a range of industry actors. I show how, for analysts as well as these actors, seeing the decline through metaphors of collapse is multiply determined by the particular positions Bristol Bay salmon producers inhabit as fishers, rural Alaskans, wild salmon harvesters, and participants in a capitalist industry, each of which comes with its own attendant risks in light of recent global shifts. Much of the chapter provides details to flesh out a fuller sense of both these shifts and the precariousness they prompt. At the same time, I draw on the experience of Bristol Bay producers themselves to suggest that crisis is perceived much more multifariously that it would seem at first glance, both because of long histories of industry involvement as well

as other kinds of pasts. In so doing, I argue that capitalist crisis is at once enacted through and limited by the spatial, temporal, and material forms that constitute what Dipesh Chakrabarty describes as "the excess that capital, for all its disciplinary procedures, always needs but can never quite control or domesticate" (2000: 60).

The chapter is divided into four main parts. The first, "Crisis Modes," examines the shape, scope, and tenor of the industry downturn as it appeared in the early 2000s during the all-time lows in which I began my research. The second, "Sea Changes," provides an overview of the radical transformations experienced by global salmon industries, markets, and spatiotemporalities over the past few decades. The third, "Reimagining Crisis," takes a closer look at how different representations of crisis have been formed and experienced. It examines the figure of the global market that animates popular and academic understandings of the downturn, and considers the implications of its circulation in Bristol Bay. Lastly, the chapter's final part, "Envisioning the Return," explores the multiple ways in which producers reframe crisis and set their sights on industry recovery.

Crisis Modes

Conditions of Crisis

There is no shortage of documentation attesting to the profound crisis facing fisheries across the globe. In fact, it is difficult to find a discussion of contemporary global fisheries that does not make explicit reference to their common state of crisis. Both popular media accounts and a vast scholarly literature across a number of disciplines have established that most of the world's fisheries, "from the coldest arctic regions to the warmest tropical seas," are at serious risk of overexploitation, as

anthropologist James McGoodwin opens his book *Crisis in the World's Fisheries* (1990: 1). By the early 2000s, a growing number of studies underscored the scale and scope of this crisis, documenting rampant overfishing as well as other impinging conditions like degraded water quality, drained wetlands, polluted estuaries, and heavily developed coastlines. Such were the findings of two comprehensive assessments of U.S. oceans released in 2003 and 2004. Despite some differing details, as newspaper coverage at the time noted, "Both of these national commissions, one public and the other private, come to similar conclusions. America's oceans are in crisis" (Reichert 2004).

In light of the bleak picture of oceans and fisheries worldwide, it seems especially noteworthy that the recent struggles of the Alaska salmon industry have actually quite little to do with many of the difficulties that plague other fisheries. In sharp contrast to other regions—like the salmon-spawning areas of the U.S. Pacific Northwest, for example—the most salient problems currently facing Alaska's salmon industry do not stem from pollution, habitat degradation, overfishing, or any form of stock depletion.

While certain salmon populations in specific Alaskan regions or river systems have experienced worrisome declines in recent years, the state's wild stocks as a whole are actually reasonably healthy at present. This becomes especially evident when viewed in comparison to other wild salmon fisheries: In evaluations of salmon runs across the North Pacific, the websites of independent monitoring bodies document shrinking ranges for numerous salmonid stocks, and contain lengthy listings of endangered populations throughout Russia, Japan, Canada, and the California and Oregon coasts of the U.S. (e.g., State of the Salmon 2007b, a). A report synthesizing existing research on North American salmon gauges the condition of Alaskan stocks to be "strong," versus a more

"mixed" prognosis for British Columbia, "weak" conditions in the U.S. Pacific Northwest, and "very weak" ones for Atlantic salmon in the northeastern part of the continent, where there are extremely limited returns and no commercial salmon fisheries at present (Knapp, et al. 2007: iv-v). Indeed, no Alaskan salmon are considered threatened or endangered; Alaskan officials regularly assert that "the state has the healthiest stocks of wild salmon...in the world" (1990); and the state management department feels bold enough to proclaim its "world-famous salmon program" a "Story of Success" (ADF&G 2007d: 1). The 2005 total commercial catch of all Alaska salmon was 221 million fish, a record harvest that exceeded the prior high of 218 million fish set in 1995 (Eggers 2006: 1).²⁰

Bristol Bay itself is widely acknowledged as home to the largest sockeye salmon runs in the world. Although returns of all species to the Bay have dipped since their historic highs in the 1980s—with numbers dropping rather low during some years in the late 1990s and early 2000s, and returns remaining puzzlingly weak for the Kvichak River on the east side of the Bay, historically the area's largest producer—the fishery as a whole has experienced fairly strong returns in recent seasons as well. For the last four years, for instance, Bristol Bay sockeye salmon returns have ranked among the 15 largest inshore runs since 1952, with 2004 standing out as the tenth largest year on record (ADF&G 2008d).

²⁰ There are some who are wary of the claim that strong Alaskan salmon populations are primarily the result of successful management programs, and question whether high harvests should be so straightforwardly treated as a "a proxy for healthy salmon populations" (e.g., Konigsberg in Knapp, et al. 2007: 13). A report commissioned by the environmental organization Trout Unlimited argues that "the apparent success of Alaska's salmon management has been due, in large part, to fortuitous circumstances," and suggests that "[h]igh returns can mask diminishing genetic diversity of stocks" (Konigsberg in Knapp, et al. 2007: 13). Certainly high harvests in earlier decades often belied deep and growing resource depletion (see Cooley 1963 for an extended discussion of this recurring phenomenon in the Alaska salmon industry).

Yet despite relatively strong salmon populations, Alaska's wild salmon industry since the early 1990s has fallen into what is widely discussed as a "crisis" of its own. As analysts are quick to note, the problems facing the industry are not primarily ecological but economic in both cause and effect. While such sharp conceptual distinctions between the ecological and the economic are blurred by even the most cursory efforts to understand the situation, it is certainly the case that the ecological conditions implicated in the downturn are not those of environmental collapse or dwindling fish populations.

Rather, the circumstances to befall the salmon industry evidence the more familiar and recurrent contours of capitalist crisis, which, alongside and in addition to the resource depletion it might also promote, represents an increasingly acute problem faced by fisheries worldwide. "Crisis has been a recurrent phenomenon" among a number of export-oriented commercial fisheries, one comparative analysis posits, "however, the situation is more troublesome and prospects bleaker than before" (Apostle, et al. 1998: 3). An expanding body of academic research has documented the especially severe dislocation experienced by a wide variety of fishing regions, communities, and households in the face of recent global economic shifts and the increasing volatility of contemporary markets. As an examination of the Bristol Bay salmon industry argues, it has become clear that the sustainability of the fish resource itself does not necessarily ensure the sustainability, in the sense of economic viability, of the fishing communities dependent on it (Robards and Greenberg 2007).

Evidence of Crisis

When I arrived in Alaska in the fall of 2002, the troubles of the salmon industry, which extended across most state fishing regions, had reached stark proportions. The

statistics paint a picture of a state of affairs that fishers, processors, and coastal residents saw all too clearly in their daily lives—plummeting prices, earnings, investments, and town tax bases, along with attendant bankruptcies, foreclosures, loan extensions, and indebtedness, not to mention a fair amount of worry and hopelessness. The monetary value of all Alaskan salmon harvested during the 2002 season was down a startling 75 percent from the yearly averages recorded during the 1980s, adjusted for inflation (Knapp 2006: 19; see Figure 5).²¹

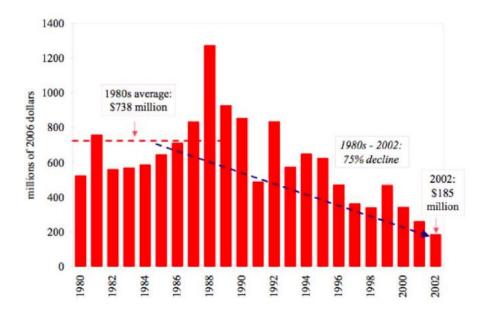


Figure 5. Alaska Salmon Harvest Values, 1980-2002 (Adjusted for Inflation) (Figure source: Knapp 2006: 19)

The downturn in Bristol Bay itself was even more dramatic. As one report from the early 2000s notes, adjusted for inflation, "the value to fishers of the annual Bristol Bay harvest has recently declined to less than 10 percent of historic highs and only 20

²¹ Unless noted, as in this case, monetary values are not adjusted for inflation.

percent of its average value from 1980-2000" (Link, et al. 2003a: 1). Economists note that these drops in value are largely the result of sharp drops in ex-vessel prices (Bjorndal, et al. 2003: 13), which are the average prices per pound paid to fishers for their catch based on post-season adjusted values. Whereas Bristol Bay fishers had sold their sockeye salmon to processors for upwards of \$2 a pound in 1988, prices hovered at just over 40 cents in 2001 (CFEC 2004b: 4).

The precipitous drop in fishing incomes that such figures suggest was paralleled by a downward spiral in the monetary value of fishers' permits and vessels. In little over a decade, from 1990 to 2002, the estimated market value for all Alaskan commercial salmon permits statewide sunk over one billion dollars, a full 84 percent (Gilbertsen 2003: 4). Analysts estimate that the drop in permit prices was "probably matched by a similar trend in vessel valuation" (2003: 4).

This dramatic loss of equity represented a serious hardship for the retirement prospects of many longtime fishers. It also presented considerable hurdles for more recent entrants, particularly those who were still paying off loans on their boats or permits. For example, by 2002, fishers who had bought Bristol Bay drift permits during the heady days of the late 1980s—when the going rate for a permit averaged \$248,802, as in 1989—were finding it difficult if not impossible to meet their loan payments. Many still owed tens of thousands of dollars on an investment whose current market price had sunk to a mere \$19,700 (CFEC 2007b). A survey of Bristol Bay permit holders indicates that, during 2001, only 28 percent of respondents with permit or boat loans were able to make their full payments (CFEC 2002: 5).

Such figures direct attention to another striking piece of data: By the early 2000s, a significant proportion of Alaskan salmon fishers were no longer making any money at all from fishing, but were actually losing money during each season of work after expenses like gas, food, and insurance were taken into account. According to the survey cited above, over a third of Bristol Bay fishers were unable to cover all their operating costs during the 2001 season (CFEC 2002: 6). Moreover, the vast majority were not able to pay themselves for time spent fishing, earn a return on their fishery investments, or set aside any money for future investments (CFEC 2002: 5-6). Although it was plainly evident to all fishers that their end-of-the-season payouts from processors had shrunk significantly, the full extent of their losses was not always as immediately discernible, given that fishing typically requires investments that are paid and pay back over many years. What was crystal clear to those I met during my research, however, was that they were finding it increasingly difficult to even be able to "afford to fish" at all, as they put it, to secure the money needed to cover a season's sizeable start-up costs.

In the face of the industry downturn, participation had dropped off in many Alaskan salmon fisheries, including Bristol Bay. From 1990 to 2002, the number of permit holders participating in statewide salmon fisheries dropped by 37 percent (Gilbertsen 2003: 3). Bristol Bay similarly witnessed a jump in "inactive permits" (Northern Economics 2003: E9). Moreover, of those Bristol Bay permit holders who fished in 2001, more than two thirds had cut back on their insurance coverage and three quarters had reduced the amount of time spent fishing in order to lower costs, while over 90 percent had reduced or postponed maintenance on vessels, gear, or equipment (CFEC 2002: 7). Fishers' attempts to modify their practices in the face of increasingly

challenging fiscal hurdles draws attention to their growing inability to participate in the fishery altogether.

This, along with dwindling fishing incomes, only fueled the continued divestiture of permits by participants with fewer resources. In addition to the other disquieting statistics already mentioned, the well-documented "permit drain" or "out-migration" of commercial fishing permits from the hands of Alaska Native area residents, which has existed since the permit system was established in the early 1970s (see, for example, Kamali 1984, Langdon 1980, Oakley 1989), and has only been furthered over the recent years of hardship. In fact, a 2006 study indicates that of the growing rural, local permit decline in fisheries across Alaska due to "transfer activity," which mostly involves permit sale, over 67 percent is attributable to transfers made in the Bristol Bay salmon fishery alone (Tide and Free-Sloan 2006: 7).

Moreover, it was not only permits that were migrating out of rural regions during this difficult economic period—it was also people themselves. Even more than due to permit transfers, permits were leaving rural Alaska because individual permit holders were moving to urban areas (Tide and Free-Sloan 2006: 7). Like the permit drain, the increasing migration of Alaska rural residents, particularly Alaska Natives, to urban centers has been a pressing policy issue and topic of social scientific research for many years. Studies have documented rising numbers of Alaska Native rural migrants during each of the past three decades, both from outlying villages to regional hubs, and from rural regions to cities (Goldsmith, et al. 2004: 2-41). Despite its decades-long trend, the matter of rural out-migration was only of heightened concern with the salmon industry downturn.

Experience of Crisis

These statistics and survey data confirm a great many of the responses, coping mechanisms, and difficult daily realities fishers expressed and exhibited at the time. During a visit to the Nushagak River village of Koliganek in February of 2003, I spoke with a number of fishers whose recent experiences brought vivid concreteness to concepts like "inactive permits" and "permit drain." A predominantly Yup'ik Eskimo village with a current population of about 165, Koliganek is a located on the Nushagak 65 miles northeast of Dillingham, past the other upriver villages of Portage Creek, Ekwok, and New Stuyahok (Alaska Department of Commerce 2007). Although Koliganek boasts a K-12 school, two small stores, a health clinic, a village public safety officer, and a post office, virtually all other services are located in Dillingham. Individuals and families in Koliganek have actively participated in the Bristol Bay commercial fishing industry for many years (see VanStone 1967: 81).

When I met lifelong Koliganek resident Charlie Ralph that winter, he held one of the expanding number of inactive Bristol Bay drift permits. Working for much of the year as the janitor at the village school, Charlie had—until the prior season—been fishing for forty years, twenty of those as a captain. Like so many area fishers, he had begun commercial fishing early in life. He helped his grandmother fish on the beach from the age of five, and began working on family drift boat operations by the time he was nine. In our conversation in early 2003, he told me that his steadily decreasing salmon earnings had become "real noticeable" over the past five years. In the prior few years, he had found that at the end of the season, he "didn't go home with enough to cover expenses...The last year I was fishing, I came home with nothing." His boat engine had

gone bad, but he couldn't afford to replace it. Charlie presented this as emblematic of how frustrating the whole endeavor had become, and why he had not long before decided to sell his permit and retire from fishing altogether. His brother had already agreed to buy his boat. If he were making the same money fishing he once did, he mused, "I'd stay in it—if I were able to buy a new engine when I needed one, not when I could afford it."

Charlie had spent the summer before "on the beach," as he put it, "after I realized I couldn't be out there." Instead of heading down to the Dillingham harbor when the salmon started running, he stayed in the village, continuing to work at the school and tending his smokehouse overlooking the Nushagak River. But not going out commercial fishing for the first time in forty years "kinda hurt," he reflected. "For the first couple weeks, I got kind of emotional," he confided, his voice tightening. Nevertheless, Charlie was adamant that after "all these years fishing and having fun, it wasn't fun anymore." Among a number of other reasons, he acknowledged that he'd grown accustomed to the financial boons fishing had once delivered—"making lots of money" and "going on vacation," for example, as well as being able to "buy what [he] needed," like a snowmachine for winter hunting or an outboard motor for his skiff—and felt that coming home with "nothing" was demoralizing after a season of work he considered demanding and "dangerous." As we talked, he spoke about what had motivated his fishing in prior decades. "I fell in love with fishing," he declared, describing that he fished throughout the 1960s and 1970s "for the thrill of it." It was a "tradition to fish," he explained; he "didn't care about price." At this point, though, he stopped himself. "Well, nowadays I do," he explained, "because everything's so expensive."

In response to my interview questions, Charlie made clear that he was not planning to gift his permit to family members. Various Koliganek residents outside his family had served as his primary crew for most of his years fishing, and his own children had taken up other jobs. His son had been working year-round on trawlers in the Bering Sea.²² Plus, he reasoned, "fishing's changed anyway." Charlie also said that he did not specifically intend to sell his permit to another Bristol Bay-area resident. In fact, he hadn't even mentioned to anyone in the village that he was considering selling his permit. Instead, he'd contacted his "friend in Dillingham who does taxes,"²³ and "asked him to ask around" for a buyer. "It doesn't matter where the buyer's from," he replied to my follow-up questions. Although I did not press Charlie further to explain his decision, his seeming disinterest in keeping his permit in the village may be a reflection of something very different from any obliviousness or indifference to the permit drain problem. In arguing that rural village residents' lack of capital, while a key factor in fueling permit out-migration, does not explain every aspect of the phenomenon, anthropologist Stephen J. Langdon (1995) has pointed out that at least some rural residents deliberately avoid selling their permits to others in the village, as this kind of exchange would make their slipping status acutely manifest.

²² The employment of Bristol Bay-area residents in the Bering Sea groundfish (species including pollock, cod, mackerel, and sablefish) industry has increased substantially in recent years due to the activities of the Bristol Bay Economic Development Corporation (BBEDC), an agency formed by the Alaska Community Development Quota (CDQ) program. The BBEDC is one of six regional corporations established in 1992 to manage allocations of the total allowable (TAC) catch of Bering Sea fishery resources for the benefit of rural communities in western Alaska (see CDQ 2007). The BBEDC has chosen to invest a significant percentage of proceeds from the harvest of its groundfish TAC back into that industry. Thus, as the BBEDC website notes, "Jobs on the Bering Sea are made available by our Partner Companies, Arctic Storm, Icicle Seafoods, Fishermen's Finest, Alaska Leader and Kaldestad Fisheries. We have invested in these companies so in turn they invest in our residents through employment and training. Last year, approximately 182 residents earned a total of \$664,000.00 adding to our local economies" (BBEDC 2007).
²³ We will meet this Dillingham tax preparer in upcoming chapters. As I would eventually come to learn, Charlie's unnamed friend is none other than Eric Redfield, who by sheer coincidence would soon become my Dillingham landlord and neighbor. There are few degrees of separation in Bristol Bay.

As Charlie and I kept talking, he reflected on what the sale of his permit would feel like. "I don't know how to put it into words," he said slowly. "It will hurt to see something like that go."

Analysis of Crisis

When I first met with Gunnar Knapp²⁴ at his office in the University of Alaska, Anchorage's Institute for Social and Economic Research (ISER), the research group had yet to move to the sleeker space it inhabits at present. Knapp welcomed me into a cramped room full of books and papers located along a hall of faded, camel-colored carpet in an aging building that never failed to remind me of the campus' prior life as a community college. (Evidently I wasn't the only one with this impression, since the structure had already been slated for major renovations.) Knapp is one of the leading economic analysts of the Alaska salmon industry. Given the severity of its crisis in the early 2000s, he was a highly visible expert.

Despite the unassuming surroundings, Knapp and fellow ISER researchers would formulate findings during this period that would prove to have weighty significance for the conceptualization of the salmon industry's troubles as well as the policy prescriptions that were pursued in turn. Along with a handful of coauthors, Knapp has generated a great deal of the data and analysis that has informed widely reproduced accounts of the downturn, including much of what is cited in this very chapter. This expertise made him a prominent figure in statewide and fishing industry media coverage at the time; it was unusual to find a newspaper article or magazine piece about the crisis that did not quote

²⁴ Note that this is not a pseudonym. Given the nature of Knapp's academic contributions and their importance to my own analysis, as well as his role as a public figure, I use his real name.

him. Moreover, he also served as a regular consultant to fisheries policymakers, and was a fixture at the many meetings, conferences, hearings, and workshops that were convened to discuss salmon industry concerns. Across such forums, he was typically called upon to present his research findings, not to mention his predictions for the future (e.g., Knapp 1998). In traveling between these varying spaces, Knapp was not simply a scholar of Alaskan fisheries economics. Like a number of other individuals—including state officials, regional political leaders, involved fishers, processing executives, and industry consultants—he was also a player in a relatively tight-knit Alaska salmon scene.²⁵

Given the prominent role Knapp and other recognized experts assumed in producing and disseminating analysis of the salmon industry's plight, it is perhaps unsurprising that industry participants' everyday understandings of their experience bear some relationship to the way the downturn was modeled on ISER computers and made visible at the time—through the proliferation of graphs, charts, images, and narratives that were circulated quite broadly during the early 2000s and are reproduced in various forms in the pages to follow. These economic models outline a constellation of interacting factors responsible for the Alaska salmon industry's downward spiral. But these and popular accounts all converge in emphasizing one especially significant fact: the rise of farmed salmon.

As world salmon production data suggests quite dramatically (Figure 6), an exponential increase in aquaculture production has occurred over the past few decades, resulting in a rising volume of farmed fish and a radical shift in global salmon markets. In 1980, farmed salmon constituted just one percent of the global salmon supply (FAO in

²⁵ I describe this scene more fully in Chapter Three, where I also further explore the implications of the overlapping roles held by economists and others in constructing contemporary markets.

Naylor, et al. 2003: 20). But by 1991, farmed salmon production had surpassed Alaska's entire salmon harvest (Knapp, et al. 2007: 60), and would quickly grow to exceed total U.S. salmon production (Sylvia, et al. 2000: 399). By 1996, salmon output from aquaculture had outstripped that from wild-capture fisheries worldwide (Knapp, et al. 2007: 60). And by 2003, over 60 percent of the world's total salmon supply was being generated by salmon farms (Bjorndal, et al. 2003: 3). In just over two decades, farmed salmon production worldwide increased more than ten fold (Bjorndal, et al. 2003: 2).

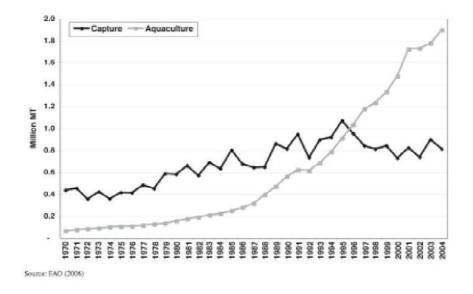


Figure 6. World Salmon Production: Wild (Capture) versus Farmed (Aquaculture) (Figure source: Knapp, et al. 2007: xii; statistics include both salmon and trout)

The effect of this aquaculture boom has been a massive increase in the amount of salmon sold on the world market and consumed across the globe. The global supply of all salmon, including both farmed and wild, increased nearly four fold from 1980 to 2001 (Bjorndal, et al. 2003: 2). Although wild-capture production rose moderately during this

same period, it is clear that, as the authors of one report note, "farmed salmon is the source of the trend growth in total salmon supply" (Bjorndal, et al. 2003: 3). The increasing ubiquity of salmon at supermarket seafood counters and on restaurant menus in particular places across the globe speaks to the fact that there really is much more salmon in the world than there was twenty years ago, a direct result of rising salmon aquaculture production.²⁶

Along with the rapid rise in farmed salmon production and the increase in total salmon supply, prices for wild salmon have sunk. "The causes of the decline in prices are complex," Knapp argues along with a team of fisheries economists in a recent report on competition between farmed and wild salmon, noting that different species and product forms sell into distinctly different salmon markets (Knapp, et al. 2007: x). "However," the authors add, in most cases, "the single most important factor contributing to the decline in prices has been growing competition from farmed fish" (Knapp, et al. 2007: x).

In later chapter sections, I more closely scrutinize the notions that inform and infuse dominant accounts of industry change—visions of the market, the global economy, globalization, and even crisis itself. I pay special attention to the representational practices through which these concepts and the sensibilities they craft are composed, as well as the ways in which these figurings are encountered and created by industry participants themselves. In the upcoming sections, however, I lay the groundwork for my

²⁶ This is not to imply that fish farming produces straightforward net gains in fish biomass. Whether salmon aquaculture can be considered sustainable in its current form, or whether it can be said to promote the productivity of fisheries broadly, are questions that have been taken up by other researchers and are far beyond the scope of this study. Suffice it to say that the farmed production of omnivorous or carnivorous fish like salmon, at least as currently practiced, requires much more fish biomass in the form of fish meal and fish oil inputs than are produced as a result. As one report documents, for the ten most commonly farmed species, about 1.9 kilograms of wild fish are needed as feed to produce one kilogram of farmed fish; each kilogram of farmed salmon requires 3.16 kilograms of wild fish inputs (Naylor, et al. 2000: 1019).

later discussion by first providing a fuller overview of the sea change in salmon production that has occurred in recent years.

Sea Changes

As fisheries economists contend, the rise of salmon farming has not merely altered the economics of global salmon market. Rather, they suggest, it has constituted a more fundamental change to the market itself, ushering in what some have dubbed as a "new world order" in salmon markets and industries worldwide (e.g., Anderson 1997, Sylvia, et al. 2000). Indeed, the farmed salmon industry has played a critical role in shaping the markets it would seem merely to service. At the same time that the proliferation of fish farms has resulted in more salmon in circulation, it has also changed the very nature of that salmon, including the species that dominate world supply, the product forms in which salmon is sold, and the availability of these products across both space and time, not to mention the appearance and the taste of the fish itself (see Knapp, et al. 2007: i). Furthermore, the contemporary salmon trade has been deeply informed by the organization of the farmed industry as it has been structured and restructured over the course of its relatively short history.

Of Growth and Growout Sites

Commercial salmon farming began in the 1970s, primarily in Norway but also to a lesser degree in Japan, Scotland, Canada, the U.S., and Chile (Anderson 1997: 176). According to Knapp et al. (2007: 59), efforts at artificial propagation were inspired by the awareness that existing salmon stocks were in decline, along with the hope that populations could expand beyond their native ranges. In this vein, aquaculture has been

touted by a number of its proponents as "a 'Blue Revolution' that matches the Green Revolution of higher grain yields from the 1950s onward," an innovation promising to "maintain living standards while averting the ruin of the oceans" (e.g., Sachs 2007: 38). The development of the farmed salmon industry has also been fueled by aspirations of entrepreneurial coups and commercial conquests. In his book *Salmon Fever: The History of Pan Fish* (2005), an account of one Norwegian salmon farming firm, Aslak Berge chronicles a world of dealmakers, bankers, and strategists striving to outmaneuver one another in competing profit-making quests.

The first fish farming operations relied on many of the technologies that had been developed earlier by hatcheries. While the human culture of salmonids has its origins in the late 1700s in Europe, hatchery propagation of salmon did not begin until the second half of the nineteenth century, and did not operate on a significant scale until the 1950s (Anderson 1997: 175, Knapp, et al. 2007: 57). Hatchery production entails collecting salmon milt (sperm) and roe (eggs), fertilizing and incubating them, placing hatched fish into holding tanks to grow and develop, and, finally, releasing them into area waters once they have reached a certain level of maturation. Hatchery programs grew considerably in Japan, USSR, Canada, and the U.S. in the second half of the twentieth century (Anderson 1997), especially with the curtailment of much high-seas fishing in the mid-1970s as a result of several different international regulatory rulings (Knapp, et al. 2007: 59).

At present, hatcheries represent a major source of salmon, contributing as much as 40 percent of non-farmed salmon harvests in recent years (Sylvia, et al. 2000: 394). Their significance is especially pronounced in areas like the U.S. Pacific Northwest, where hatchery fish comprise between 70 and 80 percent of coastal salmon and trout

fisheries (Northwest Fisheries Science Center 2007). Although hatchery production is often discussed as a form of aquaculture per se (e.g., Anderson 1997), the most recent analyses group hatchery fish within the broader category of "wild salmon' to refer to all salmon that are not farmed" (e.g., Knapp, et al. 2007: 5 note 1). Hatchery production in Alaska has long been considerable.²⁷ According to Sylvia et al., "Alaska was the first U.S. state to actively promote hatchery programs, creating the Fisheries Rehabilitation, Enhancement, and Development Division (FRED) in 1971," which initially authorized the private non-profit hatcheries that operate to this day (2000: 396).

Salmon farming involves some of the same techniques of artificial propagation as hatchery production, but also entails the rearing of fish, typically in net pens in coastal waters, until the point of harvest. As Knapp et al. (2007: 58-59) detail, and I summarize here, the entire farming process has been engineered to mimic the life cycle of anadromous salmon, with its freshwater and marine phases, albeit in as protected and controlled environments as possible. Like hatcheries, fish farms raise young salmon in holding tanks and provide these fry with feed made up of ingredients such as freeze-dried fishmeals and fish oils, which facilitate rapid growth. The fry grow in size to become fingerlings, continuing to mature until they undergo a variety of physiological, morphological, and behavioral changes through which they become smolts, now suited for life in saltwater marine environments. Whereas hatcheries usually release fish at around this point, fish farming operations transport smolts in specialized tanker trucks or well boats from the production facility to the marine "growout site," generally net pens supported by a floating structure. There, the fish continue to be fed until they reach a

²⁷ The status of hatchery fish among those Alaskan salmon marketed as wild is considered at more length in Chapter Six.

predetermined "market size," at which point they are moved to processing facilities, often right nearby. To this end, they are often pumped live from the net pens through large suctioned tubes and transferred to holding pens, from which they are ultimately pumped directly into the processing plant itself (see also Knapp 2002a).

Although the farmed salmon industry can today be considered "one of the most important examples of commercially successful intensive aquaculture in the world" (Knapp, et al. 2007: 57), its astounding rise and newfound commercial dominance has only been achieved by dint of an extraordinary amount of scientific research and government sponsorship, technological innovation and not-always-successful experimentation, infrastructure construction and development, and product marketing (see summary of Foster 2002 in Knapp, et al. 2007: 67-69). Norwegian aquaculturists and capital led the charge, and by the end of the 1970s Norway possessed the only "penraised salmon industry of any significance" (Anderson 1997: 176). Although the Norwegian industry was still quite small at that point, its well-developed fish-farming technology set the stage for rapid growth in the years to come (Naylor, et al. 2003: 20).

The 1980s witnessed the swift expansion of salmon farming, first in Norway. However, government restrictions on farm size in Norway pushed aquaculture investment and expansion into other temperate locations elsewhere, like Scotland (United Kingdom), Ireland, Chile, Canada, and the Faroe Islands (Denmark) (Knapp, et al. 2007: 61, Sylvia, et al. 2000: 397). Knapp et al. note that these industries were boosted throughout the 1980s and 1990s by a "combination of suitable environmental conditions and probusiness governments in these locations, as well as the expansion of international trade" (2007: 61). In the years from 1980 to 1987 alone, salmon aquaculture production saw a

thirteen-fold increase (Naylor, et al. 2003: 20). By the late 1980s, pen-raised fish dominated European markets for fresh and frozen salmon, and constituted 90 percent of fresh imports on the Japanese market (Anderson 1997: 179).

This substantial growth in aquaculture operations was especially dramatic in Chile, which "became the second largest producer of salmon in the world in 1992, and now produces at a level commensurate with Norway" (Knapp, et al. 2007: xiii). Data indicate that the Chilean farmed salmon industry grew at an average rate of 42 percent a year from 1984 to 2004 (Knapp, et al. 2007: 57). Environmental conditions are favorable for year-round farmed salmon production in Chile, and the industry has had the advantage of easy access to other fisheries that can be used to produce the fishmeal necessary for salmon feed. But the industry's growth can also be attributed to "low-cost skilled labor, minimum interference from commercial and recreational fishermen, a favorable regulatory climate and less pressure from environmental groups than elsewhere" (Hicks 1995 in Knapp, et al. 2007: xiii). As Gilbertsen writes:

The competitive advantage Chilean farmed salmon enjoys is largely based on less stringent environmental regulation and the low cost of labor. Over 90 percent of Chile's salmon industry is located in The Region of the Lakes, one of the poorest areas in the country. In 2001, the average wage paid to Chilean workers in the salmon industry was \$199 U.S. per month, with 80 percent of the workers averaging \$133. In the same year the Chilean government's poverty level for a family of four was \$240. Alaska seafood processing workers, protected by minimum wage laws, earned an average monthly salary in excess of \$2,100 in 2001 (2003: 5-6).

Back at the Ocean Ranch

As farmed salmon production worldwide began to skyrocket in the late 1980s and early 1990s, the Alaska wild salmon industry was just beginning to contend with the implications of the changing world market that the rise in aquaculture had wrought. Most accounts of the State of Alaska's initial response to the increasing production of salmon farms emphasize officials' "indifference" to the developments and seeming obliviousness to the impending crisis (e.g., Anderson 1997: 176-177, King 2003: 12). At the time, fisheries economist James L. Anderson argues, Alaskan producers and agents were instead focused on management matters, and on the development of state hatchery programs (1997: 177). Moreover, as later sections will explore, these were boom years for many Alaskan salmon fisheries, particularly in Bristol Bay.

By the late 1980s, fish farming had indeed risen to be a topic of discussion in Alaska salmon industry circles, but there is evidence to suggest that many still "could not believe that the fixed costs of artificially farming fish could ever compete with a wild product" (King 2003: 12). In 1987, the State of Alaska imposed a moratorium on all forprofit finfish farming, which became permanent the following year (Anderson 1997: 178). In 1990, following the release of a report by the state-appointed Finfish Farming Task Force, a statute prohibiting finfish farming was passed by the state legislature (1990). Since that time, the sentiment against fish farming has only deepened across the state. From small coastal hamlets to major cities like Anchorage, anti-aquaculture bumper stickers—e.g., "Friends Don't Let Friends Eat Farmed Fish - Support Alaska's Wild Fisheries"—have been a common sight for well over a decade. Thus, there is widespread consensus (even among those who would wish it otherwise) that the provisions outlawing fish farming in Alaska show no signs of being overturned in the foreseeable future, despite continuing industry difficulties.

As Anderson (1997: 178) recounts, and as is evident in the text of the ban, the explicit reasons for Alaska's prohibition of fish farming centered on environmental

concerns. Like agricultural feedlots, in which large numbers animals are confined together in relatively small spaces, fish farm net pens provide a prime site for the spread of disease and parasites—which aquaculture operations typically address by administering vaccinations, plus antibiotics in feed pellets when outbreaks occur (Naylor, et al. 2003: 30). Moreover, also like feedlots, fish farms produce significant amounts of waste, which can create localized marine dead zones as well as larger area pollution and water quality degradation. While effluents consisting of uneaten salmon feed, fish fecal matter, facility chemicals, and pharmaceuticals may be diluted through the movement of tidal currents, they can also be spread to adjoining areas this way (Naylor, et al. 2003: 31). Such problems have been mitigated to some degree in recent years: The level of antibiotics used in salmon feed has declined dramatically in at least some farm contexts over the past two decades (Knapp, et al. 2007: 59), just as effluent volumes have decreased through efforts to facilitate "feed uptake and digestion by the fish" (Naylor, et al. 2003: 31). Yet these conditions remain fundamental challenges to intensive aquaculture production, and continuing issues for those concerned about the implications of the industry for the health of ecosystems and human consumers alike.

In banning finfish farming, the Alaska legislature also cited concerns about the potential for adverse interactions between wild Pacific salmon stocks and escaped farmed salmon, which was, then as now, largely Atlantic salmon (see Alaska Finfish Farming Task Force 1990: 7-9). The potential for competition between native and introduced salmon over food and habitat—as well as the genetic intermingling of wild and farmed stocks of any Pacific species—were also among the issues raised, which remain concerns in light of present-day Canadian aquaculture development not far from Alaskan waters,

especially in the southeast part of the state, not to mention current proposals to promote aquaculture development nationwide in federal waters offshore.²⁸

Nevertheless, Anderson points out that many of the same genetic and biological questions raised about fish farming also pertain to hatchery production, which was being enthusiastically pursued in Alaska in its incarnation as "ocean ranching" at around the same time that the fish farming moratorium was enacted (1997: 178). Research has long demonstrated that hatchery fish, like farmed fish, develop significant genetic differences compared to wild fish and are potentially harmful to wild stocks when they interact (Knapp, et al. 2007: 44). Anderson thus argues that other motivations besides ecological concerns were likely at play in the Alaskan ban. Even at the time, some explicit concern was being raised about the socioeconomic implications of intensive aquaculture: The 1990 Finfish Farming Task Force report pithily notes that "Non-Alaskan investment in the finfish farming industry would lead to the exportation of profits," and that, "There are economic incentives toward vertical integration in salmon farming to take advantage of all profit centers" (Alaska Finfish Farming Task Force 1990: 22, 24). Anderson contends that opposition to fish farming in Alaska can be attributed at least in part to the wariness

²⁸ These proposals concern fish farming in the U.S. Economic Exclusive Zone (EEZ), the area three to 200 miles offshore that is controlled by the federal government. The aquaculture program organized under the U.S. National Oceanic and Atmospheric Administration (NOAA) was a major force in developing the National Offshore Aquaculture Act of 2007, a bill that has not yet been passed into law. According to NOAA, the act is intended to establish regulatory parameters for any future aquaculture development in the EEZ, and is part of a broader "national initiative to help the United States become more self-sufficient in the production of seafood. This initiative is based on sustainable commercial marine fisheries complemented by robust domestic aquaculture production" (NOAA 2008b). NOAA's recent efforts to promote aquaculture in the EEZ have been greeted with "concern" by many Alaskans and even the State of Alaska itself, given its stance on finfish farming within state waters (The State of Alaska 2008a).

of Alaskan fishers and other salmon industry players of a farmed industry controlled by powerful multinational corporations (1997: 178).²⁹

Big Aquaculture, Inc.

Along with "suitable conditions" of various sorts, the growth of aquaculture in Chile and elsewhere has been heavily influenced by the involvement and investment of powerful corporate interests, and patterned by the periodic crises that have punctuated their efforts at accumulation and expansion. Aquaculture around the globe has been dominated by a handful of large multinational corporations for quite some time, with interests spanning numerous individual fish-farming nations, and products encompassing a wide range of goods and services. The biggest firms are represented by a small handful of conglomerates, most based in northern Europe (Naylor, et al. 2003: 21). The booming Chilean industry has been financed in large part through foreign investment and joint ventures, and foreigners still own the better part of many of the large multinationals operating there (Knapp, et al. 2007: 66).

The recent history of the industry leaders illustrates a number of critical features of the "new world order." Marine Harvest, originally founded by the Anglo-Dutch conglomerate Unilever, was the world's chief producer of farmed salmon for a number of years (Knapp, et al. 2007: 63). In 1999, the company was acquired by Nutreco (2007), a major farmed salmon producer that in recent years has controlled 40 percent of the world aquaculture feed market (Naylor, et al. 2003: 21). In 2005, Nutreco merged its fish farming activity with that of Stolt-Nielsen, another top firm, in the form of a Marine

²⁹ The Alaska salmon industry's prior history of domination by powerful packing cartels no doubt has some bearing on this concern. I provide a more detailed account of this history in the following chapters.

Harvest joint venture, which resulted in a renewal of Marine Harvest's identity as "the world's leading producer and supplier of farmed salmon" (Stolt-Nielsen S.A. 2006). But shortly thereafter, in 2006, Nutreco and Stolt-Nielsen sold their respective interests in Marine Harvest to a company that had controlling interests in Pan Fish. Marine Harvest then merged with Pan Fish, which had not long before acquired the sizeable Fjord Seafood. As a result of this series of mergers and acquisitions, Marine Harvest (2007) is now a publicly traded Norwegian concern that operates in 20 countries, produces a third of all the world's farmed salmon and trout, and can yet again claim the title of "the world's leading seafood company," this time in a much more consolidated industry.

These repeated consolidations have made for a volatile, fiercely competitive, and "highly cyclical history of the farmed salmon industry" (Berge 2005: 5). As the Norwegian business journalist Berge writes, "Like in an American dream this forms the basis of a tremendous boom and, unfortunately for many, abysmal losses and bankruptcies" (2005: 208). For those remaining in business, however, the concentration of ownership in the aquaculture sector that Marine Harvest exemplifies has only helped to fuel the industry's further growth. By no means an unintended consequence of corporate strategy, this integration has led to increasing economies of scale for the multinational aquaculture companies, which has in turn resulted in steadily decreasing production costs for most fish farming operations (Knapp, et al. 2007: xiii). However, it is important to note that this concentration itself is not merely a cause of the explosive rise of farmed fish, but also a product of it at the same time.

The first wave of consolidation in the farmed salmon industry occurred in the early 1990s, on the heels of an initial surge in output. The burgeoning supply of salmon

created by rising farmed output worldwide led to falling prices across species and sectors, including those for farmed fish—a situation that economists present as a clear-cut case of depressed prices caused by overproduction (Knapp, et al. 2007: 57, 62). Just as Bristol Bay fishers began to struggle in the face of price drops in the early 1990s, salmon farmers around the world felt the effects of sinking prices as well. To add to the troubles of the Norwegian firms, as Anderson (1997: 179-181) chronicles, the U.S. International Trade Commission imposed countervailing and antidumping duties on Norwegian aquaculture products in early 1991, effectively eliminating Norway from the U.S. market,³⁰ At this point, Norway lost most of its market share to Chile and Canada, who remain the two largest suppliers of farmed salmon to the U.S. (Knapp, et al. 2007: xxi).

The combined effect of low prices and penalty duties pushed numerous Norwegian aquaculture firms into bankruptcy, as well as Norway's main marketing organization (Sylvia, et al. 2000: 399). In the wake of these closures, the Norwegian industry was substantially restructured (Hjelt 2000 in Knapp, et al. 2007: 62). In 1991, new laws were enacted that changed local ownership restrictions in Norway to allow farmers to own multiple farms, and the number of farming companies there went from 1,000 in 1990 to a mere 270 in 1998 (Knapp, et al. 2007: 62). Since that time, as the case of Marine Harvest suggests, the consolidation of aquaculture firms has only reverberated across the globe and proceeded apace (Anderson 1997: 180, Naylor, et al. 2003: 20-22).

³⁰ The small U.S. farmed salmon industry charged Norway with dumping its salmon on the U.S. below fair market value. U.S. farmed salmon production has always been fairly limited. Fish farming has met with strenuous objections from environmentalists, Native American groups, coastal residents, and property owners in many areas of the U.S. where it has been attempted. As Knapp et al. indicate, although at this point "most U.S. salmon consumption derives from farmed product, the U.S. salmon farming industry, mostly in Washington and Maine, in 2002 accounted for less than 1 percent of world farmed salmon production, and it is likely to continue to decline in market share" (2007: xii).

The Marine Harvest example not only illustrates how aquaculture companies have become fewer in number and comparatively more powerful in recent years, but also gives some sense of the remarkable vertical integration of the largest corporations, noted by Alaskan observers as far back as 1990. The firms are vertically integrated in that they are generally engaged in a number of different stages of aquaculture production, controlling many smaller individual companies that produce needed inputs as well as those that represent later buyers. Indeed, fish farming enterprises typically consist of vertically integrated feed, hatchery, grow-out, distribution, and processing companies (Naylor, et al. 2003: 21). The integration characteristic of the industry leaders does not only facilitate the production efficiencies noted earlier, but it also makes them increasingly well suited for supplying contemporary salmon markets in light of a parallel consolidation and integration taking place in retail and food-service sectors. As Knapp (2002a) points out, the rise of big retail outlets like Costco and Wal-Mart, along with consolidation among existing supermarket chains, greatly favors producers who can offer a consistent supply of seafood in large volumes at low costs.

Remaking Salmon

In his book *Making Salmon* (1999), Joseph Taylor chronicles the salmon crisis in the U.S. Pacific Northwest, where failing salmon runs were repeatedly answered with increased efforts at artificial propagation. The book's title alludes to the multiple ways in which salmon has been created through human actors' varying social, cultural, and political-economic lenses as well as their more literal attempts to cultivate fish, most notably through the establishment of hatcheries. While the hatchery mode of salmon "enhancement" represents a profound intervention in wild salmon reproduction, it

nevertheless largely maintains the existing geographical and temporal parameters of salmon production and consumption. With the rise of salmon farming, however, the space and time of salmon is fundamentally altered, with noteworthy consequences.

Over just a short few decades, salmon markets and industries have been radically reconfigured along with the global salmon seascape itself, which is markedly different at present from anything that ever existed before. Until quite recently, virtually all the world's salmon could be found in a discrete number of wild populations in the North Atlantic and Pacific.³¹ Most of this salmon was made up of Pacific species, only more so because many Atlantic runs were already becoming overfished by the 1800s (Montgomery 2003: 60).

Today, exponentially more salmon is aswim across the world. In sharp contrast to the past, most of these fish are now located within the confines of fish farms, and much in the southern hemisphere, a region of the world without any native salmon species. Moreover, the better part of the world's salmon is now Atlantic salmon.³² This is the case even in Chile, a nation whose entire western coast touches Pacific waters. Although Chilean salmon farming began with and continues to include the cultivation of Pacific coho salmon—which is not native to Chile either—Atlantic salmon initially obtained from Norway became Chile's leading species in 1992 (Knapp, et al. 2007: 66). This means that along with the steady relocation of salmon processing, a significant

³¹ Both Atlantic and Pacific salmon are members of the salmonid family. Atlantic salmon belong to the *Salmo* genus, while Pacific salmon are classified under the genus *Oncorhynchus*. There are noteworthy physiological differences between the genera, just as there are among the species within each genus. One of the more salient differences is that while most Atlantic salmon, like Pacific salmon, are anadromous, migrating between fresh and salt water and back, Atlantic salmon do not necessarily die after they spawn. ³² Atlantic salmon surged from less than ten percent of the world's total salmon harvest to almost half by 2001 (Bjorndal, et al. 2003: 3). Likewise, North American wild salmon, which constituted more than half of world supply in 1980, represented only about a sixth by 2004, largely because of the growth of farmed salmon production (Knapp, et al. 2007: xv). Bristol Bay alone produced 13 percent of the world salmon supply in 1980, but only 2 percent by 2001 (Knapp 2004: 2).

component of which is now done in China (Knapp, et al. 2007: 109), the biogeography of salmon habitation has shifted considerably: The salmon family worldwide is now dominated by Atlantic salmon, much of which is cultivated along Pacific shores, even though there are limited wild Atlantic salmon runs left in existence.

Atlantic salmon constitutes the vast majority of the salmon farmed around the world because of a few key characteristics. It is easy to handle, adapts well to environments beyond its native range, and generally fares much better under cultivation conditions than other salmon species due to its comparatively high tolerance for crowding, strong disease resistance, and rapid growth rate, among other attributes (Knapp, et al. 2007: 57, 67). In addition, Atlantic salmon makes a prime choice for commercial propagation because it has long been considered a "high value" species garnering strong prices, and has a notably high "fillet yield," the proportion of total poundage that can be converted into edible meat (Knapp, et al. 2007: 67). In fact, as Knapp et al. argue (2007: 57, 67), such particularities of Atlantic salmon constitute a crucial element that has facilitated aquaculture's global spread and rising output.

The present-day ubiquity of farmed Atlantic salmon means that the material composition of salmon has shifted as well. Any salmon consumed worldwide today is much less likely to be Pacific salmon than was the case twenty years ago. Atlantic salmon is generally softer fleshed and milder in flavor than most Pacific species, particularly the very meaty sockeye. So its newfound omnipresence is arguably altering expectations about what salmon looks, feels, and tastes like. (As later chapters record, Bristol Bay harvesters worry, not without reason, that consumers accustomed to Atlantic salmon might find area sockeye too "fishy" for their tastes.)

Furthermore, aquaculture expansion and the year-round output it affords have also changed the temporalities through which salmon is produced and consumed. As Barbara Adam observes in *Timescapes of Modernity*, the temporalities of nature are themselves multidimensional, with rhythms, speeds, and happenings that give rise to different timescapes, the "embodiment[s] of practiced approaches to time" (1998: 11). Adam focuses her analysis on the conflicts that arise among divergent timescapes within industrial modes of life (1998: 9). In the case of wild salmon, its wildness both reflects and dictates timescapes quite distinct from those fostered by industrial aquaculture. Although fish farming both relies on and is complicated by various natural forces—from the biophysical processes that enable aquaculturists to calculate salmon growth rates with reasonable accuracy to the algae blooms that can destroy whole fish crops—wild salmon production is more unremittingly determined by the natural phenomena that bring it into being. In addition to the demands and constraints imposed by human designs, from government regulations and industry organization to technological capabilities and the requirements of capital, Alaska's wild salmon fisheries remain patterned by the runs' distinctive temporalities: their striking seasonality, perishability, and relative unpredictability in timing, volume, and a host of other particularities.

Unlike farmed salmon, wild salmon fisheries have a discrete season, not an ongoing grow-out phase. Whether wild salmon runs come in gradually over much of the summer or during a more compressed period, as is generally the case in Bristol Bay, they nevertheless return during a limited window each year. In certain respects—particularly in comparison to other wild-capture fisheries—the seasonality that characterizes wild salmon actually facilitates its commercial harvest. Because runs of particular species

arrive en masse to the same river systems at around the same time each year, migrating salmon can be easier to locate in place and time than fish that stay only in the depths of the high seas. Yet the limited availability of wild salmon has become a commercial liability of sorts since the rise and spread of industrially farmed fish.

Salmon farming has facilitated a dramatic increase in the amount of fresh salmon available year-round across the world. The fresh market is the fastest growing salmon sector, with U.S. consumption of fresh salmon more than tripling from 1989 to 2004 (Knapp, et al. 2007: 126). Farmed Atlantic salmon dominates the fresh market, accounting for an estimated 88 percent in the U.S.; it is also much more likely to be available fresh at any given time than Pacific salmon, which is far more often sold either canned or frozen (Knapp, et al. 2007: 125). Moreover, farmed fish are leading the trend in rising fillet sales, and in particular fillets whose pin bones have been removed. (Pin bones are the tiny bones buried along the midline of fillets.) According to Knapp et al., much of this growth has been facilitated by the introduction of "pinbone-out" or "PBO" technology by Chilean farmed salmon producers in 1994-1995, which reduced the need for retailers to have skilled employees behind their seafood counters (2007: 143).

The stark disparities in product form between wild and farmed salmon are in large part due to their divergent temporalities. Wild salmon runs often arrive in fits and starts that are nearly impossible to forecast, despite the best efforts of biological managers. This unpredictability affects nearly every aspect of salmon fishing practice. Whereas fish farmers are aware of and indeed often choose the species, size, and conditions of the salmon they harvest at any given time, fishers have much less control over these variables, and their exact specifics are usually unknown until a given catch is pulled onto

boats. Moreover, unlike fish corralled in net pens, salmon en route to their natal streams can still be quite challenging to find and catch.

These elements of uncertainty in capture fisheries—along with salmon's highly perishable nature, especially once it has been removed from the water—shape the businesses of wild salmon processors as well. Like other fleshly goods, captured fish must be processed before it spoils, which presents serious logistical challenges given the unpredictability of the runs and the brief production season. In their frantic attempts to turn perishable objects of nature into a form of money—"some lasting thing that men might keep without spoiling, and that by mutual consent men would take in exchange for the truly useful but perishable supports of life"—Alaska wild salmon processors appear as if from the pages of Locke's Second Treatise ([1690] 1952: 28). In the chapter "On Property," Locke argues that the amassment of private property can only happen with the widespread use of money as a medium, since hording would be both impossible and nonsensical under conditions of spoilage and decay. Without a nonperishable medium of exchange, Locke claims—like a can of salmon convertible into currency, for example any enclosed property would instead be given up again to the "wild common of nature," as he describes in his vision of America (Locke [1690] 1952: 29).

Salmon canning, which developed in the nineteenth century as a means of quickly transforming heavy volumes of fish into shelf-stable commodities, is still practiced today for much the same reason. As Rosamond L. Naylor, Josh Eagle, and Whitney L. Smith note, "Millions of fish of varied quality arrive on the docks of processing plants in short periods of time, and they must be processed as quickly as possible (the 'sell it or smell it' doctrine) before the next load arrives. As a result, the bulk of Alaskan salmon are still

canned despite the shrinking market for canned fish" (2003: 24). Whereas salmon canning in the nineteenth century "broke with the past, introducing new food-processing technologies and entirely new food products to society" (O'Bannon 1987: 558), the process is viewed today by many producers and consumers alike as that of a bygone era, especially when compared to fresh PBO fillets.

In contrast, the production of farmed salmon can be planned to a much greater degree, not to mention planned in a way that makes famed output better poised for commercial sale. Fish sucked from net pens can be kept alive—untrammeled by nets, human handling, or baking sun—until the point of processing. Moreover, they can be processed year-round at a consistent and largely predetermined rate, and made into products that require more lengthy and careful procedures, like fillets.

The novel seascapes and timescapes generated along with aquaculture have not merely served to transform existing markets for salmon, but create new ones altogether. As Knapp et al. point out, at the same time farmed salmon rose to market ascendancy in the U.S., wild salmon consumption also increased. "Thus," they conclude, "the growth in farmed salmon consumption was not driven by substitution by consumers of farmed salmon for wild salmon," but by "expansion in the fresh and frozen salmon market" fueled by aquaculture production (Knapp, et al. 2007: xx). As a result, farmed salmon has become consistently available in fresh product form in markets in which wild salmon was never sold. And it is precisely these retail spaces, most notably sites in the new and growing domestic market, that are both talked about longingly and doggedly pursued by the makers and markers wild Alaska salmon, especially those in Bristol Bay.

Reimagining Crisis

When poor salmon returns prompted by overfishing led to depressed earnings during the 1953 season, President Eisenhower declared Alaska to be a "disaster area," apparently a somewhat unexpected move at the time (Gruening 1954: 405). As then-Alaska Territorial Governor Ernest Gruening explains, "Designation of a 'disaster area' by the federal government customarily followed major calamities such as flood, drought, hurricane, tornado, earthquake, conflagration or pestilence, usually referred to as an 'act of God.' It was unique and unprecedented in the failure of a federally managed resource, attributable, rather, to the acts of man" (1954: 405). By the time the salmon industry began to falter in the early 1990s, however, Alaska's sporadic fishery crises had long been greeted as disasters, with no particular attention paid to parsing human from natural causes, much less those stemming from divine intervention. A combination of low fish prices and weak returns prompted Bristol Bay to be declared a "disaster area" by the state in 1997, 1998, 2001, and 2002, for instance, as well as by the federal government in 1998. Yet in addition to being interpreted as another in a long string of unexpected misfortunes warranting aid, the most recent industry downturn was also, not unlike the 1953 fishery failure in its time, changing the ways in which crisis was conceptualized.

Given the "new world order" detailed in the prior section and its prominence in understandings of the industry's predicament, salmon producers would be increasingly invited to interpret their struggles as representative of a new type of crisis—or, more pointedly, a difficult period of adjustment to a new global economy. Along with disaster relief funds, for example, Alaskan fishers became eligible in 2003 for a federal program offering financial assistance and education benefits to producers of commodities negatively affected by foreign import competition (Alaska Sea Grant 2003, TAA 2007).

The Trade Adjustment Assistance program was originally intended for farmers, but in the wake of the North American Free Trade Agreement (NAFTA) and the impending passage of the U.S.-Chile Free Trade Agreement, Alaskan elected officials were able to successfully argue that fishers' businesses had also been dramatically affected by precisely this sort of competition in the form of farmed salmon.

During my period in Bristol Bay, I was on hand as program administrators representatives from the U.S. Department of Agriculture's Farm Service Agency, in this case agents from the Dakotas and other parts of the U.S. Midwest—moved into a small basement office in downtown Dillingham to set up the program for area fishers. In order to gain benefits, fishers were required to watch a video that opened with a description of the underlying causes of their occupational challenges. In its first few minutes, the video presented powerful statistics before a fast-moving montage of images: a downwardplunging line graph, supermarket shots, flying planes, Japanese street and seafood trading scenes, and salmon farm facilities, all interspersed amid Alaska salmon production footage, as well as churning wheat combines and a welding steelworker, pictured to represent other U.S. producers who have similarly fallen upon hard times (Marine Advisory Program 2004).

Like the comprehensive economic studies cited throughout this chapter, the educational video I watched in Dillingham alongside two fishers from the Bristol Bay village of Manakotak was quite convincing in linking downward-trending Alaska salmon prices to the economic processes it so vividly identified. It clearly outlined the most critical dynamics involved in the changing position of Alaskan salmon exports in the global market. Through its baritone voiceover and briskly edited snapshots of people and

places across the planet, it conveyed a sense of deep global interconnectedness and conjured a complex web of contemporaneous economic causes-and-effects. At the same time, it also brought these linkages into being as it constructed an object—the global market—from heterogeneous constituent phenomena, and endowed it with the ability to reshape individual lives from Manakotak to Manila.

As a number of social theorists have noted, in contemporary practice, representations of the economy, globe, and market seem to have a peculiar and arguably in some ways determinative relationship to the entities they would seem strictly to describe (e.g., Carrier and Miller 1998, Lee and LiPuma 2002, MacKenzie, et al. 2007). In the upcoming sections, I examine the imagery and ideas engaged in the depictions of an industry crisis provoked by a new world order. What assumptions underlie these visions of the globe and the market that unites it? What are the lived effects of the centrality of these visions to participants' understandings of the industry's experience as well as their own? Which processes, histories, and practices are thrown into relief by recurring motifs, and which are obscured—and to what consequence?

Locating the Global Market

In an article entitled "The new challenge for wild fisheries," Knapp explicitly links the remarkable expansion of aquaculture and the struggles of the Alaska wild salmon industry alike to broader macroeconomic transformations:

Globalization – characterized by lower trade barriers, technological revolutions in communications and transportation, and world economic integration in markets for goods, services, resources, labor, and capital – is transforming the world economy; including seafood production, distribution, and retailing. Globalization is reflected in the rapid expansion of the seafood trade, the movement of seafood processing to low-wage countries such as China, international standards for food handling and safety, web-based business-to-business interaction, and increasing consolidation and vertical integration in seafood production and distribution and in the retail and food service industry.

Globalization is expanding worldwide market opportunities for seafood producers who can meet demands of ever-larger retail and food service buyers for large volumes, consistent and reliable supply, consistent quality, traceability, low and stable costs, and productions which will be perceived by consumers as convenient, safe, healthy, and environmentally and socially responsible (2002b: 4).

Here, he argues that processes associated with economic globalization have paved the way for expanded seafood markets, but have simultaneously made those markets less hospitable to the vagaries and organization of most capture fisheries. Before the advent of aquaculture, Knapp points out, many wild fisheries enjoyed conditions of fairly little competition, which today no longer exist. In fact, he suggests, competition is not only more intense, but also has taken on a much more challenging character. "Together," he writes, "globalization and aquaculture create a new challenge for wild fisheries: the challenge of the market" (Knapp 2002b: 4).

Although perhaps more sweeping and emphatic than typical descriptions of industry reconfiguration—and no doubt far more detailed and comprehensive in its pinpointing of particular trends and their implications—this interpretation both echoes and informs other widespread portrayals. During my time in Bristol Bay, it was not uncommon to witness the struggling salmon industry cast as a sort of poster child for the perils of the new global economy. While I have heard many fishers also attribute faltering industry conditions to a host of more proximate causes, like abuses by processing companies, most seemed to accept at least in general terms the notion that the Alaska salmon industry was being negatively affected by broader shifts in world markets.

Knapp's above reference to "the market" is clearly intended for dramatic effect, but his characterization nevertheless draws attention to its frequent deployment in analyses of the salmon industry and beyond as an agentive, monolithic, and highly powerful entity. Needless to say, this depiction of the market is not supported by even all of Knapp's own work—elsewhere he warns of the hazards of speaking in sweeping generalizations given the great diversity of individual salmon markets (e.g., Knapp 2006: 4-9); and his observations about aquaculture would suggest that the market can hardly be taken as an imperative external to and independent from seafood industry attempts to supply it. Yet his representation of the market in his "new challenge" article is very much in keeping with what Benjamin Lee and Edward LiPuma (2002: 193) have described as one of the "fetishized figurations" of collective agency that, as Charles Taylor (2002) posits, constitutes a key social imaginary of western modernity.

At present, the market—or the global market, the global economy, or even globalization—often appears as the current incarnation of "the economy," with all its agentive force. As Susan Buck-Morss argues of eighteenth-century Europe, "The discovery of the economy was also its invention....The great marvel is that once a scientific object is 'discovered' (invented), it takes on agency. The economy is now seen to act in the world; it causes events, creates effects" (1995: 439-440). Indeed, as Lee and LiPuma contend:

Members of capitalist economies almost invariably think of 'the market' as a third-person collective agent, to which first-person agents...respond but do not necessarily identify with. The covert asymmetries of agentive verbal ascriptions reflect this relationship. Thus, 'the market' can *act*, *indicate*, *warn*, *hesitate*, *climb*, and *fall*, but is usually not able to take second-order verbs such as *reflect*, *assume guilt*, or *take responsibility* in the ways that a national people might (2002: 196).

In salmon industry participants' own considerations of the market and its implications for rural Alaska, they often grant entities like the "global economy" a great deal of agency. Some even go so far as to attribute to this inanimate actor certain faculties that Lee and LiPuma might deem second-order verb functions, such as the capacity for desire. In this respect, fishers are not unlike the innumerable economic analysts who talk in terms of how "the market" "demands" one thing or another.

After one Anchorage workshop devoted to matters of salmon industry restructuring, for example, fisher and lifelong Alaskan Greg Heffernan shared his impressions of the panel discussions. Over lunch at a Vietnamese noodle shop in one of Anchorage's endless strip-malls, he spoke of how "eye-opening" the conference had been for him in certain respects. He described how it had dawned on him during the sessions that, as he vigorously asserted, "The global economy *doesn't want* these small communities," referring to the fishing outposts threaded along Alaska's coast, including the one in which he had grown up. As he fiddled with his chopsticks, he talked about how he had come to this revelation as he realized that, by the logic of the global economy and its search for efficiencies, "everyone should just move to Anchorage, or maybe not even Anchorage, everyone just move to L.A.," where presumably production would be cheaper. In Greg's narrative of his own coming to consciousness, the global economy itself very clearly figures as an actor that not only possesses wants, but also has at least some ability to impose these desires upon the world.

In addition, Greg's identification of the economy as an explicitly global actor only seems to give it added range and force. As evidenced in the Trade Adjustment Assistance video described earlier, in which fast-paced planetary networks are made

visible, the global economy as frequently figured is at once the author of radical change in particular economies across the world at the same time that it is not localizable in geographical space or overtly put in the service of particular nation-states, politicaleconomic interests, or human beings. Such representations are in keeping with what Fernando Coronil (2000) has identified as globalcentrism, a representational regime epitomized in corporate discourses of globalization. In his critique of globalcentrism, Coronil observes that it has occasioned the deterritorialization of Europe or the West as the locus of imperial power, but has simultaneously "entailed its invisible reterritorialization in the elusive figure of the globe, which conceals the socially concentrated but more geographically diffuse transnational financial and political networks that integrate metropolitan and peripheral dominant social sectors" (2000: 368). "As the West disappears into the market," Coronil argues, "it melts and solidifies all at once" (2000: 368).

While the global economy itself may not be pegged to a precise locus in Greg's discussion and others, his account quite clearly positions rural Alaska within a wider frame, albeit quite insecurely. In the same fashion, as commodity producers watch snippets of struggling fishers, steelworkers, and farmers in training videos, they see themselves, or at least proxies of themselves, located within the wider globalizing world. This closely corresponds to what Buck-Morss suggests about the "representational mapping" that creates the economy as an empirical, visible object—that it produces "doubling, but with a difference": "the map shifts the point of view so that viewers can see the whole as if from the outside, in a way that allows them, from a specific position

inside, to find their bearings" (1995: 440).³³ In light of the formidable power and expansive reach of the globalizing market in its dominant representations, it is no wonder that Greg's new vantage only made his own bearings seem all the more precarious.

Reframing Globalization

In addition to the hazards of globalcentrism as outlined by Coronil, understanding the salmon industry as simply a casualty of globalization leaves out an important part of the picture. Without entering into the scholarly fray on the existence, significance, and defining features of what has come to be known as globalization, it is critical to note that many of the same trends identified as constitutive of the phenomenon by Knapp were not long before vehicles for great industry profits in Alaska. In a sense, then, globalization came somewhat earlier to the Alaska salmon industry than is generally assumed, and with quite different implications: From dramatic shifts in currency valuation to increasing foreign direct investment to more flexibly organized production to facilitate greater responsiveness to changing consumer demand, the boom the industry experienced during the 1980s was fueled in part by many of the economic shifts implicated in the downturn that persists into the present.

If, as many analyses contend, the contemporary era of globalization can be usefully understood to date from the financial deregulation that occurred in the early 1970s with the end of the Bretton Woods agreement and the switch from the gold standard to floating currency rates, the experience of the Alaska salmon industry in the

³³ One may also consider this in the vein that Lee and LiPuma propose. In their view, the market and other social imaginaries operate as what C.S. Peirce terms "indexical icons,' each of which contains a representation of the totality it is a part of"; Peirce's well known example is that of a map of a beach drawn in the sand, which represents the map itself, and within that, a map of the map, etc., in infinite regress (Lee and LiPuma 2002: 195).

late 1970s and 1980s can be interpreted as a prime illustration of some of the initial consequences of this global transformation. It was during this period that that the Alaska salmon industry became increasingly tied to the Japanese market, whose economic growth and rising currency at the time have been attributed in part to this first wave of financial deregulation, as some have also argued for the later bursting of the Japanese "bubble" and subsequent slowdown (e.g., Gao 2001). Thus, explicitly viewing the Alaska salmon industry through the frame of globalization's longer durée directs attention not just to its recent struggles in a changed market, but also to the extent to which its usual cycles and crises have become increasingly more volatile, intense, and fast-changing.³⁴

Japan is the world's leading seafood importer, as it as been for some time (FAO 2008). In his recent book *Tsukiji* (2004), titled after the famed Japanese fish market, Theodore Bestor examines the overwhelming significance of seafood in Japanese diets and daily practices, forms of culture, and senses of national identity. Tsukiji itself provides a fitting point of entry into his study given its status as the world's largest seafood market, a depot for more than \$5.7 billion of seafood in 1996 alone (Bestor 2004: 10). The channels of seafood production, circulation, and consumption it has come to connect and create are vast. As Bestor describes it, "In the late nineteenth century, Chicago became hog butcher for the world; in the late twentieth century, Tsukiji became fishmonger for the seven seas, not only shaping the international fishing industry but also remolding patterns of consumption and distribution across the world" (2004: 35).

³⁴ I do not mean to suggest that the economists who have described the industry's downturn in relation to globalization are unaware of its earlier period of prosperousness. On the contrary, it is their assessment of industry conditions in the 1980s that forms the basis for my discussion here. My point is simply that framing the industry's rise in the same terms as its fall enables us to more readily perceive globalization as a shift in longtime capitalist practice rather than a departure from it.

The Alaska salmon industry became more enmeshed this network in the 1970s, as the Japanese market for Alaska salmon began to expand appreciably, spurred by several different circumstances. For one, Japan lost access to the Alaskan salmon stocks it had fished on directly during prior decades. Despite concerted efforts to end Japanese highseas fishing of Alaska-bound salmon in the 1950s, this practice was not really curtailed until the mid-1970s. In 1976, the U.S. Fishery Conservation and Management Act, now known as the Magnuson-Stevens Act, established the 200-mile Economic Exclusive Zone (EEZ) extending from U.S. shores, where only American vessels are permitted to harvest. Japanese fishing on Alaskan salmon stocks was further limited the following year when high-seas fishing lines were readjusted by the International North Pacific Fisheries Convention (King 2003: 11).³⁵ As these avenues of access began to close, Japanese companies pursued Alaskan salmon through the purchase and control of fish processing companies themselves (King 2003: 11). In addition, major improvements in freezing technologies dovetailed with expanding Japanese demand during this period, fueling a dramatic transformation in product form from canned to frozen salmon, much of it heading to Japan (Knapp, et al. 2007: 92). This change was also connected to an increasing reliance on floating processors, which were more easily modified to churn out new product forms than the existing land-based canneries. Along with such developments, Alaskan salmon returns themselves rebounded from lows in the 1970s to soar throughout much of the 1980s, with Bristol Bay catches being especially high.

³⁵ Although Japan was forced by WWII Peace Treaty provisions to join Canada and the U.S. in the International North Pacific Fisheries Convention in the early 1950s and abide by its high-seas fishing restrictions, the lines drawn at the time were based on limited biological knowledge and did not account for the full migration patterns of certain Alaskan stocks, especially those returning to Bristol Bay (see Cooley 1963: 189, 192). The efforts of Bristol Bay fishers to "kick the Japanese off the high seas," as well as fishers' relationships with Japanese buyers and consumers, are discussed in more detail in Chapter Six.

The convergence of these largely unanticipated circumstances proved fortuitous for Alaska salmon purveyors given the phenomenal growth the Japanese economy experienced at around the same time. They set the stage for a vast outflow of fish to a flush market, and ushered in a decade of extraordinary profitability for the Alaskan salmon industry in general, and Bristol Bay in particular. During the mid-1980s, the rapidly rising value of the yen relative to the dollar only served to boost ex-vessel values further and make salmon industry earnings all the more spectacular (Knapp, et al. 2007: 92). Yet throughout this meteoric rise, key mechanisms and conditions were being established that would ultimately provoke, or at least worsen, the downturn to come, especially in Bristol Bay.

Bristol Bay as Bellwether

More than any other Alaskan fishing region, Bristol Bay was associated with the salmon industry's heady period of profits, not unlike it has been with its more recent collapse. The 1980s are remembered as a gold rush of sorts, a time when newspaper headlines proclaimed "Alaska gold' in Bristol Bay" (Northland News 1985:1). Tales of cash windfalls, which are recounted in the Bay to this day, gave the fishery an almost legendary status across Alaska and beyond. As researchers in the early 1980s noted: "In March of 1977, with an uncertain season ahead, the price of a permit was roughly \$5,000; in November of 1980, with a banner year predicted, the price of a permit is minimally \$100,000 and rising" (Van Maanen, et al. 1982: 201). The estimated value of drift permits would ultimately climb as high as \$265,818 in August of 1989 (CFEC 2008a). These statistics indicate an over fifty-fold increase in permit prices in little over a decade.

Among the chief reasons for Bristol Bay's commercial success in the 1980s is the overwhelming preponderance of the sockeye (or red) salmon species in the region's catch. For most of the past few decades, sockeye have accounted for about 91 percent of all pounds of salmon harvested in Bristol Bay on average, and over 95 percent of exvessel earnings (CFEC 2004a). The sockeye, a fish with firm, orange-red flesh, is known as one of the "high value" species among Pacific salmon.³⁶ It is also a preferred salmon in Japan. As Bestor (2004) shows, intricate classificatory rubrics underlie Japanese seafood consumption practices. For Bristol Bay salmon producers, the most important one is that of "red-fleshed salmon," a category that includes the sockeye, king, and coho salmon species (Knapp, et al. 2007: 89). In contrast to king and coho, which are not generally found in extremely large runs, sockeye is unique in its possibility of being, in the language of the business, both high volume and high value. This is certainly the case in Bristol Bay, the sockeye capital of the world.

The large proportion of sockeye in Bristol Bay harvests distinguishes it from other Alaskan fishing regions at the same time it positions the Bay as a bellwether for the salmon industry at large, whose total value is led by sockeye production (clearly due in part to Bristol Bay's massive sockeye catches themselves).³⁷ Thus, for Bristol Bay and Alaska more generally, a fate so closely tied to sockeye, and the Japanese frozen sockeye market in particular, was a great boon in the 1980s. However, in more recent years, it has

³⁶ The classificatory system that dominates industry discussions places kings (chinook), reds (sockeye), and silvers (coho) within the high value category, while excluding chum (dogs) and pinks (humpbacks, humpies) (for example, see ADF&G 2007c).

³⁷ In 2006, for example, the ex-vessel value of the total Alaska sockeye harvest represented over 52 percent of the value of the entire statewide salmon catch, with all other species accounting for much smaller components, ranging from nine to 16 percent apiece (ADF&G 2007b). Ten years prior, when sockeye prices were comparatively stronger and catches considerably larger, sockeye constituted over 72 percent of the state's total salmon value (ADF&G 2007a).

made the industry especially susceptible to the downward price pressures that have accompanied rising farmed salmon production.

Farmed fish consumption has grown rapidly in Japan, as elsewhere, from the 1980s to the present. But the most significant development for Alaskan producers is that Chilean farmed coho has come to compete directly with Bristol Bay wild sockeye in the Japanese red-fleshed salmon market (Knapp, et al. 2007: 89). Data indicate that sockeyespecific demand appears fairly limited in this market (Knapp, et al. 2007: 91), and wild sockeye and farmed coho are even treated as "market substitutes" in some economic analyses (CFEC 2004a: 80). Not only have Bristol Bay fish had difficulty competing with a cheaper substitute, but the rapidly expanding total supply of red-fleshed fish in Japan has also had the effect of depressing prices generally. Moreover, wild Russian sockeye has flooded the Japanese market since the disintegration of the Soviet Union (Knapp, et al. 2007: 88). As Knapp et al. detail, downward price trends for salmon have been fueled by larger-scale shifts as well, such as the broader slowdown in the Japanese economy, a parallel slowdown in the rise of the value of the yen vis-à-vis the dollar, and the increased power of Japanese buyers as a result of retail sector consolidation (Knapp, et al. 2007: 92). In addition, actual salmon harvests in Bristol Bay have fallen since their all-time spikes in the 1980s.

Along with the common conditions informing the industry's rise and fall, the high profits and large catches of the 1980s transformed Bristol Bay production in a number of ways that would only make the subsequent industry downturn more acute for many participants (Link, et al. 2003a: 28). In this respect, Alaska salmon producers' experience is very much akin to that of U.S. farmers during the 1980s farm crisis as

documented by Kathryn Dudley (2000), in which soaring export markets and aggressive lending practices in the 1970s resulted in expansion and expenditures that set the stage for the collapse to come. In order to handle large volumes of salmon in Bristol Bay in the 1980s, fishers looked to expand their harvest capacity by buying bigger boats or make costly adjustments to their existing operations. Because fish prices were so high, they had little financial disincentive to make such investments. In fact, high fish prices only encouraged fishers' acquisition of added technology and equipment, particularly items that would enable them to compete more effectively against other boats. As a result, "Bristol Bay gillnetters got wider and faster...loaded with electronics and power gear," even as they remained subject to the 32-foot boat length limit written into Bristol Bay regulations (King 2003: 12). This image of the hulking, souped-up Bristol Bay drift boat would eventually become the chief example employed in more recent statewide discussions of issues of "overcapitalization" and "excess fishing capacity" in the Alaska salmon industry.³⁸ Further, the material reconfiguration of the industry to meet this extreme model of mass production would not only make it more precarious in the face of price drops, but also out of step in critical ways with the emergent market paradigms ushered in by aquaculture.

The dissonance between the existing infrastructure of the Bristol Bay industry and the direction of the current salmon market is crystallized in the pallets of product that collapsed so spectacularly during my stint at Mermaid Cove in 2003. Indeed, as the once lucrative Japanese frozen sockeye market became less hospitable to Bristol Bay fish,

³⁸ These issues are considered more thoroughly in Chapter Four.

processors shifted their production to a more stable market: the can.³⁹ During my research, I observed Bristol Bay fishers respond with anger and disbelief when they learned that area processors had actually begun producing *more* canned salmon with the catch since the economic downturn. Indeed, canned production in Bristol Bay now hovers at around half of the total pack (Link, et al. 2003a: 79), a proportion not seen since the early 1980s, when frozen salmon production first began to exceed canned output (King 2003: 11). The biggest share of North American salmon production is now in the canned market rather than the once-dominant the Japanese frozen market primarily because of recent changes in sockeye production (Knapp, et al. 2007: 80). Regardless of whether most Bristol Bay fishers were aware that the canned sector is the only major salmon market that has not grown but has actually declined over the past two decades (as documented in Knapp, et al. 2007: xv), they nevertheless associated it with a product form that was eclipsed back in the 1970s.

Specters of Extinction

The bourgeoisie cannot exist without constantly revolutionising the instruments of production, and thereby the relations of production, and with them the whole relations of society. Conservation of the old modes of production in unaltered form, was, on the contrary, the first condition of existence for all earlier industrial classes. Constant revolutionising of production, uninterrupted disturbance of all social conditions, everlasting uncertainty and agitation distinguish the bourgeois epoch from all earlier ones. All fixed, fast-frozen relations, with their train of ancient and venerable prejudices and opinions, are swept away, all new-formed ones become antiquated before they can ossify. All that is solid melts into air... (Marx and Engels [1888] 1978: 476).

³⁹ Although canned salmon prices have also trended downward in recent years, there is relatively little competition from farmed fish in the canned market, at least as of yet; most canned Alaska sockeye is exported to European markets, particularly the U.K. (Knapp, et al. 2007: 92).

In their horror at falling back upon what was widely perceived as an antiquated mode of production, Bristol Bay fishers display attentions that are crystallized in Marx and Engels' now-famous depiction of capitalism as a thing in constant, unrelenting motion. As the above account suggests and later commentators have extensively explored, temporality itself becomes configured by mechanisms of capitalist accumulation. In this context, failure to constantly revolutionize technologies, instruments, and relations of production becomes akin to regression in time.

Such motifs are woven throughout popular discussions of contemporary economic life. Take, for example, *New York Times* columnist and best-selling author Thomas L. Friedman's analysis of globalization, which he likens to "creative destruction on steroids" (2005: 35). Here, everyday economic practice is portrayed as a race against time in which those in the U.S. need to "run a little faster" in order to keep up with practitioners of "extreme capitalism" like India, China, and South Korea (Friedman 2005: 37). Friedman cites Bill Gates approvingly in hammering home his strong sense that, in the race that is globalization, "America is falling behind" (Gates in Friedman 2005: 37). As analyzed by Marxian thinkers, exemplified by commentators like Friedman, and experienced in southwest Alaska, the bourgeois epoch is one that pushes all human activity into its fast-hurtling thrust, and "compels all nations, on pain of extinction, to adopt the bourgeois mode of production" (Marx and Engels [1888] 1978: 477).

When I arrived in Anchorage in August of 2002, there was a pervasive sense of falling behind by participants in the Alaska salmon industry, and a palpable fear of extinction. The headline of *Alaska Magazine*, whose glossy photos could be seen on most supermarket checkout lines, asked "Endangered Fishermen: Is Our Salmon Fleet

Bound For Extinction?" Inside the issue, the article's subhead explains that, "A changing market and outdated management might doom commercial salmon fishing" (Jung 2002: 24). Such anxieties of obsolescence and impending doom were also evident among fishers and other industry workers themselves, as I witnessed from Anchorage meeting venues to the warehouses of Mermaid Cove. I had never conceived of my dissertation project as an exercise in salvage anthropology, but according to gossip circulating at the cannery, which made it back to me on more than one occasion, I had come there to do "a study of a dying industry." During my first year or so of fieldwork, I met fishers who joked, only half-kiddingly, that they were "the last of a dying breed," and witnessed one impassioned plea by a local fisher and politician who called upon a regional council to back a particular fishery restructuring plan lest they all become "dinosaurs."

In various public forums, speakers conjured bleak visions of slow but seemingly inexorable declines alongside the more urgent images of crisis enlisted to secure disaster funds and relief monies. At one conference in Dillingham devoted to issues of land and resources—essentially a discussion of the various proposed oil, gas, and mineral development plans that have galvanized the region in the wake of the fishery downturn⁴⁰—Jake Bayne, the then-head of a large regional organization, opened the first day's proceedings with remarks that included his own reflections on the abandoned mining communities in Michigan's Upper Peninsula and Minnesota's Iron Range that he had seen in his youth. Jake presented these cases as a cautionary tale for the Bay, pointing to both the perils that haunt any resource periphery tethered to the export of primary products as well as the particular risks of extractive industries like mining.

⁴⁰ I describe these other resource development prospects more fully in the Conclusion.

At one workshop addressing the salmon industry downturn in late 2002, a presenter made reference to the multiplicity of Alaska place names that are no longer living communities. Indeed, many of the town sites dotted across state maps exist only as markers for the failed industrial dreams of earlier eras, from abandoned mining claims to boarded-up logging operations—material remains that constitute what Ann Laura Stoler (2008) has recently theorized as "imperial debris." Unlike the visions of fiery devastation seared onto the American imagination at the start of the millennium, these evocations suggest that the apparition that haunts the resource-extracting periphery most is the ruin of the ghost town.⁴¹ The presenter and the other panelists spoke eloquently about the significance of the salmon industry to Alaskan coastal communities, as well as the vital importance of taking these rural fishing towns into account in turn when developing fishery policy. But the speakers' repeated insistence that such communities need to be considered only served to foreground the unspoken undercurrents that framed the larger conversations about how to promote industry competitiveness and efficiency.

As the panel discussion and Greg's earlier comments suggest, efforts to examine the Alaska salmon industry during this period were laced with profound anxieties about its marginality, as well as that of the people and places through which it came into being. The sense that fishers and fishing communities were increasingly rendered superfluous was only exacerbated by the growing talk of fleet consolidation, also known as rationalization, which was being implemented at the time in other fisheries in Alaska and

⁴¹ While most Alaskan ghost towns remain just that, a few have found new lives as tourist attractions, like Kennecott, the subject of an essay by William Cronon (1992). The Kennecott mine and community was developed and subsequently abandoned by the Guggenheim- and J.P. Morgan-funded Kennecott Copper Corporation, which has since become a part of the major mining firm Rio Tinto Group.

around the world.⁴² In an article entitled "Irrationalization," the cover story of the April 2004 edition of *National Fisherman*, Jerry Fraser argues that although consolidation may hold appeal at first glance, it ultimately hearkens the demise of small producers (2004: 24). The magazine cover is filled by an illustration of a cloaked grim reaper armed with a scythe bearing the word "consolidation," the boats surrounding him slashed into bits. The headline reads, "Less Ain't More: fewer fishermen isn't the answer."

Growing concerns about possible fleet consolidation during this period were joined by news of increasing consolidation among processing companies purchasing Alaska fish. Although the state had succeeded in keeping salmon farming itself out of its waters, key features of the farmed salmon industry were steadily making their way into Alaskan production.⁴³ Like the farmed sector, the wild industry was growing ever more concentrated, and thus more heavily controlled by a limited number of increasingly powerful companies. Along with the shuttering of processing plants in the early 2000s came a reduction in the number of Alaska salmon buyers through bankruptcies, mergers, and more than a few corporate decisions to cease Alaska salmon operations.

In May of 2004, the major Alaska seafood processor Trident Seafoods bought another longtime buyer, NorQuest. "Consolidation appears to be the key to survival for fish processors in Alaska," reporter Charlie Ess writes his coverage of the merger, "As the flow and availability of seafood products increase on a global basis, an increasing number of fish packers have been forced to consolidate or get out" (2004: 15). There was

⁴² These rationalization trends are considered further in Chapter Four.

⁴³ In fact, some of the same multinational companies invested in salmon aquaculture have become increasingly potent players in the wild salmon industry. Take, for example, the Nichiro Corporation, which recently merged with an even larger Japanese food conglomerate called Maruha to become the world's largest seafood company (Cherry 2007): It helped pioneer salmon aquaculture in Chile (Berge 2005: 11) and remains a major buyer of Alaskan salmon through its wholly owned U.S. subsidiary, Peter Pan Seafoods (2008).

certainly concern at the time that fewer buyers for Alaska salmon would mean less competition and lower fish prices. But like so many of the dynamics to shape the salmon industry, the increasing concentration of processing companies also seemed to reflect a new reality, at least to some fishers. Not long after the Trident-NorQuest merger, I brought it up in conversation with Pete Koyama, a Dillingham resident and longtime NorQuest fisherman who was heavily involved with Bristol Bay fish politics. "It's called consolidation," Pete said ominously, "and you're going to see a lot more of it."

Indeed, Pete's portentous remarks, like all salmon industry conversations of the early 2000s, took place before a backdrop of precipitous devaluation, not just of individual boats and permits, but of entire processing facilities and, it often seemed, the coastal communities that housed them. At the time, former cannery sites across Bristol Bay were up for sale, huge complexes full of supplies and machinery that had remained after production ceased, with asking prices at a mere fraction of the apparent value of the array of individual items that comprised the sale. Yet, often, no one bought them. It was as if the real possibility existed that any salmon industry equipment stuck on the shores of the Nushagak might suddenly be worth nothing at all, despite sturdy frames, years of proven use, and ongoing working order.

Even the high profile, newly constructed Anchorage processing facility ASI, Alaska Seafood International, was struggling to keep afloat during this period. A huge structure with state-of-the-art equipment, ASI had been built with much fanfare, and a good deal of taxpayer money. It was intended to revolutionize Alaskan fishery production by serving as a manufacturing facility for value-added, retail-ready Alaska salmon and other seafood. But the facility that began operation in 1999 would wind up

shutting down for good in 2003, only to be sold by the state in 2004 to a church group for less than half of the \$50 million it cost to build (see Loy 2004, Richtmyer 2004). With even the most up-to-date facilities in major cities like ASI pulling their plugs—and aging canneries in rural regions like Bristol Bay having little hope of reincarnation as megachurches—the specter of industry extinction indeed loomed large.

Envisioning the Return

Reinventions and Refusals

Despite the somber mood, dire predictions, and unpromising circumstances that characterized the Alaska salmon industry of the early 2000s, great energies were already afoot to hasten its recovery. If indeed Alaskan officials and salmon fishers themselves had exhibited a lack of concern about the industry's ongoing viability during the earliest signs of price dips, this nonchalance was no longer apparent. Instead, significant resources were being marshaled to assess current conditions, alleviate the most pressing economic difficulties, and develop workable solutions for immediate and long-term industry improvement. A state-sponsored salmon industry task force set to work in 2002. Its launch was soon followed by the announcement of a \$50-million salmon industry revitalization plan, which would direct federal funds toward aid, marketing projects, infrastructure development, and small business initiatives (State of Alaska 2003). Congress also appropriated an additional \$10-million outlay for salmon marketing (Alaska Fisheries Marketing Board 2007).

Besides these earmarks, a variety of other initiatives were taken up at the time by a broad range of agents—from federal, state, and local governments, to non-profit bodies and academic institutions, to individuals working in close conjunction with family,

friends, and business partners. Conferences, workshops, and new business plans abounded, all designed to save the Alaska salmon industry from decline and obsolescence. Over the course of the chapters to follow, many of these initiatives are explored in detail. A number of them called for or implemented major changes to how the state's salmon fisheries had long been organized and practiced. To perhaps a surprising degree given the circumstances, these were pursued with a fair amount of invigoration. As one Bristol Bay leader is quoted as declaring in a 2001 teleconference, "We need to reinvent the Alaska salmon industry" (BBNA 2001)

In their embrace of reinvention as a means of crisis recovery, Bristol Bay fishers and policymakers alike were unwittingly adhering to a dictum promoted by Friedman and credited to Stanford economist Paul Romer: "a crisis is a terrible thing to waste" (Romer in Friedman 2005: 37). Indeed, their long history of participation in a capitalist industry punctuated by crises and distinguished by sharp fluctuations prepared them not simply for feeling behind as the industry changed, but also for visions of turning crisis into a business opportunity. As these details suggest, a closer look at the even most foreboding episodes to visit the Bristol Bay region and the scores of fishers facing deep personal and economic distress reveals both the exuberant and the quiet crafting of counternarratives. While such alternative accounts do not dispute undeniable hardship nor deny difficult straits, they nevertheless question the catastrophizing strands of dominant disaster narratives by instead interjecting attention to resilience and return.⁴⁴

⁴⁴ In so doing, these alternative accounts represent an important site for analytical attention. As Arun Agrawal (1998: 32-34) points out, the pervasive emphasis on loss in scholarly discussions of indigenous and resource-reliant groups may reflect more the allegories, assumptions, and ambitions of academics than it does the particular histories of those they study. Scholarship can thus run the risk of imposing the sort of marginality it would presume to describe. At the same time, examining how loss is multifariously experienced and understood provides a means to reckon with its consequences, rather than simply equating culture with adaptation, which, as Stuart Kirsch (2001: 177) observes, effectively denies cultural difference.

In the opening remarks to another Dillingham meeting about a month after the resources conference described earlier, Zell Norgren, a lifetime fisherman and longtime participant in the region's Alaska Native politics, set forth a counterpoint of sorts to the picture Jake Bayne had conjured of abandoned Iron Range mining towns. Reflecting on Bristol Bay fishing over the years, Zell noted that there had always been ups and downs, and that the recent crisis actually seemed much less disastrous when viewed alongside various periods in the 1950s and 1970s, when low fish prices were combined with abysmal salmon returns. He joked that the area fish prices at the time "were like a recovering alcoholic," down so low, "the only way is up."⁴⁵

Not only did Zell's remarks make clear that Bristol Bay fishers and area residents had long been buffeted by capitalist vicissitudes, but they also served to recode these dynamics as a normal part of life in the region rather than signs of a state of emergency. Such comments even suggest that industry shifts are akin to other sorts of natural fluctuations, like the ebbs and flows of tides, for example, or annual variations in salmon returns themselves. Commercial fishing business rhythms are not determined strictly by cosmic timescapes, of course, just as there is compelling evidence to indicate that recurrent resource crises in export-oriented fisheries are not generally the result of primarily "natural" cycles. Yet the commonalities between the cyclical return of salmon runs each summer and fishing industries' cyclical businesses—even if not wholly unrelated—have the effect of naturalizing variability and volatility in both. A similar set of assumptions underpinned some of the collective conversation about salmon fisher "dinosaurs" or "endangered species," whereby postindustrial abandonment and decay

⁴⁵ This statement and others like it make linkages among the different forms of dependence in rural Alaska, as well as between fishing and addiction. Such issues are explored in subsequent chapters.

was at times framed as a kind of natural evolution of societies and landscapes, while newness and reinvention were equated with forward-marching progress.

Zell's comments at the meeting were not unlike those I'd heard him offer in other venues, which similarly shied away from declensionist narratives. During a group discussion in the context of a continuing-education Bristol Bay history course offered at the local branch of the University of Alaska, Zell and a number of the other Dillingham residents expressed their dissatisfaction with some of the stories about village outmigration to appear in recent media coverage. The group largely agreed that the issue had been "overstated" as a problem. They concurred that most of the young people who leave the region do so to go to college and get a better job, so they all found it difficult to understand how anyone would "want a person to stay here" when they were happy and successful elsewhere. Regardless of where these young people wind up, Zell reasoned, they would "always have roots" in the region, just as it would always be there for them to come back to. "Dillingham will always be here," one person in the class said assuredly.

As students of the region's history, the group was well aware that Bristol Bay had been home to a great many communities that now cease to exist. Their broadly shared sense of the region's resiliency and the permanence of its places, then, was clearly grounded in other convictions. For one, it seemed to reflect a general weariness of being interpellated, and typically singled out, as a population ravaged by crisis, whether economic downturn, substance abuse, diabetes, domestic violence, suicide, or any number of the other epidemics that confront, and are ascribed to, predominantly Native communities in rural Alaska. Furthermore, many of the avenues for addressing such socioeconomic problems hinge on the successful performance of declarations of

emergency, and thus virtually require region residents to endlessly present themselves as disaster victims of one form or another. During the conversation about rural outmigration, for instance, the class nodded approvingly when one student made the point that the issues facing rural Alaska are present in other places too, since "lifestyles are changing" in all sorts of communities, not just Alaska Native ones.

Nevertheless, it is undoubtedly the case that the region's particularity as a place, and specifically as an Alaska Native place, forms the basis for much of the sense of rootedness expressed in this discussion and others across Bristol Bay. Such roots are inextricably entangled with the region's identity as a place of salmon, just as they are materialized in the actual fish that work their way up its tributaries each summer. Though a migratory species and thus a "fugitive resource," salmon's homing instincts mean that it is profoundly tied to geographical place. As the next chapter examines in detail, the Bristol Bay region has become the place it is today through its intensive reconfiguration by successive regimes that have extracted its natural wealth for distant markets, particularly the commercial salmon industry. But even in this setting forged by capital, all that is solid evidently does not quite melt into air. The sense of the salmon's perpetual return, for one, endows place with a certain sort of dense enduringness.

Indeed, Bristol Bay fishers typically located their hopes for industry recovery in the salmon's potential for perennial return itself.⁴⁶ As residents repeatedly insisted to me, everything would one day be fine as long as the salmon itself kept coming back. Their abiding "faith in this fishery," as one Dillingham fisherman declared to me, seemed to

⁴⁶ The existence of high hopes is confirmed by survey data obtained from a large study of salmon permit holders across Alaska between November 2002 and May 2003: "Within the group, most fishers (84 percent) felt that salmon fisheries were currently in crisis, but only one-third [sic] of those believed the crisis was permanent. Virtually all the respondents (97 percent) plan to continue salmon fishing in the future" (Naylor, et al. 2003: 28).

suggest that the continual reappearance of Bristol Bay salmon would prove an anchor for an ongoing industry just as it had enabled their forebears to sustain themselves well before the advent of commercial fishing. "It's been good to us," as Zell said of Bristol Bay salmon towards the end of his meeting remarks, "it's fed our dogs, provided subsistence, and made us a living." As Zell's reflections bring to the fore, because of the renewability of the wild salmon resource, the industry had never truly been boom and bust, despite its wild fluctuations; along with the salmon, fishing had gone on.

The subtle resistance many fishers expressed to portents of salmon industry collapse and rural demise thus reflects a double movement, which will be teased apart throughout the chapters to follow. On the one hand, fishers are not only deeply familiar with the recurring reorganizations demanded by capitalist industry and shifting state regulation, but, as we will see, many of them actually embrace their role as architects and agents of reinvention. On the other, despite their identification with many aspects of capitalist practice, their experience of the fishery resource is rarely limited to participation in the commercial industry alone. The commercial and subsistence economies are deeply entangled in the region, as examined in Chapter Six, which in turn affects the practice and meaning of each. Salmon is not simply export good, but is woven into the spaces, times, and substances of everyday life.

Fables of the Reconstruction

While area residents' faith in their fishery alone has not and cannot reverse many of the disquieting statistics included at the start of this chapter, it nevertheless represents a powerful imaginary that informs fishers' action and thus real-world conditions. In fact, hindsight reveals that surprising possibility and openness were present even in situations

that once appeared only dismal. As it turns out, despite the sweeping and steady outmigration of permits during the intervening years, Koliganek resident Charlie Ralph had decided to hold on to his. Pestered by his Dillingham broker about the need to keep fishing rights in local hands, swayed by the unappealing prospect of selling a potentially valuable asset at the bottom of the market, and evidently moved by his son's desire to be more active in the industry, Charlie managed to hold on to his drift permit after all.

Indeed, despite ongoing struggles and abiding worries, the Alaska commercial salmon story over the past several years has not realized the tragic demise that at one point seemed nearly inevitable—at least not yet. A survey of Alaskan newspaper reports on salmon industry conditions over the several years, especially those covering Bristol Bay, charts a repeated series of rising expectations and dashed hopes, recurring disappointments followed by modest signs of recovery amid persistent, if somewhat less extreme, difficulties. In 2006, the total Alaska salmon catch value topped \$300 million for the first time in ten years, which is almost double the lows experienced in 2002 (Welch 2006), if still significantly less than the decade before. While it does not appear as if a solution has been found for the salmon industry's problems exactly, the crisis is without a doubt less acute than it was at the start of my research.

Even the aging structures of Mermaid Cove, which appeared at one point to present such a clear symbol of the growing anachronism and impending downfall of the Alaska salmon industry writ large, can be seen as much as monuments to hardy continuity as archaic holdouts, as the material embodiments of an enterprise steadily remade more often through little-noticed, back-room retooling rather than undone in a single, shuddering crash. Although the warehouse collapse that opens this chapter made

for a fairly dramatic day at the cannery, it never quite materialized as the emblem of industrial ruin it might have portended at first rumble. Not only did cannery production continue throughout the period of collapse, investigation, and clean up, but the regularly scheduled coffee breaks, a cannery institution of sweets and stimulants that has been called "mug up" for as long as anyone can remember, were still held right alongside the crater's rim. From the long tables with their plastic checkered tablecloths, the view of the rubble and its slow but steady disassembly was an impressive sight to behold.

After the forklift and the more intimidating shards and scraps had been removed, I was sent down into the pit along with a group of cannery employees to retrieve the salvageable cans and remove the punctured ones. We scrambled among the debris that remained, collecting many a can that lay, barely dented, on a cool bed of Nushagak mud. (It is possible to see the small, blue baskets we used to gather these cans in Image 5 included earlier.) After the regular fishing season ended, we proceeded to "re-can" this salvaged product, cracking open one can after another with industrial-sized openers, tipping each cooked, oily mass into a new can "body," as the cylinders are called, and sending the fish for the second time along the line that supplied lids and cooking. Although many of the workers alongside me on the line were happy to get the extra hours of re-canning wages, we all commiserated that it was a much more smelly and greasy affair than processing uncooked fish. While we worked in the cannery, full-fledged reconstruction was underway in the warehouse, undertaken by the cannery crew reserved for heavier labor, an all-male group known as the "beach gang." By the end of the summer, the collapsed section of the warehouse was completely rebuilt.

In more recent summers, new cannery construction has proceeded in leaps and bounds, by many of the same beach gang members who repaired the collapsed section of the warehouse near the mug-up area. The old net loft warehouse was condemned and demolished after its aging supports were damaged in an autumn storm, its contents moved to a new building erected close to the cannery gate. The entire Egg House was also reconstructed from the pilings on up. Its interior is now filled with sleek new equipment, and its processing lines streamlined considerably since my boxing days.

The fresh-frozen room has witnessed the biggest transformations, having been expanded to more than twice its former size. Where a hodge-podge of metal tables and insulated totes once sat, high-tech machinery forms the basis for two full processing lines. While many of the early cannery structures remain as before—albeit now all the same color, and freshly painted—there is much more about the facility today that speaks to its changing role in a rapidly reorienting industry. Just as the cannery was reassembled and retrofitted after any number of disastrous breakdowns, the chapters ahead record innumerable instances of reinvention, of the recreation of the Bristol Bay industry and its diverse participants alike over the course of its history.

Chapter Two

Capturing the Return, Part I

Across the North Pacific, signs of spring initiate a process of radical transformation for many of the salmon swimming in its waters: a return to natal estuaries to spawn, and then to die. Setting forth from the commingled salmon populations of the high seas, sockeye salmon returning to Bristol Bay travel from 40 to 60 kilometers per day during their journey (French et al. in Quinn 2005: 45). Although much about the patterns and mechanisms of salmon migration is still unknown, biological research indicates the salmon coming to Bristol Bay from the Bering Sea head either north or south around the Pribilof Islands, while those coming from the Gulf of Alaska make their way through narrow passes that cut across the Aleutian chain (Quinn 2005: 54). In their return, Thomas P. Quinn notes, these fish "converge…with remarkable precision…having been spread over a large portion of the Gulf of Alaska and the North Pacific Ocean only a few months before" (2005: 46-47).

On the shores of the Bristol Bay region, in a parallel fashion, commercial fishers and other industry workers converge in the region's coastal communities each year to make ready for the salmon's arrival. While peak salmon returns are not generally seen until late June or early July—the height of run is said to occur sometime around the Fourth of July—Dillingham springs back into life as a summer fishing town well before then. After the winter snows melt, which usually happens sometime in April, the muddy,

brown, southwest Alaskan springtime sets the stage for the burst of summer green and flurry of activity to come. By mid-May, the first new buds are about to unfurl, and the place has shaken many vestiges of off-season dormancy: tarps and covers fly from fishing boats, bags of nets suddenly abound, and clanking tools ring on engines and decks. The chain link gate to the cannery once again opens wide to the steady traffic of its pre-season crew; mucky sidewalks and smoky bars get progressively livelier as fishers and other workers living outside the community start trickling into town; and talk about the fishing season ahead buzzes in the air.

The sheer diversity of the human group that congregates each year to greet the salmon's return is remarkable, as is the earth-circling span of their far-flung places of origin. At the cannery, each week of pre-season preparation brings a new set of workers as operations gear up for full production. Many of these are familiar faces, those who have worked alongside one another for years and even decades. They include processing workers, office staff, managers, dining hall employees, machinists, power plant operators, quality control specialists, and longtime members of the beach gang, who do construction before and after the season, and unload salmon from transport vessels when fishing is in full swing. Every year introduces new people as well: friends and relatives of current or past processing workers, many of Latin American and Filipino heritage, who make their way up the West Coast from one agricultural or seafood processing job to another; recruits provided by labor agencies, who often target particular countries for their hires (large groups from Turkey and Moldova arrived during my research period); and even the batch or two of predominantly Euro-American college students, in one case the members of a church youth group, and, in another, a handful of sorority sisters from Washington

State University who decided to pursue fish processing jobs one season when summer internships in their fields of study were scarce.

As the southwest Alaskan summer days grow longer and nights brighter, activity also returns to the boatyard and the boat harbor that are adjacent to the cannery. The denizens there are similarly diverse. They include residents of Bristol Bay-area villages who often fish with large extended families aboard their boats; aging hippies who started fishing in Alaska in the 1970s to carve out a counter-cultural existence; local leaders whose heavy engagement in fish politics puts them on a first-name basis with the Governor; and those from multi-generational fishing families who are involved and invested in fisheries in several states. In the time they spend readying for the season and between the intermittent fishing periods that mark its slow start, these varied individuals often find themselves side-by-side in close proximity.

Steep walkways drop down from the dusty road to the harbor docks, which border two sides of the square-shaped lagoon. Unlike the docks at a seaside tourist town, these are floating metal platforms without individual slips. Boats simply tie up to the side of the platform, and then to one another, in a tight row (Image 6). Those fishers tied up on the far end of each row have to climb from boat to boat in order to make their way out to their own vessels. In so doing, they often step across spaces that reflect the range of social distinctions routinely referenced by fishery participants: locals and "Outsiders" (those who hail from outside the region, and particularly outside Alaska), Native and non-Natives, highliners and lowliners (that is, those who have a reputation for catching lots of fish versus those who do not). The boats themselves, all limited to 32 feet in length by regulation, are nevertheless similarly diverse, including aging fiberglass

Rawsons, known for their compact design and rolling motion in rough waters; doublewide Modutechs, whose massive height and girth makes them dwarf the other 32-foot vessels beside them; and aluminum Raider bow/stern-picker jet boats, which are able to operate in very shallow waters and allow for versatile and fast-paced fishing off both the front and back of the vessel. During the early part of the season, while fishers bide their time in the harbor, waiting for the season to begin in earnest, the railings of the Rawsons and the Modutechs and the Raiders rub up against one another just as do their skippers.



Image 6. Dillingham Boat Harbor at Low Tide. Photo by Karen Hébert.

A certain sort of restlessness pervades activity on boats and banter on the docks during these early weeks. Although the fishing in the nearby Nushagak district and across Bristol Bay officially begins with the start of commercial openings for king salmon in early to mid June, everyone knows the real season is yet to come. King salmon arrive earlier, and in a slower and steadier fashion, than the more populous runs of reds. As late June approaches, reports portending the start of the sockeye season start to filter back to the commercial fleet. By this time the Dillingham boat harbor is full, humming with what can only be described as a collective quiver of anticipation. Fishers know that after they leave the harbor for the next fishing period, they might not see it again for a while—and by the time they return, much of the season will be already behind them, a sleepless blur of round-the-clock exertion. So they wait for the mass exodus into the district, for the time when crew will scamper across the decks and dock, loosening the lines of the long rows of vessels bound together, tossing them from boat to boat, and managing the controlled chaos that ensued as a jumble of aluminum frames and fiberglass hulls tried to nudge their way out of the harbor at once (Image 7).



Image 7. "Boat Drill": Boats Leaving the Dillingham Harbor for a Red Salmon Opening. Photo by Jedediah Smith.

On a gloriously sunny day during one such a period of anxious anticipation, I came across Dillingham residents George and Bertha Sugatuk tied up at the harbor beside Kaleo and Ramon Perry, brothers who live on Vashon Island outside Seattle in the offseason. As Bertha and her teenage son Sam mended nets on their broad aluminum deck, making a passing comment or two in their native Yup'ik, Kaleo's deckhand turned up the techno music that was pulsing from his boat's high-quality sound system as he made his way down to do some work on the engine. Both boats had a reputation for high catches, which was no secret to the other; and while there were no palpable expressions of close friendship displayed by the two crews, there were no signs of outright hostility either. After all, George may have had his thoughts about the aggressive fishing style with which Kaleo and Ramon were identified, but he also had watched them grow up. The Perry brothers had been fishing Bristol Bay for almost as long as anyone could remember. They worked for many years alongside their father, and old-timer whose travels around the Pacific had left him with numerous children and jaw-dropping stories of long-distance sails by outrigger canoe. Like most of the relationships that were elaborated and forged anew during each salmon season-whether marked by friendship, animosity, mutual disinterest, or competitive tension—the exchanges between Sugatuks and the Perrys were informed by decades of past interactions, and even longer histories of inherited associations.

In attending to interactions among the fleet, I never quite felt as if I had reconstructed an archaeology of these past encounters that was complete enough to fully account for present dynamics, nor a genealogy of interpersonal and kin relations that was sufficiently deep or encompassing so as to explain the myriad ways in which almost

everyone I met was linked in some fashion to one another. For this reason, my knowledge undoubtedly skims the surface of that which draws together and fissures those operating the boats tied alongside one another: not only the Sugatuks and the Perrys, but also those with connections to a wide array of other social networks. The fleet that fished the Nushagak included Seventh Day Adventists whose parents and grandparents had established a community on Lake Aleknagik near Dillingham in the 1930s; a group from the Yup'ik Eskimo community of Toksook Bay on Nelson Island to the north, who were first recruited into the fishery during the labor shortages of World War II; and a handful of Russian Old Believers residing on the Kenai Peninsula south of Anchorage, almost all of whose hulking fiberglass boats appear to have been custom built from the same model. There are certainly observable patterns amid their entangled histories and remarkable diversity—the subtle social geographies by which the Toksook boats often wind up next to one another in a line of matching Rawsons at the harbor (see Image 6 foreground), and the docks off the far boat ramp come to hold a preponderance of local boats. Yet from the fishery's earliest beginnings, such distinctions stemming from place, language, and culture have been both blurred and heightened as people have assembled to harvest the onslaught of salmon.

The Making of Labor

This chapter examines the making and remaking of such distinctions alongside the expansion of capitalist production in Bristol Bay. The region's status as a cultural borderland extends prior to its reconfiguration as a site of resource extraction for emerging transcontinental markets, as I will show in the coming pages. Nevertheless, it

has also been shaped and reshaped through its long history of production for capitalism, whose broader historical emergence it thus shaped in turn.

Even before the establishment of the commercial salmon industry, new relations and forms of differentiation were enacted as the region became incorporated into imperial Russia. In the wake of Vitus Bering's 1741 expedition, Russian trapping interests scoured Alaskan coasts for sea otter pelts, which were typically harvested through the coerced labor, even enslavement, of Native hunters from the Aleutian Islands to the south of Bristol Bay. By the end of the century, vying Russian fur trading companies were engaged in intense and often violent competition for control of a broad swath of Alaska, including Bristol Bay, which ended only with the granting of a monopoly to one firm by Tsar Paul I in 1799 to the form the Russian-American Company (RAC) (Black 1984: 27). RAC representatives made an expedition to Bristol Bay in 1818, and from that point forth maintained a presence in the region until the U.S. purchase of Alaska from Russia in 1867. During this time as a Russian imperial outpost, Bristol Bay's furbearing animals and human inhabitants became natural and human resources for the production of commodities that circulated across much of Europe and Asia, and the accumulation of wealth in places like St. Petersburg and Novograd. Yet these transformations, while profound, nevertheless laid the groundwork for the even more dramatic reconfigurations that would accompany the rise of commercial fishing in the 1880s.

In contrast to many other fisheries, the unruly abundance of Bristol Bay salmon runs have been as much of a factor in the formation of production as have periods of scarcity. Given the salmon's abundance and spatiotemporal specificities, the fishing industry has been faced with an intense but spasmodic need for living labor. Since its

beginnings, it has answered that need by gathering a heterogeneous assemblage of people to its site of production along the Bering Sea, and pressing their varied energies into its labor force. As James VanStone writes, from "the early days commercial fishing caused major seasonal fluctuations in population" and brought the people of Bristol Bay "into first-hand contact with many different races and nationalities" (1967: 63). These workers brought with them vast differences: they were from the far corners of the world, spoke different languages, ate different foods, had different methods for the most minute of practices, like coiling rope or cooking dinner. Labor became a site in which such differences were revealed, explored, and negotiated, as well as imposed, produced, and elaborated anew—typically as they were drawn into the highly racialized relations that underpinned "sliding and contested scales of differential rights" (Stoler 2008: 193).

This two-part chapter aims to explore the historical constitution of labor in Bristol Bay in order to account for the "emergence of a world at once increasingly interrelated and fractured" (Coronil 1995: xiii). It seeks to explain the relationship between structures of production and structures of feeling, the production of commodities and the production of personhood. It delves into the differences that are at once asserted and subverted, created and foreclosed as workers' energies are objectified as labor. At the same time, it probes the paradoxes amid the fraught social identities forged through these processes. In a poem entitled "Dillingham, Alaska, the Willow Tree Bar," referencing one of the community's two drinking establishments, Gary Snyder paints a scene of "Texans, Hawaiians, Eskimos, / Filipinos, Workers, always / on the edge of a brawl—" ([1983] 2005: 91). Indeed, as these lines suggest, Bristol Bay workers are heavily marked by rigid ascriptions of bounded identity, which are nearly inseparable from their identities as

workers in everyday practice. And there are indeed ongoing frictions between groups of industry participants. However, the diversity of the workforce and its long multicultural past is just as often a point of brimming pride for those involved in the fishery at present. One day at the harbor, I found myself in conversation with Terry Sergei, a fisher from the nearby village of Clark's Point. When I mentioned to him that I'd been working in the Mermaid Cove cannery, his excitement rose. "If those walls could speak!" he exclaimed. "What a history! All those people from all races, all nations!" Along with the disparaging jabs about the cannery's aging equipment and antiquated products, I also heard this fonder sentiment expressed quite regularly by those in Bristol Bay.

Whether in celebration or derogation, the conceptualization of industry labor as comprised of those from a diversity of bounded "races" or "nationalities" is widespread. Yet this vision of fragmentation is at times marshaled to underscore an alternative reckoning of Bristol Bay as a place of mixture and synthesis. It is my contention that these views reflect the simultaneous fracturing and interrelation that have arisen along with shifting processes of capitalism and imperialism. I thus interpret the social distinctions that transect Bristol Bay labor as "imperial formations" (Stoler 2008, Stoler and McGranahan 2007) and "imperial effects" (Coronil 2007). Although Russia and the U.S. are not generally analyzed as empires, the chapter as a whole follows a body of scholarship (e.g., Burbank 2007, Kaplan and Pease 1993, Miller 2006, Stoler 2006a, Williams 1972, [1959] 1988, [1980] 2006) in providing compelling reasons for examining this corner of Alaska as one patterned by imperialism as well as capitalism. In so doing, it confirms what Fernando Coronil (2007) has identified as the importance of seeing the development of capitalism and imperialism as coeval and mutually reinforcing.

In the simultaneous capture of profits, rent, nature, and labor in Bristol Bay production, the chapter's two parts demonstrate, relations of various sorts of dependency are elaborated. These include the very stark conditions through which "the self-fashioning of sovereign centers entails the making of dependent peripheries" (Coronil 1995: xiv), as well as the multiple ways in which capital accumulation comes to depend on processes it cannot not fully control or evacuate from its abstractions. The tensions between these modes are revealed in moments that highlight "the self-fashioning of these peripheries" (Coronil 1995: xiv). I show that the intercultural space created in Bristol Bay alongside capitalist production can be interpreted as one of transculturation in the terms proposed by Fernando Ortiz ([1947] 1999), which entails at once transformations to existing identities, the production of new cultural forms, and loss.

This chapter is a whole split into two separate parts. The first is organized under the rubric "Baptisms by Empire," which follows below. This first chapter segment evaluates the ongoing implications of the region's involvement in the Russian fur trade. It shows how the complexity of ethnic identifications in Bristol Bay in the present reflects diversity that existed before the Russian presence in the region. It also shows how identifications and identities alike only gained new layers and dimensions through the region's involvement in the fur trade. The second part of the chapter, which follows separately, describes the transformations wrought through the later establishment and growth of the region's commercial salmon industry and its increasing Americanization.

Baptisms by Empire

"If the observer ascends to a height the country appears to him like a heaving ocean suddenly become stationary, with its waves transformed into sand and mud; these

waves are now covered with vegetation, but their outlines are still very striking" (Veniaminof in Moser 1902: 178). In this way, the Russian Orthodox missionary Ioann Veniaminof, otherwise known as Saint Innocent of Alaska, described the topography that still ripples across present-day Bristol Bay in his writings during the first decades of the nineteenth century. As Veniaminof's observations suggest, the glacial movements embedded in the region's deep geological past have left traces on its physical landscape in the present. These only rise to visibility when held at some distance, however, and teasing out the ongoing transformative processes they evidence is no doubt tricky in light of their seemingly eternal and unmoving solidity. So, too, some of the shifts that accompanied the incorporation of Bristol Bay people and resources into Russian imperial relations in the eighteenth and nineteenth centuries likely remain difficult to pinpoint in the present, distant transformations that have long since sedimented into daily existence. It was in these years that the rhythms of local ecologies and social orders first began to be joined with the fluxes of increasingly global markets, for instance, and people differentiated, at least from imperial standpoints, through their roles in the process.

Nevertheless, there are many features of present-day life in Bristol Bay that render this Russian imperial past more manifest. These include the widespread practice of Russian Orthodoxy among the region's Alaska Native inhabitants, the preponderance of Wassilies, Anuskas, and Blunkas in its general population, and the names of everyday objects employed by many—like the Yup'ik *luuskaaq* for what in English is a spoon, and *caayuq* for tea, which are adaptations of Russian loan words.⁴⁷ A number of practices

⁴⁷ The "c" in Yup'ik is pronounced like the English "ch" as in "Charlie." It is worth noting that the Yup'ik *caayuq* (pronounced something like chai-yuk) is derived from the Russian чай, or *chai*, which is itself a derivation from "cha," the pronunciation of the Chinese word for tea in a particular dialect, suggesting a long chain of linguistic borrowing. A fascinating map produced by Östen Dahl (2008) of the Max Planck

that speak to the Russian presence have become so thoroughly incorporated into everyday life in the region that they are considered core to Native tradition.⁴⁸ Public presentations of Yup'ik dancing like those held today in the Dillingham, for instance, often begin with a blessing by the priest of the local Russian Orthodox parish—even though similar dances were discouraged earlier in the twentieth century by Orthodox officials. The contemporary commercial fishing season, too, is marked by a blessing of the boats, which is always carried out by the Orthodox priest in town as well as a few local leaders of other Christian denominations (Image 8).



Image 8. Blessing of the Boats, Dillingham Boat Harbor, 2004. Photo by Karen Hébert.

Institute shows the derivation of words for tea in languages around the world, the majority of which derive from the Chinese word through either the Min Nan Chinese te or the Sinitic cha dialects.

⁴⁸ Ann Fienup-Riordan (e.g., 1990: 97) has observed the association of Russian Orthodoxy and "traditional" Yup'ik culture in the Kuskokwim River region to the northwest of Bristol Bay. As Lydia Black describes of southwest Alaska broadly, "Traits and complexes which can be proven to be of Russian origin are spoken of, or believed to be, 'native" (Black 1984: 21). Black extends these observations to argue for a reassessment of the significance and pervasiveness of the Russian influence in the region, which, she suggests, has tended to be erroneously portrayed by scholars as quite limited in comparison to the later American presence (1984: 21-22).

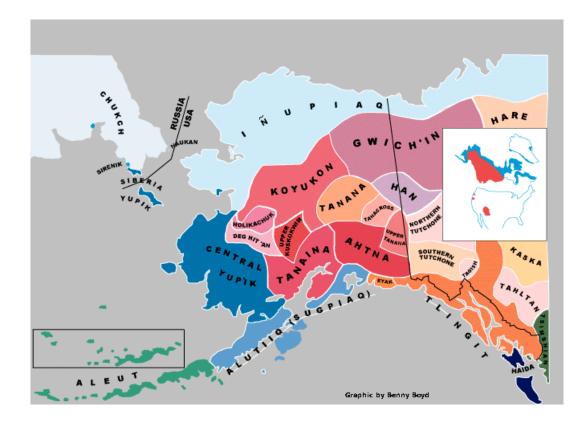
As these details suggest, the persistent Russian influence in the region is evident in the degree to which it provoked the naming and renaming of cultural elements that subsequently came to express new or rearticulated practices, identities, and relations. Yet the above examples also make clear that terms gleaned from interactions among Bristol Bay residents and representatives of imperial Russia were themselves transformed by through these exchanges. The Alaskans who adopted Russian words and cultural forms at once adapted them, and in so doing recreated whatever seeming Russian original they iterated. Russian Orthodoxy itself, for example, was profoundly shaped by the varied terrain of cultural difference that characterized its imperial reaches, as were Russian notions of rights and citizenship (Burbank 2007). In this section, I examine the Russian period in Bristol Bay not only as a site of profound transculturation, but also as a series of events that reflect what Michael Silverstein has theorized, following Hilary Putnam (1975) and Saul Kripke (1972), as "baptismal" moments (Silverstein 1996). I suggest that the literal and metaphorical baptisms that accompanied Russian rule—as Bristol Bay's encompassment into the fur trade also brought missionaries and government functionaries as well—condense the dialogical conditions of their production into their foundational forms, and carry those traces with them through their subsequent reinterpretations. This highlights a theme that runs throughout the chapter as a whole: that as much as Bristol Bay's status as a hinterland was imposed by distant powers, the negotiations through which exploitation and exchange took place, like those in other colonial contexts, ensured that outcomes were never fully controlled by imperial dictates.

Boundaries and Unboundings

If Bristol Bay today is distinguished as a meeting and melding point for different groups of people, this has been a characteristic feature of the region for quite some time. While the borrowings dating from the Russian period are striking, its cultural exchanges and interchanges have an even deeper history. As the coming paragraphs outline, the region was a cultural and ethnic borderland well before the arrivals of Russian imperial officials, Moldovan contract workers, or Washington State University sorority sisters.

At present, Bristol Bay "is probably the only area in Alaska where the three major Native ethnic groups live in close proximity," as historian John Branson posits (1998: 9). These Native groups are often referred to colloquially as "Indians," "Eskimos," and "Aleut," although, as we shall see, the linguistic and ethnic markers employed in anthropological scholarship and Native self-identification are often somewhat different from these, not to mention from one another. Within the region, area-wide organizations routinely describe its Alaska Native population as including "Yup'ik Eskimos, Athabascans, and Aleuts" (e.g., BBAHC 2008b). The abutment of such different groups is represented on the below map of the geographical distribution of Alaska Native languages (Map 3). The map distinguishes between the related languages that stretch throughout Alaska's Interior—Athabascan (or "Indian") languages represented in red tones—from the blue-green units that line much of the coast to the west and north, which stand for branches of the Eskimo-Aleut language family. These different languages are associated with populations having distinct histories of migration to the New World.⁴⁹

⁴⁹ The peopling of the New World is the subject of an ongoing scholarly debate, and far beyond the scope of this study. Suffice it to say that some scholars argue that archaeological, linguistic, and biological evidence suggests that human migrations from Asia to the western hemisphere happened in three waves: a first wave of Paleoindians who moved through a region called Beringia, a one-time land bridge between



Map 3. Alaska Native Languages (Map source: ANKN 2008)

As archaeological and historical evidence suggests, the members of these multiple Native groups have lived and interacted in Bristol Bay since at least the time of the first Russian forays into the area. Both Russian explorers and their Native interlocutors recognized cultural and linguistic difference between those inhabiting coastal and interior environments, and drew distinctions among a considerable array of "subcultural enclaves" as well, subgroups that recognized themselves as distinct despite their small

Siberia and Alaska, from 14,000 to 12,000 years ago, eventually becoming established in lower North and South America; a second wave of expansion from Asia from 11,000 to 10,000 years ago, in which the ancestors of present-day Athabascan and Northwest Coast Indians moved into North America; and a third more recent wave during which the ancestral Eskimo-Aleuts settled along the coasts of mainland Alaska and the Aleutian Islands (Turner 1988: 115). Although the archaeological evidence from this third migratory wave has been largely destroyed by rising sea levels, evidence from sites in the eastern Aleutians indicates that this area was populated by at least 6,000 B.C. (Turner 1988: 115).

numbers (e.g., Black 1984: 22-23, VanStone 1967: xx-xxiv). Some of this ethnic complexity remains acknowledged into the present, as Bristol Bay Yup'ik speakers interviewed by Lydia Black in the 1980s recognized many of the ethnonyms contained in early Russian reports (1984: 23). At the same time that the interchanges between these groups were not always peaceable—certain parties were quite consistently "at war" in the years before the Russian presence was firmly established (Dumond and VanStone 1998: 39)—they also occasioned a great deal of cultural borrowing (e.g., Selkregg 1998: 4).

As this suggests, the sorts of seemingly rigid boundaries now delimited on the language map were actually much more fluid, subject to mixing and movement. Those seeking to delineate the "subcultural affiliation" of different Native groups in the past face inordinate challenges for this very reason (1967: xxi). Moreover, in addition to exchanges among neighbors, the region's aboriginal residents had been connected to extra-local circuits of people and goods, including those linked to Russia, for quite some time. "Extensive native inter-continental pre-contact trade via Bering Strait" existed well prior to the Russian arrival in the North Pacific in the 1640s, Black documents (1984: 24). Manufactured goods from across Asia and Europe had thus reached Alaskan shores long before Russian traders ever set foot on them. For anthropologists in prior decades seeking to reconstruct the "aboriginal baseline culture" of southwest Alaska, such longstanding linkages infinitely complicate the ethnohistorical task, as Margaret Lantis (1970: 7) and VanStone (1970) confess.

While the language map may strip away some of this complexity and reify speech activity into static, bounded, color-coded linguistic units, its partitions do give some sense that Native identity in Bristol Bay remains far from monolithic. As represented on

the map, the area around and to the north of Lake Iliamna, visible as a hole within southwest Alaska, is home to Tanaina Athabascans.⁵⁰ Tanaina villages in Bristol Bay



Map 4. Bristol Bay Villages. (Map source: SAFE 2008)

include Nondalton on Lake Clark and Pedro Bay on Iliamna (see Map 4). Athabascan is a Native American language and culture group of the larger Na-Dené ("Indian") family that extends from the interior of Alaska into Canada and beyond. The inset on the language map (Map 3) shows an island of red in the U.S. Southwest, which represents Navajo, an Athabascan language.⁵¹

⁵⁰ Depending on one's preferred orthography, Taniana is also written as Dena'ina, and Athabascan as Athabaskan or Athapaskan. I follow the spellings used by the Alaska Native Language Center (ANLC 2008a) and the Alaska Native Knowledge Network (ANKN 2008).

⁵¹ It is fairly well established that the forbears of the Navajo and other speakers of Apachean Athabascan languages in the southwest U.S. were part of a more recent migration from the north sometime since 1000 A.D. (see Campbell 1997: 112).

The area around Dillingham is figured on the language map amid a sea of blue that represents Yup'ik Eskimo.⁵² Although Dillingham's status as a hub community in the region means that its Native population is of varied backgrounds, it is at the same time heavily Yup'ik, as are its surrounding villages. Yup'ik is an Eskimoan language, along with Iñupiag.⁵³ "The Eskimos...from Greenland to northern Alaska...are noted for the uniformity of their speech," James VanStone explains, but there is "a major cleavage within Eskimoan" in the area around Alaska's Norton Sound (1967: xx). This break is represented on the language map by the boundary between dark and light blue areas on Alaska's western coast, by which Central Yup'ik and Iñupiag are separated. As VanStone's comments suggest, the Iñupiaq that is spoken across northwestern and northern Alaska, along with the closely related Canadian Inuit and Greenlandic dialects, "may collectively be called 'Inuit' or Eastern Eskimo," which is linguistically "distinct from Yupik or Western Eskimo" (ANLC 2008d). Thus the ethnonym "Inuit," which has largely replaced "Eskimo" in Canada as that term has fallen out of favor, does not encompass all Alaskan Eskimos-most notably Yup'ik people-and is therefore not employed in Alaska.

The term "Eskimo" is used fairly regularly in Bristol Bay in descriptions of selves and others without evident disparagement. Recent scholarly contributions have asserted

⁵² "The use of the apostrophe in Central Alaskan Yup'ik, as opposed to Siberian Yupik, denotes a long p" (ANLC 2008c). Central Alaskan Yup'ik is the Eskimoan dialect spoken by most, but not all, of Yupik-speakers in Bristol Bay. I tend to use the apostrophe unless there is a specific reason not to, mostly because Central Yup'ik is especially prevalent among Yupik-speakers on the western side of the Bay in the area around Dillingham, my primary field site.

⁵³ Significantly, differences of self and other are condensed in the names of the languages themselves— Iñupiaq and Yup'ik both mean, literally, "real person" in their respective languages, e.g., from "yuk," human being, and "pik," genuine or real. I follow the spelling of Iñupiaq used by the Alaska Native Language Center (ANLC), which notes that "'Inupiaq'...is often spelled 'Iñupiaq,' particularly in the northern dialects" (2008d). Using the tilda also signals the word's pronunciation. In addition, the plural form in both Yup'ik and Iñupiaq ends in -t, such that one refers to the Inupiat people of Alaska, and in the case of Yup'ik speakers, the Yupiit. As Morrow and Schnider note, however, the plural "Yupiks" is widely acceptable English-language writings (1995: 9).

that "'Eskimo' carries no negative connotations in Alaska and is often considered preferable because the Yup'ik people do not share the term *inuit* as their word for people" (Morrow and Schneider 1995: 9). While this may be the case generally, I have also heard some area Yup'ik speakers express discomfort with the designation of "Eskimo." The reason given by one speaker, who said that he preferred to identify himself as "Yup'ik," is apparently the most commonly cited rationale for the presumed offensiveness of "Eskimo": that it can be traced etymologically to a derogatory word meaning "eaters of raw meat" in another Native American language. Interestingly, this derivation itself is contested by many contemporary linguists (The American Heritage Dictionary of the English Language 2008a). Irrespectively, this issue is most often sidestepped in the Bay given that the vast majority of those there who might self-designate or be designated as Eskimo are, in fact, Yup'ik, and simply identify themselves as such.

The self-identification of those Alaska Native people coming from the upper part of the Alaska Peninsula on the east side of Bristol Bay evidences its own complex politics of indigenous identity, one that similarly signals the historical formulation of contemporary Native ethnic designations amid changing structures of power. Recall that Bristol Bay-area organizations regularly refer to the region's "Aleut" people. Similarly, during my research I heard a number of people from the Bay's east side reference their "Aleut" heritage. Yet according to the language map, the eastern shores of the Bay are marked not by the Aleut language—now known as Unangax[^] by linguists, a branch of the larger Eskimo-Aleut family (ANLC 2008e)—whose range begins further south. Rather, the area to the north is labeled "Alutiiq/Sugpiak," which refers to "a Pacific Gulf variety of Yupik Eskimo" that is "[c]losely related to Central Alaskan Yup'ik" (ANLC

2008b).⁵⁴ "Although traditionally the people called themselves *Sugpiaq*," one authority (ANLC 2008b) explains, "the name *Alutiiq* was adopted from a Russian plural form of Aleut, which Russian invaders applied to the Native people they encountered from Attu to Kodiak." Given these details, it is even more striking that so many people from the upper Alaska Peninsula consider themselves "Aleut" rather than Yup'ik, Sugpiaq, or Alutiiq, regardless of what linguists might say.

As Lydia Black and R.G. Liapunova describe, the term "Aleut," which was originally the self-designation of Unangan people living on the westernmost Aleutian Islands, "has become the preferred self-designation of several Alaskan peoples," including "several Yup'ik speaking groups of the eastern Alaska Peninsula" (1998: 9). In a recent study of the Alaska Peninsula Alutiiqs, Patricia Partnow writes that both the Alutiiq and Unangan people "now call themselves 'Aleut' when speaking in English" (2001: 29). William Fitzhugh similarly notes that contemporary "Pacific Eskimo…people often prefer to be known as Aleut, and call their language Alutiiq, emphasizing their historically linked ancestry with Aleut people with whom they have become associated as a result of Russian colonial enterprises" (Fitzhugh 1998: 26). Black and Liapunova supply additional information on the presumed rationale for the preference Fitzhugh notes: "All of these groups [who prefer to self-designate as Aleut] came under intensive Russian influence in the late 18th century, and in the last 200 years their history followed the same or very similar courses. Members of these groups were

⁵⁴ Linguists also identify the Egegik dialect of Central Alaskan Yup'ik on the upper Alaska Peninsula as well, which appears as a strip of darker blue (ANLC 2008b).

considered citizens of the Russian Empire with civil status similar to that of free peasants in metropolitan Russia" (1998: 9).⁵⁵

As the above example indicates, the complexities of present-day Native ethnicity in Bristol Bay not only reflect the historical diversity of its aboriginal residents before direct European contact, but also suggest the degree to which subsequent exchanges with non-Natives contributed to the further elaboration and reconfiguration of these distinctions. As VanStone writes:

Considering the diversity of the ethnic boundaries in southwestern Alaska, it is little wonder that these became blurred as a result of the fur trade, epidemics of introduced European diseases, the establishment of schools and missions, and particularly the emergence of an important commercial salmon fishery in Bristol Bay (1967: xxi).

In addition to their blurring, of course, we might add their rearticulation, as earlier distinctions were no doubt not simply lost, but also transformed and expressed anew.

Difference and Differentiation

Prefiguring the arrival of U.S. salmon packers to Bristol Bay in the late nineteenth century, who came in search of salmon runs they had not yet depleted, the Russian entry into the region in the early part of the century was driven by the RAC's search for populations of furbearing animals that it had not yet exhausted. While RAC traders salted salmon for their own provisioning and some small-scale export, it was not until after the development of canning technology in the 1860s that the area's salmon were extensively exploited for profit (Cooley 1963: 23-24). Bristol Bay's history thus offers a vivid picture of capitalism and empire intertwined over two quite different periods.

⁵⁵ See Krauss (1979: 815) for another discussion of this issue.

Beyond a number of structural similarities in the ways Bristol Bay nature and labor came to be exploited in each era, the Russian fur trade serves as a point of contrast to the later development of the salmon industry in several respects. For one, the work of fur trapping itself was done largely independently of direct RAC company oversight, and formed the basis for a mercantile capitalist economy rather than the more tightly organized form of industrial capitalism that accompanied salmon packing. Moreover, as Jane Burbank (2007) argues, the style of Russian imperial dominion did not merely allow for the expression of heterogeneous cultural difference among those within the realm, but in fact was premised upon it. "A multiplicity of differences was fundamental, not problematic, for the workings of Russian empire," she contends (Burbank 2007: 78). According to Burbank, the legal structure of the empire itself was "based on differentiated rights," variable laws that applied to particular collectives by virtue of their cultural, geographical, linguistic, and religious difference (2007: 84). Thus, at the same time that this imperial structure produced its own status differentiations-as perhaps are still manifest in Bristol Bay residents' contemporary self-identifications as "Aleut"-it also laid the groundwork for the elaboration of identities premised on difference. Not unlike the "middle ground" forged through the interactions of various Europeans and Algonquians in the early Great Lakes fur trade as documented by Richard White (1991),⁵⁶ the hierarchies during the Russian period relied more on the blurring of identities, mingling of peoples, and sharing of meanings rather than their compartmentalization.

During the first half of the nineteenth century, Bristol Bay became a significant site for RAC operations. Following the 1818 expedition into the region, RAC officials

⁵⁶ I thank Josh Reno for reminding me of the comparative relevance of White's work.

established a fortified trading post along the Nushagak River.⁵⁷ This post, called Novo-Aleksandrovskii Redoubt, or Alexandrovski Redoubt (later known in the American period as Fort Alexander), was built across and just a few miles downriver from the location of present-day Dillingham. The first Russian trading post north of the Alaska Peninsula, the redoubt became "the base from which the Russians explored the interior of southwestern Alaska and opened up the area to the fur trade" (VanStone and Sarafian 1972: 54). For over a decade, it would serve as the only post of its kind for hundreds of miles, and ushered in new kinds of contacts and relations for those living in the region.

As Black explains (1984: 30), the fur trade in southwest Alaska was conducted in the form of barter. Native trappers exchanged furs with RAC officials or a variety of Native middlemen for other goods, generally manufactures like metals, household items, and foodstuffs, and also things made by Natives elsewhere in Alaska that may have been in short supply locally, like whale products. Native trappers traveled from great distances to the major redoubts, which formed the core of RAC operations along with subsidiary outposts and expeditions into even more remote areas.

In their varying roles as producers, consumers, partners, and even competitors visà-vis the RAC, different groups of Alaska Native people were brought together in a more direct and intensive fashion than in earlier trade circuits. At the same time, these people also encountered new practices through which they were set apart. The RAC sought to capture trade through the cultivation and service of local elites, drawing on the chief strategy that characterized the Russian imperial quest for "control over resources—land, its products, and labor—and the social order required to secure them" (Burbank 2007:

⁵⁷ In describing these activities of the RAC, I rely on the research of VanStone (1967) and Black (1984), as well as a summary by Selkregg (1998).

79). In Bristol Bay as elsewhere, this was forged through the creation and elaboration of status differentiations. RAC officials established relations with desired trading partners by first attempting to identify community leaders, people they designated *toyons*, to help build linkages. Tellingly, the designation of "toyon" itself is the product of a form of transculturation: It is a term taken from the Sakha of eastern Siberia in company dealings there and transported for interactions with other aboriginal peoples.⁵⁸ Those designated toyons in southwest Alaska, VanStone reports, "were given silver medals, called 'United Russia,' with the Tsar's picture on one side, a certificate designating the leader as a person of authority recognized by the company, and occasional incentive gifts" (1967: 54). While it is unclear how these imperial tokens were received or what their actual social effects were—VanStone doubts that those dubbed toyons wielded as much authority over community members as RAC officials may have hoped—these practices nevertheless encouraged the adoption of new roles for certain individuals.

The place of Alaska Native people in RAC operations bears some relationship to the complex social identities of the individuals installed to represent "Russian" interests at these far-flung imperial posts. As Burbank argues, Russian imperial practice defies the "we"-"they" relations between colonizer and colonized that are characteristic of other colonial projects because, fundamentally, "there was no national or metropolitan 'we' confronting an inferior or peripheral 'they" (2007: 82). "[M]any of the most powerful administrators, military leaders, and advisers to the emperor were not Russian anyway," she points out, given that the "political economy of the empire was based from its earliest days on cooptation of high-ranking and powerful local elites into a serving and ruling

⁵⁸ As VanStone and Winston L. Sarafian explain, "toyon" is "a Yakut term meaning tribal elder. Used by the Russian-American Company to refer to individuals in native villages who were representatives of the company and were responsible for maintaining satisfactory trade relations" (1972: 57-58)

class" (Burbank 2007: 84). Indeed, at RAC posts in southwest Alaska, Black explains, those representing the "Russian establishment'...were seldom ethnic Russians": "Many were creoles, that is people who claimed mixed Russian/Alaskan ancestry of diverse degrees from a Russian progenitor, sometimes a putative one; occasionally they were Alaskan natives or Siberian Asiatics...or people of mixed Russian-Siberian Asiatic ancestry" (1984: 23). The founder and first resident trader of the Alexandrovski Redoubt himself was of mixed Russian and aboriginal American ancestry (VanStone 1967: 9).

Not only were ethnic Russians typically in the minority among RAC post employees in southwest Alaska, but they were often subordinate to creoles in various trading contexts; in addition, intermarriage between employees and Native women predominated (Black 1984: 32). "Through long-term residence and marriage alliances," Black describes, "RAC personnel had friendship and kinship ties with native men. Often, their Yup'ik in-laws became not only their trading partners but eventually official middlemen in the RAC-native trade" (1984: 32). These intermediaries made agreements by coordinating information about the kinds and quantities of goods sought by a given Native group with news about the furs being bought and prices paid by the RAC. As these details suggest, the organization of trade closely bound the actors involved in relations of mutual obligation, just as similar intermarriages and kin bonds did among fur-trading Europeans and Algonquians in the Great Lakes (White 1991). As Black points out, the mediating status of intermediaries was only more pronounced in the case of the children of RAC officials in southwest Alaska, who generally grew up in Yup'ik households and spoke Yup'ik as a first language. "Fully conversant with native

customs," Black contends, "...these 'Russians' were not at all strangers in the native society. To-day, their descendents are natives" (Black 1984: 33).

Despite the ethnic and cultural mixing signaled by these ties, they served to smooth the way for RAC profit-making through terms of trade that were patently exploitative for most southwest Alaskans (Black 1984: 31). Like other merchant capitalist enterprises, the RAC extended credit to Native trappers during times of shortage in exchange for exclusive rights to their furs, fostering patterns of indebtedness that would only be deepened by the practices of subsequent fur trading companies in the American period (Townsend 1970: 88). As VanStone describes, the RAC throughout its operations "assumed a paternal role, controlling the goods which the Eskimos could obtain and carefully regulating how much they were to receive" (1967: 56). During the Russian period, it seems, this company paternalism was often quite literal.

In this way, as in others, Bristol Bay's development as a site of capitalist production was closely linked with the changing social identities and relations that were forged alongside it. Even as trade was conducted through barter, Native intermediaries and perhaps even the people they represented became well acquainted with the key features of a cash economy, especially the price fluctuations that characterized incipient global resource markets. Although the rise of the commercial fishing industry would introduce new forms of industrial capitalism to Bristol Bay shores, relations marked by deep paternalism would be continued by the major salmon packers operating in the region for much of the twentieth century, and arguably even into the present.

Perils of Production

At the same time that imperial powers shaped Bristol Bay as they named trading partners and mapped the region, they also transformed the area and its inhabitants through more literal baptisms as well. As the continuing practice of Russian Orthodoxy in the region suggests, the production of furs was tied to the production of persons, and not simply the designations of toyons, but also, more expansively, the creation of Christian souls. The earliest traders often harbored missionary ambitions, and actual missionaries arrived in the region not long after the RAC established a presence. According to Selkregg, the founder of the Alexandrovksi Redoubt, "combined tireless industry in expanding the Russian fur trade with a zeal for Christianizing the Eskimo inhabitants of the region" (1998: 4). He himself baptized a number of area residents before the more regular appearance of clergy in the region, which accompanied the construction of a chapel by the RAC at the redoubt in the early 1830s and the establishment of an official mission there by the Russian Orthodox Church in the early 1840s (VanStone 1967: 21-25) (Image 9 shows the mission church).

A mission school was established in the early 1840s, and operated on and off for many decades to follow. The community that expanded around the post and mission was known as Nushagak, which grew in size together with a handful of other nearby Yup'ik villages that had existed since at least the earliest Russian contact.⁵⁹ Although it is no longer a year-round community, the old Nushagak village site is the location of a presentday summer encampment for commercial fishers who set net on the nearby stretch of beach known as the Combine. Present-day Nushagak is described in later chapters.

⁵⁹ VanStone suggests that the population around Nushagak increased in part because the post afforded some measure of protection to previously warring groups (1967: 118-119). In its use today, "Nushagak" can thus refer to the Nushagak River, the Nushagak River region, and/or this particular place along the river.

Through much of the nineteenth century, the Nushagak mission came to take on increasing importance even as the trading post itself became subsidiary to other redoubts. RAC documents actually indicate that Alexandrovski might have been shut down completely at mid-century had officials not been wary of the implications of such a decision for the mission (VanStone 1967: 56). In this case, the geography of souls influenced that of fur trading, and of the region's settlement patterns more broadly.



Alaska State Library - Historical Collections

Image 9. "Exterior of church on hill in Nushagak."⁶⁰

Image source: Alaska State Library, Michael Z. Vinokouroff Photograph Collection, John E. Thwaites (undated), ASL-P243-2-007.

⁶⁰ The people in the image are unidentified. The doorways behind them are entrances to the semisubterranean houses used by Alaska Native people across the region, often known as *barabaras*, the term that was established during the Russian era for the similar Aleut dwelling, *ulax*. In addition to these dwellings, the Yup'ik across Bristol Bay built larger semi-subterranean men's houses of a similar design used for ceremonial purposes, *qasgiq*, or what VanStone describes as "kashgee" (VanStone 1967: 125).

Russian Orthodoxy won many converts in the Nushagak region, and the mission remained active even after the sale of Alaska to the U.S. in 1867. While the switch to American rule did not immediately transform daily life in the region, it did initiate certain changes, including the eventual reorganization of the RAC into the Alaska Commercial Company and increasing missionization from North American churches. A Moravian mission would be opened just a few short miles from Nushagak in the late 1880s, which before long included a school with a U.S. government teacher and the region's first hospital, key institutions in its increasing Americanization.⁶¹ In addition to competing for influence in what VanStone characterizes as a "feud" over mission schools (1967: 91), clergy would compete with one another over baptisms themselves. One Moravian missionary reported that his Orthodox counterpart would follow his route in visiting villages, rebaptizing children along the way (VanStone 1967: 16).

Whether because of these Orthodox efforts or a variety of other factors, the Moravian church never achieved the presence on the Nushagak River that it enjoyed along the Kuskokwim River to the north. Yet the success and spread of Orthodoxy in Bristol Bay should not be taken to mean that aboriginal lifeways were simply stamped out through an imposition of foreign norms. Scholars have suggested that the adoption of Orthodoxy among many Alaska Native people can be attributed at least in part to the order's willingness to allow for the incorporation of Native beliefs and practices into its form of Christianity. In southwest Alaska, as elsewhere, Orthodox missionaries used Native languages (Black 1984: 34) and demonstrated remarkable flexibility with church

⁶¹ The mission itself was discontinued in 1906, in spite of the apparent success of its school in comparison to the Orthodox one, whose operations one visiting Moravian bishop disparaged as "the utter worthlessness of the opposing Greek [e.g., Russian Orthodox] establishment" (Bachman in VanStone 1967: 94).

rules (VanStone 1967: 31-33). As a result, contemporary Orthodox practices in the area are often interpreted as radically syncretic (e.g., Fienup-Riordan 1990: 94-122).

In light of the deep traditions of cultural borrowing detailed thus far, it might come as no surprise that along with trade goods and loan words, elements of Orthodoxy became a part of the repertoire of Yup'ik shamans even before Alaska Native forms were incorporated into the region's brand of Russian Orthodoxy. During the 1818 RAC expedition, the official who would go on to found the redoubt, Fedor Kolmakov, himself received a baptism. As Black relays:

He [the shaman] said he wanted to "baptize" Kolmakov. This man then took a tuft of grass, ordered Kolmakov to bear his breast, and marked him, on the body and on his hands, with the said tuft of grass (dipped in oil?) with the sign of the cross. Korsakovskii [the expedition commander] remarked that it was a good imitation of the act of chrizmation [sic, an Orthodox rite of confirmation] and concluded that the man must have observed Fr. Iuvenalii [an early Russian Orthodox priest in the region who was killed and became a martyr] performing it....Interestingly, the elder, after the performance of his act, said that now he will call Kolmakov his "Russian son"... (1984: 28)

While we might question the interpretation of this act as mere "imitation"—rather than, say, mimicry in Homi Bhaba's (1994) sense—this kin-making event captures in quite dramatic fashion the extent to which, even quite early in the region's recorded history, Bristol Bay residents created composite practices as they negotiated forms of difference.

At the same time, however, the contact and syntheses epitomized in these baptismal moments were often laced with potentials for danger and loss. For this reason, Ortiz's ([1947] 1999) concept of transculturation provides a critical analytic, since it does not merely account for the production of new forms of culture and identity in conditions of human transmigration and transmutation, but also destruction as well. The losses to visit southwest Alaska have been of a somewhat different nature than those wrought by the transatlantic slave trade that shaped modern Cuba, yet bear more similarities in their uprootings and recombinings than may be evident at first glance. Among the other introductions provided by Russian empire representatives was the omnipresent specter of disease. The presence of Europeans and Eurasians in southwest Alaska, as in so many other parts of aboriginal North America, is linked to the outbreak of a number of different, yet similarly deadly, epidemics in the nineteenth and twentieth centuries.

In the mid-nineteenth century, an Orthodox missionary recounted how one group of Nushagak River villagers were reluctant to adopt Christianity because they believed in what VanStone describes as a "germ theory of baptism," stemming from their observation that the region had never experienced epidemics until after the arrival of Russian Orthodoxy and its attendant rites (1967: 100). These associations would prove ironically portentous. The most devastating outbreak in Bristol Bay—the worldwide influenza epidemic that began in 1918 and reached Bristol Bay in the spring of 1919—is in fact thought to have entered the region with a traveling Orthodox priest arriving for Easter celebrations. Unlike some of the baptisms of the prior century, however, the priest's visit was apparently actively sought by area residents, so much so that the precautions established to protect the region from infection were not observed. "The desire of the people in the region to attend Easter celebrations was too strong for any travel restrictions," one report asserts (BBAHC 2004: 3).

Once the flu took hold, it spread quite quickly. As VanStone relays, a vivid description of the epidemic is contained in a pamphlet issued by the Alaska Packers Association (APA), the major salmon canning conglomerate whose vessels arrived to the Nushagak in May of 1919 to find most of the population gravely ill, and the rest waiting

for death (1967: 103). Entire villages were wiped out. Often, the few survivors chose to move away from the places that "had been the scene of intense misery and death" (VanStone 1967: 103). Because adults and very young children were more likely to die from the disease, these survivors included a disproportionately large number of orphaned children and teenagers.

Along with the Orthodox Church and the U.S. Territorial government, the APA, a direct heir to the trade in the region's resources during the post-Russian period,⁶² also assumed a measure of responsibility for the region's sick, dying, and orphaned inhabitants. Canneries across Bristol Bay housed and cared for orphans during the 1919 summer fishing season, after which the children were brought to the hospital that had been moved just a few years earlier from the Moravian mission to a new site near the Native village of Kanakanak, which itself was one of those communities abandoned after the epidemic. Children from every corner of Bristol Bay were relocated to the hospital-turned-orphanage, located on the outskirts of present-day Dillingham (BBAHC 2004) (Image 10). Many of these orphans, who came from different villages and spoke different Native languages, would eventually settle together in multiethnic Dillingham, and the Kanakanak Hospital would later expand to become the primary medical center for the entire Bristol Bay region. Moreover, the coordination of aid prompted by the influenza epidemic marked the growing presence of American government in this part of

⁶² As longtime Alaska Territorial Governor Ernest Gruening explains, the APA "was in a way a descendant of the Alaska Commercial Company, since the owners in that dissolved fur-trading corporation and members of their families were among the principal and controlling stockholders in the Alaska Packers' Association" (1954: 252). As mentioned earlier, the Alaska Commercial Company had assumed RAC assets after the U.S. gained control of Alaska, which gives the APA a commercial lineage that can be traced back several centuries.

southwest Alaska, and helped cement the fishing industry's powerful influence in the region, setting the stage for the century to come.



Image 10. "A group of native orphans at the Kanakanak government orphanage." Image source: Otto William Geist Collection, Alaska and Polar Regions Archives, Rasmuson Library, University of Alaska Fairbanks, unknown photographer (undated), UAF-1964-98-178.

Adoptions and Adaptations

The relations forged during the years leading up to the arrival of commercial salmon canning interests in Bristol Bay would lay the groundwork for those that were alternatively elaborated and dismantled during the subsequent century. In a similar fashion, the first part of this chapter forms the basis for my discussion in the second half to come. As we have examined thus far, since the earliest forms of capitalism in the region, efforts to extract profits from Bristol Bay have been founded upon a very literal ensnaring of nature, which itself has relied on living human labor for production. However, unlike in the salmon-canning era that followed it, the human energies that

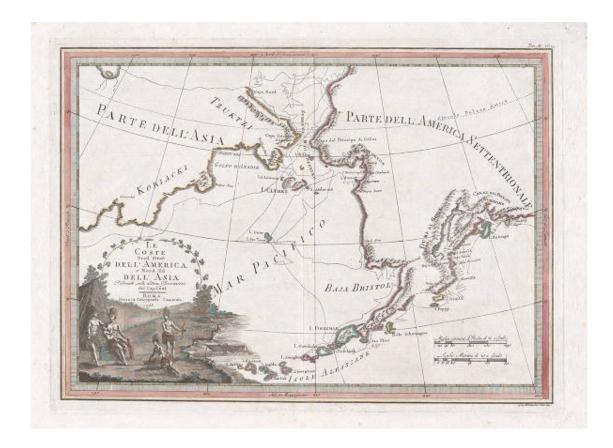
fueled the Russian fur trade were not fully under capital's control; those who trapped all winter long deep in the forested uplands of Bristol Bay were arguably not a captured labor force exactly, even as they furnished RAC profits.

As others have asserted (e.g., Dumond and VanStone 1998: 43, VanStone 1967: 63), the rise of the commercial fishing industry from the late nineteenth century onward has ushered in the most dramatic of the region's many transformations over the past several hundred years. It introduced major shifts in population and everyday practices, as activity was reoriented to churn out products for one of the world's major salmon fisheries. The salmon industry's history would be shaped by only more tense interactions among imperial powers, aboriginal residents, and a diverse array of intermediaries and settlers over many decades. During these encounters, capital's efforts to capture labor and nature for production—like the various baptisms through which imperial agents in the Russian period sought to claim people and places for their own ends—would find their referents pushing against and slipping across the boundaries erected to enclose them, largely by dint of the heterogeneity they carried within them.

We can read this open-endedness contained within projects of imperial dominion in Bristol Bay's very inscription as a place itself. In 1778, a year before the British explorer Captain James Cook would meet his end on a Hawaiian beach, his ships entered the waters of an estuary in southwest Alaska to which he bequeathed the name "River Bristol" (Beaglehole 1967: 397). Cook named the body of water after a friend, Augustus John Hervey, the third Earl of Bristol, England (King 2003: 5). This last segment of Cook's ill-fated third voyage, which navigated routes around and between Alaska and

Hawaii, charted shores that would one day become the far reaches of United States soil.⁶³ Although the history of Bristol Bay hardly begins with its baptism by Captain Cook, he was the one who set down its name.

Yet even Cook's christening of the region has proved incomplete: Although the designation of Bristol Bay stuck—the words scrawled into the British navigator's journal became reproduced on maps widely circulated at the time across Europe (see Map 5),



Map 5. "Le coste norde ouest dell' America e nord est dell' Asia : delineate sulle ultime osservazioni del Cap. Cook." Italian Map of the North Pacific Including "Baja Bristol."

Map source: Rare Maps Collection, Alaska and Polar Regions Archives, Rasmuson Library, University of Alaska Fairbanks, Giovanni Maria Cassini (1798), G9236 S12 1798 C3.

⁶³ In fact, at the time of Cook's expeditions, the U.S. had not yet won its independence from the Kingdom of Great Britain, which would not occur until the signing of the Treaty of Paris in 1783. In addition to providing cartographic information to be marshaled in wartime, Cook's travels were arguably critical to the formulation of empire in the nineteenth century to follow.

and have influenced the area's conceptualization as a discrete region into the present there is no "River Bristol" in contemporary southwest Alaska. As the editor of Cook's journals, J.C. Beaglehole, points out (1967: 397 note), the waterway designated by Cook refers to either the present-day Naknek or Kvichak Rivers, whose names more likely reflect Russian transliterations of Native terms rather than genuflections to British aristocracy. In Bristol Bay, like other sites of imperial formation, we find the ascriptions of identities and the delineation of differentiated hierarchies alongside what Ann Laura Stoler describes as the "ambiguous zones of empire that refused or refuted colonial appellations" (2006b: 1).

Ultimately, Cook's journal entry during his sail through Bristol Bay would prove visionary, if in ways he could not have realized at the time. Although his passage did not occasion any encounters with the region's human residents, he and his shipmates did bear witness to its teeming runs of salmon. The expedition, which reached the River Bristol on July 9, 1778, traveled through the area at around the peak of its sockeye salmon season. "It must abound with Salmon, as we saw many leaping in the Sea before it," Cook recorded in his brief journal entry for this day (Beaglehole 1967: 397). Given the limited technologies that existed for preserving salmon at the time, it is unlikely Cook would have been able to envision the fish he witnessed as the sort of resource for capital accumulation they would become a century later, not to mention the transformation of the remote region along the Bering Sea into a place of large-scale industrial commodity production for global markets. It is left to Beaglehole to inform readers in his comments on Cook's original journal entry that, "The descendants of his salmon are now multitudinously canned on the shores of the bay" (Beaglehole 1967: 397 note).

Chapter Three

Capturing the Return, Part II

Despite all that I had read and heard about the astounding volumes and remarkable intensity of the Bristol Bay salmon season, I was wholly unprepared for what I witnessed during my first summer in the region. The sheer numbers of fish that flooded area waters and the suddenness that marked their arrival was shocking to me. Yet even veteran fishers I met expressed awe at the phenomenon. Some recollected times years earlier when they had been overcome with wonder at the unbridled natural spectacle. One fisher told me that he could never forget a moment he had experienced in the late 1970s on the Kvichak River on the east side of Bristol Bay, when he was stunned into silence by the vision of a veritable sea of salmon, an entire river thick with fish, their glistening backs ablaze as they fought upstream in the light of the setting sun.

My first experience of peak-season fishing as an industry worker came shortly after I had joined a small set net crew captained by my neighbor, Pat Kelly, a teacher who had first come to the region as a draft-dodging VISTA volunteer from California in the late sixties. Just before I signed on, Pat had partnered up for fishing that summer with the new Russian Orthodox priest in town, Father Wassily Simon. A Yup'ik man with a young family, Father Wassily and his wife had grown up in villages on the Kuskokwim River to the northwest of Bristol Bay. We were an eclectic trio, but the three of us became fast friends as we passed our first days on the fishing grounds talking and

cracking jokes, eating smoked salmon strips and drinking tea out of a grimy, dented thermos, and waiting interminably for just one strike of a fish hitting the net to make us feel like the outing wasn't a complete waste of time. Then, the salmon came. In just a matter of hours, the net that had lolled quietly in the water for so long exploded with activity. Every few seconds it jerked and bobbed from the thrashes and tugs of another caught fish. The water was choked with salmon, and they pushed into the net as fast as we were able to pick them out. "I can't believe it," Pat whispered to us, his eyes wide and his voice charged with emotion, "this is it, this is already it! This is the peak!"

My initial excitement grew tempered by the terrifying thought that the fish might never stop coming. An entire day sped by without any break in the pace of the salmon or our work. My fingers and wrists were swollen from working the taut net mesh out of countless gills, and my back ached from so much lifting, bending, and pulling. Looking back, I realize it is fortunate that I had no idea that it would be several days until I would get even a few solid hours of sleep. In this way, the furiousness of the peak's pulse quickly slipped into wearying monotony, as days turned to nights that turned to days again. Fishing periods would continue at regular intervals for a couple more weeks, along with relentless fishing routines.

Due to a significant extent to the volume and timing of the runs themselves, the sustained burst of round-the-clock exertion I witnessed during my period on Pat's set net crew has been characteristic of commercial fishing in Bristol Bay from its earliest days. The reports of various observers of salmon production in the Bay from across the past century are remarkably consistent in their wide-eyed amazement at both the size and pace of the salmon onslaught as well as the intensity and diversity of human energies

marshaled for its harvesting and processing. "The Bering Sea season is short, and the

pack must be made in from three to five weeks," explains U.S. Navy Commander

Jefferson F. Moser, who toured the fast-developing salmon fisheries of the Alaska

Territory for the federal Fisheries Commission around the turn of the century (1898:

178). "[W]hen the fish are running," he observes, "work is continued day and night"

(Moser 1898: 178). His steamship, the Albatross, made several stops in Bristol Bay. Not

unlike I reacted when I saw the Bristol Bay fishery firsthand, Moser was stunned by the

masses of fish, tireless rhythm, and wearied exertion of the frenetic season he witnessed:

Unless one has seen the bins of a large cannery in running order words can not fully convey an impression of the masses of fish used in a single day....In Nushagak Bay, off Clark [sic] Point, on two occasions the fish were running so heavily that they were caught in the propeller of the launch of the *Albatross*, stopping the engines.

...The canneries are practically in full operation about one month, as the redfish run is over by July 20 or 25, and during this time they present a busy scene; everyone is worked to his full capacity, and nothing is thought of, talked of, dreamed of, but fish.

...The employees appear weary; the Chinese, never very robust-looking, seem to drag along as though they would drop in their tracks....At last, when the force is about exhausted, a respite comes; the run slacks and there is a sigh of relief by all except the superintendent, who swears that he has not packed enough, though every can may be filled. The relief is only temporary, however; the laquering, labeling, testing, and boxing must now be done, and there is a rush for the final clean up, all being eager to take their departure (1902: 183-184).

A mid-century account of the salmon fishing that supplied the canneries similarly

describes it as an "endurance test," especially in Bristol Bay:

Gillnetters, comprising one of the largest groups of Pacific Coast fishermen, are a hardy group of workingmen. They have to be. When the 'run' comes, they must work hours on end, sometimes catching a cat nap between 'drifts,' eating quick pick-up meals, in general going through an endurance test. This is particularly true of the fishermen who go to Bristol Bay each year for the famed Alaska red salmon run. They are lucky if they catch three or four hours of sleep a night during the one-month season (The Dispatcher 1951: 7).

What is most noteworthy about these various historical depictions of Bristol Bay fishing and processing is their resonance with contemporary industry practice. The region's salmon season is frantic, volume-oriented, and heterogeneously labor-intensive to this day. To a remarkable degree, production scenes like the one below (Image 11), captured in a photograph of a Bristol Bay cannery in the 1950s, differ only in their details from those that take place on contemporary processing plant docks.



Image 11. "Putting salmon off boat at cannery."

Image source: Anchorage Museum of History and Art at Rasmuson Center, Library and Archives, Ward W. Wells Collection, Wells (ca. 1950-1959), AMRC-wws-156-R23.

This chapter segment picks up where the prior part left off, providing an account of the historical creation of the labor force assembled in present-day Bristol Bay through an analysis of the establishment and transformation of the commercial salmon industry. The pressures that accompany the fishery's short season and heavy volumes—not to mention the structures and strictures of industrial production—have given the salmon industry's need for labor a decidedly different flavor from of that of the Russian fur trade. As Moser observed in Bristol Bay, "labor is needed particularly when the rush is on, and for which profitable provision can not otherwise be made" (Moser 1902: 186). This segment of the chapter details the ways in which the salmon industry has long answered these conditions by seeking profitable provision through the importation of workers from distant places, whose dependence on processing companies tended to ensure their availability and pliability during the crucial weeks of the compressed season. When the canning companies did enlist the labor of Bristol Bay residents, they employed them along with strategies for hemming in these workers' autonomy as well. In this way, the abiding heterogeneity of fishery workers has been closely enmeshed with their control.

In pursuing this control, the salmon industry elaborated many of the techniques for securing work that were introduced into the region during the fur trade, only now in an even more thoroughly saturated transcultural space. In addition, as suggested by Moser's portrayal of the Chinese workers in Bristol Bay canneries, the industry relied upon new forms of differentiation. Unlike the status markers that the RAC sought to cultivate within the interpersonal and intercultural "middle ground" that arguably arose through the Russian imperial fur trade, the hierarchies that accompanied the growth of the salmon industry tended to incorporate workers into "a common and yet exclusionary system" founded in the "extensive racialization of difference" (Coronil 2007: 254). By transforming elements of workers' heterogeneity into racialized inequalities, industry

practice generated fissures and exclusions that ultimately served ends of capital accumulation. As a result of these techniques, and in contrast to Russian fur traders, the salmon industry was largely successful remaking the work it coordinated in Bristol Bay into labor as a homogenous force.

Yet the circumstances that have brought this labor into being—a diversity of workers together expending immediate bodily activity in the face of an abundant, animated, and largely unmodulated form of nature-have also created conditions for what have been theorized as moments of "interruption" to capital (Chakrabarty 2000, Gidwani 2008). Similarly, the ongoing human contacts and mixings that have accompanied the industry's divisive presence have continued to generate spaces and occasions for "refut[ing] colonial appellations" (Stoler 2006b: 1). In this second part of the chapter, I further the analysis begun in the first by even more explicitly combining two distinct strains of postcolonial scholarship: that directed toward questions of capitalism, and that focused on the tensions embedded in colonial governance. Through their intersection, these contributions reveal production as a site of intimacy: dense meshings among people, and between people and non-human nature. Amid the intimacies of production, we find, the relations that sustain both capitalism and imperialism open inward and outward to allow for the experience and expression of other possibilities.

This chapter is organized into a series of sections that one by one unpack the history of the arrival of the salmon industry to Bristol Bay. The sections chronicle the mechanisms enlisted in the production of the industry labor force, a process that is punctuated by flashes of interruption but never defeated by them. The chapter shows

how the intimacies of production incubate relations that exceed their usefulness for capital, even as they remain entangled in its categories: Relations forged through mutual work have inspired organized labor but simultaneously reproduce inequalities that serve to unravel forms of collective action; past and present-day workers use the language of labor to carve out their own senses of difference and belonging, even if they are restricted by terms upon which they draw. The chapter concludes by pointing to a further unanticipated dimension of human fashioning in the face of the salmon return: Fishers find within production experiences of work that would deny the rubric of labor at all, mirroring instead the energetic expansiveness of the salmon itself.

Arrival of the Packers

Buildings on the Bay

In 1883, along the shores of the Nushagak River, construction began on the buildings of the Arctic Packing Company, the first salmon cannery in Nushagak Bay and the Bering Sea region of western Alaska at large (VanStone 1967: 67). By 1908, there were ten canneries operating in the Nushagak region, and by 1920 there were 25 across Bristol Bay (VanStone 1967: 71-72). The rapid rise of the salmon industry in Bristol Bay during these early years parallels its growth in Alaska more broadly. The first two canneries in Alaska opened in 1878 in the Southeast region. By the turn of the century, the state was producing over a million cases of canned salmon annually, and by 1918 its output had soared to well over six million cases. The number of Alaskan salmon canneries tripled in the decade from 1909 to 1919 (Gruening 1954: 209-211).

The arrival of the major West Coast salmon packing concerns to Bristol Bay marked the far reaches of their progression northward and westward, a movement spurred

by signs of depletion in more southerly fish runs. The first Pacific salmon cannery was established in 1864 the Sacramento River in California, and canneries sprang up the coast shortly thereafter, from the Columbia River in Oregon to the Fraser River in British Columbia and beyond. As cannery magnate R.D. Hume wrote of the industry's first decade, "In the lapse of ten years, what a change!" (Hume in Cone and Ridlington 1996: 61). Despite Alaska's vast salmon populations, its distance from major markets meant that it was not initially the first choice for capital investment. Yet as salmon populations near existing canneries started to show signs of decline, the "rush to establish other canneries began," as Richard Cooley writes, "and the era of commercial exploitation of the salmon resource in Alaska was on" (1963: 24).

Not unlike the early expansion of the aquaculture industry in the late twentieth century detailed in Chapter One, in which a crisis fueled by overproduction precipitated industry consolidation, the dramatic growth of salmon canning in the Pacific U.S. in the late nineteenth century was followed by a subsequent concentration of ownership in the hands of a few large companies. On the heels of fish price declines and the bankruptcies of a number of packers in the late 1880s, a movement began to "unify control over the production and marketing of canned salmon" (VanStone 1967: 68). What started as cooperative arrangements between several independent cannery owners eventually resulted in their merger into the Alaska Packers Association (APA) in 1893, a privately held company that coordinated production (VanStone 1967: 68-70). All the canneries operating on the Nushagak at the time became a part of the APA (VanStone 1967: 69). By 1894, the APA owned or controlled 90 percent of all salmon canneries in Alaska and 72 percent of the total pack (Cooley 1963: 28). As economists James Crutchfield and

Giulio Pontecorvo describe it, the Alaska salmon industry "moved toward rationalization through 'trustification'" (1969: 74)—that is, toward an apparent increase in economic efficiency through the whittling down of the industry to just a few cartels.

The APA was soon joined by a competing salmon trust, Pacific American Fisheries (PAF), which rose to prominence through a few different consolidation moves between 1899 and 1905 (Center for Pacific Northwest Studies 2008). The Mermaid Cove cannery in Dillingham was once a part of the PAF empire, as the painted lettering still visible on the side of the boatyard warehouse indicates. At the time of Moser's 1901 investigations, the APA controlled an estimated 50 percent of the pack, while PAF's precursor organization followed with about 30 percent (Moser 1902: 351). With its plentiful salmon resources, Alaska emerged as the battleground for these vying cartels.

Although the Alaska salmon industry was at its most consolidated around the turn of the century, according to Cooley, the oligopolistic character it developed during this period would prove enduring, fueled by persistently unstable market conditions, intense competition, and considerable barriers to entry, particularly given the expense of establishing operations in rural Alaska (1963: 27-28). As Cooley argues in his 1963 study of the industry, its basic structure was shaped by a few key factors, which are particularly pronounced in Bristol Bay. The wide dispersal of fishing grounds in geographical space, along with the perishability of the resource and the lack of cheap refrigeration, created conditions that favored the establishment of many small plants, each somewhat isolated from one another as well as from major population centers (Cooley 1963: 25). "Consequently," he writes, "from the beginning of the commercial era the main outfitting, employment, and financial centers for the Alaska salmon industry

grew up outside the territory, primarily in Seattle and San Francisco" (Cooley 1963: 26). The industry's absenteeism and its concentration of ownership became hallmarks, along with the striking degree of control the packers exercised over fishing itself. For a large part of the industry's history, the processing companies themselves supplied the boats and gear used for fishing, and, for many years, even the fishers themselves.

These elements make for an industry structure and historical conditions that are markedly different from the way commercial fishing industries have developed in most other contexts. There was never an artisanal Alaskan fishing fleet that tarried its catch to market. Nor did merchant capitalists choose to truck in Bristol Bay residents' salmon catches or manufactures like they did their furs, at least not in any extensive or organized fashion. The beginnings of the Alaska salmon industry itself thus cannot be pictured through the stock images of independent fisherfolk that underlie most Euro-American assumptions about maritime tradition. In Cooley's (1963: 29) analysis:

Traditionally in the United States fishing has been characterized by the small independent fisherman who owns his own boat and gear, and who chances the risks and physical hardships of the sea to bring in a catch which he sells as a free agent to the processors or distributors. In short, the fisherman generally has been an independent businessman in much the same manner as a small farmer. For various reasons, however, an altogether different pattern developed in Alaska.

While commercial salmon fishers in Bristol Bay today are indeed "free agents" who own their own boats and gear, this was not a feature of the industry from the start. As this and coming chapters will show, they only gained the vaunted status of "independent fishermen" vis-à-vis seafood processors through many years of struggle, a considerable amount of regulatory change, and a great deal of concerted collective action. Whether because of a limited local labor supply or because imported labor proved more pliable and thus more profitable—Cooley suggests both—"from the very beginning the cannery operators undertook the organization and financing of the fishing operations on a large scale in order to assure themselves an adequate supply of fish" (1963: 29-30). Alaskan residents were prohibited or actively discouraged from participating in the industry. Instead, the packers assembled groups of workers and production materials on the west coast and transported them north for the summer. As Cooley argues, this practice further cemented the power of the largest packers: "Only the larger companies were able to finance these annual expeditions and by so doing they gained a large degree of control over fishing grounds in Alaska, especially in the more remote areas such as Bristol Bay" (1963: 30).

In this respect, as in so many others, the features that distinguish the Alaska salmon industry generally are only more strikingly characteristic of Bristol Bay, where processing companies historically exhibited the greatest concentration in ownership and had the most control over fishing. As Crutchfield and Pontecorvo elaborate, barriers to industry entry were even steeper in the Bay than elsewhere in Alaska given its comparative isolation, high overhead costs, attendant business risks, and limited suitable physical sites for further cannery development (1969: 80). "Concentration increased as one went north and west in Alaska," they conclude, noting that this situation "has persisted" (Crutchfield and Pontecorvo 1969: 76). As a result of this concentration, they argue, the canners were even more able in Bristol Bay than elsewhere to exclude Alaska residents, both Native and non-Native, from participation in the fishery (1969: 108-109). By owning the proverbial means of production in boats and gear, and bringing in

contracted fishermen themselves from elsewhere, the canneries were able to exert

considerable control over the fishing sector, even if they did not own the fish.

Visions of Arrival

The coming of the salmon industry to Bristol Bay brought new people and

perspectives into contact and competition. In this memoir, the late Dillingham resident

John W. Nicholson⁶⁴ reflects on how he viewed the industry's arrival from his location in

a Nushagak River village and cannery site in the 1920s:

As a teenager at Clark's Point, I looked forward to the spring arrival of schooners. I enjoyed watching new people come ashore from large, wooden ships anchored off Clark's Point. When Outside fishermen, Chinese gang, sprinkled with Mexicans arrived, it was a relief to see them. We saw very few people during winter months. Also, with the arrival of the ships, the Alaska Packers Cannery store would receive their supplies. I knew there would be a shipment of bottled soda pop and brightly wrapped candy. When I saw the pop bottles and candy on the shelves, my mouth watered. If I had any loose change in my pocket, I'd buy what I wanted. That pop and candy did not last long, just like the fresh fruit at Nushagak Trading Post (Nicholson 1995: 23).

As Nicholson documents, the salmon season during this time was ushered in each

year by the arrival of great packing company sailing ships like the Star of India (Image

12), which transported most of the supplies and personnel needed for the summer's

production, except, of course, for the salmon itself. Although the packers' use of these

sailing barks may suggest "the romantic era of tall ships," historian Bob King notes, "in

fact, that era had long since passed"-these vessels instead represented the "discards of

shippers who had already converted to steam" (2003: 6). As King explains, "the obsolete

⁶⁴ Note that unlike the many of the other names used throughout this work, John W. Nicholson is not a pseudonym. I use real names for those who have published memoirs or other accounts of their experiences, or have recorded oral histories intended to be made available to the public. I also use the real names of figures appearing in archival documents and historical records.

sailing ships made...economic sense" in light of the industry's short operating season (2003: 6).



Anchorage museum of History & Art. Library & Archives.

Image 12. "Cannery ships, Bristol Bay, Alaska." Image source: Anchorage Museum of History and Art at Rasmuson Center, Library and Archives, General Photograph File, John E. Thwaites (ca. 1896-1913), AMRC-b80-81-17

On board these ships was an assortment of cargo. As Nicholson reflects, the shipment north included stores of consumer goods to be sold to the fishery work force and across western Alaska. Production materials included the needed tinplate for salmon cans, box makings, boats, nets, construction supplies, various pieces of machinery, foodstuffs, and a nearly endless list of sundries and equipment. In addition, there were scores of people—cannery line workers, cooks, carpenters, machinists, and on and on.

The sheer amount and diversity of stuff transported up each year to Alaskan shores is strikingly evident in the descriptions of those who experienced the annual arrival while on board the ships themselves. An oral history recording of the late Paul Romie (Romie and Davis February 23, 1995) provides rich detail of the passage. Born and raised in Oregon, Romie first came to Bristol Bay as a teenage stowaway in the late 1920s aboard one of the cannery steamships that were just coming into use. Inspired to see Alaska after reading about the Klondike gold rush, he eventually would settle in the Nushagak River village of Ekwok, marrying a Native woman who had been one of the orphaned children at Kanakanak.⁶⁵ Romie's account of his journey to the Bay paints a picture of the PAF vessel he climbed aboard as a sort of salmon-canning Noah's ark:

I went along the dock til I found this ship. The ship was loading the last things, ready to sail for Alaska. So I went aboard and I went down where the Filipinos was. They were in the stern of the ship. That's what they call under the poop deck, you know....On this ship there were...two crews for two canneries. One in Naknek and one in Dillingham, or on the Nushagak. There probably was over a thousand people, more or less, on there. They had the cooks and they had the cannery workers, and they had the whole crew to operate, too, and the fishermen. Even the fishermen were on there. And, uh, carpenters and candlestick makers, and all of them on there. Had Filipinos for cleaning the fish and machinists, everybody. And they had the cargo for all the things they needed: food and cans and machinery. They had all that aboard. And also, they had two big flat scows on there, on deck. And also some fishing boats up on deck. They had a cow in there and a little building for the cow. That cow was going up to Nushagak because the Superintendent brought it up. He wanted his family to have fresh milk when they were in Alaska. And they had a cowboy to milk this cow too, who let me milk it once in a while so I could get a little of that milk. It was fresh whole milk, you know. And they had pigs and live chickens aboard, too, on this ship. It was pretty well loaded up with fresh meat, you know. In them days, we didn't have freezers and stuff like that. When you get to Alaska, they said they only had ice houses, so they'd have to keep the animals alive and butcher and eat it up before it gets spoiled, you know.

After a few days as a stowaway, Romie announced his presence to the captain,

who promptly put him to work on deck. From his new perch, Romie had a good vantage

for taking in the scene when the vessel reached its final destination, the Mermaid Cove

⁶⁵ In the oral history, Romie describes his late wife Dorothy as an Aleut originally from the Alaska Peninsula community of Chignik, one of the sites for Patricia Partnow's (2001) study referenced in the previous chapter.

cannery in Dillingham. In his account of ship's disembarkation, Romie offers a view of the packers' arrival in Bristol Bay that complements that narrated by Nicholson:

Well, we anchored out there and we came in off an old flat scow. They brought us in there, and, you know, the fish dock is there. There was some Natives there and they was all dressed up. It was kinda cold yet and there was a little snow and a little ice along the beach yet when we landed there, a little wind blowing. They was standing behind there watching us guys when we landed there....They had parkeys on. Gee, they had nice parkeys, some of them. They had these ground squirrel parkeys, beautiful parkeys. And mukluks on their feet, you know?...The ship anchored out there and we come in with a scow there, the fishermen and everybody, they took them off the ship, you know. Then they started unloading the ship. The cannery, getting stuff ready for the cannery.

As both Romie and Nicholson's reflections suggest, the annual return of the cannery ship was a major event for both Bristol Bay residents and those who arrived from starting points elsewhere. It marked the beginning of yet another salmon season, but often the start of new work experiences, social interactions, and life chapters as well. It signaled both a familiar return as well as fine-grained encounters with difference observations of ground squirrel parkas and mukluks, perhaps, or the "long, braided hair hanging down to [the] waist" of many of the male Chinese cannery workers, as struck the young Nicholson (1995: 22). It materialized the linkages between Bristol Bay and distant markets, connecting spaces of production and consumption through exchanges like the replacement of the ship's spring cargo of goods like soda pop and brightly wrapped candy with its late summer haul of canned fish. And it made the region's ties to the cash economy as concrete as coins in a pocket. As a result of the vessel's thousands of nautical miles of travel, a heterogeneous collection of people wound up gathered together on Bristol Bay shores. Yet this happened through the simultaneous creation of spaces whereby difference—and stark inequalities—were demarcated and reproduced.

A Variety of All Kinds, Ethnic

The way in which both Nicholson and Romie characterize those around them by ethic and place affiliation-as Filipinos, Natives, Outsiders, Mexicans, and members of the "China gang"—is not only ubiquitous in the archival and oral history material I examined over the course of my research, but also persists into the present in a number of forms. If, as Ann Stoler suggests, imperial formations can "saturate the subsoil of people's lives" (2008: 192), they often do so quite literally in Bristol Bay. For those who grew up in the region, the ethnic markers that organize identity have become fixed in the landscape itself, which is dotted by both informal and on-the-books place names that reflect these distinctions: from the one-time Scandinavian Cannery not far from Mermaid Cove, to the handful of Dago Creeks across Bristol Bay, to the old "Jap cabins" not far from the Nushagak Bay community of Ekuk. During my fieldwork, I learned a whole new array of ethnic epithets that I never knew existed simply from trying to keep abreast of commonplace local idioms of identity. "Squarehead," for instance, can refer to a Swede or Norwegian, or so I have been told. Despite their omnipresence and precision, these kinds of classifications, then as now, seem more pointedly involved in regularizing social hierarchies than providing referentially accurate designations of identity or national origin. At the Mermaid Cove cannery in the early 2000s, for example, processing workers from El Salvador or Peru were routinely labeled "Mexicans."

Like the cannery workforce, the fishing fleet was dominated, especially in the industry's early decades, by so-called Outsiders, a mixed group in and of itself that Romie describes as "a variety of all kinds, ethnic." In Moser's (1898: 23) synopsis:

The cannery fishermen are nearly all foreigners, the majority being 'north countrymen,' or, as they are termed, 'hardheads,' though there are some fishing gangs comprised of what are called 'dagoes,' consisting of Italians, Greeks, and the like. When these two classes form different fishing gangs for the same cannery, the north-country crew is referred to as the 'white crew.'

As Moser's description suggests—beyond the distinctly relational ascriptions of whiteness an industry context dominated by "ethnics" and "foreigners"—the largest and most visible groups of fishers were Scandinavians, mostly Swedes and Norwegians, from the Seattle area, and Italians from San Francisco and Monterrey. Slavs, particularly Croatians, and various other Europeans, such as Finns, also participated in the Bristol Bay salmon fishery in smaller but noteworthy numbers. Traveling together to Alaska from strong ethnic enclaves on the Pacific coast, brought up as a group by the particular packer for whom they would work all summer, speaking in their native languages, staying together in their own cannery bunkhouses—no doubt for these reasons and more, the groups of fishers developed tight-knit circles that were apparently only reinforced on the fishing grounds. As Romie expresses it, "they all stayed by themselves; and the other guys stayed by themselves."

With respect to cannery workers, the contract labor system that was in place for much of the industry's history only furthered the division of the workforce into ethnic gangs at the same time it promoted gross inequities. Under the contract system, packers hired cannery workers through intermediaries, middlemen who bid competitively for contracts to supply a particular plant with a given number of workers for a summer salmon season. The cannery workers were not employed directly by the packers, then, but by the contractors themselves, known as bosses. Because the bosses were generally

of the same ethnicity as the workers themselves, fishing industry reports are littered with references to a given cannery's "China boss" or "Filipino boss."

This contract labor system, which had been in existence in other industries since the early 1850s, would prove both "central to the emergent social networks and industrial economy of the Pacific Coast region" (Newell 2003: 256) and "central to the cannery experience" in Alaska (Norris 1984: 38). It was widespread by the Alaska salmon industry's earliest decades. Based on his investigations in 1900, Moser describes how "[t]he arrangement for the employment of Chinese is made through the labor agencies of the large cities, principally in San Francisco. They work under a 'boss' of their own, who guarantees each man a certain amount for the season…" (Moser 1902: 185). Donald Guimary and Jack Masson argue that the industry's dependence on contract labor only intensified from the early twentieth century onward, as canneries moved from directly recruiting "Japanese, Puerto Ricans, Filipinos, Mexicans, and blacks as well as Chinese," to relying even more heavily on contractors to supply cannery labor (1990: 91).

As Guimary and Masson outline, the system was largely designed to keep the processors' labor costs and responsibilities to a bare minimum. "By encouraging contractors to underbid one another and giving them complete control in managing and supervising their crews," they point out, "the canners encouraged their contractors, at the very least, to take advantage of their workers and, at the very most, to abuse them" (Guimary and Masson 1990: 94). For some fairly straightforward reasons, the system proved as brutally effective for the processors as it was exploitative for the workers. Recruits were often recent immigrants with little knowledge of English or U.S. law; and at the same time, the remoteness of most canneries, especially in the Bristol Bay region,

made it exceedingly difficult for them to leave, much less return home (Guimary and Masson 1990: 94). As Guimary and Masson detail of the Chinese experience under the contract system, workers were "virtually held in bondage while being systematically cheated at every turn," subject to contracts that imposed "exorbitant penalties if they terminated their employment before the season's end or even complained to their co-workers about their living conditions" (1990: 91, 94). One young Chinese cannery worker Romie met explained that even before the start of the season, he'd already owed his entire summer's pay to the "China boss": "I was in a poker game coming up with the China boss," the worker told Romie, and thus "I have to work for him all summer."

In both the fishing and processing sectors, then, employment was heavily determined along ethnic lines, reinscribing boundaries that were maintained through a variety of quotidian practices. As indicated earlier, workers of different social groups were not only given different jobs, but spatially segregated at nearly every point in the salmon production process as well. From the voyage up to Alaska, to the cannery's ethnically-specific bunkhouses and mess halls, to the particular places in which labor was carried out, given groups of fishers and processing workers were shuttled into different spheres. Among fishermen and cannery workers, "ethnic groups [were housed] separately in a Chinese bunkhouse, a Filipino bunkhouse, and so on" (Guimary and Masson 1990: 98). For most of its history, the Mermaid Cove mess hall had distinct eating rooms and meals divided along ethnic lines. When the recently retired superintendent arrived as a young assistant in the 1970s, he was shocked to find the persistence of these segregated spaces, and even more surprised to find that a wide variety of workers were actually disappointed when these separations were eliminated.

Particular occupational and ethnic distinctions were not only maintained in daily cannery working and living arrangements, but became codified in industry practice as well through the negotiation, drafting, and implementation of contracts and other documents. Contracts between the APA and the Alaska Fishermen's Union (AFU), first established in 1902, set forth different rights, privileges, and pay rates for members of different groups in its Alaskan fleet and workforce. Amid long lists of very specific responsibilities and entailments-as detailed as the provision that "Beds on ships and cannery bunk houses shall be equipped with springs," as appeared in a 1938 contract the documents both reflect and reproduce the prevailing separate-and-unequal industry practice. Reading between the lines of the agreements, a picture emerges of an industry whose intricate social hierarchies are materialized in highly concrete acts of labor and meticulous calculations of earnings. For example, the 1938 contract establishes "...that only once during the season shall men be required to wash paint and at no time shall they be required to clean the quarters of the Orientals," and further declares that, "Whenever a man is entitled hereunder to payment or credit for the average catch of boats fishing at his station, the average shall be computed separately at his cannery from the natives fishing." Assured separate Native averages and distance from Oriental quarters, the man who is both assumed and brought into being through these contracts has divergent interests from the larger industry workforce.

The intensive differentiation of spaces and entitlements on the basis of ethnicity arguably splintered working-class solidarities, fueled ethnic factionalism, and fomented conflict within and between groups of workers, as posited by many involved in the fishing industry as well as by a range of scholars, including Guimary and Masson (1990:

91). As suggested above, and as coming sections will explore further, the union activity that became central to industry practice by the 1930s often pursued gains for some of its members at the expense of others, just as the individual sectors often advanced their own agendas instead of fostering broader solidarities. Nevertheless, the expansion of unionization following the passage of the National Labor Relations Act in 1935 prompted the organization of Alaska cannery workers in 1937, which helped to end the contract system and win other improvements (McCullough 2001: 39).

But what of the generations of workers who toiled under this system? Most cannery workers who were brought up to Alaska by the large packing companies, like the laborers Romie saw relegated to the stern of the ship, would leave with only minimal earnings to show for their summer's work. Their experience in Alaska is commemorated photographs and oral histories, as well as beneath the actual subsoil of old cannery sites, which is occasionally lifted to reveal items like old medicine bottles and painted placards with Chinese characters, as I saw at unearthed at Nushagak.

For other migrant workers, however, Alaska would become home. In Bristol Bay today, a number of widely held surnames reflect Japanese or Filipino heritage, forefathers who first entered the region generations ago as cannery workers. As Sue Ellen Liljeblad reports, some Filipino workers found they could make better lives for themselves in Alaska than elsewhere in the U.S., particularly in "smaller towns, such as Dillingham," where racism seemed less pronounced, employment opportunities were available, and greater interaction and intermarriage among ethnic groups was possible (1978: 5). Early on, she notes, these settlers "became integral members of the community" (Liljeblad 1978: 5), as their descendents remain today. Thus, at the same time that the early salmon

industry was responsible for perpetuating fundamentally racist sensibilities, practices, and institutions, it also helped create conditions for their subversion, however limited. In interludes of contact and common work, canneries afforded some degree of interaction among people from strikingly different backgrounds. Contemporary Bristol Bay residents still recall their parents and grandparents' first impressions of the foreigners they encountered. At brief moments, workers of various ethnic gangs became one multiethnic "gang" of industry workers—if perhaps only for snapshots like the one below, taken outside the cannery at Ekuk on the Nushagak in the 1920s (Image 13).



Image 13. "1926 Gang. Ekuk, Alaska." (Image source: Fresco 2008)

To be clear, the ethnic and national distinctions that were so central to everyday cannery operations were not typically effaced through other social ties. For instance, as I heard recounted more than once, when Japan invaded the Philippines during World War II, in December of 1941, the Filipino-Americans living at Clark's Point set out across the tundra with guns to confront the Japanese-Americans who lived near Ekuk. By that point, both groups had married into Native families and were well established in the region. Yet nationalist sentiments still, evidently, ran deep. According to Bill Douglas, Jr., the son of the Clark's Point cannery winter watchman at the time, Bill Sr. managed to head off the armed group before they reached Ekuk and talk them out of violence. However the situation got defused, the story illustrates the tensions continually at play in the multiethnic communities formed in the shadow of the salmon industry, dominated by vying capitalist cartels, on the edge of warring imperial nation-states.

Cannery Men and Company Stores

The day-to-day practices of processing companies did not only splinter industry workers, remaking cultural difference into racialized identities. They also ensnared fishers and cannery workers alike in relations that only deepened processors' control over them. In so doing, the firms profited from the "blur between care and coercion" that frequently marks imperial formations (Stoler 2006a: xiii).

Many of the arrangements that characterized the fishing industry in its early years were highly standardized, largely patterned by cannery dictates. During the month-long fishing season of the early industry, fishing took place on a fixed regular schedule, typically Monday through Saturday of each week.⁶⁶ The vast majority of fishers in the industry's early years worked on vessels provided by the cannery, which were brought up each summer by the packers, along with the fishers themselves. The boats were identical to those employed in other Pacific Coast salmon fisheries, and were in fact increasingly

⁶⁶ In this respect, fishing then was quite different from the present, as it now happens during fishing periods set and announced during the season by ADF&G, which are based on biological escapement goals and the estimated status of the run at any given point.

cast-offs from these other fisheries as they converted to power craft. For the first half of the twentieth century, Bristol Bay fishing was performed in sailboats. Not unlike the canneries' use of anachronistic sailing ships to bring up the season's supplies, sailboat fishing was not practiced because it represented the most advanced technology of the day. Rather, powerboats were banned from use in Bristol Bay by federal regulation until 1951.

As James VanStone explains, powerboats were brought into the Bay for a brief period in 1922, along with boats using another fishing method called purse seining, in which schools of fish are encircled by a large net. "Seiners and power boats proved to be extremely efficient at catching fish and the federal regulating authorities felt they would endanger the run were they allowed to continue," VanStone comments (1967: 64). "In addition," he notes, "the cannery operators realized that their tight control over the fishery would be weakened if seiners and power boats, worked by independent operators, were allowed to come into Bristol Bay. As a result, regulations were passed outlawing these kinds of equipment" (VanStone 1967: 64-65). Given the packers' concentrated power in Bristol Bay—and, as the next chapter discusses, their weighty influence on Territorial politics—processing company opposition to the introduction of powerboats in the region's fishery took years to overcome. Bristol Bay fishers thus refer to the period before 1951 as "sailboat days," and many across Alaska still associate the fishery with historical images of a fleet of small sailing craft (such as Image 14 below).

Fishers' reliance on sail had a number of consequences for their role in the fishery and their relations with processors, with reverberations into the present. It meant that even in the act of fishing itself, fishers remained extremely dependent on the canners. In order to facilitate salmon capture but maintain control over production, the packers began

to use tow boats—called monkey boats by fishers—to move a group of sailboats to, from, and around the fishing grounds. Given the control of monkey boats by the industry, as well as the limited use for small sailing craft in the Bay or elsewhere beyond the monthlong fishing season, it made little sense for fishers to invest in their own boats. Few did.



Alaska State Library - Historical Collections

Image 14. "Bristol Bay Fishing Fleet." Image source: Alaska State Library, Michael Z. Vinokouroff Photograph Collection, Hewitt's Photo Shop (undated), ASL-P243-2-143

The majority of fishers thus remained "cannery men" or "company men." Processors demanded that fishers work exclusively for a single company, which is typically still the case today, when fishers are granted a "market" for their catch by a specific seafood processor for a given season. The loyalty of company men was relatively easy to enforce in days of cannery sailboats and monkey boats. Season after season, individual fishers—not to mention whole families, social groups, and even villages at times—tended to fish for one particular packer. Those who reminisce about sailboat fishing often recall the fleet's division into quite visible company units: the APA's blue sailboats, the yellow fleet of Libby McNeil and Libby's Ekuk cannery, the white PAF boats, and the grey boats of Bristol Bay Packers. Although there are no longer color-coded cannery boats, present-day relations are not altogether different. Fishers still generally work for the same processing companies for years on end—and not infrequently the same companies for which their fathers' fished.

The canneries reciprocated their fishers' loyalty with a variety of perks, even if many of these seeming favors only entangled the fishers more tightly in relations that were ultimately exploitative. For example, many resident fishers came to rely heavily on the grubstakes the cannery provided after a summer's season, stores of supplies that were often used to sustain whole families during a long winter of trapping upriver. This also represented a continuation of the older social forms extending back to relations created through the policies of the RAC and the Alaska Commercial Company, which inherited RAC fur trade operations and many of their management techniques.

Like much of the merchandise transferred at the literal company stores run by Bristol Bay canneries, grubstake provisions were not paid for in cash, but taken out of past or future earnings. For many decades, Bristol Bay residents depended on the company stores almost exclusively for market goods, as Nicholson's recollections also imply. Further, there is evidence to suggest that the Native residents of Bristol Bay were particularly targeted for company-store debt. As recounted by Jonathan Hughes, an economic historian who spent two summers during graduate school working as a cannery accountant at Clark's Point, cycles of indebtedness were as much a "social fact" of cannery life as the segregation of the mess hall:

[N]early all of the residents were in debt to the company, which 'grub staked' them at the company store and warehouse during the 265 days when there was no employment in the cannery. Those debts were paid off all or in part from summer earnings, and then new grub stakes were 'rationed out' (loaned) at the end of the season. This practice was equivalent, in some respects, to 'dept peonage' in the South after the Civil War, and impinged upon other relationships, sharply reducing the independence of the Eskimo set-netters, who nearly all were caught up in the practice.

...The company store sold to the Eskimos for their winter food supplies the contents of a high-class Michigan Avenue delicatessen. All to be paid for from future earnings. So the books at Clark Point were never really cleared. Nor did we want them cleared; we wanted instead, an assured native labor supply. And barring death or disability, the grub stakes assured that. The natives went where they had credit, where they owed money. A mile down the shore was the Libby Cannery at Ekuk. They also had their own supply of indebted natives. Each group was tied to its own grub stake (1982: 8-9).

For many years, the canneries avoided hiring Alaska Native workers at all, as coming sections elaborate. The above reflections suggest that even when they did, mechanisms were put in place to ensure continued entrapment in ongoing labor relations.

In addition to the financial entanglements that kept fishers associated with particular processors, there were personal bonds as well. Certain cannery superintendents distinguished themselves by serving as a frequent master of ceremonies for the region's high school graduations, for instance, or distributing candy at Christmas (Clark and Faith 2005: 155-157). Despite fishers' highly developed and frequently expressed resentments about processors' policies and their control over the industry, other less overtly antagonistic sentiments and relations hold as well. Not only do twenty-first century Bristol Bay fishers have strong memories of the treats and grubstakes, which they at times invoke to describe how processors have "taken care of their fishermen" over the years, but they also reproduce quite similar relations in the present in both their interpersonal relationships and financial negotiations with processing company officials.

As scholars have documented, projects of both capitalism and imperialism often exploit the sentiments that inhabit the human relationships formed in their stead. At the same time, the colonial archive is filled with evidence of "how habits of the heart and comportment have been recruited to the service of colonial governance but never wholly subsumed by it," as Stoler suggests (2006b: 4). So, too, the relations structured by capitalist enterprise also create arenas for the cultivation of what Vinay Gidwani describes as a "politics of work." Given the "heterogeneous and irreducible sense of meaningful fabrication" that Gidwani locates in the activity of living labor—which he terms "work"—he posits that a politics of work can "break capital's flow by making affective connections that are based upon a refusal to be dialectically defined by capital as 'not-capital'" (2008: 212-213). Amid the intimacies patterned by colonialism and capitalism, whether located in intermarriage or mutual work, Stoler and Gidwani argue for relations that have the potential to exceed straightforward subjection or objectification.

The relationships fishers were able to fashion for themselves on cannery boats provides one example. The double-ender sailing craft employed in Bristol Bay were invariably "operated by two men one of whom handled the net and the other the boat" (VanStone 1967: 64). The packers determined at least of one the pair by granting what Bristol Bay residents still talk about as "a spot on a cannery boat." Fishers were then often able to choose their fellow operator. The two fishers, referred to as fishing partners,

were known colloquially as the boat puller and the captain, respectively.⁶⁷ Despite the clear delineation of these two roles, it seems that there was a certain amount of flexibility in their everyday performance. On more than one occasion fishers explained to me that the captain was in charge of running the boat while the puller's primary responsibilities included picking fish. However, when pressed further on the division of labor in these early operations, one group of older fishers suggested that in fact both partners were involved in both activities (see Image 15).



Anchorage Museum of History & Art. Library & Archives.

Image 15. "Fishing boat in Bristol Bay."

Image source: Anchorage Museum of History and Art at Rasmuson Center, Library and Archives, Ward W. Wells Collection, Wells (ca. 1950a), AMRC-wws-156-R19

⁶⁷ The terms for these different roles seem to vary to some extent. Moser reports that, "Two men form a gill-net crew—a netter and a puller" (Moser 1902: 180). I find this terminology somewhat confusing because, according to present-day fishers, the "puller" was not so named because he pulled or oared the boat, but because he pulled in the net.

As these details suggest, and the partner designation itself might signal, the captain and puller experienced a fair amount of joint work and similar treatment, at least in the industry's early years. Based on conversations with fishers and surveys of archival materials, it seems as if the captain may have held somewhat more power and responsibility than the puller in early fishing operations, but did not necessarily make much if any additional money. A number of different sources confirm that the standard pay breakdown was a third of the total revenue to the puller, a third to the captain, and a third to the boat. Whoever owned the boat would thus recoup anything left over after expenses were deducted. In the early days of fishing, then, when the cannery claimed the boat share, a rough parity between captain and puller payments was likely.

In the context of an industry in which standard operating procedure was characterized by individual vessels in fierce competition, as well as highly differentiated groups pitted against one another, these occasions for mutual work arguably allowed for the formation and elaboration of diverse solidarities. These bonds likely reproduced many of the industry's hierarchized distinctions, but there is also reason to believe that they exceeded their service to production as well. Early fishing partner arrangements both reflected and fostered an ethos of egalitarianism that continues to represent a powerful industry ideal into the present, however riddled with contradictions. The idiom of partnership still circulates in the Bay, even if the financial arrangements and status equalizers that characterized partner relations in the early years are rarely present in a fishery made up of individual permit holders and boat owners. Although contemporary fishers' descriptions of the past are often laced with romanticism, many bemoan the transformation of the fishery from the days of "iron men in wooden boats" (as opposed to the "wooden men in iron boats" of the present), when the fleet was "a band of brothers."

As coming sections will show, the egalitarian ideal arguably spurred the expansion and transformation of organized labor in the fishery at the same time it remained fissured by the exclusions that permeated industry practice more broadly. In this respect, the bonds of kith and kin forged through the fishing partners' work on the fishing grounds indeed represents what Gidwani has described as the flashes of a politics of work within a politics of labor. As he writes, "the instances I have posed do not have to fit cleanly into one of two boxes—'politics of labor' *or* 'politics of work.' They bear a contaminated logic, which troubles this dualism" (Gidwani 2008: 214). Indeed, as we find in the case of the Bristol Bay salmon industry, this contamination creates the conditions for moments of work that can exceed their objectification as labor, yet simultaneously limits the radicalism they might impart to a politics of labor.

Coming into the Country

The politics of labor in the salmon fishery during the first half of the twentieth century was markedly influenced by Bristol Bay's growing resident work force, which was fast changing as a result of the increasing settlement of non-Natives in the region. The American period in Alaska generally is distinguished by scholars from the prior Russian era by the degree to which Euro-Americans (and others) began to take up permanent residence in the Territory. The arrival of a new set of "pioneers" to Bristol Bay would lead to mounting pressure for the expansion of residents' employment and equal treatment in the fishery. Yet as these newcomers increasingly adopted an Alaskan identity along with their pursuit of these egalitarian ends, they helped build up social

fields resting on inequalities. An examination of the way in which these pioneers

represented themselves and were represented reveals what may be understood, following

Stoler, as a "racialized histor[y] of U.S. empire" (2008: 205).

As dramatized by the following passage from a fraternal order popular in Dillingham in the early to mid twentieth century, some of the Euro-Americans who

settled in Alaska chose to view themselves as pioneers quite literally:

Fellow Pioneer(s), the word 'Pioneer' was originally used to designate those soldiers who went ahead of the main army to prepare the road. It is our privilege to prepare the way for peaceful armies of civilization. Beginning in the 'Far East,' the 'Cradle of man,' pioneers have ever traveled westward, blazing the way across the lands, and sailing over seas, until they reached our continent. Still the pioneers pushed westward finally reaching our own Alaska....Alaska is the last great frontier... (Pioneers of Alaska 1922: 4).

These scripted opening lines of initiation to the Pioneers of Alaska organization—as outlined in a ritual booklet dated April 4, 1922, to be spoken by the designated historian of a given Grand or Subordinate Igloo—provides a window onto one of the stories Alaskan settlers have told themselves about themselves. An epic of manifest destiny, it is a narrative of the peaceful conquest of civilization through what the Alaskan fraternal order would later hail as the "constructive development of our vast natural resources" (Pioneers of Alaska 1939).

In addition to the arrival of the salmon packers in the late nineteenth century, the Territory witnessed an explosion of people and publicity after rich gold deposits were discovered along the Klondike River in Canada's Yukon Territory in 1896. Alaska was the point of entry for most prospectors to the Klondike, and subsequent gold rushes in Nome and Fairbanks also drew hopeful miners to the Territory. Paul Romie was far from the only one who was taken by tales of the stampedes, which glittered with the promise of adventure and riches during a time of worldwide economic depression. An estimated 100,000 people set off for the gold fields, though somewhat less than 30,000 actually made it there (National Park Service 2008). While only a small fraction of those prospectors who reached Alaska stayed there after the stampedes slowed, a number eventually made their way to Bristol Bay.

Louis Hansen of Sweden, for example, as well as Oscar Rousseau of Canada, Roy Smith of Michigan, Charles Steen of Indiana, and Thomas Gardiner of Scotland all came into the country during the Klondike and stayed, settling in Bristol Bay in the years to follow. An even longer list of those on the rolls of the Pioneers Igloo No. 28 in Dillingham came to the Territory via Nome around the time of its gold rush. Unsurprisingly, most of the remaining Dillingham Pioneers were introduced to Bristol Bay through the salmon industry, whether as fishers, carpenters, storekeepers, or others. More than half of Igloo 28's members were born in Europe. Although Norway and Sweden far outnumbered other European countries of origin, the local chapter included men who had been born Danes, Brits, Finns, Germans, Estonians, and Dutch.

The membership applications of these Euro-American men provide flashes of detail that help to flesh out the picture of this early wave of settlers, as membership in the Pioneers was restricted to Alaska resident men who had been born in or entered the Territory before 1911.⁶⁸ They also shed light on the classificatory terms that configured settler identity, as well as the ways in which such imperial effects were inscribed onto and embedded within human bodies. The applications record the brothers' places of birth, next of kin, occupations, and physical features, broken into categories like "Eyes"

⁶⁸ In 1945, no doubt because of a dwindling membership base, this 1911 cutoff was pushed back to 1916. It is noteworthy, however, that other key eligibility requirements were not amended at the time. Entry was still restricted to "Men of pure white blood, of good moral character…" (Pioneers of Alaska 1945).

"Complexion," and "Forehead." Perhaps because of a preponderance of Northern European members—or the widespread popularity of scientific racism at the time, not to mention the Pioneers' explicit restriction to "Men of pure white blood" (Pioneers of Alaska 1945)—"blue," "light and clear," and "high" appear quite often, respectively, among the filled-in responses.

In addition to their facial features, Pioneer applicants were called to list other physical characteristics by which they could be identified, if need be. The application of Willian H. Bartman, a man born in Rotterdam, Holland in 1879 who was better known as Glass-Eyed Billy, indicates that he, "Lost right eye wares glass eye in place," while that of Carl August Brinkmann-Hall of Bochurn, Germany reports the "Amputation of the toes on both feet and frozen heel on right foot." Such details point to the rough lives and difficult circumstances these itinerant workers likely experienced between mining camps and the high seas. Many Pioneers' days as sailors are further evoked by the intricate tattoos of ships and anchors that are reproduced on their bodies as well as on their applications. A number of the membership forms seem to have been filled out by someone other than the Pioneer himself, and misspellings and grammatical errors are more common than not—all reminders that English was a second language for most of these men, and that more than a few may not have been literate in any language at all.

In penmanship that ranges from near calligraphy to scrawl, some members provide short auto-biographies in their own hand. Louis Hansen, for example, writes of his own experience: "First came to Alaska in 1898, mined and prospected in the different mining camps. Carried mail over in the Yukon country and eventually coming to the Nushagak in 1901, and have following the fishing game, became married, and raised a

family who are all married and are raising familys of their own." William Hurley, an Englishman born in the originary Bristol in 1859 who settled in the Nushagak village of Ekwok, narrates his experience as follows: "Age 66 years. Followed the sea until 1900 from the age of 14 years. Went to Nome with the gold rush. Then back to the States and sailed from San Francisco with the canning fleet for Nushagak River Bristol Bay. Have been here since 1902 engaged in trading trapping and fishing." Billy Hurley's name is instantly recognizable to most Bristol Bay residents, and even newcomers who aren't aware of his existence are likely to know one of his descendents, along with Hansen's. Since most of these men entered Alaska young and unmarried, they often established families with Native women; a striking proportion of the names on the Pioneers roll are now those of the region's largest Native families today.

The Pioneers' varied backgrounds provide ample evidence of the heterogeneity of even the self-proclaimed "white" population that began to settle in Bristol Bay around the turn of the century. As the many foreign-born members on the igloo's roll suggests, the Americanization of the Territory was still very much a work in progress around the turn of the century. Only a few decades prior, Alaska had been a part of Russia, and was more than a half-century away from becoming a U.S. state. Yet the categories of alien and citizen were becoming increasingly salient. For example, the diary of Dave Carlson, a Dillingham resident of Swedish descent originally from the U.S. Midwest who became involved in city government, is peppered with entries like that dated August 29, 1938: "Learned that Fred Johnson is probably an alien." No doubt many of these early aliens aspired for trajectories that would lead *From Alien to Citizen*, as conjured by the title of the 1914 memoir by Edward A. Steiner, which Carlson was reading at the time.

In addition to joining a brotherhood of American citizens, membership in the Dillingham Igloo likely represented a means of advancing social status generally, particularly given the deeply working-class roots of the better part of these self-styled pillars of the community. The local group held dances, provided for members in need, paid for funeral expenses, and looked after regional affairs, including fishing industry issues, while the state-level Grand Igloo lobbied for "constructive projects pertaining to the development of the Territory" and promoted Alaska resident rights (Pioneers of Alaska 1939). As much as the Pioneers chafed under residents' subordinate status vis-àvis nonresident workers, who received preferential treatment in the fishing industry, they sought to establish themselves as community leaders. Even as they embraced their identity as Alaskans and fought for residents' rights, most of the actual residents of rural Alaska were not even eligible for membership in the Pioneers' organization.

In this fashion, the Pioneer experience in Bristol Bay encapsulates broader tensions underlying settlers' relationships with the Alaska Native people of the region, as well as with the many non-Natives employed by the fishing industry. At the same time that a fair number of the Pioneers became integrated into Native families, their participation in the organization itself was premised on Native exclusion. There is evidence to suggest that at least some members experienced this as problematic and contradictory. During a conversation in which I sat and read the Pioneers' applications alongside Zell Norgren, who supplied additional biographical details and tidbits of gossip about each member, Zell explained that both of his grandfathers had joined the Pioneers, but one eventually "quit them." According to Zell, his grandpa decided he didn't want to be part of a group he saw as "racist." For this reason, this grandfather never got a

headstone for his grave, a major perk of the brotherhood. Zell also relayed that there was worry among certain Pioneers about whether "blood would mix, white and Native," and that these men opted against marrying local women and having children.

Despite the many interlinkages between the settlers and aboriginal residents of Bristol Bay, a number of contemporary Dillingham residents, even some with Pioneer ancestry, recall a time when the town was run by a "loosely-knit group of white men," and hold vivid memories of the wrongs experienced by Native people in turn. When I spoke about these memories with Zell and Hal Benson, a prominent local leader and commercial fisher, the stories followed in quick succession. Hal described how his father, Jack, a man of mixed ancestry whose own non-Native father died when he was quite young, never forgot getting turned away at the door of the Territorial school as a child. The school principal told Jack's Yup'ik mother to take her son to the Native school instead. Hal mused that he'd often thought that this incident with the principal, and the strong memory of it Jack carried, had motivated his father for his entire life.

Zell remembered the disparagement with which certain non-Natives in the region would talk about locals, using derogatory terms like "siwash" and "mud people." When I probed about the connotation of "siwash,"⁶⁹ Zell and Hal concurred that it conveyed something like "dirty, no-good Native." Zell recounted a story from when his father and grandfather were out fishing in the sailboat days. It was a nice afternoon, and Zell's Euro-American grandfather decided to take a nap, leaving his half-Yup'ik son at the helm. As another boat drifted near, the fisherman aboard shouted across for the Norgrens

⁶⁹ According to the Yinka Déné Language Institute (2008), "siwash," is the term for "Indian" in Chinook jargon, a trade language that developed on the Northwest Coast that was used widely in the nineteenth and early twentieth centuries. It is derived from the French *sauvage*, meaning wild. The Institute reports that the term "was sometimes used by First Nations people to refer to themselves, but at present it is generally considered offensive."

to pick up their net so it wouldn't get run over by his boat. All of a sudden, Zell's father heard someone yelling, "Pick up, you Siwash! Pick up, Siwash!" As Zell recounted: "My dad bends down and tells his father, 'Papa, someone's hollering.' So my granddad picks his head up, and the fisherman says, 'Oh, it's you, Gene! I didn't know it was you.'" Zell's passed-down story gives some indication of the hazards of recognition and misrecognition when racialized hierarchies swirl amid currents of transculturation. Insofar as Zell's father was interpellated a siwash, the incident shows how unequal relations were reproduced in quotidian practice. At the same time, however, it also suggests the degree to which partitions of difference were continually negotiated and renegotiated in everyday interactions, giving rise to the awkward encounters in which imperial appellations might possibly be reworked.

Unions Forged and Fissured

Despite the explicit efforts of organizations like the Pioneers to set themselves apart from Alaska Native people, all Bristol Bay dwellers mingled in the emerging political identity of Alaska residents. At the same time the category of resident itself was deeply fractured, it was increasingly used to make claims vis-à-vis salmon processing companies, the federal government, and Territorial officials alike. Besides their portrayals of prejudice against Alaska Natives, the stories of Hal, Zell, and other Bristol Bay fishers of their generation are also replete with examples of the discrimination suffered by Alaska residents at the hands of the salmon industry. Almost every account of fishing in the sailboat days remarks that resident boats were literally branded as different: They were required to be emblazoned with the letter "A." According to Hal and Zell, even for the fortunate residents who managed to get onto cannery boats,

shabbier treatment awaited: "hand-me-down nets, bum gear, rotten boats," not to mention significantly smaller limits on the number of fish they were allowed to deliver. Like individual groups of cannery workers, residents as a rule were assigned to different, and presumably worse, living quarters and mess halls while ashore.

In the meeting minutes of organizations like the Pioneers, the pages of diaries like Dave Carlson's, and the correspondence of local politicians with state-level elected officials, the archive is filled with evidence of the efforts of a wide range of Alaskans to push for the greater and more equitable participation of region residents in Bristol Bay's commercial salmon fishery. Over much of the 1930s, Alaska's sole non-voting U.S. Congressional delegate during this period, Anthony Dimond, regularly introduced bills intended to advance the rights of residents in the industry and limit nonresident participation. Although none of Dimond's major legislative initiatives were successful,⁷⁰ his efforts were followed closely by those in Bristol Bay and written of approvingly by local politicians. The growing political pressure they generated, along with the increasing organization of resident fishers, ultimately had the effect of provoking industry change. As Crutchfield and Pontecorvo argue, the industry's ability to exclude nonresidents eroded "largely because of increased political pressure within the Territory, and by the end of the decade [1930s] the practice of using Alaskans was established" (1969: 108). In the late 1930s, Dave Carlson's diary indicates about equal numbers of resident and nonresident cannery boats, at least among certain packers.

⁷⁰ As Cooley notes, Dimond "succeeded in getting only one minor piece of legislation through Congress [in 1938], which provided that the insignificant set-net fishery in Bristol Bay was to be handled only by those who had resided in the area for two years" (1963: 148). This fishery has become far less insignificant than it was at the time of Cooley's writing. Although the residency requirements that Dimond established no longer pertain for the commercial set net fishery, its association with resident fishers continues to this day.

Yet the employment inroads made by Bristol Bay fishers in the 1930s only heightened their sense of continuing disenfranchisement. Not merely were residents disadvantaged by packers' policies, but they were also discriminated against by their own labor union. The AFU represented all salmon fishers working in Alaska at the time, but this union was and had always been controlled by nonresident fishers. Even into the 1930s, nonresidents were explicitly and consistently favored in AFU agreements with processors. As Cooley confirms, for decades union labor contracts required employment priority for nonresidents and paid them several cents more per fish (1963: 148). Given the rising participation of residents in the industry, these ongoing conditions made for more pitched political battles and growing friction within the AFU. Spurred by the broader unionization movement throughout the U.S. during the 1930s, resident fishers established their own AFU local union in 1937—the Bering Sea Fisherman's Union (BSFU)—geared to supporting residents' interests (VanStone 1967: 79).⁷¹

In Cooley's analysis, the growing unionization of the 1930s only intensified the "great cleavage" among industry workers: the conflict between residents and nonresidents. From this point forth, nonresident members sought to maintain dominance over the unions that were headquartered in Seattle and San Francisco despite rapidly changing industry conditions in Alaska (Cooley 1963: 147). The circumstances prompted by the outbreak of World War II would arguably cleave industry labor even further at the same time they initiated a new era of increased bargaining power. By all accounts, the participation of residents in the Bristol Bay fishery, particularly Alaska Natives, would jump markedly during the war years (King 2003: 8, VanStone 1967: 79).

⁷¹ 1937 also marked the arrival of the first unionized cannery workers to Bristol Bay (McCullough 2001: 39).

Canned salmon remained an important food item for military rations, but because many nonresident fishers and cannery workers were engaged in service overseas or other warrelated efforts during these years, Alaska residents were hired on in large numbers. According to Bristol Bay historian Bob King, "As jobs and money flowed into the region, local fishermen and communities began to organize. Dillingham fishermen formed a coop in 1944 to break away from the company store, and a resident cannery workers union was organized" (2003: 8).

In King's (2003: 9) assessment, these wartime changes in fishery labor forms directly precipitated the defeat of the ban on powerboats in 1951:

Organizational changes and unionization among fishermen helped bring major changes to the fishery itself. Immediately after the war, resident and non-resident fishermen challenged the long-obsolete ban against powerboats....The political influence of the canners dragged the issue out for several years, but in 1951, fishermen ultimately won and powerboats were allowed in Bristol Bay, limited to 32 feet in length.

Ironically, around the very time that fishers' coordinated efforts met with success in overturning the ban on powerboats, the simmering tensions between resident and nonresident workers reached a breaking point. In 1950, the BSFU formally split from the AFU to form a separate union to represent resident fishers. During an National Labor Relations Board hearing on the matter, Jim Downey, a non-Native Dillingham resident who was president-elect of the new union, "described the need for the split by stating, 'The residents and non-residents are incompatible, are separated and need a divorce'" (McCullough 2001: 71). As Downey's image of a broken marriage suggests, side-by-side work on fishing docks and in regulatory arenas could evidently splinter kinships as much as it could forge them.

Besides residents' longstanding dissatisfaction with AFU representation (or lack thereof), the union rupture was also fueled by fissures in the organized labor movement across the U.S. and even the world—breaks between craft and industrial unionism, the AFL and the CIO, Harry Lundeberg's Seafarer's International Union and Harry Bridges' more radical International Longshore and Warehouse Union. Contests between vying unions, factions, personalities, and ideologies were played out in Bristol Bay, as elsewhere in this period, all before the backdrop of the House Un-American Activities Committee investigations and allegations of communist sympathies put forth by Senator Joseph McCarthy. These contests led to a strike against the salmon industry by the BSFU in 1951 that was ultimately as much about struggles among unions as it was between labor and capital, not to mention between local leaders with competing claims to represent area residents.⁷²

While the formation of the BSFU was applauded by most Bristol Bay residents as a means of redressing historical inequities, it was viewed as a wedge dividing labor by the likes of Harry Bridges, who had long suggested that the salmon industry itself fueled the friction between resident and nonresident groups in order to undermine the fleet's power for collective action (McCullough 2001: 74). Bristol Bay fishers indeed pursued fleet-wide goals through parallel sets of organizations during the decades to follow.⁷³

⁷² The strike is described by Nicole Susan McCullough (2001) and Hughes (1982). The strike story is a complex one, and the details were apparently a matter of some confusion even at the time. They are beyond the scope of this study, which is decidedly unfortunate, because they are colorful. The strike provoked headlines in a Dillingham newspaper like "Salmon Industry Betrays Nation" (Endal 1952), referring to alleged communists in the unions aligned with AFU, and lengthy statements by those involved in the strike, such as a pair of Jesuit missionaries stationed in western Alaska who had become deeply involved in the region's labor politics.

⁷³ Throughout the second half of the twentieth century, collective bargaining on behalf of Bristol Bay fishers was increasingly undertaken by "marketing associations" instead of unions. As the next chapter explores, following the end of the ban on power craft in the Bay, more fishers started to own their own boats and gear, becoming "independent fishermen." In response to concerns that the independent fishers

These organizations worked closely at times, and coordinated successful strikes for several decades to come. But their bisected structure persisted until the largely unsuccessful strikes of 1980 and 1991 led to the end of fishers' collective bargaining for salmon prices altogether. During these strikes, especially the one in 1991, larger numbers of strikebreakers (many facing hefty payments on newly acquired boats and permits) were able to catch a significant portion of the run, in part because of improved fishing technologies. The striking boats were thus unable to effectively shut down the industry. On the heels of these defeats, the organizations that once coordinated joint bargaining have since disbanded, or shifted their focus to other forms of fisher advocacy (e.g., AIFMA 2008). Unlike in the past, Bristol Bay fishers today begin their season without collectively bargaining or signing a contract for specific salmon prices.⁷⁴ Since 1991, there have been no strikes by the region's fishing fleet.

The Difference of Work Today

Most Bristol Bay fishers today have vivid memories of the strikes in earlier decades, and for some these recollections extend into the 1950s. In discussions heard at meetings and out on the fishing grounds, there are occasional murmurs that "going back" to the fleet organizations and strike tactics of the past might push the major processors to

could not bargain as a union without violating the Sherman Antitrust Act, marketing associations were formed a means of continuing joint negotiations for fish prices with processors. Resident fishers formerly involved in the BSFU established the Western Alaska Cooperative Marketing Association (WACMA) in 1954 (VanStone 1967: 80). The Alaska Independent Fishermen's Marketing Association (AIFMA), the marketing association that tended to represent greater numbers of "Outside" fishermen, was formed in 1966 (AIFMA 2008).

⁷⁴ Processors set prices per pound for fish at the beginning of the season, which they may adjust up or down throughout the season. Fishers are paid on the basis of these prices and whatever "post-season adjustments" are made to base prices after the company has a better sense of its revenues for the season. Given the variability of catches and prices, there is a great deal of indeterminacy in annual earnings. As one "greenhorn" crew member in his first year of fishing complained, "What kind of job is this where you don't even know how much you're getting paid?" Crew members are usually paid a crew share, figured in terms of percentage, of the boat's total proceeds or profits after expenses have been deducted.

raise sagging salmon prices. But such comments are generally either made as grumbled asides, or met with sharp disagreement from others when proposed. For instance, during one mid-season conversation I witnessed, a group of set netters who did not already know each another discussed the ongoing industry slump. "What we really need is a strike!" one of them put forth. "Were you here in 1991?" another shot back with some scorn, quickly dismissing the idea as impractical. Likewise, during a public forum held in Dillingham regarding the prospect of a Bristol Bay regional seafood development association intended to spearhead marketing and infrastructure improvements,⁷⁵ one audience member's suggestion to revive the region's old bargaining unit instead of creating a new organization was flatly rejected. "Things have changed," responded the speaker supporting the new association, a longtime Dillingham fisherman who was in fact a former president of the old residents' bargaining organization.

Despite the apparent dissolution of organized labor as a means of advancing fishers' interests at present in Bristol Bay, work itself nevertheless remains the critical arena in which fishery participants negotiate imposed identities and self-fashion their own modes of activity and belonging. As anthropologists Marc Miller and Jeffrey Johnson argue, "Bristol Bay is first and foremost a working scene" (1984: 221). In the cannery and out on the fishing grounds, differentiation comes to be expressed and reinforced, often quite self-consciously, through labor practices. At the same time, work provides the most readily available language through which participants can articulate both senses of difference and common identity alike. As one older fisherman insisted, all

⁷⁵ The Bristol Bay Regional Seafood Development Association (BBRSDA) has since come into being. Two months after the conversation detailed above, in May of 2006, Bristol Bay drift permit holders voted to fund the organization. The salmon taxes that used to be channeled from Bristol Bay drift fishers to the statewide Alaska Salmon Marketing Association (ASMI), 1 percent of their commercial harvest, are now used to support the activities of the fledgling BBRSDA (2008).

that mattered in the industry "was that you were a good worker." This of course provokes its own questions about when, how, and by whom work is made good.

As I traveled across industry social divisions during my fieldwork, it quickly became apparent that I was far from the only one interested in the nuanced variability of industry participants' work practices. Fishers themselves were even more absorbed in observing the differences in fishing style that existed across the fleet and reflecting on what they might signal. With each new fishing operation I joined, I was confronted with a flurry of inquiries into the proclivities and performances of those with whom I'd fished in the past. Does she like to fish on the flats? Did they work the net a lot? Do they use fish picks? How did he do? Fishers generally used any information I was willing to offer to extrapolate about the behavior of entire groups, and characterize perceived differences in approach. In this way, patterns and processes of everyday work become the data for fishers' own theories of fishing, culture, difference, and worth.

In the cannery and out of the fishing grounds, observations about the labor practices of others, and even explanations of one's own work activity, are often made with explicit reference to ethnic or group stereotypes. "I don't fish like the Italians do," one fisher reports to Miller and Johnson, "I fish inside. I find a little hole where the fish will hold at a certain stage of the tide" (1984: 220). Miller and Johnson's work, as well as an earlier study by Johnson (1981), records an endless catalog of these kinds of distinctions, many rooted in the microphysics of particular harvesting techniques. While not all of these same points of differentiation were commonplace along the Nushagak in

the 2000s, they were not entirely absent either.⁷⁶ At one point while I was coiling rope on deck, my captain at the time stopped me to marvel that I was doing this in exactly the same manner that the old Italians did. I'd mentioned to him earlier that my grandfather had been an Italian immigrant, and he excitedly remarked that Italian fishing techniques must be in my blood.

As this move suggests, stereotypes are easily elided with naturalizing assumptions about what kind of work is best done by whom. During my stint of employment in the Mermaid Cove cannery, a manager explained to me that women are generally better at patching, a job on the canning line that entails correcting can weight by adding or removing small pieces of fish, because they have smaller hands and are more detailoriented than men. This closely parallels the long-held belief by canners that Alaska Native women possess "immemorial instinct" in salmon handling, which motivated the hiring of Native women even at a time when very few Native men were able to secure fishing or cannery work (Friday in McCullough 2001: 30). I actually had to push to be moved around the cannery during my period of work, because I kept winding up in the positions appropriate for someone with my gender, race, and class background. "Why do the white girls always get the clipboards?" a fisherman friend of mine remarked after he'd seen me at work in the cannery. Indeed, I seemed to be shuttled from one organizing and expediting task to another: "bitch jobs," as one young man I worked with griped as we sorted through fuses together in the slower pre-season. He was elated when he got a spot on the beach gang, which handles most of the cannery's heavy labor.

⁷⁶ Johnson and Miller's work was conducted in the late 1970s and early 1980s on the east side of Bristol Bay in and around Naknek—a district, incidentally, with greater Italian participation historically. It seems noteworthy that the fisher who noticed my Italianate rope handling was born and raised on the east side.

In the striking degree to which particular jobs and sets of jobs were gendered, classed, and ethnicized, the cannery environment I observed at the start of the twenty-first century was remarkably similar to what is described in accounts from a hundred years prior. Over sixty years after the abolition of the contract labor system, for example, there was still a "Filipino boss" at Mermaid Cove. Even though this person at present is simply a longtime cannery employee with Tagalog language skills and managerial responsibilities over those working the slime line, where fish are cleaned and gutted, the retention of this title seems noteworthy insofar as it suggests the experiential continuities of older relations. At times, the rigidity of such roles was laid bare. When I asked one of the college-age workers why he had been shifted to different stations in the cannery, he rolled his eyes. "Yeah, they couldn't figure out where to put me," he explained, "because they thought I was Mexican." Apparently, that the fact that he was of Hawaiian descent confounded the usual job assignment protocol.

Despite the constant accusations of and discussions about racism at the cannery, however, the locus of this racism proved surprisingly hard to pin down. The few workers who expressed overtly racist sentiments were shunned by almost everyone, like one who became known as "douchebag" for weeks before eventually losing his job. More often, it seemed difficult to say who specifically was responsible for racism, despite the pervasive sense that it abounded. On my way to dinner one night, a fellow worker approached me to talk because he'd heard a rumor that I was "writing a report about the cannery." A Yup'ik man in his thirties who'd grown up on the Yukon River delta to the north of Bristol Bay, he wanted to make sure to convey to me how "racist" he felt this workplace was. During our conversation, I pressed him to elaborate. Did he experience racist

attitudes from the cannery management? After some reflection, he clarified that it was not the managers who were responsible but the "QCs," a group of mostly white, collegeage, clipboard-carrying women who monitored other workers' activities and recorded quality control measurements. Interestingly, I knew from prior conversations with some of these same QCs that racism was a constant topic of their own conversations. Several had told me explicitly, unprompted, that they were appalled by the "racism" they witnessed, which, one explained, "you just don't see in Eugene, Oregon." It was undoubtedly the case that the collective labors of the heterogeneous cannery workforce made starkly visible social distinctions and hierarchies with much longer histories and reverberations than those forged in any given salmon season alone.

Indeed, in their evaluation of one another's performances of work, industry participants today summon questions of labor and difference that have riddled commercial salmon fishery relations in Alaska since their very beginnings—especially given processors' strategies to source labor globally, to scour multiple continents in search of "satisfactory labor" (Moser 1898: 23). Historical documents are full of cannery operators and others' detailed evaluations of the labor of particular ethnic groups, like complaints that a certain collective is of an "inferior class," or "not only lazy and worthless, but…constantly raising a disturbance" (Moser 1902: 185). Even now, some of the most salient distinctions industry participants make involve estimations of, reflections on, and judgments about how hard they or others work.

While working hard and being a hard worker are generally considered good things, there is a range of subtle variation in opinion about the moral and practical value of hard work, not to mention how it might be defined in the first place. Fishers, for

example, use everyday work choices as indices of broader orientations that can then be judged. Who starts fishing very early in the season, and who stays for what's called "scratch fishing," when the last of the run trickles into the district? After making a set, does a fisher sit back and wait for the fish to hit her net, or does she instead vigorously "work" the net, whether picking it up and towing it into a slightly different spot or better position, or cruising beside it at high speed in order to scare fish into the net and keep marine predators like seals away? How much sleep does a given fisher tend to allow himself, and many sets does he make throughout a cold, rainy night? While most fishers scoff at someone who gets a full night's sleep while fishing, and likely disrespect them for being lazy and ineffectual, there is also a certain measure of disapproval directed towards those who "kill themselves" working like "maniacs," particularly when it seems uneconomical to do so, or who are so "greedy" that they act as of they have to "catch every last fish in the sea." I heard a range of complex attitudes expressed about scratch fishing and working the net depending on how, and by whom, the practices were performed and evaluated.

Assessments of these practices, like so much else associated with labor in Bristol Bay, are often tightly bound to dominant group stereotypes. After I'd returned one season from a very early king opening, in which we'd expended a lot of fuel and sleepless hours searching for salmon that, as it seemed, had not yet arrived to Bristol Bay waters, I ran into a group of fishers including Zell Norgren, none of whom had opted to fish the opening. Upon their prompting, I gave a quick report of the conditions we'd experienced, characterized by few fish and fairly rough weather. After my run-down, one of Zell's friends asked—somewhat playfully, knowing his usual style—if Zell would be

heading out for some of these early openings himself. "I'm not hungry like a white man!" Zell retaliated. Not only does his response emphasize the extent to which issues of work in Bristol Bay are articulated in terms of difference, but they also raise questions about the difference of fishing industry work itself—that is, whether work in Bristol Bay is always best thought of as work at all.

Work Beyond Work

As in countless other colonial contexts, not only in Alaska but indeed across the world, nineteenth-century salmon industry employers were quickly confronted with the fact that an interest in wage labor, along with an embrace of its structuring of human activity, is hardly a cultural universal.⁷⁷ "The complaint is made everywhere," Moser writes in 1898 in his Alaskan fishery investigations, "that Indian labor—that is, the labor of the men—is uncertain. After making sufficient wages to supply their personal wants and getting a few dollars ahead, the desire for hunting or fishing seizes them and they are apt to leave when they are most wanted" (1898: 25). In his reports on fishery labor in Bristol Bay and elsewhere, Moser issues harangues heavy with sarcasm and disapproval:

When the cannery ships arrive in the spring the native, having struggled through a long, severe winter, is hungry and has many wants. He greets the cannery ship with childish glee and wishes work. It is given him, his hunger appeased from the overflowing cannery table, his daily wages soon supply the few luxuries he desires, and then he no longer cares for work. Why should he work? Hunger no longer worries him, his immediate wants are satisfied, and he has no others! (1902: 186).

Significantly, Moser's censure is not merely directed toward Native people, with their appetite for useless luxuries, but also to the canneries themselves, whose overflowing tables he considers "abundant to the point of wastefulness" (1902: 187). His stern

⁷⁷ As E. P. Thomspon (1964, 1967) documents, factory discipline was no more natural in England.

message is clear: "if he [the native] is willing to work he can earn money and procure civilized comforts" (Moser 1902: 187).

Key elements of Moser's maxims and diatribes are echoed in missionary writings from this same period. According to Ann Fienup-Riordan, the writings of John and Edith Kilbuck, Moravian missionaries on the Kuskokwim, are filled with criticism of Yup'ik behaviors they take as evidence of laziness and indifference (Fienup-Riordan 1990: 83). Despite their many years in southwest Alaska, Fienup-Riordan writes, the Kilbucks "never lessened their poor opinion of those who lacked their sense of the inherent value of work" (Fienup-Riordan 1990: 83). Although John Kilbuck himself was apparently less critical than many of his contemporaries of Yup'ik ceremonies and other gifting traditions in which food and other goods are broadly redistributed (not unlike the potlatch institution of the Northwest Coast Indians), these same feasts were condemned by other non-Native observers at the time as "wasteful and wanton" (Fienup-Riordan 1990: 84).

Indeed, I was told that the giveaways largely stopped along the Nushagak when the Orthodox Church began to actively quash the Native dances with which they were closely associated. According to second-hand sources, the dances were discouraged not because they represented pagan ritual, but more because the giveaways were getting "out of control," and impoverishing communities in the process. Memoirs by both Nicholson and another Bristol Bay elder, the late Joe Clark, offer descriptions of these dances. Nicholson (1995: 153) writes:

When some Native dances were in full swing, someone laid a bolt of gingham or calico cloth on the hallway floor. While the frolicker is dancing, he or she is pulled onto the main floor area by the cloth. Seen all over the dance hall floor are expensive guns, newly made snowshoes, traps, clothes made of fur, agutaq (Native ice cream made out of salmon and black berries), and many other items. All of the gifts were danced away by Natives, who gave the gifts to everyone gathered in the dance hall. This was almost like Christmas time. Actually, this custom died because of missionary influences.

Clark's description suggests that the dances were instrumental to the establishment of

leaders, and indeed what it meant to be a leader, in Yup'ik communities:

There were also Native dances when I was young. People went from village to village. Certain people were the leaders in the villages. I don't know how to describe them in English words, but in Yup'ik they are called nukalpiat. These leaders were progressive. They were good hunters and good providers. When dance time came, they gave away every thing they owned. Every last thing, sometimes. It was just like they were trying to beat one another, to be on top of everybody. I think that sometimes they overdid it. But they did it to prove their good will and to show people that they could do it again and again. Giving away was a sign of strength, and doing one's best (Clark and Faith 2005: 44-45).

Clark's account of the cultural logic of Native dances and the nukalpiaq figure

more generally is, of course, strikingly reminiscent of the anthropological analysis of the potlatch as examined by Marcel Mauss ([1950] 1990) and in earlier classic ethnographies. Moreover, it also echoes Georges Bataille's ([1967] 1991) consideration of the social-theoretical significance of luxury, excess, expenditure, and exuberance. Indeed, the cultural forms described by Nicholson and Clark in fact pose a quite radical challenge to the bourgeois notions expressed, in differing ways, and at times obliquely, by canneries, missionaries, and fish commissioners.

A rich body of anthropological literature has argued that human-animal relations in many Northern hunting and gathering societies are patterned through notions of reciprocity, by which both humans and non-humans are enjoined in the reproduction of animate life (e.g., Brightman 1993, Fienup-Riordan 1990, Hallowell and Brown 1991, Hensel 1996, Morrow and Hensel 1992, Nadasdy 2003, Nelson 1983). Among the Rock Cree, for instance, animals offer themselves to human hunters, who, by taking these "grateful prey" and treating them with respect, ensure that their spirits will return to inhabit other animals (Brightman 1993). Unlike mainstream models of environmental conservation, then, human hunting in this view does not limit animal populations but is instead critical for their reproduction. Nor are animals considered scarce and limited, but rather an "infinitely renewable" resource (Brightman in Fienup-Riordan 1990: 167).⁷⁸ In light of these very different models of nature and personhood, Fienup-Riordan comments, it is no wonder that nineteenth-century missionaries interpreted the Yup'ik feasts and dances, many of which were presumably intended to establish relations of reciprocity across human and non-human worlds, as instead "profligate and irrational squandering of scarce and limited resources" (1990: 73).

In Alaska, and in Bristol Bay especially, natural resources and the human labor required to capture them have long represented sites in which constructions of difference and visions for the future are crystallized. Consider, for example, the following passage from the Pioneers of Alaska initiation ceremony:

President: (Addressing Candidates.) ...Alaska is a land where men by honest toil, grow hardy, both in mind and body; it is no place for the indolent or unambitious....Persistency and tireless energy are here especially essential to success. Our Territory is one of the fairest and most alluring under the sun; and it is entirely by persistent, patient and persevering labor of our true men that Alaska is now emerging from obscurity to the sunlight of rugged greatness. The hopeful worker is the true optimist, and because of the sturdy strength and happy industry of her pioneers, Alaska with prophetic soul looks beyond the summit of her lofty hills with abiding faith in the great future" (Pioneers of Alaska 1922: 5).

With its repeated emphasis on patient toil, this passage suggests a reason beyond

scientific racism for the exclusion of Alaska Natives from the organization's ranks.

⁷⁸ For this reason, seemingly environmentally friendly practices like catch-and-release fishing are often viewed with suspicion by those in southwest Alaska who see fishing itself as the respectful acceptance of a freely given offer (Fienup-Riordan 1990: 184-187).

Westward-leading Pioneers, it seems, are by definition everything that the aboriginal inhabitants of the Territory are not: those who bring Alaska out of timeless obscurity and into the future, from indolence to happy industry (and industrial development).

If we read through the lines Moser's account from around the same time, it seems that Alaska Native people were not only aware of attitudes like those of the Pioneers, but also very much committed to crafting their own counter-critiques. "Their frequent boast," Moser writes of Natives who are being pursued in the service of salmon industry work, "is that white men and Chinese must work to get something to eat, while the waters and forests furnish the Indians with all they want. A very small amount of money will supply them with the few necessaries which money alone will purchase" (1898: 25). By revaluing their reluctance to participate in wage work and incomplete integration into the cash economy, these nineteenth-century actors articulate an alternative to the conceptions of labor and nature outlined by the Pioneers.

Although many of those who settled in the Bristol Bay region signed on, both literally and figuratively, to the Pioneers' professed brand of patient labor, the motley crew who headed north for work in Alaska—not to mention those who decided to stay there—also included a fair number of individuals who viewed their path as a sort of antiestablishment project.⁷⁹ I make this observation in order to suggest that there were both external and internal critiques, and perhaps even articulations among them, that developed in Bristol Bay along with and against hegemonic notions of hard work. As T.

⁷⁹ This is not to say that these projects necessarily were, nor should this point be taken as evidence to support certain untenable claims of Alaskan exceptionalism. As Stephen Haycox (2002) has incisively argued, "rather than escaping the consumer-oriented urban culture of mainstream America, Alaskan settlers have replicated it on the last frontier." Haycox points out that the rhetoric that surrounds Alaskan independence, as both political and personal ideology, is belied by the state's deep reliance on the federal government for funding and much else. Significantly, this ideology of independence is founded in exactly the sort of hegemonic notions of hard work that are challenged by the attitudes I call antiestablishment.

J. Jackson Lears (2003) has explored, besides the currents in so-called American culture that valorize industry and economizing, there have long been those that celebrate chance, luck, gambling, jackpots, and windfalls. In Bristol Bay, these strains seem only more evidently in tension, which is perhaps unsurprising given the conditions of the fishery itself, whose erratic bursts and unpredictable jags make windfalls of fish—and, because of the commercial industry, cash—possible and even, at moments, probable.

From the pens of fishery participants, who have narrated their experience in the form of poems, novels, essays, satires, and songs, there is a great deal of fondness expressed for "those magic days when no mountain man ever did a lick of work, honest or otherwise, if he could avoid it" (Emberg 1985: ix). The author of this particular settler fantasy is Truman Emberg, a longtime Dillingham resident, fisherman, and union organizer from the 1940s on. In his novel *Frolic Welcome*, Emberg guides like-minded readers into his Alaska, where "The unexpected is the sugar and salt and spice of all adventure, and the fact that you are here in these hills proves that you are a refugee from the dull routine of a sanely ordered existence" (Emberg 1985: viii).

At the same time that the world Emberg depicts is very explicitly set apart from workaday existence, his text gives some sense of how unexpected adventure is reconciled with work in the context of the fishing industry. His introduction narrates the reader's experience as a fisherman who parties the night away and then misses the next morning's tide, only to accidentally stumble onto a load of fish while nursing a hangover near shore:

Your gear starts smoking from float to boat as a school of reds smashes into the web, leaping, thrusting, churning in an orgy of self destruction, and in ten minute's [sic] time you have to start hauling net, working like a madman to get it in before the fish drown and drag it to the bottom. Your arms feel as if you are wrenching them from their sockets, your back aches....You pick fish as if a pack of pitchforked devils prodded your rump....Then you go through the whole back breaking, soul trying rigamarole once more.

After the back-breaking work, the fisherman staggers ashore, cursing himself for his night of revelry, until he overhears that he alone caught so many fish, and is now "a member of the elite...a sure 'nuff high boat fisherman. It's as easy as that!" These tightly linked motifs—of luck, exertion, and (male) heroism—are woven into a great many of fishers' own narratives of their work.

While it is precisely the underlying premise of salmon scarcity that motivates this story's celebration of good fortune—it would hardly end as heroically if all boats in the fleet had caught as much as the lucky latecomer—it nevertheless dovetails in unexpected ways with a longstanding Yup'ik appreciation of abundance. As Chase Hensel reports, "Yupiit with whom I have fished in Bristol Bay (home of the largest sockeye [red] salmon fishery in the world), were thrilled by large catches" (1996: 99). Based on years of ethnographic research along the Kuskoswim, Hensel attributes this thrill not to competitive braggadocio, but rather to a cultural framework that celebrates plenty and profusion, particularly with respect to fish and game. Similarly, it seems noteworthy that, like a converging appreciation for bounty, both Native dances and settler stories seem to welcome a certain form of "frolicking" (Emberg 1985, Nicholson 1995: 153) instead of, or even as a part of, work.

It is parallel and intersecting threads like these, I propose, through which Bristol Bay fishers inhabit a shared sense of their activities as work beyond work. Indeed, they tend to see fishing as facilitated by skill, luck, experience, knowledge, aggressiveness, persistence, social networks, money, and equipment, among other aids, in addition to straightforward toil. While Hannah Arendt ([1958] 1998) differentiates "labor" from

"work"—energies required for sheer survival versus those directed toward the creation of material and conceptual artifacts beyond mere need—many fishers describe how they enjoy the activity of fishing precisely because it subverts what I would express as dichotomies like physical and mental, work and play, necessity and desire.⁸⁰ At moments, then, fishing becomes even more than just not-labor, but that which breaks open categories of work and labor altogether.

Fishers' mutual arrival at this common sensibility, regardless of its disjunctures and different points of origin, does not merely hold the potential to animate flashes of the politics of work into the politics of labor. I submit that it also offers the possibility of moments of solidarity that cannot be expressed in the terms of production, even as they are realized through it. "The brief Bristol Bay season," Miller and Johnson write, "is a social scene and an event which paradoxically bonds fishermen while, at the same time, it pits them against one another" (1984: 210). My analysis here is intended to peel apart this paradox, showing how the capture of surging salmon by heterogeneous industry workers results in a surplus over and above returns seized by capital alone.

⁸⁰ I take up this theme again in Chapter Seven and provide additional ethnographic detail for these claims.

Chapter Four

Properties of Restructuring

When the lights dimmed in the conference room, a series of jerky, brightly colored lines crossed the screen above the panel of presenters: graphs corresponding to declining fish prices, increasing energy costs, skyrocketing world salmon supply, and plunging fishing incomes. The University of Alaska's facilities at its Anchorage campus (UAA) may not have had the tapestried carpeting or polished chandeliers of the Marriott or the Hilton or the Westin, but the space contained the telltale accoutrements of a fishery "meeting": the same hum of microphones and overhead projectors, the identical stackable chairs, and the familiar tables in back with printed materials, glasses for ice water, and oversized chrome cylinders of coffee and tea. Part of a larger initiative to make academic research and policymaking resources accessible to fishers, coastal residents, and other members of the public, this was one of several workshops held at UAA from 2002 to 2003 that was geared toward "solving Alaska's salmon crisis" (Salmon Tools 2007).

Before large windows looking out onto the landscaped lawns of the UAA campus, featured speakers presented PowerPoints and talking points that drew upon a set of concepts used to analyze and reconfigure an increasing number of fisheries around the world. At one of the workshops, "Options for Restructuring Alaska's Salmon Fisheries," salmon fishers from across Alaska observed and participated in panels with titles like

"Options Involving Permit Number Reductions." The discussions that took place within such forums considered major changes to the existing structure of Alaska's salmon fisheries, and underscored degree to which broader trends in fisheries management were being applied to the conceptualization of the industry's recent problems. As Julia Olson explains the prevailing discourse: "Economists and biologist alike speak of too many boats and too many fishermen—overcapitalization and overcapacity" (2006: 307).

At the UAA restructuring workshop and the many others like it I attended over the course of my fieldwork, economists and other analysts argued that Alaska's salmon fisheries were hobbled by their inefficient organization in an increasingly competitive global market. They pointed out that salmon runs across the state could be harvested by much smaller fishing fleets than existed at the time, and that the high cost of maintaining larger fleets lessened total industry profits. They further noted that given so many boats all competing under the fisheries' "derby"-style format—what is consistently referred to as the "race for fish"—individual fishers had more incentive to make capital investments directed toward helping them out-fish one another than increasing the total value of the catch (e.g., Knapp 2002a). In the metaphor employed most regularly, the fisheries were said to be organized such that collective energy was channeled into fighting over the slices of a shrinking pie, rather than enlarging the pie itself (e.g., Link, et al. 2003a).

In the multimedia presentations and printed materials offered up at these forums, visuals like the ones below (Image 16) were widely used to illustrate the Alaska salmon fishery's condition of overcapacity and overcapitalization—faults that were especially found in the Bristol Bay fleet. The photograph on the left is of drift fishing on the east side of Bristol Bay in the Egegik district, known for its crowded and competitive

conditions. The picture was taken from one of the lines of the Egegik district boundary, where fishers get their first chance to catch the salmon coming into the area. The photograph on the right is of two vessels at the Dillingham boat harbor. It depicts one of the hulking aluminum boats for which Bristol Bay has become known directly beside a smaller boat of the sort that used to comprise the fleet. In the contexts in which I was present, this photo was shown as a means of emphasizing the magnitude of the resources fishers have channeled into their vessels—what was described as "capital stuffing"—in their attempts to out-compete one another. Whenever the picture was displayed, it seemed to both resonate and resound, especially among Bristol Bay fishers: They guffawed, shook their heads, and gave one another knowing looks.



Image 16. Photographic Illustrations of Overcapacity and Overcapitalization. Left photo: "Fishing the north Egegik line, Bristol Bay," by Bart Eaton Right photo: "Two 32-foot driftnet boats in Bristol Bay," by Norm Van Vactor (Image source: BBSFRS 2003: 1 and 3)

The industry commentators who headlined the workshop panels, conference meetings, and task force sessions that proliferated in the early 2000s argued that the race for fish did not merely lead to inefficiencies generated by seemingly superfluous labor and equipment. These analysts also emphasized that the Alaska salmon fisheries' competitive structure simultaneously foiled expansion of the proverbial pie—in this case, efforts to improve the market value of the catch itself. Give the fishery's structure, they pointed out, participants put money and energy into catching more fish, rather than into activities that might result in higher market prices paid for the fish they were catching. Industry and marketing analysts further maintained that salmon harvested quickly and for volume goals were increasingly ill positioned in changing markets.

Along with industry recovery proposals geared toward reducing fishery costs, then, were a series of closely linked efforts to raise prices and revenues. The UAA workshop on fishery restructuring was soon followed by another, titled "Enhancing the Marketing and Quality of Alaska's Salmon Fisheries." Panels in this workshop included: "Should Quality Standards Be Mandatory?" "What Are Domestic Customers Expecting?" "Options for Direct Marketing By Alaska Fishermen," and "How Great Can You Make An Alaskan Salmon?" Efforts to generate higher prices for Alaska salmon typically centered, as the workshop title plainly indicates, on promoting new kinds of "quality" handling and processing methods and standards; integrating more targeted information on consumer preferences into production designs; boosting branding and marketing campaigns; and promoting such ends through entrepreneurial ventures, like direct marketing by salmon fishers to end consumers.

This sweep of proposals put forth across a range of venues, like the multiple plans for industry improvement that circulated more broadly at the time, do not form a single coherent whole. They encompass distinct and often mutually exclusive methods, and have been greeted variously by diverse industry participants in turn. However, in drawing together of a range of expert opinion, the options that were explored in these public arenas nevertheless converge in creating a composite image of a possible profitable future for the fishery: one in which a smaller fleet of more efficient operators works together to create products tailored for particular market niches and sold more directly to end consumers. The very different tactics for improving the conditions of the Alaska salmon industry thus come together in their ambition to restructure the fisheries in line with more market-driven models.

Properties of Restructuring

The core elements underlying this vision of Alaskan salmon fishery transformation are far from unique. Fisheries across the globe are being rapidly rationalized, as the process is called—restructured through what are now known as "rights-based fishing" approaches. Inspired by neoclassical economic theory and fueled by increasingly neoliberal resource governance structures, these approaches are driven by claims about property and its effects. Specifically, they seek to impose some amount of individual proprietary control over marine resources with the goal of facilitating economically efficient harvest and increased rents. Indeed, those who condemn the race for salmon in Alaska advocate its replacement by a rights-based fishing regime instead. An inspection of these regimes reveals, as Seth Macinko and Daniel Bromley assert, "a clear, systematic emphasis on the introduction of private property rights as the necessary

condition for salvation from the world's fishery problems" (2004: 623). Rights-based approaches, they note, are both "ubiquitous" and "hegemonic" at present, with fishery regulators and participants confronted by a "stark policy prescription: privatize or perish" (Macinko and Bromley 2004: 623). In this respect, fisheries have followed some of the same neoliberalizing trends as have restructured industries and sectors more generally, with worker downsizing and industry consolidation operating as both impetus and effect.

In conversations in and about the Alaska salmon industry during the early 2000s, academics, policymakers, and fishers alike considered the applicability of the primary tool of rights-based fishing: the individual fishing quota (IFQ), or what is known as an individual transferable quota (ITQ) in its more fully marketized form. These quotas represent fixed percentages of the total allowable catch of any given fishery. They are granted to an individual or a group that then exercises something resembling a private property right over the resource. According to the economic theory that created them, the ITQs will lead to the harvest of fish in the most efficient and market-oriented manner possible. As the hegemony of the rights-based model might suggest, innumerable fisheries worldwide have been reorganized through the introduction of ITQs. These reorganizations have been accompanied by a vast social scientific literature that has examined the underpinnings and (often negative) implications of this new mode of resource management. Often, these accounts compellingly describe the resistance policymakers have encountered from fishers who reject quotas as form of enclosure of a previously common good (e.g., Helgason and Pálsson 1998).

In the early 2000s, a great many Bristol Bay salmon producers were well acquainted with the concept of rationalization and the tool of ITQs, which by that point

characterized a large segment of state and federal commercial fisheries. Some salmon fishers were even ITQ holders themselves in other fisheries like halibut or cod, though this was more the case for nonresident fishers, since there are only limited other fisheries in Bristol Bay besides salmon. During the same stretch of time in which the UAA workshops took place, meetings of the U.S. North Pacific Fishery Management Council held at the Anchorage Hilton Hotel across town were entirely devoted to implementing rationalization for federal fisheries in Alaska. In December 2003, for instance, the Council worked through the details of the rationalization of Gulf of Alaska groundfish, which includes species like pollock and cod. This initiative entailed reducing the fleet catching that region's groundfish, carving up of the fishery into harvester IFQs, and even considering controversial provisions for processor quotas. It was amid this context that commercial salmon fishers from the Chignik fishing region⁸¹ on the Alaska Peninsula formed a harvesting cooperative that for a few seasons fished a quota of the area salmon run. Despite the co-op's communitarian rhetoric—as well as any communitarian sensibilities motivating it or fostered through it—it was patterned on an image of rationalization: Its goal was to reduce the number of boats fishing competitively so as to cut costs and raise fish prices. Although the Chignik co-op was ultimately ruled in violation of state law and disbanded, it offered Bristol Bay fishers a concrete example of how rationalization policies might be implemented.

Despite talk about and proposals for major regulatory restructuring, nothing resembling the Chignik co-op has ever been attempted, much less implemented, in the

⁸¹ The communities of Chignik, Chignik Lagoon, and Chignik Lake, as well as the neighboring villages of Ivanoff Bay and Perryville, are at times considered part of the broader Bristol Bay region (see Map 4), especially for purposes of social service delivery. However, the Chignik salmon fishery is distinct from that of Bristol Bay.

much larger and more diverse Bristol Bay fishery. In fact, fierce battles have surrounded schemes for far more circumscribed changes to its existing regulatory structure. While one controversial measure allowing for "permit stacking"—the combined use of multiple permits on the same vessel—was passed in 2003 for Bristol Bay by the state Board of Fisheries, this occurred in the face of vigorous outcry from large segments of the fleet. Other plans involving rationalization or consolidation designs have proved so divisive that the Board chose to table all Bristol Bay restructuring proposals during its most recent review of these issues in December of 2006. No action was taken on any such measures, which will not be considered again until the Board meeting in 2009-2010.

In Bristol Bay fishers' vehement rejection of plans to downsize themselves out of salmon industry existence, they have made impassioned pleas in opposition to measures that would provide a regulatory basis for unequal classes of fishers. Drawing on metaphors from fishing practice, they have pressed for an understanding of the salmon fishery as the region's "economic engine" as well as its "social net." At these moments, they exhibit palpable resistance to forms of rationalization in ways that seem quite similar to what scholars have recorded in other coastal contexts. Yet unlike many of these other protests, I submit, Bristol Bay fishers' ethical objections are informed less by a philosophical opposition to private property forms than an attachment to them as the basis for articulating fleeting moments of egalitarian belonging in an industry otherwise built through status differentiation.

This chapter analyzes the history of commercial salmon fishery organization in Alaska and Bristol Bay, highlighting the growing role played by private property in both the content and form of fisheries policymaking. It shows how expressions of ownership

not only become the material basis for fishers' engagement in fishing, but also for participation in communities. These include both the geographical communities in which fishers often reside, like Dillingham and other Bristol Bay villages, as well as the discursive communities in which they develop and debate fishery change.

As this chapter makes clear, Bristol Bay salmon is produced through activities that take place in policymaking arenas as well as on fishing vessels and in processing plants. As James McGoodwin argues, a "fishery" is used to refer variously to "a geographical location where fishing takes place," "a method by which fish are caught," and "a particular marine species," as well as the combination of these "definitional attributes" (McGoodwin 1990: 65), in the way that one can talk about the Bristol Bay drift gillnet sockeye salmon fishery. He argues that fisheries are fundamentally "a human phenomenon," though, "since there can be no fishery without human fishing effort" (1990: 65, emphasis in original). His point draws attention to the ways in which Alaskan salmon fisheries are formed through a socially shaped matrix of statutes and regulations, or "regs," which also establish a political process through which these structures may be transformed. Fishery restructuring thus happens (or doesn't happen) through meetings, a nearly endless variety of public hearings, conferences, research commission sessions, and the like. The process through which salmon becomes regulated demands considerable time and energy, so much so that Bristol Bay residents involved in local fish politics often joke about the winter "meeting season" that parallels the summer salmon season.

As these details suggest, in contrast to many other sites of natural resource extraction, salmon fishing in Alaska is both heavily regulated by the state (in this case, the literal State of Alaska) and subject to at least some measure of nominal control by

industry participants themselves. Thus, while those meeting on behalf of the Alaska salmon industry wrangle with the many of the same market-driven restructuring designs that characterize neoliberal economic policies across the globe, the political context in which these conversations takes place does not correspond to the stock features of neoliberal reordering, which usually presume the retraction of state governance and the subordination of stakeholders to powerful corporate interests. This chapter examines the causes and the consequences of this unusual condition of the Alaska salmon fisheries. Specifically, it explores how the regulatory processes now responsible for the Alaskan salmon fishery's management-through-meetings developed historically, since they were not always among its distinguishing features. As the details included in the prior chapter suggest, the Bristol Bay salmon fishery looked in many ways more stereotypically neoliberal at the turn of the twentieth century than it does in the current millennium. For most of their recorded history, the Alaskan salmon fisheries were marked by a radical absence of control over the salmon resource by government agents and commercial fishers alike. It is the long shadow of this historical absence, I argue, that largely explains the attention granted salmon industry woes in the early 2000s, as well as the character of contemporary debates surrounding fishery restructuring. I further demonstrate how this past helps explain some of the tensions that underlie fishers' participation in both fishing and policymaking arenas at present.

The chapter chronicles how increasing control over the salmon resource has come to be actualized and conceptualized through arrangements and idioms of ownership. The first part of this chapter, "Salmon's State," describes the centrality of the salmon industry to Alaska's battle for political autonomy, as well as the centrality of ownership in fishers'

own accounts of their growing independence from powerful processing interests. The section to follow, "Experiments in Ownership," considers how practices of property became elaborated through the first iterations of an emerging resource management paradigm that has culminated in the sweeping rationalizations of the present. Many of the same arguments put forth by economic analysts of Alaskan salmon fisheries today are recapitulations of those initially outlined in the 1960s, which propelled the design and implementation of the Limited Entry permit system established in the early 1970s. The subsequent section of the chapter, "Propertied Communities," examines the collectives that were formed through such extensions of property, highlighting the contradictions incorporated within them. Lastly, the final section, "Property and Participation," explores the role fishers play in contemporary salmon industry forums as active shareholders. It suggests that control of and through property has given fishers new visibility in policymaking arenas at the same time it brings concomitant risks.

Salmon's State

There are a variety of different reasons as to why the struggling salmon industry ultimately managed to galvanize so much attention in Alaska and mobilize so many resources by the early 2000s. For one thing, the industry has continued to remain economically important, even in its depressed state. As Knapp et al. point out, Alaskan salmon products were worth over half a billion dollars in 2005, and made up a full 18 percent of the value of total U.S. seafood exports (2007: 1). Moreover, the salmon industry is a huge employer, generating thousands of harvesting and processing jobs across the state. "In terms of employment," Gilbertsen writes, "salmon is by far Alaska's largest commercial fishery" (2003: 3).

But it seems likely that the vigorous efforts to revitalize the Alaskan salmon industry I witnessed in the early 2000s were not inspired by its present-day economic import alone. Fishing has slipped from its spot as the state's largest private industry employer (Patton and Robinson 2006: 10), and salmon no longer represents its most valuable fishery. Salmon was years ago eclipsed in value by groundfish, which includes pollock and cod, whose ex-vessel values have been well over twice those of salmon in recent years (Division of Commercial Fisheries 2005).

Indeed, more than current employment and earnings statistics alone might suggest, the salmon industry plays a central role in Alaskans' imagination of themselves. For most of its history, the salmon industry represented not merely Alaska's largest fishing industry, but its most significant industry generally. Although Alaska was first colonized by Russia for its furbearers, settled by Euro-Americans in pursuit of mining riches, and ultimately boosted in recent years by "big oil," its salmon fisheries have proved a particularly enduring, if fluctuating, resource in a hinterland economy dominated by the exploitation of primary products. The remainder of this section describes the lasting significance of the commercial salmon industry's Territorial history in and for Alaskan politics, and for Bristol Bay.

Territorial Traps

In his 1954 best-selling book *The State of Alaska*, then-Territorial Governor Ernest Gruening presents a case for Alaska statehood. As in his address to the Alaska Constitutional Convention the following year, "Let Us Now End American Colonialism," Gruening's book advocates for "...the most basic of American principles, the principle of 'government by consent of the governed'" (Gruening 1955). The book both introduces Alaska to a broader American public, and sets out to document the ways in which the people and resources of Alaska have been mistreated as a result of its longstanding governance from a distance. The salmon industry provides the lynchpin of his argument. Because Alaska was not a state at the time—and because it had not been given the power to regulate its fisheries as a Territory—the salmon resource, which was elsewhere placed under state jurisdiction, was under federal regulatory control until 1960, the year after Alaska statehood.

Alaskan salmon fisheries have long been distinguished by their abundance, which was evident both upon the arrival of the salmon packers in the late nineteenth century, and now in comparison to the many depleted wild salmon populations across the North Pacific. However, these runs themselves experienced deep declines during many decades of the twentieth century. By the time of Gruening's aggressive statehood campaigns of the mid-1950s, the fisheries were at an all-time low. Instead of serving as a counterpoint to wild salmon struggles in Pacific Northwest, in the way that the Alaskan case is often marshaled to do today, it was generally framed as an even more powerful story of the overexploitation and rapacious destruction of a once-plentiful natural resource. In Gruening's account, which represents the narrative that Alaskans increasingly rallied around in the push for statehood, the decline of the fisheries during the period of U.S. control was a direct result of the political disenfranchisement of Alaska residents and the Territory's neglect by the federal government.

The story Gruening tells is a sweeping epic in which "a distant and uninterested Congress" (1954: 144) ceded control of Alaska's resources to absentee corporate cartels, which plundered its natural bounty and left the Territory with few profits or employment

in return. The salmon industry makes an apt focal point for Gruening's analysis not simply because of its domination by the so-called "Fish Trust" and its heavy reliance on nonresident labor. As he argues, salmon also possesses a psychic significance in Alaska that lends itself to hyperbole:

Salmon and Alaska have been as closely intertwined as cotton and the South.⁸² Before the coming of the white man this abundant fish furnished the principal food supply for Indians along the coast and inland along the rivers. With the discovery of its commercial value and the establishment of the first canneries in 1878, extension and expansion into Alaska of the activities of the northwestern salmon entrepreneurs followed. Half a century later Alaska had become the world's principal salmon producer; its salmon fisheries were surpassing mining as Alaska's major industry, representing there the largest investment of capital, the biggest annual financial yield, the greatest employment, direct and indirect, of labor, the largest single source of territorial revenue, and the dominant factor in Alaska's political, economic and social life (Gruening 1954: 245-246).

Despite the crucial importance of the salmon fishery, or perhaps precisely because

of it, Gruening describes how its regulation was elusive from Alaska's earliest days under U.S. rule, and across its transformation from Department to District to Territory. He contends that, "even before the industry had become fully established, reckless overfishing was bringing on a decline," not unlike it already had in California, Oregon, and Washington (1954: 75). As early as the late 1880s, fisheries investigator Tarleton Bean warned that "without...regulation and restraint we shall have repeated in Alaskan rivers the story of the Sacramento and the Columbia" (Bean in Cooley 1963: 72).

Yet, Gruening argues, the shifting U.S. bureaucracies nominally in charge of regulating the Alaskan salmon fisheries in these early years were utterly ineffectual. He suggests that the failure of the federal government to protect the resource from

⁸² Although perhaps as an unintended consequence, this unexpected metaphor brings into relief the ways in which conditions of regional political-economic marginalization are, in both locales, accompanied by a variety of exclusions, exploitations, and abuses at different sites and scales.

overfishing stemmed from both its inability to enforce any regulations it imposed as well as the massive political influence of the major packers themselves. The detailed legislative chronicle he offers shows how Alaskans' efforts to tax the salmon pack, impose land legislation for controlling the establishment of new canneries, and require the packers to employ Alaska residents were largely stymied. Gruening heartily concurs with a statement made by Alfred P. Swineford, Governor of the District of Alaska from 1885-1889, who remarked that, but for its mining, "'Alaska would be to the country at large nothing more than a national fat goose left unprotected and to be annually plucked of its valuable plumage by nonresident corporations'" (Swineford in Gruening 1954: 65).

The image of Alaska as a fat goose is echoed in other accounts of the day, and recalls the portrayal of the material body of the Venezuelan state as a rich store of natural wealth, as argued by Fernando Coronil (1997). What is striking in the Alaskan metaphors is that the resource's renewability is incorporated into the bodily imagery at the same time that emphasis is place on its plucking, robbery, or plundering. As one observer of salmon operations on Kodiak Island testified to the U.S. Senate as early as 1889: "I believe these people will kill the goose that lays the golden egg....If...restriction is not put upon the fishing business up there the quantity of fish will be greatly lessened in a few years" (Senate Report 1530 in Gruening 1954: 533n). Gruening himself drew upon these images of improvident bodily ravishment to suggest a morality tale of his own, that even as "Alaska's marine cornucopia was pouring out its superabundance," the stage was being set for dramatic resource shortfalls soon to come (1954: 211).

The political battles Gruening chronicles center on packers' widespread use of the fish trap (Image 17). "No object in the life of Alaska has been so much in controversy and conflict," he writes, "from its first installation in the early days of the salmon industry to the present" (Gruening 1954: 169-170). Fish traps, fixed structures positioned

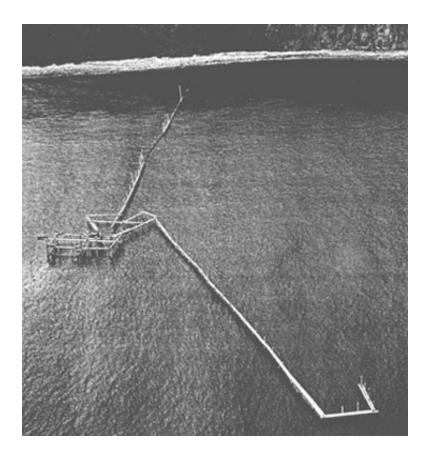


Image 17. Alaskan Salmon Fish Trap. (Image source: Colt 1999: 9)

at river mouths that lead fish into a holding pen from which they cannot escape, operate through a basic technology that, at least in its fundamentals, had been used by aboriginal fishers long before the arrival of the commercial salmon industry (Colt 1999: 5, Cooley 1963: 19). But it was not until the arrival of the packers in the late nineteenth century that streams and rivers across Alaska began to be barricaded with fish traps on a massive scale. Richard Cooley suggests that the traps, "because of their efficiency and pattern of ownership" became "the chief symbol for all the real and alleged evils of the absentee economic system under which the resource was being exploited" (1963: 95).

Although traps were never used as extensively in Bristol Bay itself as they were elsewhere—they tended not to work well there because of the Bay's shallow, silty waters and dramatic tides (Colt 1999: 22, King 2003: 7, VanStone 1967: 64)—they quickly became a favored gear type employed by canneries across much of Alaska. It soon became clear to observers that the traps' extreme efficiency made them a threat to salmon conservation. Then as now, biological conservation was assumed to require "adequate escapement," that is, enough individual salmon making their way back to spawning grounds to provide for a given population's reproduction in any particular stream or lake (Gruening 1954: 246). Not only did traps collect salmon without abatement, but they also did so unselectively, regardless of whether there was a commercial market for every species. "Practically all fish taken in the traps, except redfish [sockeye], are waste," Jefferson F. Moser explains, "and until one sees the tons of this waste product, one can not realize the magnitude of this giant octopus that grasps everything in its tentacles" (1902: 181).

These traps were opposed by fishers not simply because of the deleterious ecological impact they so often had. Their use by canneries tended to reduce the price of fish given the control over supply they introduced as well as lessened the need for living labor in the form of fishing (Cooley 1963: 97). The issue most at stake in the traps was thus control over salmon itself. Because salmon, along with most fish in public waters, are classified legally as a wild animal, *ferae naturae*, "[o]wnership while they are in a

state of freedom is held by the government for the benefit of all, and no individual property rights can be claimed in the fish so long as they remain wild—unconfined and in a state of nature" (Cooley 1963: 11). For this reason, Cooley clarifies, fishing is considered a public right, and private ownership over the fish in public waters can only be established once possession is established through capture (1963: 11). In the absence of outright ownership of fish, the packers thus sought to control access to the fishery resource so far as they could, whether via importation of fishing labor or de facto control over a particular fishing area by dint of trap placement or cannery location. The logic in each case was to capture the living beings needed for production through their objectification as labor or even as capital itself in the form of private property.

As Stephen Haycox (2000) argues, the language of ownership has long been politically potent in Alaska precisely because of the widespread conviction that Alaska was barred from rightful possession of its own land and resources. The prominent conservationist Gifford Pinchot drew upon this rhetoric in a statement made about the regulation of Alaskan resources in 1911 in the *Saturday Evening Post*:

Two solutions of the Alaska question are possible today. We can let Alaska become the private preserve of a few great special interests to be developed and controlled at their pleasure and as their profit may dictate....Or we can treat Alaska as the future home of hundreds of thousands of free American citizens, and its resources as a trust to be developed and conserved for their benefit and for the benefit of all the people—who are its owners" (Pinchot in Cooley 1963: 204).

As these comments suggest, the contest over fish traps at the Territorial level and beyond was waged through opposed efforts to gain increased control over the salmon resource through vying proxies for ownership, or its denial. Analysts note that for Alaska residents this involved "an intense two-pronged effort...to gain control over the management of the resource and to outlaw the use of traps" (Cooley 1963: 95). "At virtually every session of Congress bills were introduced by Alaska's delegates for [the traps'] abolition as well as for the transfer of management of the fisheries to the territory," Gruening relates, even if most of these bills never managed to make out of committee because of federal government and industry opposition (1954: 392). The packers fought to resist such efforts through their own competing claims, simultaneously pressing for more legally protected exclusive fishing at trap sites and other sorts of "possessory rights" (Gruening 1954: 263).

Although few traps existed in Bristol Bay, it became one of the battlegrounds for these debates over fishing rights. In 1919, the Bay experienced a crash in sockeye returns, which represented the first major run failure in the fishery's recorded history (King 2003: 6).⁸³ In an effort to protect salmon populations, the federal government instituted conservation measures that limited the number of canneries operating in the Bay. This prompted much protest in Alaska because of the added control over production it afforded the largest packers (Gruening 1954: 264-265). Ultimately, the controversy was stemmed by the passage of the White Act of 1924, which set forth conservation measures but forbade any "exclusive right" in salmon for packers or anyone else (1954: 266). It also included a ban on the use of fish traps—but only in Bristol Bay, where they had never been widely used. Although the White Act was widely hailed as a milestone at the time, its value as a conservation tool would ultimately be undermined in

⁸³ This crash may have been a first, but it had been prefigured long before. As Jefferson F. Moser writes of Bristol Bay early in the century, "It is a wonderful salmon country, and can not be equaled. The redfish still run in countless numbers, and, as the rivers can not be barricaded and as overfishing has not yet produced its effect, there seems to be no depletion. The next few years, however, will see many new canneries established by the capital that was used in the canneries on the failing waters of the northwest coast of the United States. But in the absence of proper laws, or the enforcement of such poor ones as now obtain, these streams, too, will become depleted in time" (1902: 217).

the decades to follow by persistent declines in salmon populations across the state. Yet its refusal to grant rights over fish would also prove enduring. As Cooley explains, the White Act's explicit prohibition against "exclusive or several right of fishery" would later became "positively reaffirmed" in an article of the Alaska State Constitution, "which provides that 'no exclusive right or special privilege of fishery shall be created or authorized in the natural waters for the State"" (1963: 11).

Until Alaska achieved statehood in 1959, the salmon trap persisted as a potent symbol of the Territory's continuing subordination to "Outside" interests. Its abolition was one of the first acts of government of the State of Alaska. Thus, not only did the salmon industry play a tremendous role in creating the communities and economies of much of present-day rural Alaska, but it also provided the central issue around which statehood, the most prominent political battle in Alaska's history, was organized. For this reason alone, Alaska's salmon fisheries represent a resource whose significance extends beyond what present-day statistics might suggest.

Declarations of Independence

Given the centrality of salmon battles in the fight for statehood, it is perhaps unsurprising that natural resource issues were explicitly addressed by the Alaska State Constitution. It set forth that Alaska's resources, wherever possible, should be developed according to the biological principles of sustained yield, which by that point had gained widespread scientific acceptance (Naske 1973: 145). In this way, Alaska's identity as a polity was formed in contradistinction to the supposed abuses that had come before. Although the recovery of the state's commercial salmon fisheries was somewhat bumpy and uneven, stock numbers ultimately did improve after management by the Alaska

Department of Fish and Game (ADF&G) took effect in 1960. Since that time, Alaska's salmon fishery has been broadly upheld as a model of the kind of responsible resource development and stewardship mandated by its constitution, as well as a venerable institution that supports small-scale independent proprietors, coastal communities, and Alaska Native villages. But how were commercial salmon fishers transformed from mere employees of the Fish Trust to full-fledged stakeholders whose presence is sought at regulatory meetings—those who have significant capital investments in the fishery, control access to the resource itself as fishing permit owners, and often occupy a relatively prominent role in state affairs?⁸⁴

In Bristol Bay, fishers themselves typically attribute this shift to their achievement of the status of "independent fishermen." In its most basic sense, independence entails ownership of the boats and gear used in fishing. Without exception, most industry Bristol Bay analysts link the development of independence to the end of the ban on powerboats in the commercial fishery, as described in the previous chapter. As James VanStone argues, "the advent of power" in the Bay led to "a major economic revolution" (1967: 65). "Prior to 1951," he writes, "private ownership of fishing boats and gear was almost unknown" (VanStone 1967: 65). He contends that this was because it made little economic sense for the vast majority of fishers to invest in sailboats. "Power boats," on the other hand, "were an efficient fishing outfit that some local fishermen could afford and since independent operators received far more for their fish than did the men working for the canneries, the number of privately owned boats rapidly increased" (VanStone

⁸⁴ In recent years, the influence of fishers as well as the fishing industry on Alaska politics has at times been alleged to be fishy: Improper ties to commercial fishing companies are among the recent allegations leveled against longtime Alaska U.S. Senator Ted Stevens and his son Ben Stevens, the Alaska State Senate President and Salmon Industry Task Force Chair (see Mauer 2007).

1967: 65). VanStone further suggests that increased fisher independence, at least among residents, led to improved bargaining power (1967: 65). Among Bristol Bay fishers today, attitudes about independence crystallize the sense of the comparative power they gained, primarily in relation to processors but also arguably within their own social networks and communities, along with increasing material ownership in the fishery.

While contemporary fishers almost always present independence as a break from cannery domination, other sources have asserted that the smallholder fishing model that is prevalent across the U.S. often works more in favor of big seafood processors than fishers. As a 1951 article appearing in the ILWU newsletter contends:

...the cannery operators thought it would be a good idea to get the fishermen, as much as possible, to buy the boats and gear. They told the fishermen they were little business men, and by and large this propaganda worked. Therefore, the fishermen had to keep up the boats and gear, and the employer got out from under providing social security or industrial accident protection for the men. Even more important, this situation did not lead to strong unions (The Dispatcher 1951: 7).

The implications of Bristol Bay fishers' ownership of boats and gear—and arguably their identity as "little business men" as well, however partial—on their cohesiveness as a fleet and their forms of collective action is subject to debate. Nevertheless, certain consequences about fishers' growing independence are clear: Unlike the unions of yesteryear, whose membership was determined by mutual participation in fishing labor, the marketing associations that arose to replace them were linked much more closely to ownership.⁸⁵

Fishers attribute significance to the attainment of ownership in their frequent descriptions of the industry's early years as a period in which fishers were objects of

⁸⁵ As noted in the last chapter, there was some question as to whether independent fishers could bargain as a union without violating the Sherman Antitrust Act. Thus, marketing associations were formed a means of continuing joint negotiations for fish prices with processors.

property rather than property holders. As longtime fisher Paul Romie articulates the oftrepeated adage: "In them days we were employees, that's all we were, employees. The cannery owned the boats, they owned the nets, they owned the men!" (Romie and Davis 1995, emphasis in original). Such statements suggest that the rhetoric of ownership was not only seized upon by Territorial bureaucrats in advancing claims for statehood, but also by those in Bristol Bay as a means of understanding their own conditions. Fishers' investment in their newly acquired personal property is plainly visible in their narrations of their achievements of independence. John W. Nicholson relates his experience as follows: "After I purchased my own conversion, I named it the John W. The name John W was painted over a fresh, gray paint job. With this boat, I became an independent fishermen [sic]. I took my sons as partners for several years" (Nicholson 1995: 130). As his remarks indicate, independence is materialized in a boat and actualized in its purchase. It represents the power to name, and specifically to project forth one's own name. Moreover, it facilitates the expansion of social goods and networks, as boat owners' gain the ability to extend employment opportunities to others, particularly family members.

Yet complete independence, at least as it was conceptualized by many in the industry, was not found in boats alone. It also required the ownership of "gear," which in Bristol Bay largely means nets. Even the handful of those who owned their own boats in the first half of the twentieth century did not own their own gear, since all nets used in the Bristol Bay commercial fishery were owned by the processing companies until 1951 (Crutchfield and Pontecorvo 1969: 108). Romie clarifies this during an oral history interview with Michael E. (Mike) Davis (Romie and Davis 1995):

Paul: ...I bought a little boat, sailboat from Scandinavian cannery. \$100. Sailboat, sail, and the whole business. I was in business then.

Mike: It was your own boat then? You were independent then?

Paul: No, no. They had the nets. We weren't independent. No way.

As Romie's clarification suggests, independence was accompanied by an awareness and appreciation of the finer points of ownership itself. In the decades to follow, the preoccupation with ownership that expanded in the 1950s would only intensify.

Experiments in Ownership

As it turns out, Bristol Bay fishers were not the only ones increasingly focused on private property and its implications. In the 1960s, economists and natural resource scholars began to devote attention to the difficulties that were, even then, plaguing fisheries around the world. Their efforts would ultimately dovetail to form the basis of today's resource management paradigm that seeks fishery salvation through the creation of private property rights (Macinko and Bromley 2004: 624).

By the time the new State of Alaska gained the power to regulate and manage its near-shore fisheries in 1960, many of its salmon populations were in deep distress. Its runs were so depressed that they were described as "near-extinction" (Cooley 1963: xiv). Unlike declines in other salmon fisheries, in which pollution, deforestation, and other factors likely played a role, the Alaska salmon fishery was viewed as "a classic case of overfishing" (Crutchfield and Pontecorvo 1969: 6).⁸⁶ "This is the pathetic history of the

⁸⁶ This is not to say that there was universal acceptance at the time that these declines were solely, or even primarily, attributable to the practices of the Alaska salmon industry. Salmon fishing by high seas fleets in the Pacific, often discussed as foreign interception, was also implicated in the downturn, particularly in Bristol Bay. In 1974, King notes, *Alaska Magazine* published an article entitled "Requiem for a Fishery," which placed the blame for the collapse on high seas interception (2003: 10).

ruinous exploitation of one of the nation's important renewable natural resources," Cooley sums up, "a food source requiring no capital outlay or labor to sow and cultivate and one which can be harvested extremely economically if managed properly" (Cooley 1963: 195).

As this diagnosis hints, a number of those formulating plans for fisheries conservation saw their analyses of overfishing as intimately related to the establishment of resource management models rooted in developing economic theories. How did these academic models affect Alaska salmon management? What were the implications of such shifts in thinking and policy for commercial fishers in Bristol Bay?

Presumptions about Property

Even before Garrett Hardin's 1968 "Tragedy of the Commons" essay, scholars were beginning to critically evaluate conditions of open access in natural resources. The Alaska commercial salmon fishery was at the time, at least *de jure*, characterized by open access, as were almost all fisheries during this period. In practice, of course, a wide variety of constraints limited the involvement of fishers and processors in the industry. But, in principle, a number of legal doctrines had established Alaskan salmon as a public good whose access was open to all: the concept of *ferae naturae* dating to the Magna Carta; the 1924 White Act's decisive stand against "exclusive rights" in fisheries and its subsequent enshrining in the Alaska State Constitution; and even provisions the U.S. Constitution that blocked Alaskans' persistent attempts to selectively exclude nonresidents from the salmon industry.⁸⁷ However, the openness of this access was precisely what a range of analysts began to identify as the chief problem, not merely of

⁸⁷ These are located in the Privileges and Immunities Clause.

the Alaskan salmon fishery, but of all open-access fisheries, and even most natural resources generally.

According to natural resource economist James E. Wilen, the roots of this turn and, in essence, the conceptual foundations for much modern management of fisheries and beyond-can be found in "two important intellectual threads, one from biology and one from economics" that took shape in the 1950s (2000: 307). Until that point, he argues, "there was no real consensus that fisheries needed to be actively managed," especially since many stocks seemed healthy (Wilen 2000: 307). (Pacific salmon fisheries were notable exceptions, then, in operating under some form of government regulation, however weak, from their commercial beginnings.) But the post-war expansion of shipbuilding and high seas trawling changed this, contributing to both a fishing boom and broad evidence of declining stocks. Biologists had occasion to refine the models guiding practices like escapement, developing concepts like "maximum sustainable yield," which is "The largest average catch or yield that can continuously be taken from a stock under existing environmental conditions" (NOAA 2006: 28). At the same time that these contributions presented biological grounds for active fisheries management, Wilen argues, economists began to offer their own rationales: They started to theorize that, under open-access conditions, fishing effort systematically increases beyond the point necessary for efficient harvest, resulting in "excessive inputs"-of boats, gear, and fishing labor-and thus the dissipation of any potential economic rents (Wilen 1988: 315, 2000: 307-308).

From the 1950s onward Alaskan salmon fisheries were increasingly understood through these developing models. The overfishing that was by that point undeniable

became viewed as a seeming tragedy of the commons, if not yet with that label. Although some reports focused solely on the biological consequences of overfishing, other commentators argued for considering economic and ecological effects. At moments, analysts acknowledged that the cause-and-effect mechanisms they outlined owed their existence to the particular industry configurations and economic conditions generated by a "competitive economy" (e.g., Cooley 1963: 12). But typically these were treated as givens. In contrast, "the peculiar common-property status" of the resource and the freedom of fishery entry associated with it were the critical elements thrown into question (Cooley 1963: 67).

The salmon studies of the 1960s first began to formulate the arguments that underlie the fishery restructuring prescriptions put forth to this today. Through theoretical modeling and data based on the experience of the Alaskan salmon fishery, a handful of reports (e.g., Cooley 1963, Crutchfield and Pontecorvo 1969) linked openaccess fishery organization to overcapitalization and rent dissipation. They claimed that given the possibility for both profit and unlimited participation in the fishery, additional effort would be directed toward exploiting the resource even when biological and economic returns started to decline precipitously. This, they posited, made for fishery features that were economically irrational and socially costly.

In Cooley's 1963 examination of the Alaskan salmon fishery, for example, he contends that, "each individual fisherman receives only a bare minimum return sufficient to meet his costs and keep him in the fishery" (1963: 58), and that the fishery's "net value" as a whole is "dissipated in excessive costs" (1963: 199). He further points out that inefficiencies and extraneous costs are further built into Alaskan salmon fisheries by

the "deliberate encouragement of inefficient methods of fishing as a means of conservation," the longtime ban on powerboats in Bristol Bay being just one of the more salient examples (Cooley 1963: 19). The combined effects, in his view, amount to "serious economic waste" (Cooley 1963: 200). Indeed, one of the chief indictments the open-access structure of Alaskan salmon fisheries at the time was the sense that in actual practice they came to defy the "principles which are fundamental to our free economy: that an industry should produce the right output at the lowest possible cost" (Crutchfield in Cooley 1963: 67-68).

Although the authors of some studies directed to a general audience chose to discuss these mechanisms through use of the term "profits" instead of "rent,"⁸⁸ their accounts nevertheless emphasize salmon as the quintessential natural resource, "a food source requiring no capital outlay or labor to sow and cultivate" (e.g., Cooley 1963: 195). The neoclassical economic tradition that informs their analysis tends to treat natural resources in two different veins, both of which account for the generation of rent. As Coronil outlines in his historical analysis of oil development and the Venezuelan state, drawing on the work of Bernard Mommer, these are a microeconomic perspective, which sees resources themselves as a form of "natural capital" not unlike other assets, with prices determined by supply and demand; and a macroeconomic perspective, which sees resource rents as income transferred from capitalists to resource owners, royalties based on the differential productivity of a particular resource in comparison with others of the same sort (Coronil 1997: 42-45). In both models, natural resources provide income by virtue of possession, evidencing a common framework that already assumes, in Marx's

⁸⁸ That this is a choice is clear—at one point Cooley writes "profits (or economic rent as it is more properly called)" (1963: 60).

terms, both "private property in the earth" and the conceptualization of production as a naturally fruitful combination of the constituent elements of capital, land, and labor, which for Marx represents a central mystification of the vulgar economy (Marx [1894] 1991: 954).

As Marx observed, "the monopolised terrestrial globe," as appears in one translation, is in fact a precondition of rent and thus of capitalist production more broadly (Marx [1894] 2008). Yet this particular phrase draws attention to the unusual case of fisheries, which lie outside the terrestrial globe and, at least until quite recently, have been characterized by much more ambiguous property designations. Once fisheries can be conceptualized as the property of the state, however, the prospect is opened for rents to be captured from them by the state—in this case, the literal State of Alaska. This possibility in turn directs attention to the resources' role in production and profit making. As Coronil points out, in addition to institutions of property ownership, rents in practical terms also depend "on the existence of…surplus profits" (1997: 47). Those seeking rents from a living, renewable resource thus have reason to attend to its ongoing vitality and the economic surpluses that might be generated through its production as a commodity.

Opening Up Limited Entry

The calls to action that were issued for Alaskan salmon fisheries in the 1960s did not go completely unheeded. By the early 1970s there was a rising sense of urgency about dwindling runs. Although many at the time opposed placing restrictions on fishery participation, which was held as a basic right to make a living from a resource owned by all, there was also growing interest in, or perhaps resignation about, the implementation of a statewide conservation plan whose organizing logic involved ending the fishery's

open access. Besides strong protest from a range of individuals to entry limitation in fisheries, rooted in both philosophical and practical concerns, there was an additional very serious roadblock for proponents of the plan: the Alaska Constitution. As Alaskan fisheries official Frank Homan recounts, "Several early attempts at fishery limitation occurred in the 1960s," but "[e]ach ran into the Alaska Constitution provision of *No Exclusive Right of Fishery*" (Homan 2006: 1).

These legal complications made it clear that in order to institute a limited entry program for Alaskan salmon fisheries, the State Constitution, barely a decade old, had to be amended. A commission developed recommendations about whether a program should be implemented, and, if so, what its key features should be. As Wilen notes, there were actually extremely few limited entry programs in existence at the time—only the Australian rock lobster and prawn fisheries and British Columbian salmon, both begun in 1968—and those arguably represented "revolutionary experiments in fisheries management" (1988: 313). Even as the paradigm outlined in the preceding section was gaining ground, management programs limiting open access in fisheries would not really take off until after 1976, when the "the institutional structure for marine resources management was suddenly and radically altered as coastal nations claimed jurisdiction out to 200 miles" (Wilen 1988: 313).⁸⁹ As this suggests, private property in fishing permits, the typical tool for entry limitation, was incumbent on other forms of exclusive control, like national sovereignty over marine environments, which were very much still being formulated during this period.

⁸⁹ These claims were formalized in the U.S. in 1976 in what is now known as the Magnuson-Stevens Fishery Conservation and Management Act. The provisions in this act bore some relationship to ongoing international negotiations taking place through the United Nations Convention on the Law of the Sea, which lasted from 1973 to 1982.

As scholars of property have long noted, property, like so many other politicaleconomic forms, is best understood not as a thing, but rather as a social relation. And as legal theorists have made clear, property is more appropriately conceived not as thing but instead as a bundle of rights. Whether or not these intellectual interventions were on the minds of the Alaskan officials weighing limited entry plans in the early 1970s, their deliberations made such observations manifest. According to Homan (2006), the group considered matters like whether permits should be issued to "natural persons" or other entities, like vessels or corporations. They contemplated how much a fishing permit should resemble any other asset. Could it be leased? Sold? Used as collateral on loans?

These considerations provoked considerable discussion and debate precisely because of the tensions that underpinned the initiative itself. Architects of the plan were clearly informed by the literature emerging from both biology and economics, and their task itself was largely motivated by the conviction that "unrestricted access to a commonproperty resource is fatal to wise conservation of the resources and to efficiency in the use of other productive factors" (Crutchfield and Pontecorvo 1969: 67). However, like the Alaska commercial fishers and state residents who would ultimately be voting on the plan, these policymakers were also ideologically committed to the smallholder ideal that statehood itself had been championed as a vehicle for ensuring. These differing visions of the fishery, while not always in direct opposition, were not necessarily easily reconciled either, nor are they still. As John Petterson argues, disjunctions inhered among the multiple objectives of the Limited Entry Act itself, and even more saliently between the policy's goals and the regulations that were ultimately formed to implement it (1983: 315).

These tensions were particularly evident in the debate that surrounded proposed permit transferability, the ability of the permit holder to freely alienate permits through inheritance or sale. Those on the commission were aware of the possibility that transferable permits might likely migrate from the hands of capital-poor fishers to those with more financial resources (see Rettig and Ginter 1980). That is to say, the permit drain problem outlined in Chapter One was imagined well before it came to pass. In essence, policymakers knew that transforming participation in the fishery into a market good was tantamount to reconfiguring relations among richer and poorer fishers, as well as those with and without permits, and likely to exacerbate certain existing inequalities in the process.⁹⁰ But they recommended transferability anyway. This was in part because of the greater economic and bureaucratic efficiency it would presumably afford, as well as due to the legal hurdles at issue in creating a "closed class" of permit holders, which was even more legally questionable than entry limitation alone.⁹¹

Based on a statewide vote, the Alaska Constitution was amended in 1972 to read:

No exclusive right or special privilege of fishery shall be created or authorized in the natural waters of the State. This section does not restrict the power of the State to limit entry into any fishery for purposes of resource conservation, to prevent economic distress among fishermen and those dependent upon them for a livelihood and to promote the efficient development of aquaculture⁹² in the State (The State of Alaska 2008b).

⁹⁰ Thus, while I concur with Katherine Reedy-Maschner (2007: 210) that there are a range of "unintended consequences" associated with Limited Entry, it seems important to note that certain consequences, including those largely interpreted even at the time as exclusionary and socially undesirable, were recognized in the deliberations of program architects as future possibilities, if perhaps not intended.

⁹¹ King indicates most residents of Bristol Bay were actually in favor of this provision too at the time because they it allowed for permits to be inherited and kept within families (King 2003: 11). State reports issued in the early 1970s offer up the latter reason in defense of transferability provisions (Governor's Study Group on Limited Entry 1973).

⁹² At this time, the "development of aquaculture" clause referred not to the industrial fish farming of the present but rather to the state's aggressive "salmon enhancement" program in hatcheries, which is discussed at greater length elsewhere in the dissertation.

The following year, the Limited Entry Act became state law. Its key features included issuance of commercial salmon fishing permits to natural persons only, a prohibition on permit leasing,⁹³ provisions preventing the use of permits as collateral, and free transferability (Homan 2006: 1). In order to receive a Limited Entry permit, fishery participants were required to fill out an application and submit it to a newly created state office, which was charged with determining the "optimum number" of permits in any given fishery and distributing those accordingly to applicants it deemed deserving.

The applications were assessed using a point system, which is still referenced in conversations about the introduction of the Limited Entry system to this day. Fishers whose applications met or exceeded a certain total number of points—17 points for drift permits in the case of Bristol Bay, for instance, and 6 for set net permits-were granted permits for that particular fishery by the state. Fishers got points based on "longevity in the fishery, investment in the fishery, dependence on the fishery, and availability of alternative sources of employment" (Langdon 1982: 97). These latter provisions were intended to ensure the participation of Alaska resident fishers, and particularly those in rural, predominantly Alaska Native communities, where few other cash jobs existed. As the commission characterized the Limited Entry program it had designed, "The plan is intended to work fairly to leave in the fishery those people who depend most on fishing and have been at it the longest. The result will be a stable fishery that permits more effective sustained yield management and allows commercial fishermen the opportunity to make an adequate livelihood from the fishery" (Governor's Study Group on Limited Entry in King 2003: 10-11).

⁹³ In fact, there are many loopholes around its leasing prohibition, and permits are leased on a fairly regular basis through a process called "Emergency Transfer" (see CFEC 2008b).

Whether it managed to realize this aim is of course another question. Limited Entry, Katherine Reedy-Maschner asserts, "has been analyzed, praised, cursed, and duplicated since the day it was launched...and has largely been viewed as a success by industry participants, economists, and managers" (2007: 210). Indeed, the program is today widely represented as an institution that has contributed to the comparatively strong biological status of Alaska salmon, and the permit system it established is now firmly in place. There are no movements afoot to do away with entry limitation, and most of those I queried in Bristol Bay seemed to voice general support for the system's intentions. They offered variants of the view that if Limited Entry had not been implemented, fishery participation "probably would have got out of hand." Nevertheless, opinions on its fairness, efficacy, and implications vary widely, and its legacy is still a subject of debate for fishers, rural residents, policymakers, and academics alike.

The program was somewhat controversial at the time of its passage for all the aforementioned reasons, and attracted a fair bit of criticism in the years immediately following its implementation. It was judged a "fiasco" by one 1980 *Anchorage Times* editorial, for instance, which contends that the rising permit prices it arguably fueled during that period "have made rich men of some lucky fishermen but also have denied many Alaskans the opportunity to make their livings by fishing" (Anchorage Times 1980). Indeed, as Wilen suggests, support for Limited Entry was in part based in a hope that it would restrict the entry of fishery participants from outside Alaska (1988: 323). There was thus great anxiety within Alaska that, as a result of Limited Entry, "The well-financed fishermen of the Lower 48 states are taking over" (Ketchikan Daily News in Anchorage Times 1980).

In Bristol Bay, there was particular concern about the differential effects of Limited Entry on resident and nonresident fishers. A significant percentage of the area's Alaska Native residents did not apply or were initially denied permits (Petterson 1983). As Petterson contends, there are a variety of circumstances to explain this, including rural residents' lack of information about the implications of permit ownership and their limited familiarity with the bureaucratic systems they were required to navigate into order to successfully apply (1983: 317-321). Because of such experiences in Bristol Bay and elsewhere, Limited Entry faced a great many legal challenges, most of which addressed its exclusivity or the methods used to achieve that result (see CFEC 2007a). The act's basic premise of entry limitation was largely upheld in the courts, however. According to one legal observer, it survived such challenges because its fishing permit holders were not a closed class, and new entrants were possible.

Arguments from a number of different angles were nevertheless successful in expanding the class beyond those initially granted permits. Several decisions by the Alaska Supreme Court altered the system to meet the Alaska Constitution's equal protection and equal access clauses (Homan 2006: 3). As Homan explains, the *Ostrosky* (1983) and *Johns* (1988) cases established that, for a limited entry system to be constitutional in Alaska, it "should impinge as little as possible on the open fishery clauses consistent with the constitutional purposes of limited entry, namely, prevention of economic distress to fishermen and resource conservation" (2006: 3). As a result of efforts to ensure that limited entry remained somehow still open, the class of permit holders in many fisheries was expanded beyond the initial numbers set. Even before the lawsuits and additional permit issuances, King notes, "[t]he initial number of drift permits

for Bristol Bay, 1,738, was slightly more than the maximum number of boats that ever operated in the fishery" (King 2003: 11). It is currently 1,875. As the Anchorage Times editorial (1980) points out, an ironic consequence of Limited Entry was that some fisheries like Bristol Bay arguably experienced more fishing pressure than ever upon the policy's implementation.

Apparent contradictions like this one have led rationalization proponents to argue that Limited Entry and other similar programs of the 1970s wound up in their implementation to be virtually as guilty of rent dissipation as the open-access structures before. "Conventional limited entry programs, although they might generate rents indirectly, do nothing to encourage efficiency and cost saving," Wilen asserts, much less "eliminate excess inputs" (1988: 320). As early as the 1980s, rationalization proponents pressed for further refinement of plans like Limited Entry so that the programs might more closely reflect their philosophical roots (Wilen 1988: 320). Fishery economists began a more coordinated push for the adoption of ITQs, transferable fishing rights controlled by either individual fishers or a "coordinated group," such as a cooperative harvesting an ITQ. As Wilen argues, through forms like ITQs, "It is conceivable, in fact, to move these fisheries very close to 'privatization'" (Wilen 1988: 320). Ultimately, programs like Limited Entry remained incomplete projects from the point of view of resource economists because of "still incomplete property rights" (Wilen 2000: 314).

The fact that Limited Entry resulted in outcomes that were practically the opposite of its intended goals in some respects also captured the attention of rationalization's early critics. In addition to those who questioned the existing Limited Entry system because of their own exclusion from the fishery, scholars criticized the program and the larger

paradigm it represented "for a number of shortcomings at both the conceptual and operational level" (Langdon 1982: 96). In a 1982 self-titled "critique," anthropologist Steve Langdon takes aim at what he calls "formalist" approaches to fisheries management, referencing their basis in formal economic theory. As Langdon suggests, these approaches had already become "the dominant regulatory paradigm," not only in Alaskan salmon fisheries through Limited Entry, but also in national and international fisheries more broadly through other similar policies at the time (1982: 95-96).⁹⁴

Langdon argues that the economic assumptions that underlie formalist projects like Limited Entry presume untenable oversimplifications about a host of critical industry structures and relations. Further, he points out that what is presented as an ethically neutral analysis is in fact premised on a highly specific mode of rationality, as well as the desirability of a very particular kind of economic actor: "a highly efficient, technically advanced, professional fisherman, with full year-round employment, who has no ties to any state, regional or local fishery but is instead spatially mobile" (Langdon 1982: 108). At the start of an era in which production was becoming ever more "flexible" in its pursuit of efficiencies and profitable conditions, economists indeed interpreted rural Alaskans' ties to place and aims for stable employment as hindrances to rational fishery development. As Crutchfield and Pontecorvo, the primary targets of Langdon's critique,

⁹⁴ Langdon refers specifically to the policy directives included in the U.S. Fishery Conservation and Management Act (FCMA), now known as the Magnuson-Stevens Act, first put into law in 1976, as well as the "interminable" U.N. conferences on the Law of the Sea (UNCLOS) (1982: 96). As Wilen describes of the discussions leading up to the passage of FCMA, "economists lobbied hard for the position that regulatory structures under the new property rights ought to be promoting economically efficient management rather than strictly biologically based management" (2000: 313). "This lobbying met with success" he writes, "when the Act was passed in 1976, normative goal statements written by economists found their way into newly created legislation to regulate in the new exclusive economic zones" (Wilen 2000: 313). Thus, economists themselves played a role in producing the "radical" alteration of international institutional structures that paved the way for the regulatory experiments to follow (Wilen 1988: 313). At the same time, they ensured themselves a role in future fisheries management. "For the first time," Wilen explains of FCMA provisions, "this created a place for economic analysts in the previously closed bureaucracy whose responsibility it was to manage fisheries" (2000: 313).

write: "In addition to the core problems of inefficiency and the stifling effect of regulation on innovation and technological progressiveness, the spectre of unemployment in the precarious Alaskan economy and the special role of the immobile native fishermen have exerted constant pressure on the fishery administrators" (Crutchfield and Pontecorvo 1969: 102). Although they imply that fishery profitability would be furthered if labor could be made as mobile as fish themselves, they do so in order to promote the capture the fugitive resource as a form of mobile property.

In writing against the economic formalism he locates in Limited Entry, Langdon makes the important point that these approaches rely on "aggregate concepts such as yield, rent, total costs, receipts, and fishing effort" at the same time they refuse to consider the "issues of distribution of the 'maximized net economic yield' their proposals are designed to produce" (1982: 98 and 106). He suggests that any aggregate gains are gotten only through the cost of very particular losses. In the case of Alaskan salmon fisheries, he argues that the populations marginalized by plans like Limited Entry are precisely those "which have geographic-based identities and long-term, cultural commitments to salmon" (1982: 113), drawing implicit reference to Alaska Native communities. As Langdon concludes:

The policy implication of Crutchfield and Pontecorvo's analysis is that such populations are pawns to be shifted about through the manipulation of economic forces legitimated by political legal [sic] power. For these populations limited entry is bitterly ironic in that the net economic yield to be maximized from the resource will not be directed their way, and they will likely be eliminated from the Pacific salmon fishery (1982: 113).

Propertied Communities

Despite Langdon's direst predictions, fishing employment and income remains an important presence in Alaska today among many of the very populations to which he

refers—even with the persistence of the longtime fishing permit drain from rural, Alaska Native hands (Kamali 1984, Langdon 1980, Oakley 1989). Over thirty years of Limited Entry fisheries management has brought a great deal of transformation to Bristol Bay and other fishing regions, forming new communities of commercial fishing permit holders. Yet, as in any exercise of property making, these bounded, limited-entry collectives have been generated through a variety of processes of exclusion.

As Reedy-Maschner argues, in the eastern Aleutians, Limited Entry exaggerated existing exclusionary processes, including status hierarchies elaborated since the Russian invasion—which she calls "limited entry systems" in their own right (2007: 211). In addition, she explores, the policy created novel forms of competition and differentiation. In a society that defines itself by fishery participation, those who did not gain initial access to fishing permits are extremely disadvantaged to this day. Reedy-Maschner notes that many of those "shut out from fishing are still resentful 30 years later," and remain emotionally invested in commercial fishing even as they are not able to enjoy fishers' earnings nor the social status afforded them (2007: 219). They are less able to provide for their families and kin, particularly since subsistence provisioning is largely dependent on the income and equipment used in the commercial industry.⁹⁵ In addition, these individuals have less access to many of the leadership roles assumed by permit holders by virtue of fishery participation (Reedy-Maschner 2007: 216-219).

Beyond solidifying existing status hierarchies, Reedy-Maschner concludes, Limited Entry "created a new career crewmember class" in the eastern Aleutians (2007: 221). As Langdon (1982: 97) indicates, the weight placed by the initial point system an applicant's past state-issued vessel licenses (which favored boat-owning captains over

⁹⁵ I explore this phenomenon in Chapter Seven.

crew) and participation in the seasons immediately preceding the application (which favored recent entrants and disadvantaged those who had not happened to fish in the particular years in question) was already interpreted as disenfranchising even in the program's early years. While some additional permits were awarded to redress these exclusions, I spoke with a number of Bristol Bay residents who reported that they had not initially received permits for precisely these reasons. The deep fishery slump of the early 1970s was of course a major impetus for the passage of Limited Entry in the first place, but those who found other work during this depressed period—like the Koliganek resident I met who took a construction job in the village during one critical summer and thus did not attain enough points to get a permit—were more likely to be cut out of the industry, irrespective of their past history of involvement.⁹⁶

The differentiations provoked by Limited Entry were not only visible in different life histories but also manifest in divergent understandings of the program itself, along with something akin to what Alberto Arce (1997) calls segmented knowledges—in this case, participants' limited awareness of others' experiences. For example, even in the Nushagak River village of Koliganek, population 165, views diverged not only in what fishers thought about Limited Entry, but what they thought about what other fishers thought. I spoke with one older fisher who, though had fished for years using an inherited permit, felt that he'd been cheated out of a permit initially because his participation as a crew member didn't earn him enough points. Immediately after, I met up with another resident of about the same age who insisted that he hadn't heard of anyone in the community being especially upset about how the original permits were

⁹⁶ Petterson (1983) argues that some of the problems experienced by Bristol Bay's Alaska Native residents in securing fishing permits can be attributed to the fishery's poor conditions at the time, and the fact that they pursued—and indeed were pursued for—other employment.

meted out. This example suggests that the social and economic differentiation that has arguably accompanied Limited Entry also lends itself to different experiences of these processes themselves, suggesting the formation of new communities within communities.

While fishers' experiences and opinions vary, there is nevertheless a strong common interest among those in Bristol Bay in theorizing about exactly how Limited Entry has changed relations among the fleet, as well as between the fishing fleet and processing companies. A number of people expressed the view that the permit system represented, as one fisher put it, the "antichrist to the processors," because it gave fishers a greater degree of control over access to the resource itself. Yet many also suggested that permit ownership served to fracture the fleet and make fishers into a less cohesive group, ultimately diminishing their power in dealings with the canneries.

Even as the ultimate implications of property in permits remain open to debate, the permit system established by Limited Entry was indisputably highly successful in creating another form of locally significant property, as growing boat ownership had done beforehand. When salmon fishers today delivery their catch to processors, they must show their Limited Entry permit cards (see Image 18 for an example), which materialize their right to catch and sell salmon commercially. In fact, these two forms of property only served to reinforce one another's significance as they materialized fishery participation: permit ownership became a critical complement to boat ownership—a 32foot drift boat up on blocks in the Dillingham boatyard was not quite as useful without access to the commercial salmon fishery—just as the possibilities inherent in permit ownership could not be actualized without a boat. Moreover, unlike the fishing partners

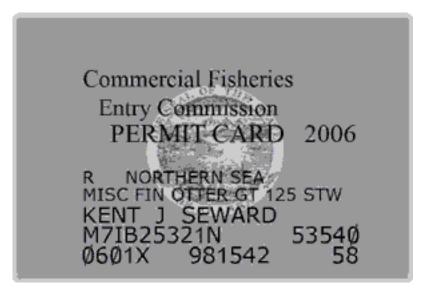


Image 18. Alaska Commercial Fishing Permit Card. (Image source: NOAA 2008a)

working on cannery boats in days of yore, captains possessing both boat and permit, often high-priced assets, were positioned quite differently with respect to their crew, not to mention other rural residents who did not—or could no longer—commercially fish. In Bristol Bay, like Reedy-Maschner (2007: 217) reports for the eastern Aleutians, a boat and permit became a "concrete index" of one's ability to participate not only in the fishery, but in the fishing community more broadly.

As these details suggest, differentiations rooted in fishery property forms splintered communities in new ways. As prior chapters emphasize, it is not as if Bristol Bay communities in the past—whether geographically bounded sites like Dillingham, or work-based collectives like the fishing fleet—were free from divisions and inequalities. But the rise of property as a basis for community membership changed the way in which belonging was derived at the same time that it shifted indices of membership. For example, the increasing relationship between permit ownership and fishing participation has been associated with the much-publicized "graying of the fleet," as aging fishers hold on to assets in the fishery and thus social and political power.

In this way, property in the fishery demonstrates quite similar effects to those observed in the establishment of other property regimes at around the same time, most notably those that arose with the Alaska Native Claims Settlement Act (ANCSA), which was approved by Congress in 1971, not long before the Limited Entry Act was passed by the State of Alaska in 1973. ANCSA was spurred by the discovery of oil on Alaska's North Slope.⁹⁷ Because of outstanding Native land claims, the coordinated plans of major corporations and the State of Alaska to construct a pipeline to bring this resource to market became mired in legal obstructions. Native land settlement thus took on a new urgency. In light of the evident problems of the reservation system throughout the Lower 48, there was widespread agreement that steps should be taken to facilitate the use of Native land for economic self-sufficiency. Perhaps unsurprisingly given the intellectual currents that we have traced in this chapter with respect to the fishery, the plan that was developed through the negotiations of representatives of Alaska Native groups and State lawmakers hinged on property. Native land claims were divided among twelve newly formed regional Alaska Native corporations.⁹⁸ The corporations were granted each a cash payout and were allocated a quantity of land, comprised of particular conveyances of their selection, which they would then own in fee-simple title. Alaska Native individuals were made property owners in turn as literal shareholders in these corporations. ANCSA also established provisions for the creation of village-level

⁹⁷ There have been innumerable analyses of ANCSA and its effects, but see Berger (1985) for a particularly comprehensive and influential overview.

⁹⁸ A thirteenth corporation was added for Alaska Native people living outside the state, though this corporation received only a monetary settlement and no land.

corporations, with a parallel set of village-level shareholders. As a result, an Alaska Native adult in her fifties living in Dillingham today, for instance, may hold shares in both the region's Bristol Bay Native Corporation (BBNC) as well as the local Choggiung Corporation that owns and develops land commercially in and around Dillingham.

In remarkably similar debates to those that surrounded the formulation of Limited Entry at around the same time, lawmakers and Native leaders deliberated about whether to make transferable the Native land owned by corporations and the shares held by individuals. While the initial act would have allowed for the free market alienability of these shares themselves after 1991, the agreement was amended in the 1980s and this provision was eliminated. There is thus no market in Native corporation shares at present, which are transferred primarily through gifting and inheritance. Despite somewhat greater restrictions on the transferability of the property forms it created, ANCSA ushered in quite similar structures of ownership to those accompanying Limited Entry.⁹⁹ Like Limited Entry's creation of an initial class of fishing permit owners, ANCSA granted the original corporation shares to Alaska Natives born on or before December 18, 1971.¹⁰⁰ This has led to the comparative disenfranchisement of younger generations, not unlike the graving of the fleet. Both ANCSA and Limited Entry thus reorganized, at least in a formal sense, communities whose membership had been based in participation into ones figured in terms of property relations.

⁹⁹ In contrast to salmon permits, however, which are still are held largely by those who actually fish in the region, Native corporation shareholders often live outside the regions in which the corporations are based. This happens when shareholders move away, for instance, or shares are left as inheritance to those residing outside the region. As a result, the people who actually live in the region may be a very different set of individuals from those who own corporation shares, and thus control local land and resources.

¹⁰⁰ The corporations themselves set the parameters by which individuals were deemed qualifying Natives.

In addition to their many parallels, the passage of ANCSA arguably provided a chronologically and logically prior buttressing to the property forms established through Limited Entry. As part of its creation of the Native corporation system, ANCSA extinguished any outstanding "aboriginal title" to hunting, fishing, and gathering rights in Alaska.¹⁰¹ Consequently, even as the fishing permit system may have been designed with an eye to its implications for rural, Native fishers, they were not granted any particular rights over the commercial salmon fisheries on the shores of their ancestral lands. Although co-management programs between ADF&G resource managers and Native groups have been established for resources reserved for subsistence uses, these are nowhere present in the management of commercial salmon fisheries,¹⁰² and there is no talk of this prospect in Bristol Bay today.

As this suggests, the Bristol Bay commercial fishery has not been subject to calls for governance by a sociopolitical commons. Rather, it has arguably transitioned somewhat smoothly, if not without grievances, to control by a community delineated by property ownership. This likely reflects both the impress of the hegemonic management paradigm¹⁰³ as well as the ongoing implications of the fishery's own history of exploitation. Given how much and for how long its natural resources have been successfully seized by capital, fishers have seized upon private property in turn as a

¹⁰¹ This is the case at least nominally. There have been challenges to this provision and its interpretation, as detailed in Chapter Seven.

¹⁰² There is one exception: The Tsimshian community of Metlakatla in Southeast Alaska, which because of historical circumstance is Alaska's only Native reservation, regulates the commercial fisheries in its waters (CIS 2008). Still, this does not represent co-management, but management by an entity other than the state. ¹⁰³ There is little acknowledgment in the work of proponents of entry limitation for Alaskan salmon fisheries (e.g., Crutchfield and Pontecorvo 1969) that natural resources organized by seeming open access could be subject to social relations and non-property institutions through which their use is collectively managed. As the work of commons scholars across a variety of fields has demonstrated (e.g., Agrawal 2005, McCay and Acheson 1987, Ostrom 1990), common property does not inexorably lead to tragic consequences—often quite the opposite. Langdon (1982) references work by Acheson (1975) to question arguments for Limited Entry. But his intervention serves to highlight the absence of the perspective he advances in most discussions of these issues that took place at the time, as well as today.

means of exercising social, political, and economic power. This bears some resemblance to fishers' organization under the rubric of labor through their many years of fleet-wide collective bargaining, as well as efforts by dispossessed peoples elsewhere to pursue forms of property as a means of articulating cultural identities deeply enmeshed with the natural world and advancing rights to them (see Kirsch 2001). However, as in other contexts of political struggle, like the indigenous counterglobalization movements examined by Stuart Kirsch (2007), new categories of belonging furnish political power at the same time that they present risks. What powers has property provided fishers, and what risks has it introduced?

Property and Participation

In the meetings through which contemporary Alaska salmon fishery policy is developed and debated, fishers play a highly visible role. Often, their participation is directly tied to their status as permit holders. As owners of the only means of access to the resource (if not owners proper), permit holders are literal stakeholders in the resource whose regulation they help make and remake. The prominence of the Bristol Bay fishery in the Alaskan industry, along with the historically high value of its catch and its fishing permits themselves, have given its fishers a particularly significant role in statewide salmon politics. (Bristol Bay, for instance, is said to have an unofficial seat on the Governor-appointed Board of Fisheries, given that someone from the region generally serves on the Board.) The forms of property that endow certain fishers with control over critical elements of production thus does not only have the effect of differentiating fishing communities internally, but also shifting their position with respect to the other interest involved in fisheries policymaking—whether commercial fishers from other

regions, government agencies, or seafood processing companies. What does permit holders' participation in contemporary fisheries policymaking look like as a result? What kind of power does this seat at the table afford certain fishers, and what kinds of control might simultaneously slip from grasp?

Let us peer into the happenings, for example, that unfold at Fish Expo, an annual trade show officially called Pacific Marine Expo held in Seattle. Each fall, Fish Expo draws thousands of fishing industry participants, suppliers, and policymakers from across the West coast. The convention center floor is lined by booths representing every conceivable fishery interest (Image 19)—from manufacturers of engines, nets, and sonar



Image 19. Seattle Fish Expo, Convention Floor. (Image source: Pacific Marine Expo 2008)

equipment; to representatives of public agencies like the National Oceanic and Atmospheric Association (NOAA); to grassroots organizations for West Coast fishermen's wives. In curtained-off ballrooms surrounding the main arena, Alaska salmon industry difficulties can often be found, quite literally, on center stage. Seated side by side at the long tables at the front of the room, fishery participants are positioned on discussion panels along with economists, other researchers, consultants, seafood business executives, and government officials, as well as other stakeholders.

As the composition of such panels attest, the group convened in the wake of the salmon industry downturn constitutes a prime example of what Michel Callon's has called "hybrid forums," whereby a heterogeneous group of actors whose backgrounds transect expert and lay authority interact in public arenas to jointly reorganize the very markets in which they themselves, in their varying capacities, are involved (Callon, et al. 2002: 195-196). The interpenetration in forms of understanding these forums foster is powerfully evident in the context of salmon industry policymaking. The fishers active in these arenas are well versed in the conceptual vocabulary contained in the analyses of salmon markets offered up by academic economists. Terms like ex-vessel and wholesale value roll off the tongues of everyone at these forums, and the fishers present seem quite comfortable entering into lengthy discussions of what the current canned salmon inventory would mean for next season's fish prices, or the implications of the changing Japanese market for frozen H&G (headed and gutted) fish. These fishers often play influential roles at the table of these events; their meeting seasons are long, far-flung, and consequential. The same individuals typically are involved in multiple advisory and decision-making bodies.¹⁰⁴ In these arenas, they are joined by a set of researchers, consultants, executives, and government officials to form a tight-knit policymaking assemblage.

¹⁰⁴ Often, they represented both the region at large and their own fishing interests in these discussions.

Fishers hold manifest power in and through these hybrid and socially dense salmon policy forums. However, the collective conversations facilitated by the forums by no means evidence an idealized public sphere. Just as all fishers are not equal participants in the industry itself, so too the collaborative participation afforded by these hybrid forums is marked by exclusions and inequalities.¹⁰⁵ Specifically, I suggest that the joint work of experts and laypersons in the formulation of authoritative industry knowledge often serves to amplify the legitimacy, power, and import of this knowledge. Despite the heterogeneous conditions of its formation, this knowledge is necessarily generated through specific conceptual frameworks and delivered in particular packagings. Fishers are not always advantaged as a result.

The characteristics of this knowledge are especially manifest in fishery regulatory meetings like those of the Alaska Board of Fish (Image 20). I once attended a Board of Fish meeting for the salmon fishing region known in Alaska as "Area M" in which Bristol Bay fishers turned out to beseech the Board to maintain strong limits on Area M fishing. Area M, which is located in the eastern Aleutians around False Pass, is known as an "intercept" fishery because the salmon in its waters are often traveling to other regions of western Alaska, including Bristol Bay. At the event, in a hotel suite not far from the main meeting room known as the Bristol Bay "war room," several Bristol Bay fishers expressed grudging admiration at how organized and politically savvy the Area M fishers seemed to be. They noted that Area M had managed to project a unified front through a diversity of individual testimonies that featured presentations by fishers, industry experts,

¹⁰⁵ Upcoming chapters will examine how group exchanges in somewhat more quotidian forums often serve to highlight and exacerbate status differences among industry actors as much as transcend them.

and even academic researchers, including an anthropologist who testified to the prehistorical dependence of the Aleut people in the region on the annual salmon migration.



Image 20. Alaska Board of Fisheries Meeting. (Image source: ADF&G 2008g)

Indeed, as the strategies of Area M fishers suggest, social scientific research was enlisted not just in a top-down fashion by large state, national, or international entities, but also by groups of fishery participants themselves. Even if Area M fishers were arguably more successful at securing this research for their own ends, those in Bristol Bay were well aware of its crucial utility. Early on in the industry downturn, Bristol Bayarea organizations recognized research to be essential in order to identify avenues for economic improvement as well as make claims on state and federal governments. They even sponsored some of the many economic and social-scientific studies of the Alaskan industry undertaken during this time, reports that ultimately generated much of the statistical data used to understand the crisis, as well as that employed throughout this dissertation.¹⁰⁶

In the wake of the industry downturn, economists and other analysts of Alaskan fisheries became only more central to the production of knowledge about the crisis and the development of recovery strategies. Although academic economists and private consultants have been fixtures at regular salmon industry events like Board of Fish and Fish Expo meetings for some time, Wilen reflects that resource economists' involvement in policymaking has actually expanded measurably over the past thirty years, from a time when their opinions and interventions were largely ignored. He argues that, "the fisheries case is really a microcosm subject to many of the same forces driving public policy in other natural resources as well as other spheres of economic activity. What has happened in fisheries policy over the past three decades mirrors the manner in which economists and economic ideas have increasingly come to play important roles in policy-making broadly in the economy" (Wilen 2000: 306). Economists' role in Alaskan salmon fisheries has arisen alongside the forms of property they helped to implement, and thus is closely implicated in fishers' own growing participation as property-bearing stakeholders.

Yet this conjoint rise to influence has also simultaneously circumscribed fishers' participation. At the same time that the explosion of studies and panels devoted to assessing the crisis in the Alaska salmon industry in the early 2000s served as a hybrid forum in which particular economic improvement strategies could be shaped and

¹⁰⁶ I did not merely draw upon such studies. As an academic researcher, I too benefited from the valorization of research I describe and the role it was presumed to play in addressing salmon industry concerns. Fishery participants and residents of Bristol Bay alike immediately recognized their own experience as constitutive of a research topic, and one they considered interesting and important. I also benefited materially from institutional efforts to promote research on salmon industry questions. I obtained UAA office space during my primary fieldwork period no doubt in part because my project centered on a topic that had already been deemed a research priority.

reshaped, these same initiatives would also come to develop an independent existence as texts exercising a particular power with respect to the industry they analyzed. Whether meeting minutes or report conclusions, as proclamations in the public arena that could be cited in subsequent discussion, they developed a life of their own.

For example, during a more recent visit to Dillingham in 2007, an official at a local organization described how the very research it had published as part of a fishery study was "used against" the agency at the Board of Fish meeting the prior winter. In testimony before the Board, Bristol Bay fishers living outside the region pointed to the study's findings as a means of advocating policies that would most likely disadvantage area residents. A number of fishers expressed similar consternation about the uses of projected salmon prices developed by economists. They voiced suspicion that these Bristol Bay projections are now being referenced as a pricing guide by the processing companies themselves—and, more pointedly, as an excuse to keep prices low.

The possibility that the economic models composed to describe salmon prices might actually be used to create them is suggestive of the notion of "virtualism" proposed by James Carrier and Daniel Miller (1998), by which real-world relationships and institutions are reworked in order to more neatly map onto the models supplied by economic theory. It also calls to mind the related if divergent formulation put forward by Callon and others that contemporary economics is "performative," as has been theorized in the domain of language—that its representational acts have the effect of actually bringing things into the world (Callon 1998, MacKenzie, et al. 2007). While each of these analyses helps shed light on certain aspects of Alaskan fisheries policymaking, neither one can fully account for the range or complexity of salmon fishers' entanglement

with the property-making policies associated with present-day fishery rationalization efforts. At times, industry participants confront market-driven restructuring measures much as a theory of virtualism would predict. In these moments, fishers draw upon their own situated practices to challenge what they interpret, not without reason, as the economic abstractions that are quite brutally imposed upon them from the outside. For example, during one Fish Expo panel discussion regarding the Chignik salmon harvesting cooperative, a State official who talked about the initiative in positive terms—as an important and exciting "experiment" for making Alaskan salmon fisheries more competitive in the global marketplace and more profitable for participants—was taken to task in the Q and A session by a Chignik fisherman in the audience who was opposed to the co-op. "Experiment?" the fisherman demanded angrily, "Are we lab rats to you? Is that what we are to you?" After a long and uncomfortable pause, the official tried to soften his earlier position and diminish the awkwardness of the moment.

In this instance and the others resembling it I witnessed over the course of my fieldwork, fishers stood up, sometimes quite literally as during the Fish Expo panel, and expressed palpable forms of resistance. Yet in a great many cases, the experiences, assumptions, and alternatives that inspired their opposition to increasingly hegemonic rights-based approaches were themselves deeply informed by some of the very same tenets of economic theory. The Chignik co-op detractors, for instance, known as the "competitive fishermen," framed their arguments in terms of property rights and declared themselves defenders of American capitalism. In Bristol Bay as well, fishers' reliance on these motifs did not appear to be simply a strategic choice, but rather reflective of the degree to which capitalist categories of property were embedded in their configurations

of identity and meaning. As Petter Holm points out, despite scholarly attention to grassroots mobilization against private property forms like ITQs, their introduction to fisheries often happens quite efficiently, with attendant dispossessions predictably following. This seems less surprising, he argues, when one considers the degree to which ITQs and related devices depend conceptually and in practice on the prior reconfiguration of fish "from a wild creature of the sea into a complex, cyborglike, scaled, and modeled entity—a resource fit for management" (2007: 238-239). In Bristol Bay, commercial fishers at times dispute area biologists' salmon calculations, describing them as "paper fish," but they nevertheless do so as a means of advancing their own claims to a certain quota of a virtual population. Similarly, economists' latest experiments in property may often be objectionable, but they do not necessarily defy fishers' categories.

Yet just as capitalist categories are congealed within rather than layered atop fishers' everyday relations in Bristol Bay, these forms of objectification are at the same time riddled with moments and meanings that are not, as Dipesh Chakrabarty (2000: 50) might characterize them via Marx, part of capital's own "life process." Not unlike labor, the process through which heterogeneous attachments and materialities become objectified into fishery property is never complete or without interruption. As Viviana Zelizer (1994) has demonstrated with respect to money, concrete particularity punctuates what at first glance seems only homogenous and abstract. Fishing permits in Bristol Bay both operate as smoothly transacted alienable assets and harbor a range of other attachments. For example, Kevin, one crew member in his early twenties with whom I once worked alongside, expressed wistful regret that his father had sold his drift permit instead of passing it along to him. The two had fished together for many years. "But,

you know, I guess I can understand," he reflected, "I mean, a hundred thousand dollars is a hundred thousand dollars." His description of his feelings about the permit, however, suggested that this was not always the case. Another fisher, Nick, was looking to sell a drift permit he had recently inherited from his brother after his sudden and unexpected death—even though Nick himself was also looking to buy a drift permit at the very same time. He acknowledged that in Yup'ik custom one does not hold onto the property of the dead. This was evidently the case for Nick even for a market good that is, in theory, strictly equivalent to and substitutable for others of its kind. In addition to all the ways in which property is pushed to the point of its unraveling by everyday social entailments in Bristol Bay, its presumptions are also regularly challenged by the fugitive resource, whose wildness is not easily corralled into property forms. At the same time that Bristol Bay salmon are fish fit for management, they can also bleed from the human designs that would box them, as coming chapters will evidence. The Bay's unpredictable salmon run itself poses complications for rights-based management proposals, for instance, given that quotas could prove exceedingly hard to determine and implement in practice.¹⁰⁷

While neoliberal economic theory may not always perform in precisely the ways its models would predict or its practitioners intend, the degree to which Alaskan salmon fisheries have already been reconfigured historically in light of earlier versions of these ascendant paradigms positions industry participants quite complicatedly amid the currents of contemporary policymaking. The philosophy that inspired Limited Entry and arguably facilitated fishers' movement into the hybrid role they occupy today

¹⁰⁷ Rationalization proponents argue that this notion is largely an excuse put forth by those who do not support fishery reorganization. They assert that although it would be more challenging to establish quotas in Bristol Bay than elsewhere, it is possible. To my mind this can be taken as a fitting example of Marx's observation, as expressed by Chakrabarty, that "the self-reproduction of capital 'moves in contractions *which are constantly overcome but just as constantly posited*" (2000: 58, emphasis in Chakrabarty).

increasingly forms the basis for policies through which, as fishers suggest, the industry has "come full circle." Some fishers reflect that given recent corporate consolidations, their position vis-à-vis the major seafood processors is not unlike what it was earlier in the century before independence was achieved. Further, the market-driven designs of the twenty-first century advance measures that were first envisioned decades ago but never implemented. These entail the restructuring of fishing practice away from goals defined in biological terms—like harvest guidelines organized by the concept of maximum sustained yield-to those established by economic ones instead. In response to recent industry struggles, economic analysts and other consultants argue that fishery harvests should be set in order to achieve maximum net profits, not maximum salmon. They advocate for determining catch volumes according to a concept of "maximum economic yield," which typically involves the harvest of fewer fish (by fewer participants) than what may be ecologically sustainable. As the following chapter examines, this push to reformulate fishery practice to more closely correspond to market goals presumes not just a shift in quantities of salmon, but in their quality as well.

Chapter Five

The Quest for Quality

Located directly across from the chain-link cannery gate, the Dillingham Fire Hall sits at the corner of the town's biggest intersection, where Main Street meets the road that heads to the post office, hardware store, bank, and high school. On the second floor, above the trucks used by the volunteer fire department, is a space called the Bingo Hall, a large, low-ceilinged room that holds weekly bingo nights and the occasional public meeting. One slushy April not too long ago, the Bingo Hall served as the venue for a three-day fish processing workshop sponsored by the local Bristol Bay campus of the University of Alaska and the Dillingham community extension office of the Alaska Sea Grant program.

The Dillingham workshop, dubbed "Nuts and Bolts of Seafood Processing," was designed to provide key information to area fishers who were considering processing, marketing, and selling their own fish directly to retailers and consumers. There was a great deal of local interest in this topic throughout the time I conducted fieldwork—the downturn in the region's salmon industry had inspired much talk of "doing it yourself" instead of or in addition to selling to the major Bristol Bay fish buyers. In addition, meeting organizers had secured grant funds to cover travel and per diem expenses for a number of fishers from across the Bristol Bay region. For both these reasons, a sizeable group of nearly fifty people had registered to participate in the workshop, which featured

presentations by experts from across the state, including seafood technologists, economic development consultants, transportation specialists, and marketing analysts.



Image 21. Seafood Processing Workshop, Dillingham Bingo Hall. Photo by Liz Brown.

By the time I entered the florescent glow of the Bingo Hall (Image 21), the workshop's opening remarks had already begun. The room was packed with people as well as audio-visual equipment, stacks of printed materials, and tables blanketed with products, pamphlets, and flyers; sample business plans and budgeting worksheets were piled alongside shrink-wrapped packages of salmon jerky and lox. I made my way to one of only a few unclaimed folding chairs in the back, settling into my seat just as we were all instructed to go around the room and introduce ourselves. From the first few introductions, the diversity among the meeting participants was evident: Besides a strong Dillingham contingent, there were representatives from many different communities and fishing districts around the Bay. The group reflected the region's larger ethnic and

socioeconomic heterogeneity as described in previous chapters, and included drift netters and set netters, residents of multiethnic regional hubs and those from more remote 70person Native villages, individuals who depended solely on summer fishing for their cash income and those with steady, year-round employment. A number of participants had investigated or even pursued their own processing or marketing ventures before, rattling on about HAACP plans, DEC permits, and RSW systems, while others seemed less familiar with these terms and the broader orientation they reflected. Yet, despite their differences, the attendees were all area fishers "looking for a change," seeking a more active role in improving their own fishing earnings.

As the workshop introductions progressed, one participant after another narrated personal histories inflected by the ups and downs of the commercial salmon industry, emotional stories of bitter disappointment and excited accounts of new profit-making opportunities, often from the same individuals. For instance, Naknek set netter Jeri-Lynn Robinson described how her "family fished since the dawn of time"—her grandfather was a sailboat fisherman and she "cut [her] teeth on smoked salmon" that her part-Yup'ik family "put up" (meaning cut, dried, and smoked) every summer. "We went through the days of \$2.50 a pound," she recollected, "I made a lot of money, did a lot of drugs." Heads across the room nodded in understanding, and there were a number of knowing smiles. "But I lost \$1,375 set netting last year," she added in a less nostalgic tone. As Jeri-Lynn told the group, her recent fishing losses had pushed her to start selling her fish to Naknek Creek, a newer processing company geared to producing and marketing what it calls "the highest quality...Wild Sockeye." Even though she had yet to see a profitable

season as a Naknek Creek fisher, Jeri-Lynn expressed her sense that, in the long run, "quality is what's going to get us a price."

Quality as Qualification

In Dillingham, talking about quality has become a way of referencing much more than seafood product specifications. On a recent visit back to the community, while boarding a 12-person flight from Dillingham to Anchorage, I ran into Joe Nomura, Jr., the son of a friend and fishing informant. Even though Joe Jr. is now nearly thirty and much larger than his shorter, slighter father, everyone I know refers to him as "Little Joe." Little Joe had fished with his father for most of his life, until he'd gotten a yearround job at the local Dillingham telephone and cable company, which made it difficult for him to get time off in the summer. During the season I accompanied Joe Sr. fishing, his younger son and nephew served as his main crew. Except for Little Joe, the whole family had moved to Texas for the winters so that Joe Sr.'s wife could attend a graduate program in social work. I asked Little Joe how the family was doing, how fishing had gone the past year, and how they liked Texas. "They're doing great," he replied, explaining that they had started a business selling their salmon in Texas. He paused, perhaps reflecting on the significance of the venture. "Things are really turning around," he continued, "you know, with quality and all."

The Nomuras are hardly alone in looking to quality for a solution to industry woes. Academic efforts by economists, food technologists, and rural development specialists to address the downturn in the Alaska salmon industry often hinge on the notion of quality and the practices associated with it. "Can Quality Revitalize the Alaskan Salmon Industry?" asks one such report (Babcock and Weninger 2004).

Similarly, quality has taken on major importance in policymaking arenas. At the hearings that set fishery policy for Bristol Bay and around the state, any proposal for regulatory change must now explicitly address its bearing on quality. "Will the Quality of the Resource Harvested or Products Produced Be Improved?" is one of the few questions asked of all submitted proposals. As I observed over the course of my fieldwork, the answers to this question have become all the more consequential as quality promotion increasingly motivates and directs regulatory action.

What is this sort of quality that is mobilized to envision an industry turnaround after years of precipitous decline? What hopes does it harbor? What practices does it entail? As seafood industry consultant John Clemence asserts, "America is noted for creating 'buzz words' and hot concepts without taking time to understand them. For the last half of the 1980s, one of these magic words was quality. Look at any seafood publication and you will notice that every company advertising in it claims to produce quality products" (1994: 104). Although it appears that it took a number of years before the Alaskan salmon industry seized upon the buzzword, and even longer for quality to be promoted in and for Bristol Bay, quality now operates as a powerful signifier for positive industry change among fishers and policymakers alike. But like the quality Ann Anagnost explores in her discussion of *suzhi*, a Chinese term roughly translatable as "quality," the term in the southwest Alaskan salmon industry "operates as a kind of floating signifier" (2004: 197).

In this chapter, I seek to identify the various assumptions and expectations that animate quality as I examine its implications as an orienting rubric for salmon industry reconfiguration in Bristol Bay. What categories come into being through the positioning

and production of quality salmon, and how are these established as markers of value? How do specifications of quality shape and become shaped by the nature and labor through which they are realized? What practices and forms of knowledge become critical for producing quality, and of what consequence?

For Bristol Bay salmon fishers, recreating local salmon as quality would seem to present an especially appealing avenue for industry improvement. Unlike many of the other economic recovery strategies debated in and for the region, pursuing quality promises profitability as well as the maintenance of longstanding patterns of fishing work—without radical restructuring of fishery regulation, major occupational shifts, or large-scale environmental transformations like those entailed by other resource development prospects recently proposed for the Bay. As we will see, however, the quest for quality in Bristol Bay is accompanied by its own quite significant reformulations of nature and labor alike. These accompany both the actual implementation of industry retoolings to meet quality goals, as well as the shifts in thinking and feeling that motivate their pursuit. As the chapter details, there are innumerable hurdles to reorganizing the Bristol Bay industry in terms of quality. In fact, industry consultants and researchers who promote quality often express their frustration that quality production is not being pursued more vigorously in Alaskan salmon fisheries, especially in Bristol Bay. Yet this chapter shows how the dream of quality is consequential itself, as a material reconfiguration in its own right that cannot be teased apart from industrial transformation more broadly.

In my discussion, I consider the pursuit of quality in Bristol Bay in light what scholars have dubbed the "quality turn" in agro-food industries (e.g., Goodman 2003,

Murdoch, et al. 2000), as well as, more broadly, what Michel Callon has theorized as the intensive "qualification" and "requalification" of products in the "new economy of qualities"—the reflexive processes through which products are positioned in relation to others (Callon, et al. 2002). These distinct quality phenomena are linked by more than mere semantics, as commentators have duly noted: The growing production and consumption of quality foodstuffs has been deemed "an archetypal case of what Callon and his colleagues...call the 'economy of qualities'" by some scholars of agriculture (Whatmore, et al. 2003: 389). Likewise, Callon and his coauthors make explicit that, "[t]alking of quality...means raising the question of the controversial processes of qualification" (2002: 199). The specific qualities that might constitute quality—that a given wine "matures with age," for instance, or "that it comes from the Médoc region or Touraine"—are not simple observations of natural facts but rather categories composed by the reflexive activity of economic agents (Callon, et al. 2002: 198-199).

The material I present confirms both the centrality of qualification in economic practice and its importance for understanding contemporary economic life. At the same time, however, I offer a quite different interpretation of the source and significance of these developments than other quality commentators have put forth. By examining the particular qualities of quality salmon production in Bristol Bay—including the parameters through which it comes to be defined, the fishing practices that create it, and the state and corporate measures employed for its control and certification—the chapter shows how processes of qualification indeed work to engender new objects of exchange, new kinds of producers and consumers, and even new property-making devices. Yet unlike many other accounts of this type of industry reorganization in agro-food sectors, I

show how emergent forms of labor and regulation are accompanied alongside—even at times by means of—the reassertion of residual ones, as Raymond Williams (1977) might characterize them. While the push for quality in Bristol Bay serves to reconfigure producers' ideas about the nature and purpose of their labor, these shifts in sensibility do not merely slavishly reproduce the demands and priorities of others, be they consumers, policymakers, or state or industry officials.

Further, whereas Callon contends that the radical heterogeneity of contemporary markets has made concepts of like "capitalism" and related "macro-structures" singularly unhelpful (Callon in Barry and Slater 2002: 11 and 12), I seek to demonstrate that the forms of qualification Callon identifies are most productively understood as an expansion and intensification of processes of capitalist value creation that have long been central to commodity production. Rather than jettison the Marxian analytics long used to assess capitalist practice, I employ and refine them so as to understand salmon qualification and its implications. Here, the notion of the commodity proves critical for comprehending the creation of quality products in Bristol Bay.

The Qualities of Quantity

As participants and presenters alike remarked, the focus in Bristol Bay had up until that point always been about quantity rather than quality. Strong peak season returns have long been the fishery's chief commercial advantage. They have also presented innumerable difficulties for fishing practice and industry operations. For one, the Bay's large volumes of fish can increase the dangers of fishing itself. Boats and skiffs begin to sink low in the water with heavy loads, becoming less maneuverable and more susceptible to being "swamped," flooded and maybe even sunk by rising waves or

upending tides. Occasionally fishers are forced to cut nets laden with salmon because the weight is dragging them onto dangerous shoals or imperiling them in rough weather. For the processors, the Bay's massive and unpredictable volumes present more regular problems. At some point during peak season, and often at several, processors find themselves "plugged," at or exceeding their processing capacity limits. Plant managers work furiously to ship fish to other facilities across Alaska and reconfigure operations to maximize every bit of storage space. Nevertheless, fishers are often put "on limit," which means that they are only able to sell a limited number of pounds to the processor. They then have to try to limit their catches in turn, which during peak season is not always an easy thing to do.

But the dangers of swamping and the specter of limits only add consequence to the pursuit of "poundage." Throughout the Bay's history, successful commercial fishers, the "highliners," made money and gained status by harvesting vast quantities of fish. Bristol Bay became renowned as a fishery in which it was possible to land a salmon windfall and strike it rich, especially during the boom years of the 1980s, as described in the previous chapters. During the days when cash buyers were anchored near the fishing grounds, large volumes of fish were exchanged for large volumes of money: Brimming fish-transport brailer bags were delivered to buyers, hoisted up by hydraulic cranes in full view of all the other boats waiting to deliver, and stacks of dollar bills came back in return, which were often stuffed into pillowcases and hidden below deck, as many fishers recalled to me. Such a fluid transfiguration of fish into money gave rise to boat names like "Cash Flow" and "Net Income," where a surge of salmon input was explicitly equated with a flood of financial returns. It also has prompted a great deal of imagery

and talk through which fish are represented as monetary units. For instance, one young crewman I got to know confessed that he had always wanted to apply his custom auto painting skills to the side of his father's boat, where he envisioned an artistic image of dollar bills caught in a gillnet. Another teenage fisher once told me that he motivated himself to keep picking fish by thinking of each salmon as a bill—though he noted that the bill's dollar amount had declined a good deal in recent years.

The homology of fish and cash and the emphasis on volume this underscores has only furthered aspects of the competitive bravado long associated with Bay fishing. When boats tie up to one another to deliver their catch to the tender (the larger boat that transfers the salmon to the processor) (Image 22), fishers' eyes often dart to the raised brailers of others as they suss out their deliveries (Image 23). Most brailer bags are



Image 22. Drift Boats in Line at Tender. Photo by Karen Hébert.



Image 23. Watching a Brailer Bag Being Delivered. Photo by Karen Hébert.

constructed to hold about 1,000 pounds of fish, which makes calculation somewhat easier than it would be otherwise. But I was always amazed how quickly fishers seemed to be able to assess the approximate weight of the individual bags of others, tally the total poundage, and recall their estimates of others' particularly impressive catches days and even weeks later. In this context, it soon became disheartening even for me to watch other boats deliver a seemingly endless stream of loaded bags when our handful hung loosely, the folds of the nylon fabric limply encircling but a few fish.

For most of the fishery's history, highliners' status was materialized by their weighty deliveries, which were posted on a constantly updated list on the wall of the cannery for all to see. The fisher with the largest total catch volume was celebrated as "top boat" in the fleet or even in the Bay, an honor that is still aggressively pursued and spread by word of mouth by a select few. On the private, scrambled radio channels that groups of fishers use to share information, there is always much conversation—infused with a palpable undercurrent of competition—about how many "bags" everyone is getting, where a bag usually refers to a 1,000-pound unit. Multiple fishers in the same radio group expressed to me that they often felt "bad" or "depressed" about their own fishing performance when they heard how many bags others had gotten on a given drift. One said that he would actually turn off his radio from time to time so as not to feel worse. Moreover, high catch volumes are often doubly rewarded by processors, who offer added financial incentives to the top producing boats in their fleet, like a percentage "production bonus" and the waiver of boat storage and launching fees.

Yet, as the participants at the Dillingham meeting emphasized, the sharp price drops of recent years had created a situation in which, "no matter how much you catch and how fast you catch it, you're still going backwards," as one Dillingham resident put it. This indeed represents a significant departure from the way fishing had once been before the advent of farmed salmon, when the Bristol Bay catch was a "significant factor affecting world salmon prices" (Knapp 2004: 2). In the new era, the Bay's astounding volumes were beginning to seem as much a curse as a blessing amid a market that, presenters endlessly reiterated, had come to be ruled by quality. "Quality, quality, quality," presenter Bob Bell repeated in an effort to sum up the current salmon market; "I know everyone says it," he said sheepishly, "but it's just so true." An Anchorage-area proprietor of a small but successful meat and fish processing business, Bob stressed the importance of knowing "how to take good care of fish" in his remarks to the group. For fishers, this proper care had come to mean most saliently bleeding, icing, and delivering fish soon after they were caught, and handling them more gently than had been common practice in the past—never picking them up by the tail, throwing them hard across the deck, or crushing them in over-full brailer bags, for instance. Based on his experience serving the booming organic and health food sectors, Bob declared that, "the market is there—it's unbelievable how they are talking about wild salmon these days—but it has to be quality."

The Commodity Trap

As Bob's comments suggest, Bristol Bay salmon had yet to attain a reputation for consistent quality, despite its apparently sought-after wildness. Rather, area fishers had grown all too familiar with "being told we have a bad product," as Ray Wilcox, Jr., a self-described "lifetime fisherman" attending the workshop, griped. Unlike other Alaskan regions such as Copper River and Cook Inlet, which were effectively transforming their fish into high-priced niche-market fare, Bristol Bay had actually become known for relatively poor quality salmon, according to industry analysts.¹⁰⁸ That is, by many accounts, Bristol Bay salmon was set apart from both wild and farmed competitors not primarily by marks of distinction like its high fat content or deep ruby color, but largely because it was much more likely to exhibit bruised, gaping, or mushy flesh by the time it reached wholesalers, retailers, and consumers. Indicative of rougher handling and a lack of prompt or sustained bleeding and chilling, such corporeal blemishes mark some of the more intractable challenges of Bay fishing, including the

¹⁰⁸ This point was emphasized by the authors of an extensive 2003 study of the Bristol Bay salmon industry and its prospects for improvement: "Far and away the most common input we received from harvesters and processors was that the quality of the catch had to improve from its current state and the industry must better market the final product" (BBEDC 2003: 59).

logistical conundrums posed not only by its enormous volumes and compressed season which make careful handling difficult—but also by the soaring energy costs and minimal infrastructure of the remote location, which constitute hurdles for chilling and brisk delivery and transport schedules.

This suggests that impediments to salmon quality in Bristol Bay are located less in the natural substance of the fish itself, and more in the natural processes through which the substance is made available to human use, most notably in the uncontrolled and unpredictable form of the "pulse" itself. In fact, the vast majority of the Bristol Bay catch, sockeye, is actually considered a "high value" form of salmon. As this label suggests, there is a definite hierarchy of species in terms of market price: In 2006 in Bristol Bay, for instance, the average grounds prices (the prices fishers are paid for their catch by processors) for reds were 55 cents a pound, while kings were 77 cents, silvers 40 cents, chums 10 cents, and pinks 6 cents (ADF&G 2006: 2). Yet the preponderance of "high value" in the Bristol Bay catch, which had long been its chief asset, has become somewhat of a weakness in a changed salmon industry. As detailed in Chapter One, its sockeye's high value classification makes it comparatively higher priced than most other species, in absolute terms its price has shrunk many times over since the late 1980s.

Unlike farmed salmon's mass-market dominance, which was easily vilified as the source of industry woes, the success of other Alaskan regions in capturing domestic niche markets was alternatively inspiring and exasperating for Bristol Bay fishers. In his introductory remarks to the workshop group, Dillingham resident Lenny Smith complained that Cook Inlet, Copper River, and even the more remote western Alaskan

fishing village of Quinhagak, were all "ahead of Bristol Bay," generating price increases through aggressive efforts to promote icing, bleeding, and other quality handling techniques.¹⁰⁹ According to him, some players in these regions were said to be limiting the weight of brailer bags to as little as 300 pounds to avoid crushing or squeezing fish. In contrast, even the most quality-conscious Bristol Bay fishers' bags were likely to be hundreds of pounds heavier.¹¹⁰ In Lenny's example, we see that the longtime Bay ambition of bursting brailer bags is exactly the kind of practice that is becoming associated with the industry's undoing.

One of the few Dillingham drift fishers to have actually, if briefly, run his own processing and selling operation of any significant scale, Lenny joined presenters in insisting that "the market is there" for Bristol Bay fish. Like the industry experts who regaled the group with stories from major food conventions in Boston and Anaheim, Lenny described an earlier visit to a D.C. food show in which he saw throngs lined up at a booth promoting wild Alaskan salmon filets produced for high-end domestic markets. As workshop attendees were reminded by panel discussions to follow, nearly all of Bristol Bay fish was still canned for sale in Europe or sent frozen, headed and gutted, to Japan. The Bingo Hall heard a collective gasp, followed by disgusted grunts and disapproving clucks, when it was announced that as little as two to three percent of Bay fish wound up in domestic markets, according to one presenter's estimate. Despite having what watershed residents often praised as "beautiful" fish, then, Bristol Bay

¹⁰⁹ Quinhagak is home to a seafood processing plant that supplies a small, quality-focused wholesaler and retailer. The Copper River fishery, which has enjoyed remarkable commercial success despite the troubles of the Alaskan industry more generally, is often considered unique among Alaskan salmon fisheries—for one, its salmon runs are the first of the season.

¹¹⁰ During my primary fieldwork period, I observed that although processing companies often instructed area fishers to keep bags under 800 pounds, loaded brailer bags typically weighed at least 1,000 pounds by the time catches were finally delivered, especially during the height of the season.

remained stuck in dead-end product forms and unable to differentiate itself as a gourmet good garnering premium prices.

In their varied discussions of markets and product development, among other featured topics, workshop panelists emphasized that Bristol Bay fishers needed to distinguish their product so that it would not have to compete in the marketplace as mere unqualified "salmon," which could be generated much more cheaply by aquaculture concerns. Making and marketing quality salmon, then, represented what Bob described as a promising way to "make more money with the same raw material." In this respect, the advice of seafood business experts corresponded quite closely with what local politicians had acknowledged as the need for Bristol Bay salmon to "reinvent itself" in order to bring about industry recovery. As one presenter framed the challenge, putting himself in fishers' shoes in order to articulate it: "I know that I have to differentiate my product so I am out of this commodity trap."

In discussions of Alaska salmon sales, being "just a commodity" signals defeat, or at least shrinking profits, low profit margins, and limited growth potential. In fact, the express goal of official state salmon promotions can be seen as "try[ing] to take a lot out of the commodity stream and elevate it to a higher price," as a representative of the Alaska Seafood Marketing Institute (ASMI) informed those at the Dillingham workshop. Such visions for rescuing at least some Alaskan salmon and their fishers from the downward-spiraling margins of mass goods adopt the definition of the "commodity" used by mainstream neoclassical economists. "A comparatively homogeneous product that can typically be bought in bulk," according to the online reference dictionary of *The Economist* magazine, the "commodity," "usually refers to a raw material – oil, cotton,

cocoa, silver – but can also describe a manufactured product used to make other things, for example, microchips used in personal computers" (Economist.com 2006b). From this perspective, "the process of becoming a commodity" can be exemplified as follows:

Micro-chips, for example, started out as a specialised technical innovation, costing a lot and earning their makers a high PROFIT on each chip. Now chips are largely homogeneous: the same chip can be used for many things, and any manufacturer willing to invest in some fairly standardised equipment can make them. As a result, COMPETITION is fierce and PRICES and profit margins are low (Economist.com 2006a).

Seeking relief from fierce competition and low profit margins alike, Bristol Bay fishers voiced little objection to workshop presenters' exhortations to escape the "commodity trap" and rise above the "commodity stream."¹¹¹ By attempting to transform their catch into quality salmon suitable for specialty markets, Bay fishers are indeed fighting "commoditisation" as described by both *The Economist* and the workshop presenters. However, fishers' efforts to singularize their salmon entailed their adhering to more rigorous handling standards, promoting consistency in fishing practices and products across the fleet, and developing regional and personal salmon "brands" with some degree of proprietary control. In almost all cases, these efforts represented attempts to expand the dimensions of salmon and its production conditions that can be made into objects of economic value and incorporated into the saleable good itself.

Although processes of singularization, of making unique and personal, are often presumed to run counter to commoditization (e.g., Kopytoff 1986), the qualification of salmon pushes us to reconsider the assumption that making things singular is somehow

¹¹¹ Being a commodity is not always a commercial curse, of course. Ironically, at the same time that fishers struggle to make their salmon more than "just a commodity" in a global market in unqualified salmon characterized by sinking prices, mining development in Bristol Bay is being pursued with great vigor precisely because of the heightened market prices of other bulk primary products. As argued in the New York Times, "The worldwide thirst for stuff from the ground — materials as diverse as copper and coal, gold and oil — has set off a stunning boom in just about every commodity market" (Romero 2006).

opposed to making things fungible. In nearly every way, the salmon Bristol Bay fishers are striving to produce complicates easy analytical divisions between the singularized and the commoditized. As I want to argue, salmon qualification represents a very selfconscious attempt to "commoditize singularities," a possibility Arjun Appadurai acknowledges as one of the more interesting ways in which Kopytoff's ideal-typical contrast between "singularization" and "commoditization" might be complicated (1986a: 17). But for this very reason, quality salmon confound the distinctions Appadurai himself draws between "singular" and "homogenous" commodities, as well as between luxuries and necessities (1986a: 16). In fact, the products are successfully positioned to the extent that they play with, step over, and even subvert the boundaries of these cultural categories.

To clarify, Appadurai posits that homogenous commodities, those "whose candidacy for the commodity state is precisely a matter of their characteristics (a perfectly standardized steel bar, indistinguishable in practical terms from any other steel bar)," must be differentiated from singular commodities, or "those whose candidacy is precisely their uniqueness within some class (a Manet rather than a Picasso; one Manet rather than another)" (Appadurai 1986a: 16). Yet as the Dillingham workshop discussion indicates, establishing uniqueness within some class—that of Alaskan wild salmon, for instance, or Bristol Bay reds more specifically—depends on the perfect standardization of its constituent elements, at least in certain key respects. Thus, presenters were quick to remind participants that, "quality has to come first": The singularity of Bristol Bay fish could not be marketed (and thus fully commoditized) until specific quality standards were established and results demonstrated across the fleet. In this way, the differentiating of

"quality," "wild," "Bristol Bay," "Alaskan" salmon from the generic salmon masses necessitates its own very sweeping homogenizations.

Similarly, it seems as if qualified salmon must walk a fine line between the luxury and the everyday if it is to enjoy commercial success. Seafood industry experts often advance the view that quality is so important because end consumers consider salmon a delicacy, or a special treat. "Unlike rice, potatoes, or pasta, salmon is not daily fare," explains John P. Doyle at the start of *Care and Handling of Salmon: The Key to Quality*, a manual aimed at fishers; "it is a specialty food in North America, Asia, and Europe. Consumers must be attracted to salmon, and if they are to be repeat customers, the product must meet their expectations" (1992: 1). Doyle actively advances view that fishers must produce quality precisely because salmon is not a humdrum food staple like potatoes. Yet, interestingly, the specifications normally associated with quality-a highly regular appearance, for example, and an unblemished presentation—were largely set by the aquaculture industry as it vastly expanded the availability, affordability, and consumption of salmon products.¹¹² So, the relative democratization of salmon has been accompanied by the propagation and elaboration of its coding as an elite, exclusive, or specialty food. In an equally paradoxical fashion, quality initiatives actually work to make wild salmon more visually similar to farmed fish (and to one another) at the same time their ultimate purpose is to establish essential differences among various salmon products and substantiate the singularity of wild Alaskan fish.

¹¹² Many quality features are more easily achieved in farmed salmon production, as fish reared together in pens can be processed live—sucked onto processing lines without ever having to thrash in a net—once they have reached a standard and roughly comparable size. Thus, certain quality-making techniques are folded into the basic aquaculture production process itself. See Chapter One for a more detailed discussion of farmed salmon production.

This contradictory process is interpreted by Callon to be propelled by the qualification and re-qualification inherent in the workings of markets broadly. In bolstering this argument, he draws upon the studies of the American economist Edward Chamberlin, whose 1946 description of a process Callon equates with qualification he paraphrases as follows:

On the one hand, it leads to a singularization of the good (so that it is distinguished from other goods and satisfies a demand that other goods cannot meet). On the other hand, it makes the good comparable to existing goods, so that new markets are constructed through the extension and renewal of existing ones. Different and singular, singular and comparable, such is the paradoxical nature of the economic goods constituting the dynamics of markets (Callon, et al. 2002: 201).

Indeed, while one might take issue with the seemingly autonomous construction of demand suggested by this passage, it incisively locates the self-reproducing tensions between homogeneity and singularity, iterability and uniqueness, and identity and difference not in any radically "new" economy, but at the heart of commodity making.

Yet these dialectical tensions have perhaps become more apparent as the forms underlying market transactions have arguably grown more abstract. William Cronon's work in *Nature's Metropolis* on the parallel transformations of grain, grading systems, and the financial mechanisms used by the Chicago Exchange provides an excellent illustration. His account shows how technological developments like the railroad and the grain elevator enabled the movement of grain in bulk, just as the implementation of standard grading and labeling systems, refined quality controls, and market instruments like futures facilitated its trade not as "the physical product of human labor on a particular tract of prairie earth but as an abstract claim on the golden stream flowing through the city's elevators" (Cronon 1991: 120). Such homogenizing abstractions have

a complex relationship with the heterogeneity of actual grain, however. While the different flavors and features of actual grain formed the basis for traded categories like "Milwaukee Club" and "Chicago Spring," these market terms came to take on a powerful role with respect to the natural matter they marked: "The very language of the market reshaped the objects traded within it" (Cronon 1991: 146). Nevertheless, grain's reconstitution in the shape of market forms was always limited by the unruliness and diversity of material nature, which does not generally lend itself to neat categorization. As Cronon explores, these tensions were most interestingly manifest in the scandals they made possible. For example, early money-making schemes to combine grades—that is, to add cheaper Grade B wheat to Grade A wheat so that the mixture was just barely still saleable as Grade A—"used the…necessary fiction of within-grade homogeneity to profit from the very real heterogeneity of physical grain" (Cronon 1991: 135).

So, too, for Alaskan salmon boosters, physical heterogeneity represents both opportunity and obstacle in commodity making. The material differences among salmon are at once the most available avenue for Bristol Bay product differentiation, for escaping the "commodity trap," as well as what stands in the way of achieving that end, given the remarkable amount of material reworking and regularization necessary for area fish to become quality salmon. In their efforts to generate this singular commodity, fishers wrestle with the task of making disparate bodies and actions comparable and, more pointedly, substitutable in market terms.

The challenge is further complicated by the fact that the commodity they are working create is largely defined by an outward appearance intended to blur its origin in industrial production and its destination for mass consumption. Quality fish are highly

standardized products that have the appearance of distinctive uniqueness—which is exactly what makes quality such a selling point. This has implications for production as well as consumption. Fishers are increasingly pushed and pulled to think of their catch not as a "silver stream" of abstract salmon resembling the "golden stream" of homogenized wheat that Cronon depicts, nor an undifferentiated mass of "Cash Flow" or "Net Income," but as singularities—particular fish that must each be treated carefully and individually, in a way that already anticipates their place as the object of another's dinner, and desirous regard.

The Qualities of Quality

Despite the ubiquity of "quality" as a salmon industry buzzword—or perhaps because of it—there is tremendous ambiguity and inconsistency in its usage. What qualities does quality possess? Whence do these features come? With respect to salmon, does it refer to traits that stem from seemingly intrinsic aspects of the fish themselves, like flesh rich in certain oils, or properties more obviously imparted by the specificities of human handling, like flesh that is free from bruises? As the Dillingham workshop discussion indicates, wild salmon are often considered the pinnacle of quality, yet at the same time even "beautiful" wild fish can be deemed "poor quality." How, then, are determinations and hierarchies of quality made? Based on what—and, more specifically, whose—criteria? And how do current visions and practices of quality relate to the forms of product quality control that have long characterized salmon industry operations? At certain points, workshop comments suggest that quality is established by a discrete catalog of quantitatively measurable attributes, such as low bacteriological counts, which themselves are associated with very concrete practices, like fish chilling. Yet at other

moments, the term is used to gesture to quite abstract notions of goodness, which appear to rest on ineffable perceptions of naturalness, purity, and wholesomeness, or other sorts of positive associations, like luxury or distinctiveness.

As academic analyses of contemporary quality initiatives have documented, this sort of definitional indeterminacy is characteristic of the concept itself. "Everybody believes that 'Quality is a Good Thing'," Peter Bowbrick observes in his examination of the economics of quality across industries, "but nobody is terribly clear what they mean by quality" (1992: 1). He argues that there are a handful of distinct senses of quality, which are largely based on the perspective of the actor judging the good at a given point in its chain of custody. Yet he points out that these differing senses are often used interchangeably in everyday practice: "[I]t is only too easy to switch from one meaning to another and then back again in a single sentence without noticing it? (Bowbrick 1992: 1). Agro-food researchers have come to similar conclusions, noting the wide array of different and sometimes even contradictory ideas deployed under the rubric in the sectors they study. As Brian Ilbery and Moya Kneafsey conclude, "the concept of 'quality' is one which is contested, constructed and represented differently by diverse actors operating within a variety of regulatory and market arenas" (2000: 217). This helps explain how very divergent ideas of goodness can be simultaneously acknowledged to embody quality—as in how, as Bowbrick writes, "I can recognize that, in some sense, round, brightly coloured, unblemished tomatoes are excellent, in spite of their thin coating of insecticide, and lack of flavor" (1992: 2).

The apparent coexistence of "objective" and "subjective" senses of quality in the salmon industry also parallels its workings in other food contexts. In Becky Mansfield's

analysis of the surimi, or imitation crab, industry, she notes that although the issue of quality is "regularly raised by individuals, associations, and magazines...it is not easy to define exactly what quality means to the industry": "[Q]uality itself is conceptualized as either real and objective, or discursive and subjective," either "a physical reality based on measurable characteristics," or "purely a social construction of what people like" (Mansfield 2003a: 10). The same dichotomization is evident in salmon industry discourse, and is especially salient in efforts to determine if certain fish "inherently" possess more quality than others. This is a particular preoccupation in Bristol Bay, where local fishers have been known to somewhat defensively assert that, "our fish are just as good as that Copper River stuff!" In a lengthy footnote to their final report, the authors of a recent fishery restructuring study commissioned by the Bristol Bay Economic Development Corporation (BBEDC) wrestle with these issues, ultimately choosing to operationalize "subjective" quality by use of an "objective" yardstick. As they write:

We encountered some debate on the point about whether Bristol Bay sockeye was inherently inferior to salmon from river systems outside the region. This debate is too difficult to sort out because inherent quality is, ultimately, in the 'taste of the beholder,' as well as subject to influences of marketing campaigns. For many people, much of the inherent quality of salmon can be attributed to oil content, with fish of high-oil content being more desirable than those of low-oil content. Limited data on this characteristic (10 fish from each area) suggests Bristol Bay sockeye harvested in the terminal districts are, on average, of similar fat content (~5%) to those in other fisheries of Alaska (Kodiak, Cook Inlet) but about half the levels from sockeye captured in the high profile Copper River fishery (Link, et al. 2003b: 59).

To salmon industry experts, particularly those working to promote quality, some of the ambiguity that often surrounds the concept reflects not definitional indeterminacy but the interplay of two distinct quality modalities: "intrinsic" and "extrinsic" quality. In venues as varied as food technology journals and fishing conferences, these two quality types are described and dissected. According to Doyle's manual: "Intrinsic quality refers to the set of characteristics unique to a species, to populations within species, and to individuals within populations....Instrinsic quality characteristics that are important market factors include size, color of skin and flesh, oil content, flesh texture, and degree of maturity" (1992: 7). "Extrinsic quality," on the other hand, "refers to changes in fish flesh that take place during and after harvesting," most notably "preventable defects caused by bruising, poor workmanship during processing, contamination, or physical abuse" (Doyle 1992: 7). In the classification scheme outlined by Doyle and employed in most industry analyses of the topic, intrinsic quality pertains to the "natural conditions" of "live fish"—that is, salmon as it exists apart from and before entering the human food chain-whereas extrinsic quality is a function of human manipulation that begins from the point of harvest and involves "every person who handles the fish (from the fisherman to the consumer)" (1992: 7). While they both are materialized in the physical substance of the fish itself, the two quality aspects are separated temporally, spatially, and ontologically in this model: Intrinsic quality reflects the prior contributions of nature, while extrinsic quality reflects the later manipulations of culture.

In practice, this neat separation of intrinsic and extrinsic quality characteristics is often confounded by the interpenetration and fundamental inseparability of cultural and natural systems, as well as by the more straightforward fact that a wide variety of socially significant salmon attributes—from flesh texture to flavor—are quite obviously coproductions of nature and culture, however delineated. Take, for example, the issue of "gaping" (depicted in Image 24, along with bruising), the sagging flesh phenomenon that some experts deem the "most common serious defect" found in net-caught salmon (Doyle

1992: 11). "Gaping," Doyle clarifies, "the separation of muscle layers due to weakening of connective tissue that causes holes or slits to appear between the muscle layers," not only "detracts from the appearance" of a given fish but also makes it unsuitable for certain types of smoking and curing (1992: 11). According studies by seafood

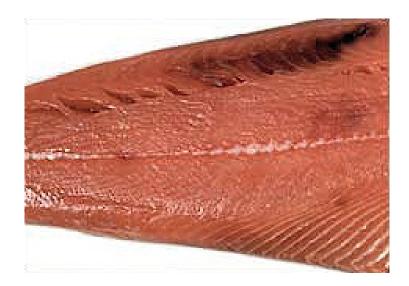


Image 24. Salmon with Bruising and Gaping. (Image source: Alaska Sea Grant 2008: 30)

technologists, the weakening of connective tissue that causes gaping is more likely to occur when fish undergo rigor mortis at higher temperatures, or if fish are bent or pulled while in rigor (Doyle 1992: 11-12). Thus, chilling and gentle handling practices especially the relatively recent prohibition against picking and throwing fish by their tails, which most people I fished with at least tried to observe—are the most common prescriptions for reducing gaping in the catch. Yet along with these more extrinsic sources, gaping is simultaneously a product of the intrinsic nature of salmon connective tissues, which are much weaker than those of mammals, as well as the particular nutritional condition of individual fish themselves at the time of capture. Interestingly, healthy salmon with high stores of glycogen are actually more likely to exhibit gaping flesh once harvested, as glycogen provides for "greater lactic acid buildup and more violent contraction of muscle tissue" during rigor (Doyle 1992: 11).

As the above example indicates, nature does not function as a set of predetermined givens but acts as a participant in the process of transforming matter into product. As Doyle acknowledges, various influences wind up working simultaneously, and at times even jointly, to determine a fish's physical presentation: "Genetic controls determine flesh and skin color as well as oil content; however, degree of maturity also strongly affects these quality attributes. Factors associated with the method of harvest and killing also have an impact" (1992: 7). Like subjective and objective determinations of quality, intrinsic and extrinsic modalities are difficult to disentangle in actual practice.

Amidst such tight enmeshing, attempts by salmon industry actors to pinpoint a definition for quality rest on significant analytical work: parsing out and naming the sources of value in objects. As Robert J. Foster frames it, the kind of quality being pursued in agro-food industries involves "what might be called the construction of qualitative value — value produced within a system of differences" (2006b: 290). In the preceding paragraphs, we see how industry participants try to account for the fact that the differences that distinguish a given thing as quality stem from the active transformation of matter into product by way of human labor (extrinsic quality), but also bear some relationship to the corporeal particularities of the matter itself (intrinsic quality). In addition, participants' efforts to nail down quantifiable quality components signal some discomfort with the idea that value might merely be a function of "subjective" preferences without any "objective" basis in empirical reality. Such deliberations about

value prove critical for understanding how Bristol Bay fishers engage with hegemonic formulations of value and conceptualize alternatives amid an industry increasingly remade in the image of consumer demand.

Creating Quality

Paying attention to extrinsic quality means looking at the crucial role of labor in the creation of quality salmon. As Doyle explains quite explicitly, he locates the "key to quality" in the "care and handling" associated with extrinsic quality because it is the arena in which fishers can most readily exercise influence: "Fishermen can have their greatest impact on quality, and therefore the market, by controlling extrinsic quality" (Doyle 1992: 7). As I witnessed in the innumerable meetings, workshops, trainings, and conferences I attended alongside fishers over the course of my fieldwork, fishers are constantly reminded of their importance in this regard, and urged to meticulously attend to careful handling practices. In fact, quality production hinges on fishers' self-conscious incorporation of attentive carefulness into everyday moments of work. The quality harvesting practices that they are either instructed to perform by industry experts or, as is not uncommon, develop on their own accord are marked by a heightened awareness of each fish as a singular object destined for consumption, if one that is comprised of a collection of individual quality traits that each need to be closely monitored and controlled. How do Bristol Bay fishers respond to industry initiatives to boost quality, and what are their attitudes about the incorporation of these techniques and orientations into their own labor?

The spate of educational materials that has been developed for harvesters explicitly focuses attention on the microphysics of fishing labor. One such primer is an

online, multimedia "quality and handling" training program created specifically for salmon fishers by the Alaska Seafood Marketing Institute (ASMI), a state-formed agency working in partnership with the seafood industry that directs Alaska seafood promotions. "You are the key to maintaining quality," the recorded voice that accompanies the photos, graphs, and video clips intones. "Remember that fish are food, and their value to our industry is dependent on the customer's appreciation, and willingness to purchase our fish in order to have seafood for dinner" (2006b). Again, in this very common strategy of appeal, fishers are put in the shoes of the final seafood dinner eater and encouraged to regard the world through his or her eyes, to appreciate the customer appreciating the product.

The ASMI training program provides a comprehensive overview of the modifications fishers are encouraged to apply to their practices for the sake of quality. Many of these routines have been integrated into the everyday work I witnessed in Bristol Bay, while others have not been adopted as readily, or by as many fishers. The program highlights a number of areas, including chilling, handling, delivery, sanitation, and boat design. Its recommendations range from tips for bodily comportment—like the ever popular "fish should not be thrown, but rather lifted by the head to avoid breaking blood vessels, which causes bruising," or "be careful when you walk to avoid stepping on fish"—to more dramatic structural changes to boats and fishing operations, such as the implementation of icing or the installation of RSW (refrigerated sea water) or CSW (chilled sea water) systems. "Keep brailer loads to less than 800 pounds" makes the list of injunctions, as does the plea to "deliver fish as soon as possible." Fairly detailed instructions on proper boat cleaning are also included, which fishers are advised to

perform after every delivery: "Wash down the deck and hold to remove slime, scales and gurry," "Scrub all surfaces with a warm detergent solution," "Rinse detergent off," "Apply a bleach solution or other sanitizer and let it stand for 10 minutes," and, finally, "Rinse with fresh water." While some boats on which I spent time were cleaned more carefully and frequently than others, I never witnessed or performed a cleaning quite this thorough, nor saw such regular use of detergents and sanitizers.

It is not as if the fishers with whom I worked dismissed the idea of having a clean boat. In fact, Pat Kelly was horrified by one photo that I had taken which captured quite clearly the thick coating of blood and slime caked on to the side of his boat, cringing that he really needed to step up the cleaning so his boat didn't look so "jalopy," a slang expression in the region that means something akin to a disorganized mess. But captains usually farmed out cleaning tasks to their crew, who were often too exhausted from fishing to clean as zealously as the captain might like, much less as outlined in the ASMI training. When Pat had handed me the thick-bristled brush and set me to work, for instance, I often went through the motions instead of energetically scrubbing. It seemed as if the grayish froth of fish blood and slime called gurry (The American Heritage Dictionary of the English Language 2008b)—a word thought to be derived from "diarrhea"—was everywhere, and would reappear as quickly it was cleaned away with the next load of fish. During the peak season, ASMI's recommended cleaning procedure would be virtually impossible to perform unless other fishing duties were forsaken.

Given this conundrum, those with whom I fished expressed varying and at times conflicted responses to quality directives, as well as to their own personal feelings about how salmon should be caught and handled in light of current market configurations. In

the height of the season, when fish surge into nets and onto boats at breakneck speed, bulging through web, twisting around lines, and spilling over onto every square inch of deck, "gentle" handling is near impossible. At moments like these, when mangled fish are chucked violently across fish holds into burgeoning brailers, any concern over product quality is usually greeted with some sort of scoffing mutter about how "it's just going into a can, anyway." I was even instructed at one point to throw every bit of mangled matter—like the ripped-off pieces of fish faces and gills—into the brailers rather than overboard as a way to boost poundage.

In addition, a great many fishers in Bristol Bay do not regularly chill their fish, yet another "key to quality" in the ASMI training, despite a program by the BBEDC that offered free slush ice bags to Bristol Bay-area residents. As mentioned earlier, even the comparatively low-tech chilling technique of icing presents significant hurdles in the region, where the availability of ice itself is often uncertain. (For a number of summers in a row during my research period the city of Dillingham was financially unable to keep the ice-making facility at the harbor in working order.) Plus, integrating slush bags into a fishing operation was also considered by some to be "a hassle" or "a pain." Thus, the ASMI training's final message to "always remember to keep it cool, keep it clean, and keep it moving" is by no means a simple or appealing task for many Bay fishers. It is likely for these reasons that they at times reject new quality initiatives like the slush ice program by defiantly insisting they will keep fishing the way they always have.

Yet, as the local enthusiasm over quality at the Dillingham workshop indicates, there are also strong indications that new market contours are working their way into the fishing habitus of many. In a variety of sometimes subtle but significant ways, fishers'

sensibilities are being reshaped to reflect new social and technical norms. During my fieldwork period, I watched a number of fishers make major changes to their boats, in large part so that they could accommodate quality demands more easily. One popular alteration was the installation of "flush decks," putting brailer bins beneath the deck so that their openings would be flush with the deck itself. With flush decks, it is possible to simply slide fish across the floor into brailers (rather than having to toss them overhead into the bins), which makes fishing work easier and tends to keep fish in better shape.

Based on my observations and conversations, it also seemed as if fishers were more actively avoiding the practice of "round hauling" (Image 25) pulling the entire net



Image 25. Round Hauling. Photo by Karen Hébert.

onto the boat in a giant pile with all the fish still in it, rather than picking the fish out of the net as it is reeled in. Round hauling—which is as damaging to the fish as it sounds—

is done in order to get the net in quickly, whether because the fishing period is about to end, or because the boat or net is at risk of "going dry," getting stuck on a sandbar or the shore when the tide changes. Because a few more minutes in the water can mean substantially more fish in a net, round hauling hasn't disappeared entirely, especially since most processors in Bristol Bay pay the same price for a given species of salmon regardless of its particular level of quality. Yet the practice is often greeted with a whiff of disapproval of the sort that is more patently evident when fishers talk about the old technique of "pewing" (Image 26), the transferring of fish from boat to tender by means of a sharp, long-handled prong, or fish pew. At several points, I watched old-time fishing footage alongside present-day fishers who could not help but wince when they watched salmon bodies being pierced by pews: "I can't believe we used to fish like that!" they would exclaim, shaking their heads incredulously.



Anchorage Museum of History & Art. Library & Archives.

Image 26. "Fishing Boat." Fish Pewing in Bristol Bay, ca. 1950. Image source: Anchorage Museum of History and Art at Rasmuson Center, Library and Archives, Ward W. Wells Collection, Wells (ca. 1950b), AMRC-wws-156-R14.

Fishers' visceral responses to production techniques now deemed damaging or inappropriate, which can evidently involve feelings of shock or revulsion, seems not unlike consumers' presumed reactions to products that defy their expectations or aesthetic sensibilities—dismay or disgust when greeted by a rotten or irregularly shaped apple in the supermarket bin, perhaps, or salmon with gaping or bruised flesh. These matters of taste and aesthetics, as Pierre Bourdieu (1984) and Norbert Elias ([1939] 1994) have explored extensively in their work, are deeply informed by cultural classifications that are rooted in and serve to reproduce larger structures of social class and state power, respectively. Their work argues that the opinions and visceral reactions that constitute taste and manners are best perceived not as the subjective orientations of particular individuals, but as socially determined and determinative.

In the case of quality salmon production, we see that the rigorous promotion of careful handling practices is closely tied to the heightened sense of the delicacy of the salmon substance itself. In the online ASMI training, for instance, fishers are told that gentle and infrequent handling of their catch is critical, because "with each handling the fish become more fragile." This fragility is depicted as a delicate fineness that makes salmon desirable—"this more delicate musculature accounts in part for its appeal," the training informs—and is strikingly reminiscent of Bourdieu's characterization of upper-class food, which conveys a distance from necessity, a preference for quality over quantity, and aesthetic stylization.

As Bourdieu emphasizes, "social subjects" are "classified by their classifications" (1984: 6), an observation that resonates closely with Callon's point that "the distinction of products and social distinction are part of the same movement" (2002: 212).

Moreover, as Lawrence Busch and Keiko Tanaka argue with respect to food grading and standards in particular, the "rites of passage" that establish a product's "goodness" are simultaneously tests of both nature and people—"For example, if Farmer John's harvest fails to make the minimum grade, it is discarded as a 'poor crop' and Farmer John is judged as a 'poor farmer' (Busch and Tanaka 1996: 8). Indeed, there is often an easy movement between evaluations of "poor quality" fish and accusations of poor quality fishers, a fact not lost on people like Ray Wilcox, Jr., the Dillingham workshop attendee who complained that he was "tired of being told we have a bad product."

This simultaneous evaluation of product and producer seems especially evident when industry consultants rail against fishers for their "bad attitudes." As Doyle asserts:

Bad attitudes that persist among some members of the fishing sector are a major cause of poor product quality. Such attitudes stem from short seasons, fierce competition for fish, and limited vessel capacity for fish and machinery. These conditions produce a general feeling that the first and foremost job is to maximize the harvest and that care of the product is secondary. This feeling leads to rough handling; poor or no chilling; and in some cases, dirty, unsanitary handling conditions. These practices must change if the Alaska salmon industry is to regain control of the market (1992: 2).

This quotation implicitly juxtaposes the badness and coarseness of recalcitrant fishers with the goodness and delicacy of the ideal quality product. The "rough" and "dirty" practices it condemns are cast as the failures of fishers themselves, even though the very nature of their work largely prohibits them from displaying the trappings of spotless refinement that seem to be presented as an alternative. In addition to the class inflections that accompany this disdain for "rough" and "dirty" labor, the passage also recalls the frequent characterizations of Alaska Native residents of Bristol Bay in the years before they were regularly employed as fishers: The belief that their fish were "dirty and poorly handled" was at times used as a justification for their exclusion from the industry (VanStone 1967: 78).¹¹³

In a similar fashion, social distinctions among fishers are evidenced, and likely exacerbated, through the integration of quality techniques into production—or lack thereof. Often, the adoption of quality practices and infrastructures are smoothed by the resources of capital and class, just as fish slide more easily into the holds on a boat refitted with flush decks. Those with smaller boats and less money for fuel will find even basic quality demands like frequent deliveries, icing, and gentle handling more challenging to meet. As Christy Getz and Amy Schreck find among banana producers in the Dominican Republic, "the poorest farmers tended to have lower quality bananas, which prevented them from realizing direct benefits from Fair Trade and kept them stuck on what might be described as a 'quality treadmill'" (2006: 499). But it is not only money that advances quality-making in Bristol Bay: The tactic clearly appeals more to those who read seafood industry journals, are involved in local politics, have ties to metropolitan markets outside rural Alaska, speak English instead of or in addition to Yup'ik—the list goes on. As suggested earlier, to a significant extent, the group assembled in Dillingham was self-selected to include those who already possessed the resources and orientations that would make them amenable to "reinvention."

Still, the promotion of quality is, however unevenly, changing the contours of fishing generally. Even Doyle notes that many deleterious practices have indeed been

¹¹³ The primary sources VanStone reviews indicate that this opinion of Yup'ik Eskimo set netters in the Nushagak River district was voiced as far back as the 1920s. Because Alaska Natives found it difficult to gain employment as boat fishermen, Native involvement in the commercial fishing industry during its early years was often limited to the sale of extra fish from set net subsistence catches. Yet the association of set net fish, and set netters themselves, with dirtiness is something that persists to this day. Then and now, set net fish are caught from nets fixed along tidal flats that are often muddy (see, for example, the images of set netting included in Introduction). Set netters continue to include proportionately more women, Alaska Native, and rural resident fishers than are represented in the drift fleet.

transformed over the past 25 years: "For example, fish pughs [sic] are no longer commonly used, and dry scow tendering is almost a thing of the past..." (Doyle 1992: 2).¹¹⁴ My own observations in Bristol Bay indicate that certain fishers, including some of those at the Dillingham workshop as well as others who are developing their own businesses based on quality production, are taking this transformation of fishing practices one step further. These individuals are not shrugging off new guidelines as hassles, nor even grudgingly responding to calls by industry experts to alter their errant ways, but are actually pursuing and implementing novel production techniques themselves, on their own initiative. For example, one fisher I know lays down a special foam pad beneath his net, so when the fish are picked free there is something to soften their fall to the aluminum deck. Another limits his time on the water so that he can make constant fresh deliveries to his small processing crew based on shore. For both these fishers, such practices involve a quite marked reorientation of fishing work and a corresponding reconceptualization of its goals—so different, in fact, that the practices are only performed during particular periods when it is practicable to produce quality fish, like at the slower beginning and end of the season, or when required to keep a processing line in operation. At all other times, and especially during peak season, these fishers return to the quantity regime of production, or what they call "fishing for poundage."

The fact fishers feel the need to switch back and forth between quality and quantity production styles suggests that current quality initiatives actually constitute another mode of fishing, and fishing goodness. As Busch and Tanaka point out, Jan Douwe van der Ploeg's study of farmers in Emilia Romagna confirms that notions of

¹¹⁴ I never observed dry scow tendering during my time in Bristol Bay—all tenders kept fish in holds with chilled or refrigerated water.

goodness can differ on the basis of production contexts (Busch and Tanaka 1996). Van der Ploeg records two distinct concepts of "good" farming in the Italian region: an "intensive" notion based on a high milk yield per cow, and an "extensive" notion that refers to a farmer's ability to manage land (van der Ploeg in Busch and Tanaka 1996: 5). In Bristol Bay, similarly, the often competing pressures for quality and quantity are met with distinct production styles, which rely on and valorize different fishing practices and results. Although fishers shift between them—sometimes even from one moment to the next, as when they select a few fish from a large drift to ice and bleed for sale or processing as quality—their reflection on the difficulty they have at times in doing so is evidence of the divergent sensibilities that accompany the different technologies and techniques. I have heard those fishing for quality, for instance, talk about how it "kills" them to pull up their nets to make a delivery while others are still "loading up," to willingly give up catching more fish in order to attend to those already caught.

While supplying quality clearly requires producers to employ new fishing practices and encourages them to conceive of the objects of their labor in a different light, it is important to note that quality modalities do not just replace other prior productive configurations wholesale: Strategies and sensibilities of fishing are not just stamped out anew like a novel product on a processing line. New ways of conceptualizing and creating value often rely on existing frameworks as much as they reconfigure them.

Controlling and Certifying Quality

Like the notion of quality itself, which does not repudiate older meanings but instead encompasses them in going "beyond" (Brown and Sylvia 1994: 9), current methods for achieving and guaranteeing quality draw upon longstanding procedures of

quality assurance at the same time they promote new modes of oversight. Contemporary mechanisms for ensuring quality depend on particular deployments of the sort of supervisory monitoring that has traditionally characterized quality control in the salmon industry. The ascendancy of quality intensifies some of them. Yet this intensification of existing forms of control by no means precludes the development of new ones. In fact, it is with and through old-style regulative mechanisms that the whole new array of certification procedures and self-disciplining practices characteristic of quality production are fully realized.

At the Mermaid Cove cannery, "QCs" are charged with monitoring and enforcing quality control: On the canning lines, they make sure that cans are being stamped with the appropriate date, species, and batch number codes, and check that the lids are properly sealed to the can bodies so as to avert botulism and other toxic mishaps; in the fresh-frozen department, they double check that graders are doing accurate work, and that individual fish meet the specifications of particular grading standards. They are also responsible for enforcing various rules of sanitation, at times positioned by doors to ensure that workers do not enter the facility unless they are wearing hair nets, have dipped their boots in a special sanitizing wash, and have removed earrings or other jewelry that might otherwise wind up in falling into cans or vacuum-sealed filet packages. The QCs' duties often require them to peer over the shoulders of workers—monitoring, recording, intervening, and reprimanding—in the same way that their own activities are closely watched by cannery supervisors. Here, the practice of quality control relies on forms of surveillance and discipline that are direct, interpersonal,

hierarchical, and punitive.¹¹⁵ Rather than exert discipline through an anonymous, panoptic gaze, quality assurance in the fish processing plant, at least in this one particular form, is exercised through the anxiety-inducing hover of someone very close at hand.

This well established mode of controlling quality and labor remains central in Bristol Bay salmon production, as it is no doubt in food processing more generally perhaps only more so in light of recent scares like *E. coli* outbreaks. Research from other production sites suggests this sort of direct discipline might be intensified by quality initiatives in particular. For instance, Getz and Shreck report that small farmers in Mexico growing certified organic tomatoes and herbs experienced a "hyperfocus on surveillance" (2006: 490). Certainly, efforts to further quality on Bristol Bay fishing grounds involve the elaboration and intensification of certain micro-level strategies of monitoring, measuring, and enforcement: Tender operators are starting to penalize fishers a few cents per pound for deliveries from overweight brailer bags, and check the temperature of the chilled fish they buy in order to, in their words, guarantee quality.

Those attempting to "DIY" in Bristol Bay find that their practices are only more intensely surveilled, if not by the major processors themselves. Fishers working to process their own catch must negotiate the same tangle of complex food safety regulations and other kinds of federal government oversight that larger processors do, requirements that appear in the form of a thicket of acronyms one presenter at the Dillingham workshop jokingly referred to as "alphabet soup." A key ingredient in this regulatory stew is HACCP, the Hazard Analysis and Critical Control Points system, which began to regulate seafood in 1995. In order to legally process fish in the U.S., it is

¹¹⁵ This helps explain why cannery-line quality control is experienced as a site of racist subordination, as described in Chapter Three.

necessary to develop a HACCP plan that meets FDA approval¹¹⁶—the subject of much strategizing and gnashing of teeth among workshop participants.

For nearly all the rural residents in attendance who aspired to become official "fisher-processors," HACCP was synonymous with onerous rules and serious headaches. The few local processing businesses that operated during my stay in Dillingham had put a great deal of time, energy, and money into reconfiguring both their production methods and their physical facilities themselves in order to meet HACCP demands. Even still, most had frequent run-ins with health inspectors. Moreover, as Jeri-Lynn Robinson and several others at the workshop bemoaned, it was often impossible to make traditional production processes square with HACCP. As Jeri-Lynn explained to the group, "what is allowed legally is not what we do." She clarified that, "smoking salmon the old way," as done by "Yup'ik women...the way we've all been doing it for centuries," does not use a high enough cooking temperature to be permissible under food safety standards. Jeri-Lynn reported that although the women in her family had been successfully selling their homemade smoked fish for over fifty years, they hadn't been able to figure out a way to make their informal business legal.

The experience of rural producers reveals that the application and enforcement of HACCP does not entirely dispense with familiarly direct forms of inspection and oversight. However, at the same time, the program also marks significant departures from past regulatory strategies. HACCP has been interpreted as an innovative form of quality control because it replaces spot-checks of manufacturing conditions and random sampling of final products with preventative measures and monitoring along the

¹¹⁶ The U.S. Department of Agriculture (USDA) regulates meat and poultry, while the Food and Drug Administration (FDA) regulates all other foods.

processing production chain at junctures identified as "critical control points" (FDA 2001). In this way, its implementation signals a reduction of the top-down regulation that depends on the close presence of an official's watchful eye or periodic intervention. Under the system, much of the responsibility for maintaining product quality is vested in the processor's continual monitoring of its own adherence to the specifications outlined in the HACCP plan. Nevertheless, its control over production facilities, intensive documentation requirements, and provisions for oversight of facilities and records alike make HACCP a powerful tool for compelling quality practices from above.

According to seafood specialists Liz Brown and Gilbert Sylvia, "HAACP methodology is adopted as part of a total quality management (TQM) system," a "means of achieving consumer satisfaction through consistently high quality and safety" (1994: 20). An approach to quality control that became popular in the 1980s, TQM marks a different way of conceptualizing production and new techniques for assessing it, as Elizabeth Dunn argues in her study of a Polish fruit juice and baby food manufacturer:

The primary difference that TQM brought to manufacturing was an emphasis on the idea that products are not just *products*—manufactured things that must be inspected after production to ensure their quality. Rather, products are the result of an ongoing *process* that can be broken down into repeatable, measurable steps, contained within statistical parameters, analyzed further in order to explain and correct defects, and tinkered with to produce improvement. (2004: 99)

Dunn's analysis shows how TQM record-keeping requirements, not unlike HACCP provisions, force workers to discipline themselves to regularly and correctly perform tasks, even when managers are not physically present. She further argues that the mediation of managerial oversight through paper logs and documentation only makes supervisors' disciplinary gaze more powerful, as it comes to more closely resemble the impersonal yet omnipresent surveillance of Foucault's panopticon (2004: 100-101).

In Bristol Bay, we see that the growth of this sort of discipline exists very much alongside the more direct quality control modes employed by QCs, tenders, and health inspectors. In fact, both work together to reconfigure ever-narrower slices of productive activity to compose particular quality forms. Significantly, besides breaking down and systematizing production processes in the fashion Dunn describes, TQM approaches like HACCP also facilitate the coordination of discrete production steps with more and more rigorous global standards. As economist Gerhard Schiefer notes, TQM rose to prominence alongside what he describes as the "system improvement efforts" initiated by the development of a new series of global standards for quality management, the ISO 9000 standards (produced by the non-governmental International Organization for Standardization) (Schiefer 1997: 139). The injunctions and prohibitions Bristol Bay fishers face when attempting to harvest or process quality salmon can be traced to standards that increasingly apply across industries and production sites.

Even as TQM has not yet wholly replaced prior forms of quality control, its own eclipse is already being heralded. In recent years, certain management gurus have begun to argue that TQM has become outmoded in a world in which, much as Callon characterizes, "joint efforts of the consumer and the firm...are *co-creating* value through *personalized experiences* that are unique to each individual consumer" (Prahalad and Ramaswamy 2004: x, emphasis in original).¹¹⁷ University of Michigan business

¹¹⁷ In a recent paper delivered at the annual meeting of the Society for Cultural Anthropology, Foster explicitly associates Prahalad and Ramaswamy's argument about the co-creation of value through personalized experiences with Callon's account of the reflexive processes of qualification in the "economy of qualities" (2006a).

professors C.K. Prahalad and Venkat Ramaswamy argue that, given the importance of "the *quality of co-creation experiences*," there is a "basic tension" between TQM and what they call "Experience Quality Management" or EQM: "Traditional productoriented TQM taught us to stamp out variation in a bid to control product quality. But EQM means combining heterogeneity—in other words, variability—with quality of execution" (2004: 113, emphasis in original).

To wrangle these "seemingly contradictory demands" for standardization and uniqueness, Prahalad and Ramaswamy recommend designing products and processes to "accommodate variation in experiences while reducing variation in the quality of the supply processes that are activated to co-construct those experiences" (2004: 113). They offer the example of the outdoor store REI, which, they posit, facilitates co-creation by connecting particular customers and knowledgeable employees, well versed, for instance, in autumn mountain biking in the Rockies (Prahalad and Ramaswamy 2004: 114). On the one hand, exactly as we have seen in the production of quality salmon, Prahalad and Ramaswamy clarify their argument by claiming that standardized quality is a "necessary, but not sufficient" determinant of "quality" experiences (2004: 114). Thus, experiences privileging heterogeneity or variability still spring from closely monitored quality specifications.

On the other hand, however, Prahalad and Ramaswamy's analysis highlights that the means of assessing and assuring quality are simultaneously changing as the notion of quality expands to encompass further attributes of differentiation, like the artisanal, natural, or local in the case of food products. As we have seen, the pursuit of quality salmon in Bristol Bay has led to other forms of self-regulation alongside strictures

imposed by state or corporate bodies. In the same way that fishers discipline themselves to stop "fishing for poundage" so that they can lay down padding on the deck or make an extra trip to deliver fresher fish, the meticulous practices that constitute quality are often self-imposed, even if not necessarily freely chosen. While required practices like those outlined in HACCP plans represent the minimum standards for fish produced in the U.S., quality salmon typically require additional layers of qualification, as the next chapter section will elaborate, and other forms of control.

Specifically, guaranteeing the growing array of quality specifications often relies on the designations of third-party auditors. In recent years, agro-food researchers have documented the rise of a veritable industry of independent certification bodies that accredit a good and/or its production conditions as "quality," "sustainable," "free trade," "ecologically friendly," "socially responsible," and such. Like the detailed knowledge of autumn mountain biking in the Rockies that, as Prahalad and Ramaswamy aver, facilitates a quality experience, contemporary food qualification is similarly reliant on the exchange of trustworthy knowledge. Through the growth of certification and auditing as a means to establish various claims to quality, quality assurance modalities are further expanded: They address the quality of the product, as in traditional "QC"; the process of manufacture, as with TQM; and, with certification, even the accuracy of claims about quality of both product and process—the quality of the knowledge of quality itself.

At many of the industry conferences I attended during my fieldwork period, fishers and processors were encouraged to pursue various certifications and the seals they enjoin as a way to positively differentiate their product. These further rungs of qualification are pursued voluntarily, just as many fishers in Bristol Bay feel they cannot

but pursue quality even though they are not required to do so by regulation. In fact, participation in such certification programs themselves is often termed in the industry as "voluntary/mandatory," an Orwellian-sounding term meaning that requirements are mandatory once the program is voluntarily joined.¹¹⁸ For example, one particular "voluntary-mandatory' program of quality assurance" is the Alaska Quality Seafood® (AQS) Program, whose self-described mission is "ensuring the best salmon in the world is also the most consistent and high quality" (AQS 2004, 2006). AQS certification entails adherence to highly regularlized provisions throughout the entire "chain of custody": It calls for "strict quality handling practices on the boat and in the plant," evaluation through "established uniform grading standards," and then verification of both handling practices and final products themselves with "independent third-party quality inspections" (AQS 2004, 2006). According to its own 2004 report, the program has met with success: "Participation by the fishing and processing industry is growing, and the seafood markets clearly pay higher prices for seafood of Certified [sic] quality" (AQS 2004).

The growing popularity of quality and the increasing heterogeneity of elements it embraces means that the concept includes approaches, images, and ideologies that at times can be contradictory. This sets the stage for some of the paradoxes we have already observed: As Jeri-Lynn's efforts to legalize her smoked salmon business indicate, despite the strong association of quality salmon with "Native" production, the

¹¹⁸ A U.S. government report entitled "Agricultural Postharvest Technology and Marketing Economics Research" explains that food labeling can be an example of a "voluntary/mandatory program—i.e., participation in the program is voluntary, but if a firm elects to participate, it must follow a mandatory labeling format and provide the necessary research data to support its label" (U.S. Congress Office of Technology Assessment 1983: 67).

regulatory requirements that define quality often prohibit the very processes that constitute "Native," "traditional," "local," "artisanal," or "authentic" methods. Yet most often, as Bob Bell emphasized to fishers at the Dillingham workshop, added layers of distinction can only be applied effectively to quality salmon (such as that pictured in Image 27 below), which by definition must be as "defect-free" as farmed fish.

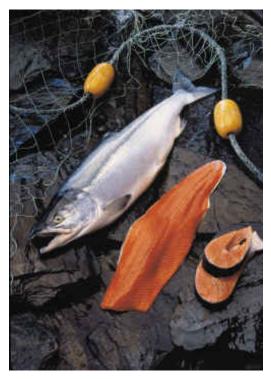


Image 27. "Quality Sockeye Salmon." (Image source: Captain Correia's Wild Alaska Salmon 2008)

Just as quality salmon is a commodity that would appear as if not mass-produced, it is a product of labor and nature that are geared toward making their own transformative interventions invisible. In large part, the aesthetic of quality in its narrowest sense is defined by a lack—of gaping, bruising, and other signs of human handling more generally.¹¹⁹ As industry experts often try to explain to fishers, quality salmon is that

¹¹⁹ This "untouched" aesthetic is hardly limited to salmon or seafood. According to Elizabeth Emma Ferry (2005), the apparent absence of human handling garners higher prices for hard-rock minerals as well.

which seems to have moved unmediated from ocean to plate: The job of the fisher is to merely to preserve intrinsic quality, "to ensure the intrinsically superior attributes of Alaska seafood reach the customer and are not compromised" (ASMI 2006b). Along with its erasure of marks of labor, quality is also characterized by the absence of fleshly features that mark the fish as decaying matter, such as visible blood lines and any blush of "belly burn."¹²⁰ Desirable fish appear in the form of a product ready for consumption, as human food rather than a dead animal, but one that seems to spring effortlessly from pristine waters. The meticulous manipulations of labor and nature that produce such untouched-looking fish are successful insofar as they conceal their own work.

At the same time that quality makes many social and natural practices invisible, however, it is also accompanied by the hyper-visibility of producers and consumers themselves as analytically privileged endpoints of commodity chains. Making and marketing the singular salmon commodity, which requires the intensive individuation of fish—fishers must carefully handle each delicate organism, which is later thoroughly inspected for quality and positioned as unique within the larger salmon landscape—also engenders the individuation of producers and consumers, as buyers ultimately choose a product that seems to have been made for them by producers whose identity is in fact a point of sale. As the next chapter explores, the seeming effacement of the work of labor and nature central to quality production is only part of the story: The qualification of specialty salmon depends on the elaboration and application of enriching narratives of labor and nature as well.

¹²⁰ According to a consulting firm specializing in U.S food quality standards, a blood line is "a line of blood located along the backbone of the fish that often is removed prior to the fish being frozen or further processed"; belly burn is "deteriorated meat in the belly cavity of a fish due to enzyme action" (FDA Consulting Services 2006). Belly burn is typically associated with reddening and discoloration of the belly flesh, and sometimes protruding bones.

Chapter Six

Signifying Substance

As noon approached on the second day of the Dillingham processing workshop, the mid-morning panel on product development was interrupted by rustlings of activity from the kitchen area at the back of the Bingo Hall. A steady stream of packaged goods sprang from the industrial-sized refrigerator, and salmon patties started to sizzle on the stovetop. That day we were all being treated to a salmon-themed luncheon, courtesy of the product development presenters themselves. By the time the food was served, a wide array of options lined the tables at the back of the room. I joined other hungry workshop participants in filling my plate with a salmon burger and some additional choice bits: pieces of a salmon jerky product being developed by Bob Bell; chunks of smoked fish brought by a small processor from a predominantly Tlingit Indian village in the southeast part of the state; and slices of lox produced by Wild Choice,¹²¹ a company that seeks to supply specialty markets with quality fish sourced from rural Alaska.

I found myself in the lunch line next to Erma Swensen. Erma had traveled to Dillingham from the village of Egegik along with her daughter to attend the workshop. Both were longtime set netters. A small community on the east side of Bristol Bay with a year-round population of only about 100 people, Egegik is the site of a high-volume and

¹²¹ "Wild Choice" is not the company's real name. Except for prominent national entities like Whole Foods and the Marine Stewardship Council, I use pseudonyms for the smaller businesses I describe in this chapter as well as for their owners—doing otherwise would undermine my informants' anonymity.

notoriously competitive summer fishing district at the mouth of the Egegik River. I had met Erma on several prior occasions: She held a number of leadership roles in the village and region during the time I conducted fieldwork, and we seemed to end up at many of the same meetings, conferences, and workshops. Her numerous responsibilities never seemed to ruffle her, though, and she always maintained a pleasant and soothing grandmotherly demeanor.



Image 28. Sampling Salmon at the Workshop. Photo by Liz Brown.

As Erma and I made our way down the tables, we joined those around us in sampling the offerings and sharing opinions about the foods and their presentation (Image 28). The luncheon quickly took on the feel of something between a potluck and a focus group. Though she was fond of the flavor of the smoked fish and the spice of the jerky, Erma was especially impressed by the Wild Choice packaging: It contained a great deal of information about the positive qualities of the salmon inside, and even included a map of the Bristol Bay region on the back, along with descriptive details about the area and its mostly Alaska Native population. "I just love how they put Egegik on the map!" she marveled, noting that the village of Egegik, as well as other Bristol Bay fishing communities, appeared individually named and located on the image of Alaska found on the back of the wrapper.

I think of Erma and her genuine appreciation for the way Wild Choice puts Egegik "on the map" of faraway consumers every time I make a trip to my local Whole Foods grocery store, which opened in Ann Arbor during the two years I was doing fieldwork in Alaska. Whole Foods stocks a handful of Wild Choice products, and I have seen items on the shelf bearing the same detailed Bristol Bay-area map that I first observed at the Dillingham workshop. When viewed on the seafood aisle next to competing products and amidst an entire store of "natural and organic foods" (Whole Foods Market 2007b), the particular qualifications layered atop and embedded in Wild Choice salmon position it as distinct from other goods yet consonant with common themes: The market's mission to vend "food in its purest state," products of "the highest quality" obtained "locally and from all over the world, often from small, uniquely dedicated food artisans" (Whole Foods Market 2007a). For Erma and the innumerable Bristol Bay fishers who echoed her sentiments throughout my field research, to be located as a site of quality, labeled as an artisanal producer, associated with food in its purest state—or perhaps simply to be represented in consumers' eyes at all—seemed of great importance, as if coming into view offered an alternative to languishing in obscurity.

Maps and Dreams

As exemplified by the marketing strategies of Wild Choice and Whole Foods more broadly, producers are becoming increasingly visible in the positioning of quality food items, in which the identity of the maker, methods of production, and geographical origins appear as points of sale. This growing visibility of producers on specialty supermarket shelves occurs alongside the rising visibility of consumers—their perceived wants, needs, predilections, and habits—in the formulation of production processes, as illustrated in the previous chapter by the push for fishers to conceive of their catch as already the object of another person's plate. How are producers and consumers represented through these reciprocal envisionings and enplotments? What assumptions about the nature of exchange and the exchange of nature underpin such representations? Which identities and practices do they bring into view, and which remain unseen?

Academic commentators have duly noted the twin dynamics by which certain producers and consumers are becoming more visible on the literal and metaphorical maps of one another. The explosion of scholarly literature on the "quality turn" in agro-food industries has examined the expanding popular awareness of the specific contexts in which specialty food items are made and used—which both depends on and generates detailed forms of knowledge about far-flung commodity circuits and conditions—and the rising extent to which this knowledge is reflexively incorporated into everyday market practice (e.g., DuPuis 2000, Goodman 2003, Goodman and DuPuis 2002, Goodman 2004). In fact, geographer Michael Goodman argues that this knowledge itself is often drawn into commodity exchange, as material goods are increasingly transferred in

tandem with a "traffic in particular 'political-ecological imaginaries" (Goodman 2004: 891).

As Robert Foster contends, the dynamics of economic globalization have sparked a "current fascination with border-crossing mobility," which has in turn fueled a pervasive interest in "the social and geographical lives of particular commodities" across both scholarly and popular arenas (2006b: 147). Specifically, Foster draws attention to the proliferation of academic studies about commodities as well "a spate of popular books" devoted to tracking products from cod to coal to tobacco (2006b: 147). My Bristol Bay findings further demonstrate that it is not just anthropologists, geographers, and rural sociologists who are interested in the biographies and geographies of salmon, to continue to draw upon the vocabulary introduced by Arjun Appadurai's volume on the social life of things (1986b). As Erma's enthrallment with Egegik's appearance on the Wild Choice map indicates, there is substantial evidence of widespread interest among producers and consumers alike in hearing, seeing, crafting, and evaluating such narratives; the traffic in "political-ecological imaginaries" is a two-way street.

This chapter examines the representations through which Alaskan salmon and its producers are positioned to consumers. What relationship, if any, do the representations that figure in salmon promotions have to the ones Bristol Bay fishers employ to understand the objects of their labor? By tracing the composition of categories through which Alaskan salmon comes to be known in the market, I demonstrate how salmon exchange is enacted through efforts to make legible others' places and practices. If reinventing the industry starts with remaking the commodity, a critical component of this entails engaging and reworking the concepts used to position it.

Geographies and Biographies

Like most of the other foods showcased at stores like Whole Foods, high-end Alaskan salmon makes much of the uniqueness of the fish and that of its producers. As the Wild Choice packaging suggests, emphasis is heavy on an item's geographical origins and associated "biographies"—both in the sense of the social profiles of its producers as well as its own particular commodity "career" and methods of production.¹²² As Ian Cook and Philip Crang observe in their examination of the rise of "ethnic" cuisine in the "fashioning of London as cosmopolitan metropolis," the local articulation of global flows of people and products "works through the deployment of various constructed (and, of course, contestable) 'geographical knowledges' about where its foods, and other cultural objects and actors associated with them, come from…" (1996: 132). What representational tropes and conceptual categories underlie the geographical and biographical knowledges through which quality Alaskan salmon is positioned?

Since the early 1990's, researchers have documented the growing significance of "geographical product descriptors" as an effective marketing tool for local foods (e.g., Hodgson and Bruhn 1993). This is especially true in the case of Alaskan salmon. Although some Alaskan salmon is qualified by its method of harvest,¹²³ its association with Alaska itself is typically its biggest selling point, especially since fish farming is illegal throughout Alaska. Moreover, as indicated by the Wild Choice wrapper, the

¹²² In Cook and Crang's frequently cited discussion (1996), the latter sense is used. My analysis here suggests that while production methods are certainly a factor in product positioning, images of idealized endpoints of commodity chains are emphasized above the myriad intermediary moments of processing, transport, and exchange that complete the circuit. Thus, salmon "biographies" are often less chronicles of careers than creation stories or origin myths.

¹²³ For instance, fish caught by hook and line trolling, which is practiced in parts of southeast Alaska, is generally thought to be of superior quality than net-caught fish, like those harvested in Bristol Bay. The Alaska Board of Fisheries sets the harvest methods permitted in each region.

widespread regional marketing that has developed in recent years takes this one step further, attempting to parlay the particularities of fish returning to different river systems into evidence for boutique piscatory profiles, like wine from the Napa Valley, or Bordeaux, or even a particular vineyard in Napa or Bordeaux.

For Cook and Crang, the rise of this place-based marketing bolsters their contention that, "geographical knowledges—based in the cultural meanings of places and spaces—are...deployed in order to 're-enchant' (food) commodities and to differentiate them from the devalued functionality and homogeneity of standardized products, tastes and places" (1996: 132). They call particular attention to "what Scott Lash and John Urry have termed the 'touristic quality' of much contemporary consumption" (Cook and Crang 1996: 135). Indeed, the copy that accompanies Alaskan salmon products and promotions is often indistinguishable from tourist literature, particularly since both rely on a common set of motifs to depict Northern peoples and places. If, as Jonathan Marsden, Terry Murdoch, and Jo Banks argue, quality with respect to food products "is coming to be seen as inherent in more 'local' and more 'natural' foods" (Murdoch, et al. 2000: 108), Alaska is well positioned for its marketing: The locality of Alaska is synonymous with the natural in its efforts at self-promotion and, often, the popular imagination.

In fact, Alaskan salmon marketing relies on some of the same tropes and rhetoric found in state tourism campaigns to convey a remarkably similar message of unparalleled naturalness. This is especially evident in the Alaska Seafood Marketing Institute's (ASMI) state-sponsored seafood promotions, which invoke Alaska's popular identity as a

land of vast, untrammeled wilderness—what Susan Kollin (2001) has termed "nature's state"¹²⁴—in order to market its salmon as uniquely natural and pristine (see Image 29).

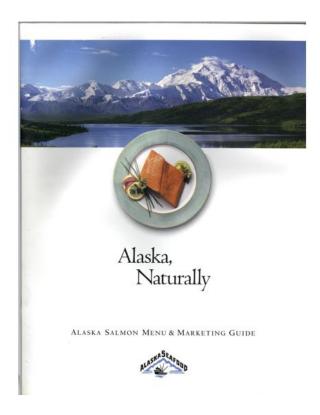


Image 29. "Alaska, Naturally." (Image source: ASMI n.d.)

In key materials, ASMI uses tourist-brochure descriptions of the region's physical landscape to characterize Alaskan marine life: "With over 3 million lakes, 3,000 rivers and 34,000 miles of coastline, Alaska is one of the most bountiful fishing regions in the world.... Swimming wild in these icy pure waters, and feeding on a natural diet, Alaska Seafood develops a superior texture and unparalleled flavor prized by chefs and connoisseurs alike" (2006a). In this account, as in countless others, Alaskan fish are

¹²⁴ Ironically, this identity of Alaska as state of nature is used to promote tourism as well as extractive resource development, pursuits that are at times at odds; in both cases, Alaska is presented as a rich body of nature, primal and pure, whether for human contemplation and appreciation, on the one hand, or utilization and exploitation, on the other.

indexically linked to the landscape's pristine nature, their desirable features pointing to unpolluted seas and a rich diet as smoke signals a fire. But these connections are also conjured iconically as well, through relations of resemblance that cast Alaskan salmon as the embodiment of Alaska itself, as nature incarnate.

The Wild Choice package design that Erma found so exciting offers a remarkable illustration of both semiotic strategies, in addition to providing a further demonstration of touristic representation: Guidebook-style text and maps guite literally envelop the salmon substance. Let us look closely at one example. The Whole Foods store in Ann Arbor is currently stocked with Wild Choice smoked "Artic Keta®" from Kotzebue, a rural hub along Alaska's northwest coast. "Keta" salmon itself is a somewhat recent creation—a trade name coined by salmon marketers to make Oncorhynchus keta, a species of fish nearly everyone in Alaska refers to as "chum" or "dog" salmon, more commercially successful. In fact, "Arctic Keta Salmon Quality Certified" is listed as a registered trademark (or, more precisely, "wordmark") held by the Alaska Fisheries Development Foundation (U.S. Patent and Trademark Office 2007). As Seafood Business reporter Fiona Robinson explains: "In 1997, the state of Alaska launched the Arctic Keta branding program, patterned after successful Copper River salmon promotions, to create niche markets for wild chums from western Alaska. Salmon producers in the region must adhere to a strict quality-assurance program in order for their product to carry the Arctic Keta brand name" (2000).

By most accounts, the Arctic Keta branding campaign has met with considerable success. On its website and in agency materials, the Alaska Fisheries Development Foundation prominently features its "aggressive project to pioneer new markets" for the

specially branded fish. It chronicles its nationwide keta promotional efforts—like bringing consumers from Florida, Oklahoma, and the U.S. Midwest "to the table to taste" "Arctic Keta® salmon from Western Alaska for the first time"—and duly notes an increase in the production and sale of such quality certified keta despite depressed returns during the same period (Alaska Fisheries Development Foundation 2007). When I struck up a conversation about the campaign with a Foundation representative at an industry convention in the fall of 2002, one of her colleagues quickly chimed in from across the booth. "You're talking to the architect of that campaign," he announced quite loudly and gleefully, "she's the one who made it happen!" The marketer blushed with what seemed to be both pride in her work and bashfulness at her colleague's very public commendation. No doubt the visionaries who transformed the Patagonian toothfish into the wildly popular Chilean sea bass—so popular, in fact, that populations are now endangered (see Knecht 2006)—were similarly lauded.



Image 30. Keta Salmon. (Image source: Orca Bay Seafoods 2008)

Throughout my fieldwork, I observed how the term "keta" now circulates across industry contexts refer to chum salmon (Image 30). And while I cannot recall a single instance in which fishers employed the word keta to talk about chum salmon in casual conversation, many who market their catch have adopted the name as a label for their fish and use it when dealing with their customers. The other more popularly held referents for the species in Bristol Bay—dog or chum—come with their own semantic baggage. Although the implication is sometimes made that the fish are called dogs because they have long been processed to feed dog teams in western Alaska, there seems to be more substantiation for the notion that the dog moniker comes from the hooked snout and very large teeth, which resemble canine teeth, that male chum in particular develop as they approach spawning (see ADF&G 2007e, Jordan and Gilbert 1881, Washington Department of Fish and Wildlife 2007). Regardless of its etymology, the semantic linking of fish with dogs might not hold great appeal for the likes of Whole Foods seafood shoppers. Nor are chum associations any more likely to whet the appetites of those not already familiar with its salmon usage. According to the OED, the chum's definition as the "dog salmon, Oncorhynchus keta" is derived from "Chinook jargon" from the Northwest Coast; but its much more common usage is a meaning with obscure origins in the U.S. that points to either "refuse from fish" or chopped-up chunks of dead fish used as bait (Oxford English Dictionary 2007).

Perhaps unsurprisingly, it is the official Artic Keta wordmark rather than any reference to chum or dogs that appears on the front of the Wild Choice smoked salmon package, along with seals from Salmon Nation and the Marine Stewardship Council. Salmon Nation is an organization devoted to promoting salmon abundance, while the

Marine Stewardship Council (MSC) is a nonprofit organization that promotes responsible fishing practices. The MSC seal certifies that a seafood product was harvested from a well-managed and sustainable fishery, as the small print accompanying the seal makes explicit. Beside those seals is a Kotzebue logo, a graphic icon that is applied to all Wild Choice goods sourced from Kotzebue. (The company "partners with" a number of Alaskan regions or villages, each of which has its own particular logo applied to products from its region.) The Kotzebue logo contains an outline of a traditionally clad Iñupiaq figure encircled by two large fish, positioned atop a miniature map of Alaska shifted north toward Kotzebue. Beneath the logo, a product summary appears: "Caught by the Iñupiaq Eskimos, this exceptional wild salmon is revered for its delicious yet delicate flavor."

The back of the package is even more descriptive, containing geographical and biographical bits that are actually more reminiscent of short encyclopedia entries than tourist guidebook excerpts. Indeed, if prospective salmon buyers are inerpellated as food tourists by the Wild Choice packaging, they are tourists for whom a significant amount of fact-filled background information only seems to add to their appreciation of the product. On the wrapper's reverse, a larger state map with a starred Kotzebue is accompanied by three text sections that provide further information on "The Salmon," "The People," and "The Place." With respect to the salmon, buyers learn that, "Wild open oceans, artic waters and remote ruggedness combine to create the cherished and natural flavor of Arctic Keta® salmon…perfect for health conscious consumers." As to the people, "In Kotzebue," shoppers are informed, "salmon is a way of life": "Each summer, millions of these magnificent fish return to an untamed and frigid land of vast rivers to spawn. Like

the salmon, Alaska Native fishermen also return, leaving their small villages to harvest the seasonal salmon. It is a cycle that has continued for thousands of years." So, too, we are told that the place is "a remote coastal community 26 miles north of the artic circle...the commercial center for ten villages of mostly Iñupiaq Eskimos."

By means of both words and images, causal claims and conjured likenesses, factoids and evocations, the salmon is imbued with geographies and biographies that are themselves filled up with pictures of nature. In these modes of representation, the Iñupiag fishers participating in millennia-old cycles are explicitly compared to the salmon themselves, as both serve to mark the other as a potent sign of "untamed" nature. As this imagery suggests, the social otherness of Alaskan salmon producers is central to seafood marketing strategies, much as bell hooks argues about the voracious latetwentieth-century appetite for all things "ethnic" in her well known essay "Eating the Other" ([1992] 2000). In the case of Alaskan salmon, however, we find that this otherness is primarily the otherness of nature itself. Despite the foregrounding of the food's origins in production, the precise calibrations and reconfigurations of the bodies of people and fish that are essential for creating, controlling, and certifying quality remain largely hidden from view. Although the producer becomes exceptionally visible through the marketing of specialty salmon-as when affixed to salmon packages in stylized form-this figure is evacuated of any transformative human agency: The singular fisher is merely a medium for the transfer of nature. In this respect, the multiple modalities by which Native Americans are stereotypically represented in white public space, as has Barbra Meek (2006) has explored, are layered upon one another. The noble savage is rendered a silent conduit for nature itself rather than a voice of its cultural expression.

Narratives of the Natural

The geographies and biographies summoned by the representation of quality salmon in the market inscribe forceful narratives of the natural. But what kind of nature do they convey? In a recent article on "postindustrial natures," K. Sivaramakrishnan and Ismael Vaccaro argue that a key feature of these formations involves "a blurring of the age-old boundary between the 'social' and the 'natural'" (2006: 306). To buttress this view, they assert that agriculture, for example, has now "become an amalgam of nature and culture, hence, patrimony too": "The quality label movement, explaining the origin, hence the quality, of agricultural products has spread across Europe. Wine, cheese, nuts are branded as locally and 'naturally' produced, in opposition to industrialized mass production" (Sivaramakrishnan and Vaccaro 2006: 308). Indeed, the making and marketing of quality salmon offers yet another instance of what Sivaramakrishnan and Vaccaro identify as the way particular industrial forms like factories and family farms, once they can be seen as "residues of Fordist industrialism," come to be interpreted as consonant with nature through a "naturalisation of uncomplicated views of industrial life" (2006: 306). Yet rather than view the tendency to elide the local and the natural as a "blurring" of nature and culture, I want to suggest that it more accurately points to a repositioning of the lines through which an opposition of nature and culture is drawn. The products of postindustrial nature may themselves be forged from deeply hybrid natural-cultural forms, but they nevertheless position themselves on one side of a sharply bifurcated divide.¹²⁵

¹²⁵ This point clearly evokes Bruno Latour's (1993) oft cited observations about the drive for "purification" amidst the proliferation of "hybrids." While this echo is deliberate, my primary aim in this chapter is not a

In the previous chapter, we learned how attributions of quality were bestowed on products that bore no traces of perceived defects like those acquired in harvest and transport, nor even any overt signs of human workmanship: Quality in its narrowest sense is defined by the appearance of a radical absence of mediation. Quality production aims to make fish that seem as if they've leapt straight from the sea onto a dinner plate. In a parallel fashion, quality promotion mobilizes an idea of the natural that foregrounds freedom from any deleterious human influence. Even as the Wild Choice package attests to the product's naturalness through the multiple certifications and associations layered atop the item, this added notion of the natural is one that nevertheless privileges absence: of pollutants, additives, or the moral grayness that might apply to purchases of competing seafood.

Representations that emphasize the "pure," "pristine," and "untamed" (read, fundamentally untouched or unmediated) qualities of salmon not only reflect the popular identity of Alaska—within a larger landscape apparently awash with contamination—but also dovetail with Alaskan fishers' tireless efforts to position their wild salmon in sharp contrast to farmed salmon. Wild salmon is portrayed as natural and good, on the one hand, and farmed salmon as unnatural and bad. Interestingly, despite the implicit contradistinction in much of its "go wild!" rhetoric, ASMI itself tends to be reluctant to explicitly attack farmed salmon in its campaigns. Officials argue that this will only confuse average consumers and scare them away from salmon altogether. In addition, fishers are quick to point out that a large part of ASMI's funding comes from seafood processing companies that also have significant interests in the aquaculture sector.

consideration of the same kinds of questions involving agency that Latour engages these distinctions to elucidate.

Given that farmed fish is reviled by most Alaskan fishers, industry boosters, and even state residents, the degree to which state salmon promotions should work to discredit farmed salmon has been a controversial and hotly debated topic since aquaculture's rapid rise. Throughout the time I conducted fieldwork, in venues ranging from newspaper editorials to radio call-in shows, ASMI officials were called upon to justify the organization's approach. In fact, an email exchange in late 2002 between a disgruntled fisherman and ASMI director Ray Riutta was widely circulated at the time and is still archived on the website of the United Fishermen of Alaska (UFA). In attempting to answer the question at hand—"Why don't we come out and conduct a frontal assault on farmed [salmon]?"—Riutta first points out that "most of the large retail food chains that sell our salmon also sell farmed salmon," and "do not expect their wholesaler (that's us) to be openly attacking other products they sell" (UFA 2007). In addition, he highlights what he calls "a fundamental marketing rule": "direct attack ads by people with similar products generally do not work" (UFA 2007).

Here, at least from ASMI's perspective, wild salmon's encompassment within the broader salmon market category complicates any differentiations that would seem to overtly impugn the admittedly hybrid category as a whole. In a report cited by the Special Committee on Sustainable Aquaculture of the British Columbia Legislative Assembly, Riutta is further quoted as saying, "We don't want to get into the accusations, because they bring the whole salmon category down and it gets people eating pork and chicken when we really want them to eat our fish" (Special Committee on Sustainable Aquaculture 2006: 877). This passage underscores that making and marketing distinctions among salmon types under the larger salmon (or even fish or seafood) rubric

displays the nested oppositions of sameness and difference, comparability and uniqueness that underlie the production and qualification of commodities as detailed in the previous chapter. Moreover, it suggests a point that marketers often make explicit in their dealings with fishers: that the dramatic expansion of salmon consumption that has accompanied the broadening of substances included in "the whole salmon category" offers new market opportunities for wild salmon in addition to its more obvious challenges.

Fishers who market their own catch, however, tend to more actively dissuade consumers from purchasing farmed fish. Daniel Silverman was first introduced to me as a "farmed fish fighter," a reputation he had acquired because of his strong conviction that the Alaskan salmon industry needed to more aggressively distinguish its product from farmed fish. Danny runs a drift operation in Bristol Bay each summer, then returns to his year-round home in North Carolina during the off-season to market and sell a portion of his catch. He operates his small business, Silverman Seafoods, out of his home. As a purveyor of salmon "direct from the fisherman" to local shops and customers at area farmers' markets, Danny has developed a niche-marketing venture that depends on his ability to compellingly differentiate his more expensive offerings from those obtainable through the mass market. While he began the business as a way to increase his income in the face of dwindling fishing earnings, he finds that his days spent alongside vendors of free-range eggs and locally grown organic vegetables have made him even more committed to the politics of alternative food networks and further convinced of the better taste and health benefits of the products circulated through them.

On the Silverman Seafoods website and in Danny's face-to-face pitches to retailers and consumers, he aims to educate and win over customers by very explicitly

contrasting the health, taste, and ecological plusses of his "All Natural, Wild Seafood from Sustainable Alaskan Fisheries" with the perils of farm-raised products. He explains that while "[w]ild salmon swim free in their natural habitat," "eating only natural foods like shrimp, herring, and squid" in waters that are "among the world's cleanest":

Farm-raised fish, on the other hand, are raised in crowded pens that breed disease and parasites. Salmon farmers combat this threat with vaccines, antibiotics, pesticides, fungicides, algaecides and other chemicals. Farm-raised salmon are fed synthetic carotenoids to color their flesh. The most common dye used, canthazanthin, is suspected of causing vision damage. The EU restricted [sic] its levels in 2003, but Chilean and North American farmed salmon still contain 4 times the level allowed in Europe.

In sharp contrast to "all natural" salmon reared in a "natural" habitat on "natural" foods, farmed fish are portrayed here as contaminated by toxic chemicals and seeped with synthetic additives. In this respect, Danny's depiction of farmed salmon recalls the anti-aquaculture bumper stickers broadly popular in Alaska, including "Farmed Salmon: Dyed for You" and "Say No to Drugs—Don't Eat Farmed Salmon," which reference the color additives and antibiotics given to most farmed fish. As depicted by their detractors, farmed salmon are not simply not natural, but almost unnatural—hyper-engineered, artificial things disguised as natural ones by their deceptively rosy carotenoid glow.

In such accounts, farmed salmon are often further depicted as the imitation knockoffs of a natural original, the real that is wild salmon. For instance, as one longtime Bristol Bay fisher who is now heavily involved in anti-aquaculture activism told a reporter in reference to escaped farmed salmon, "[a]sking a wild salmon fisher to go for farmed fish is like asking a dairy farmer to promote margarine" (quoted in Dorry 2001). This opposition of (real) dairy butter to (artificial) margarine is strikingly similar in structure and content to metaphors employed by others. In an article published in a small

regional magazine devoted to healing, natural foods, and sustainability, Danny promotes the consumption of wild salmon through a highly descriptive account of Bristol Bay along with an aside that explicitly contrasts wild salmon with its farmed competition. "These are a poor imitation of the natural fish," he writes of farmed salmon, "about as similar in taste and health benefits to a wild salmon as Tang is to orange juice." Although margarine and Tang are less menacing associations than those that emphasize actual toxicity, they quite powerfully highlight the extent to which ideas of the natural are closely bound to notions of the real and authentic in much wild salmon representation.

Pointing to Purity

In their efforts to draw sharp distinctions between farmed and wild fish, Alaskan wild salmon boosters and sellers tend to devote most of their energy to educating consumers about the various environmental "bads" from which their fish are largely free. Aside from the laundry list of "vaccines, antibiotics, pesticides, fungicides, algaecides and other chemicals" associated with farmed fish, they are also quick to note that their fish have much lower levels of mercury and PCBs than are found in many other fish species, even wild ones. As Wild Choice informational material maintains, such statistics support the contention that Alaskan wild salmon are among "the purest of all wild fish species" and "the purest of seafood options" more generally.

In addition, wild salmon promotions also tend to announce the presence of certain corporeal "goods." For example, no promotion of wild salmon fails to mention its substantial quantities of Omega-3 fatty acids, a type of lipid that in recent years has been linked to health benefits in a number of scientific studies. Indeed, Omega-3s are featured prominently in the various "health" sections of the websites of ASMI, Wild Choice, and

Silverman Seafoods alike. The Silverman Seafoods website additionally notes that these fatty acids are much more plentiful in wild salmon than in farmed varieties. Besides the fact that the diet of wild salmon is necessarily different from that of farmed fish, farmed fish are most often Atlantic salmon, a different species from all five types of Pacific salmon found in Alaskan waters, and one with notably different flesh features and composition.

As such promotions provide fitting examples, product information on Alaska salmon often comes replete with facts, figures, and recommendations gleaned from recent scientific studies. The efforts of Silverman Seafoods, Wild Choice, and ASMI alike to document the purity and naturalness of wild Alaskan salmon provide striking evidence of the centrality of science in product qualification. Claims are generally substantiated with reference to particular medical experts or research data, and often rely heavily on technical terminology and statistical presentations. Examples range from commentary about the effect of Omega-3s on "LDL (bad cholesterol)," with references to the work of "medical professionals" like Dr. Andrew Weil (the integrative medicine guru who once appeared on the cover of *Time Magazine*) and Dr. Barry Sears (proponent of the Zone Diet); to a graph that shows the exact findings of a product contaminant analysis, accompanied with data indicating low levels of mercury-only .03 ppm-and no detectable amounts of PCBs in the random wild Alaskan salmon samples tested. Like the numerical specifics woven into the other promotions we have seen—Alaska's 34,000 miles of coastline, for instance, or Kotzebue's location 26 miles north of the Arctic Circle-this detailed product information attesting to purity and naturalness is conveyed with the kind of precision that suggests its rigorous authentication. Evidence of the

presence of goods and absence of bads located in the substance of wild Alaskan salmon is not merely scientific in nature, then, but is presented in the style of science so that it may command the weight of scientific validity.

The proliferation of statistics, research data, and measurements, as well as expert references and neatly plotted graphs, are all pointers that signal features of salmon substance—and, in another respect, their seeming insubstantiality. These indices of the natural, along with those that mark the contaminated and artificial, identify material qualities that are not visible to the senses, particularly to the naked eye. It is precisely the invisibility and imperceptibility of such presumed benefits and hazards that makes their indexing all the more crucial. As Barbara Adam's (1998) work reminds us, the contemporary natural world is one in which poisonous toxins and pernicious heavy metals can lurk within matter that seems spotless and wholesome. Quality fish might be defined by the visual appearance of pure and full presence, salmon that seems to announce itself as embodying ideal form, whose gleaming surfaces of vibrant flesh constitute its essence. Yet its purity can only be established through the rigorous signposting of the presence or absence of other substances, whether PCBs or Omega-3s. And its claims of wholeness and wholesomeness alike can only be demonstrated by the meticulous breakdown of its biochemical composition. These particular semiotic imperatives are only furthered by quality salmon's lack of corporeal signs that point to something else outside of its own substance. The intensive and repeated layering of scientific claims, precise facts, cadastral maps, and depictions of the picturesque on the quality salmon product is no doubt fueled by the idealized muteness of the quality product itself.

Evoking Eden

The carefully documented claims of biochemical purity described above, always cast in the language of science and linked (often literally, through web hypertext) to its experts, often sit right alongside the more romantic evocations laced throughout wild salmon promotions. As the Wild Choice package illustrates, marketing designs tend to employ a pastiche of different representational genres, strategies of appeal, and semiotic techniques. In fact, Danny's article referenced earlier offers an even more poetical description of "The Salmon," "The People," and "The Place" than provided by the brief Wild Choice snippets. Through vivid images of the landscape, he transports his readers to a place "of tundra and lakes with the volcanic spine of the Alaskan peninsula visible in the distance": "It's the world as it once was, where brown bears and walrus outnumber people, where rivers turn red with spawning sockeyes, where you can see hundreds of white Beluga whales chasing the salmon and pods of Orcas hunting the belugas." In this particular version of what ASMI officials talk about as "the whole wild salmon story," the fishery appears as a sort of lost Eden of natural abundance that has elsewhere vanished from the earth.¹²⁶ Bristol Bay is presented as a living, if timeless, relic of an unfallen prehistoric past, othered through what Johann Fabian (1983) might describe as a "denial of coevalness."

Alaska salmon promotions are in fact filled with this type of Edenic imagery and rhetoric. As "Alaska, Naturally," one ASMI menu and marketing guide I picked up at a

¹²⁶ This is not to say that the account is inaccurate in any of its detail. The assertion that brown bears and walrus outnumber people in the region is actually difficult to prove or disprove using existing published data, as the state game management units for brown bears and the ranges of walrus populations do not overlap exactly with the area encompassed by the Bristol Bay fishing district. Moreover, the human population in the region varies greatly with the influx of people during the summer fishing season.

fishing industry convention, begins: "There is one place in the world where the waters are still pristine and rich with the bounty of natural salmon: Alaska!" (ASMI n.d.). In the beginning, such promotions would have it, all the world was Alaska. This is an especially telling permutation of Locke's famous assertion that "in the beginning all the world was America" (Locke [1690] 1952: 29). The echo, along with its alteration, directs attention to both the enduring influence of Locke's foundational liberal doctrine as well as the radical historical-philosophical shifts signaled by the substitution of "Alaska" in place of "America." In the case of both America and Alaska, the state of nature is one in which abundant resources present themselves to be claimed as private goods. In Locke's America, the earth constitutes a site to be molded to human purpose through the mixture of nature and labor. In ASMI's Alaska, however, nature appears as property, as the centerpiece of a personal dinner plate, as if through its own design. In America, nature is seen as misused unless it is tamed and transformed through labor. In Alaska, nature is seen as contaminated unless it is kept in a seemingly pristine, untamed, and untouched state, even though this itself requires as much of a mix of labor and nature as found in Locke's America. In keeping with such Alaskan motifs, ASMI promotional campaigns around the time of the convention dramatized not the human work involved in the commercial traffic in salmon but solely that of the fish themselves: "Nothing Ever Worked This Hard to Reach Your Plate" was announced in 2003 as the theme of its latest promotion, designed to help boost awareness of the fishery's "MSC eco-label," which was first awarded in 2000 (ASMI 2003).

Although perhaps less compelling to some consumers than the "story" of the striving of the salmon itself, whose dramatic journey across high seas to return to the very

waters of its birth is awe-inspiring to most, promotions are also populated with images of hardy fishermen, fishing families, or Native communities engaged in what is cast as another timeless, natural ritual: the age-old custom of making a livelihood from the sea. Despite its success in promoting Alaskan salmon, Native heritage is not the only form of "cultural identification" mobilized for marketing campaigns, nor is it the only producer identity that is connected with nature—and literally naturalized—in the process. In a seafood marketing presentation created by state economic developers that I heard alongside Bristol Bay fishers during my research, three categories of persons were highlighted as representatives of "the unique nature of the people who catch and process the fish" in the Alaskan salmon industry: "Native heritage - fishing for thousands of years"; "Rugged individualists surviving the elements to bring consumers worldwide [sic]"; and "Way of life - Thousands of 'Mom and Pops' in the world of multinational conglomerates" (State of Alaska Office of Economic Development 2007).

By way of marketing imagery that couples such identities with "romantic images of a fishing vessel against a backdrop of rugged snow-topped mountains" (ASMI 2005), promotions reiterate a "state of nature" in which the particular small-proprietor configuration they depict seems as organic and unchanging as the Alaska Native harvesters they portray. To be sure, the Alaskan salmon industry's relatively small-scale, owner-operator fishing outfits do indeed distinguish it from its farmed competition, as well as from a growing number of fisheries across the state, country, and world, which are increasingly dominated by a smaller number of larger players. And we may, for very good reason, prefer these independent owner-operators to multinational conglomerates. But they are not necessarily any more "natural." As prior chapters have chronicled, the

popular image of the independent fisher manning the helm of the lone vessel is in fact a deeply, and relatively recent, historical phenomenon in Bristol Bay. These stylized personas nevertheless serve as a potent resource for fishers as they set out to qualify their products or, as we will see in chapters to come, combat trends of industry consolidation. Yet, as I argue here and elsewhere, they also bound and shape the kinds of identities producers are able to express, as well as the fishery organizations they tend to imagine.

It is not as if the representations designed to promote wild Alaskan salmon like those examined above are false. They are, as any representation, merely partial. In this case, their partiality tends to endow the certain practices and people that inhabit their depictions with attributes that make them functionally equivalent with and harmoniously integrated into a particular rose-colored vision of nature. Thus, the products of "small, uniquely dedicated food artisans" constitute "food in its purest state" on the shelves of Whole Foods. Despite the proliferation of detail mobilized to describe these foods, none are included that would disrupt the clean lines by which the products are distanced from states of seeming impurity. For instance, it goes without saying that one identity not seized upon by state seafood promoters for use in salmon marketing is the persona of the toiling migrant worker who processes fish seasonally for minimum-wage pay.

Purity as Purification

A further example of the way wild Alaskan salmon is subject to processes of purification is the way in which state salmon promotions account for the nearly tens of millions of hatchery fish that return to Alaskan waters each year. The state operates the Alaska Salmon Enhancement Program under the authority of the Alaska Department of Fish and Game (ADF&G). As part of the program, ADF&G oversees more than thirty

hatchery facilities across the state, most of which are located in Prince William Sound and southeast Alaska (White 2006: 1). Hatchery production, which is described in more detail in Chapter One, is often termed "ocean ranching" in Alaska.¹²⁷ These activities are generally framed in terms of the "enhancement" and "rehabilitation" of already existing wild salmon populations; hatcheries tend to improve salmon returns because the survival rate of young fish is typically higher when they are reared for the first part of their life in the controlled, predator-free environments of hatchery holding tanks (Northwest Fisheries Science Center 2007).¹²⁸

Although one would be hard pressed to find explicit mention of hatcheries—even

in its more decorous phraseology of ocean ranching-in ASMI informational materials,

hatchery output is by no means a marginal factor in total Alaskan salmon production. As

detailed in a recent annual report of the state's enhancement program:

Over 1.7 billion salmon eggs were collected by Alaskan hatchery operators in 2005. In addition, over 1.4 billion fish were released. An estimated 80 million salmon of hatchery origin returned. Of the 200 million salmon harvested in the commercial common property fishery, over 53 million or 27% of the harvest was contributed from ocean ranging by the Alaska salmon enhancement program. Enhanced salmon provided over \$39 million or 14% of the preliminary value of the commercial common property harvest. The ocean ranching program provides hundreds of Alaskans with seasonal and fulltime jobs. It is considered the largest agricultural industry in Alaska (White 2006: 1).

¹²⁷ To be clear, not all hatchery production, which generates fish through "artificial spawning and rearing," necessarily qualifies as "ocean ranching," which is defined as "[t]he process of artificially hatching and releasing juvenile fish into the ocean with the intent of later harvesting as adults" (Environment and Natural Resources Institute 2001: 64). Hatched fish could be released into a pond or lake, for instance, simply to repopulate a stock. With respect to Alaska salmon, all hatchery production can be conceptualized as ocean ranching.

¹²⁸ The difference in survival rates is considerable. As Knapp et al. note in their recent study, hatcheries generally aim to "maximize the yield of quality fry for rearing to smolts with a survival rate of more than 90 percent," while survival under natural conditions is much lower due to predation—around 0.12 percent in the case of Atlantic salmon (Knapp, et al. 2007: 58).

The state's current enhancement program was initiated in the 1970's during a period of especially low salmon returns, though the first successful efforts to establish hatchery facilities in Alaska actually date back to the early 1900's (Environment and Natural Resources Institute 2001: 5). As indicated in Chapter One, hatchery technology itself began to be seriously developed in the second half of the nineteenth century, and its methods form the basis for contemporary aquaculture's fish farming.

While hatchery production is not associated with the same sorts of environmental woes that have been linked to fish farming, it nevertheless has its detractors. As a public information website maintained by the Northwest Fisheries Science Center, part of the National Oceanic and Atmospheric Administration (NOAA), explains in simple terms: "Scientists have known for decades that salmon spawned and reared in hatcheries tend to become different from their wild ancestors" (2007). These differences encompass a range of genetic, physiological, and behavioral traits, some of which have been associated with risks to wild populations from hatchery stocks. For example, there is evidence to suggest that genetic changes among hatchery fish affect their homing abilities, traits that might then be passed along to non-hatchery fish when they interbreed; and that hatchery fish regularly compete with non-hatchery fish for food and territory, often with greater success (Northwest Fisheries Science Center 2007).

In western Alaska, there is a heightened sense of the competition posed by hatchery fish, even though there are no hatcheries in operation there at present. On a number of occasions during my fieldwork, fishers from across western Alaska, including those from Bristol Bay, would advance the claim—and complaint—that wild fish from their regions competed with hatchery fish, almost all of which are chum and pink salmon

released in the southeast and southcentral parts of the state. This competition was often seen to be economic, as when low prices for chum salmon were said to be caused by the hatchery fish glutting the market (e.g., BBSFRS 2002: 14) and, somewhat less frequently, ecological, as when it was insinuated that rising hatchery production in southcentral Alaska might be a contributing factor to poor runs in western Alaska (cf. Knapp, et al. 2007: xi). Ecological worries about hatchery production are no doubt more pronounced in what is often referred to as the AYK—the Arctic, Yukon, and Kuskokwim regions, located to the north and west of Bristol Bay—where salmon runs themselves have faced steep declines in recent decades. Fishery organizations for those regions have actually funded scientific research to investigate if competition from hatchery fish might be a biological factor contributing to those declines (e.g., Myers, et al. 2004).

The generalized sense that hatchery fish, along with farmed fish, represent a threat of some sort to Bristol Bay fish—combined with the lack of local familiarity with the products of hatcheries (not to mention aquaculture)—makes for a close association between hatchery fish and farmed fish in the minds of more than a few Bristol Bay-area fishers.¹²⁹ At the Dillingham processing workshop, a confusing series of disconnects ensued when local fishers directed questions to the ASMI representative on hand, Jennifer Graham. Workshop participants inquired about how much of ASMI's operating budget was gained from taxed proceeds of "wild" versus "hatchery" fish, and how much money was spent on the marketing of these two different kinds of fish in turn. In response, Jennifer explained that ASMI is only authorized to promote particular fish on the basis of species—though, for example, any "sockeye" promotions would de facto

¹²⁹ Hatcheries and fish farming are often grouped together by academic researchers as well, if for somewhat different reasons. In one study, the authors clarify that "[s]almon aquaculture, as discussed in this chapter, can refer to farming or ranching" (Sylvia, et al. 2000: 394 note).

benefit Bristol Bay. A follow-up question asked if "the housewife" shopping for her family's dinner would be aware if a given fish in the seafood case was a hatchery fish or not based on the way it was labeled, displayed, or marketed.

Jennifer responded to this question by reiterating that this kind of information would not be provided to the consumer, nor was ASMI able to market on such a basis. As she framed her response, however, she appeared to pick up on the sense that she and the participants were employing different categories of reference—that in fact participants were placing *hatchery fish* and *farmed fish* in the same general category. She ended her remarks by clarifying that there are no farmed fish in Alaska: Fish generated by "ocean ranching, or hatcheries," are "marketed as wild" by ASMI. Jennifer's clarification seemed to restore a sense of mutual comprehension to the conversation, though it did little to ensure shared meanings: "How can you say it's wild when it's not?" participant Ray Wilcox, Jr. wondered aloud in response.

Although Ray's comment is crucial for my argument here, it should not be taken as proof that most Bristol Bay locals hold a unified and resolutely non-capitalist notion of nature that Arturo Escobar might characterize as "organic nature" (1999). Although there are no hatcheries in Bristol Bay at present, it is not as if everyone in the region has always been vehemently opposed to them. A sockeye hatchery operated on the Snake River, a small tributary not far from Dillingham, for a number of years in the late 1970's and early 1980's (according to published sources this was the only salmon hatchery to have operated in the Bay) (Clark, et al. 2006: 95). By all accounts, the hatchery was not especially successful—hatchery propagation of sockeye salmon in particular often proves difficult (ADF&G 2007f). Additionally, a number of fishers reported to me that since

that time, the Snake River, which drains into the Nushagak on its western side not too far below a series of commercial set net sites, was once teeming with fish but is now a place of few returns, for reasons that largely remain murky. While discussion of this ecological change did not always implicate the hatchery as a cause, the spatial and temporal cotermineity of these phenomena did little to improve local fishers' estimations of hatcheries. If area residents were wary of hatcheries to begin with, for whatever reason, they were probably only more suspicious of them and their claims to naturalness after this particular historical conjuncture.

In this example, we see how the practices and products of hatcheries, which constitute an even more dramatic blurring of conventional distinctions between nature and culture than does fishing itself, uncomfortably unsettle the implicit boundaries ASMI seeks to preserve between wild and farmed fish. Representing hatcheries as ocean ranching, which conjures rough-and-tumble adventure on the open range instead of artificial insemination in the tanks of a laboratory facility, would seem to provide a means of drawing this particular nature-culture hybrid more safely onto the "wild and pure" side of the divide, to reference a turn of phrase employed by ASMI (2006a). Unless hatchery fish are absorbed into the wild and natural category, they remain awkwardly positioned outside it by the mere terms available to reference them, since the easiest way to distinguish non-hatchery fish without the use of a negation is to call them "wild" or "natural" as a point of contrast. As evidenced in a study by a University of Alaska research institute designed to evaluate "Alaska's ocean-ranching salmon hatcheries," any terminological choice happens within a field of loaded language: "Rather than use the terms *enhancement* and *supplementation*, which have imprecise

meanings, this report simply distinguishes between hatchery-produced and wild or naturally-produced salmon" (Environment and Natural Resources Institute 2001: 5, emphasis in original). Another report makes similar distinctions between "[n]atural wild salmon" and "hatchery wild salmon" (Knapp, et al. 2007: xxii). The slipperiness and manifest contestedness of all of these categories speaks to battles waged on the fault lines of the natural.

The War of Words

ASMI marketers are well aware that the positioning of salmon—including the development and deployment of the concepts used to define it—is a pitched political struggle rather than the disinterested distribution of objective facts. It is, in the view of the agency, a "war of words" in which they "hold the front-line" (ASMI 2005: 5). In such statements, boosters acknowledge that command over the seafood market is as much about managing representations and controlling terminology as it is about fat content or bacterial counts or flesh hue. Although such pursuits are often represented as belonging to ontologically distinct realms—one involving the reconfiguration of the materiality of things, the other the independent application of purely symbolic words—we see throughout this chapter how the work of product positioning itself complicates this very separation. Rechristening chums from western Alaska as quality certified "Arctic Keta®," for example, does not merely rename an existing thing, but brings into being a new object—with all the attendant reconfigurations of labor and nature that entails, as detailed in the previous chapter.

Moreover, on the shifting battlegrounds of ASMI's self-styled fight for wild Alaskan salmon, words themselves are objects, their particularities becoming resources

for campaigns as well as sites fraught with riskiness. As others have argued in this vein, words often possess a hardness given that their semiotic capacities are always embedded materially with other entailments (Keane 2005, 2007). In the context of salmon promotions, attempts to capture certain labels for Alaskan fish or reposition a product by reshaping the categories used to describe it both draw upon and reckon with the range of the ways in which words exceed their supposed role as mere referents: the semantic associations that connect certain words with other concepts beyond their own definitions; the historical particularities they often sediment; their status as markers of varying discursive modes, which are often differently valorized; and even the very sounds that make for different pronunciations when spoken. At the same time, these words also serve as the medium through which processes of translation between contexts of production, exchange, and consumption are sought. From favoring talk of ocean ranching over hatcheries to transforming chum into keta, seafood promoters vigilantly work to craft particular product identities for Alaskan salmon that are intended to appeal to buyers and consumers. Whether they work the way they are intended, as we will see, is of course another story.

Along with ASMI's work to limit the circulation of certain words altogether, like chum or dog when applied to salmon, its activities also involve consumer education projects designed to revalue other concepts and terms by shifting their position within a larger semiotic field. Not long ago ASMI launched the "Cook it Frozen!" campaign, in part to unseat the persistent binary of "fresh" and "frozen" so often held among end consumers. As the campaign website explains: "When people ask 'Is the seafood fresh?' what they really mean is 'Is it good quality?' It may come as a surprise, but some of the

best and highest-quality seafood is often frozen" (ASMI 2007a). No doubt this assumed opposition was first forged in an era when seafood sourcing was much different than it is today, industrial freezing technologies were in their infancy, and fish were not differentiated on the basis of distinctions like farmed and wild. Departing from ASMI's usual bucolic seascapes and turning instead to the language of technoscience, the Cook It Frozen! website explains in detail how the best method to preserve seafood quality is in fact "high-technology freezing," which involves rapid chilling to 32 degrees Fahrenheit, "flash-freezing" at no more than -20, and then glazing with protective coating of water to guard against dehydration (ASMI 2007a).

The term "flash-frozen" is ubiquitous in Alaskan salmon promotional material, as it references the latest technological advances in freezing at the same time it works to reposition "frozen" as a form of quality. Yet the term "fresh," not to mention the concept of freshness, nevertheless endures as the dominant point of reference. As the Cook It Frozen! campaign assures buyers, the flavor of flash-frozen salmon "tastes 100% fresh"; one big retailer now supposedly uses the term "refresh salmon" to refer to fish that was previously frozen; and increasingly the phrase "fresh frozen" is employed to describe frozen Alaskan salmon products as well. The entire time I worked in the Dillingham cannery, I was never quite sure if the fresh-frozen room was called such in reference to its primary output of fish frozen while fresh, or the tiny portion of its production that was shipped out fresh along with its frozen manufacture.

Such ambiguities no doubt fuel marketers' sense that key terms and their semantic deployment require close management and rigorous authentication alike. In the language of ASMI officials, both "Alaska" and "Alaska Seafood" themselves are highly valuable

"brands" that the marketing group has both strategically employed and carefully developed. At salmon industry conventions, meetings, and working groups, ASMI representatives never fail to remind fishers and policymakers that the "Alaska" brand of seafood is consistently ranked among the top three most highly regarded brands served in the nation's finest restaurants—up there with Angus beef and Oreo cookies in the version I have heard repeated several times. This helps explain why Alaskan salmon boosters pushed so heavily for COOL, or Country of Origin Labeling, a provision worked into the 2002 Farm Bill. Because of concerted lobbying efforts by the Alaskan salmon industry and its friends in Washington, the labeling of wild and farm-raised fish and shellfish is now required by law despite a delay in the implementation of most other COOL provisions (USDA 2006a).

As the Wild Choice packaging examined earlier indicates, seals from certification bodies like MSC as well as labels like the Kotzebue logo that specify a product's source of origin do much to bolster the presumed authenticity of a product. Indeed, academic research has recorded the rapid diffusion of "geographical indications" like the latter not just as a marketing tool but as a form of intellectual property as well (see Moran 1993b, a). According to Warren Moran, controlled geographical indications, such as the French *appellation d'origine*, were developed to establish the authenticity of products whose character is thought to derive from the uniqueness of a particular place and/or the production methods developed there (Moran 1993a: 264). He notes that French wines have for years been defined by *terroir*, their region of production, designations that have enjoyed legal protection; he explains that these provisions have only expanded since the Uruguay round of GATT, in which issues of intellectual property were directly

addressed, as well as with the further development of EU trade standards. In his work, he argues that the appellation functions more like a trademark than merely the association of a product with a place: "It attempts to identify and publicize the uniqueness of a particular product. It does this not by identifying the product with a particular company or brand but by identifying it with a particular territory" (Moran 1993a: 266).

Organic Acts

Amidst the many controlled brands, indications, and certifications attained and pursued by Alaskan fishing interests, no label has been as sought after—nor as vexing—as the designation of "organic." As the seafood special advertised on the Ann Arbor Main Street easel described at the start of the Introduction evidences, fish is currently described as organic in everyday U.S. consumption outlets with some degree of frequency. To prospective diners passing the restaurant's sidewalk promotion, "Organic Salmon" likely suggests healthful distinctiveness. But for many Alaskan fishers, however, it points to something else entirely in light of their as yet unsuccessful attempts to win the official U.S. government organic label for wild fish. "Yeah, *organic* salmon," Danny muttered with irritation when I informed him of my easel sighting, "it means nothing—it's just what they're calling farmed salmon these days." In fact, as it is currently used, the descriptor might mean something to someone—namely a consumer choosing *among* farmed fish, since organic fish farmers use it to reference differences among aquaculture operations.¹³⁰ Evidently Alaska wild salmon producers are not the

¹³⁰ As a recent newspaper article clarified, "'organic' fish are farmed salmon, from British Columbia and Scotland. Their producers say the salmon are being raised in a cleaner environment with more room to swim than most farmed fish. They get better food; some even eat certified organic feed. They're not given antibiotics or hormones. Chemicals aren't used to clean their nets" (Ness 2004: F-1).

only ones seeking to set themselves apart from farmed competitors through arguments and labels that privilege naturalness.

Since the early 1990's, any agricultural and livestock commodity that declares itself "organic" in the U.S. must be produced and handled in accordance with national standards set by the U.S. Department of Agriculture (USDA), and comply with the specifications outlined in its organic certification program. It can then be sold under the organic label (Image 31). The regulations are designed to ensure that certified organic crops are grown without pesticides and most synthetic fertilizers, and that animals are given organic feed and access to the outdoors, as well as raised without antibiotics or growth hormones (USDA 2006b). However, the USDA has yet to determine if and how



Image 31. USDA Organic Label. (Image source: Om Organics 2008)

the official organic designation might apply to seafood, the subject of a contentious debate that has worn on for a number of years (for a detailed discussion of this controversy, see Mansfield 2003b, 2004). In the meanwhile, retailers are free to call seafood products "organic" when they have been imported from nations that recognize

such designations; there are a number of independent organic certifiers of aquaculture products.

The crux of the debate hinges on the fact that federal organic standards for animals require tight control over living and feeding environments to ensure that all inputs meet organic certification. These requirements stem in part from the conviction of many organic advocates that organic production by definition involves active human management and that organisms cannot be "organic by default"; to them, it is the balanced mix of human and nonhuman agents in production processes that is precisely what constitutes the movement's more radical challenge to nature-culture dualisms (see Mansfield 2004). But unlike carrots in a field or cattle on a range, anadromous fish like Alaskan salmon typically traverse thousands of miles of ocean before returning to their natal estuaries—even biologists who study their migrations are often unsure about exactly where their routes take them. For this reason, the Aquatic Animals Task Force of the USDA's organic standards board concluded in 2001 that, "[a]quatic animals captured from free ranging populations that have not been under a producer's continuous management beginning no later than the second day of the animals' life are not suitable for organic certification" (National Organic Standards Board 2001: 1).

For boosters of Alaskan seafood, the 2001 task force findings were dismaying. Not only did the comments indicate that wild fish could not be appropriately considered organic, but they actually suggested that farmed fish could—provided that they were raised with organic feed and without antibiotics or synthetic additives. More recent recommendations from a second task force convened 2005 included provisions for the organic certification of farmed fish with even less stringent guidelines than those

previously outlined (Martin 2006). Both reports prompted outrage from Alaska's fishing community and its Congressional delegation, who blasted the findings. As Republican Senator Lisa Murkowski remarked: "It seemed incongruous to us that farmed salmon could be labeled as organic when something as natural as wild salmon was not" (cited in Bayne and Ferguson 2003). Addressing the argument that Alaskan fish are more accurately "wild" than "organic," Murkowski complained that, "people don't know what wild fish is....People know what organic is, or at least they think they know what it is" (cited in Bayne and Ferguson 2003).

As Murkowski's comments lay bare, determinations like "organic," "wild," and "natural," qua communicative categories in a competitive marketplace, depend on forms of knowledge that both construct shared categories of reference and provide their content. In the eyes of Alaskan salmon industry proponents, the organic designation might serve as a means of marking an approach to husbandry that rejects nature-culture dualisms for those active in the organic movement, but for most consumers it simply signifies exceptional naturalness confirmed by an authoritative and trusted source. After so much work to stake out the ground of the natural as their own, wild salmon boosters were distressed to see it become available to their farmed competition. Further, their concerted efforts to gain the organic label demonstrate how the positioning of Alaskan salmon involves an intricate and ever-evolving translation of what marketers identify as positive product features into the terms that they imagine are most meaningful to consumers.

Murkowski's comments also serve to rearticulate Alaskan efforts to see farmed and wild salmon as characterized more by differences than similarities. Like the metaphors that position farmed salmon as a copy of the wild original, her remarks cast

wild salmon as the genuinely natural. In contrast, other commentary on the battle over the USDA organic label for fish conjures idioms of tight relatedness in describing farmed and wild creatures. "The fishing industry is eager to call wild salmon 'organic,' as a way of denoting quality to consumers," write the editors of The New York Times during the most recent round of the debate, "But there's a problem....A wild salmon is a glorious thing, and every bit as delectable as its cousins raised in fish farms that are, or are not, organic. But to call a wild salmon organic is to demean it, since it comes from a place where the word has no meaning. That is a little like calling the ocean 'natural'" (The New York Times 2006). Yet wild Alaskan salmon boosters might not shy away from describing the ocean in such a fashion, particularly if it might further speak to the naturalness of "their" fish that swim in its waters. And they would no doubt take issue with the presentation of farmed and wild salmon as closely related kin. Although the *Times* editors urge readers to hope "that there remain wild salmon out in the oceans, beyond any of our categorizing" (2006), we nevertheless see that these fish have long been molded to some degree by market labels, and that the carving out of these categories requires the conceptualizing of relationships that involve people as much as their nonhuman catch.

Walking on the Wild Side

As Murkowski's comments indicate, the association of wild Alaskan salmon with wildness has proved to be somewhat of a mixed blessing for the industry. Although many fishing industry players now attest to the strong selling power of wildness, "wild fish" also carries with it the hint of something akin to "endangered species." Fishers expressed much frustration when complaining about how they constantly had to explain

to those they met outside Alaska—friends, acquaintances, and potential customers alike—that salmon in Bristol Bay were not endangered, and that runs had actually been at historic highs in recent years. In these situations, instead of launching in to their wellpracticed spiel on the evils of aquaculture, they first had to counter the fairly widespread idea that eating wild fish is irresponsible in light of the plight of global fisheries, many of which have been decimated by overfishing. I, too, encountered this idea innumerable times as I conducted my research on the industry, particularly when I would explain my project to those who were less familiar with Alaskan fishing or distinctions like MSC labels. This dissonance between producers' categories and everyday understandings is perhaps what Murkowski had in mind when she fretted that "people don't know what wild fish is" (cited in Bayne and Ferguson 2003). In this case, the concept of wild, once bestowed, can takes on a life of its own, guiding and structuring interpretations beyond a narrower referential function.

Ironically, as the category of wild salmon has come to gain more purchase as a market object, it has begun to introduce the Alaskan industry and its participants to another set of risks as well. As Cronon's analysis of wheat examined in the previous chapter indicates, the conceptual abstraction required in composing market categories, grades, and labels at all—that of making disparate material bodies into particular tokens of a common type—radically increases possibilities for fraud. While words are deeply entangled in the formation of things, this is not to say that matter bends to their will. In fact, these words bring with them the distinct possibility of insincerity, of misrepresenting the things they purport to reference.

This intense focus on labeling evident in the debate over the organic label also fuels concern over the reported increase in fraudulent labeling. Danny Silverman has long maintained that much of the salmon he sees advertised as wild in North Carolina retail outlets is in fact farmed—purposefully mislabeled, he avers, not by seafood department managers but by dishonest middlemen. Like most Bristol Bay fishers and area residents, he speaks confidently about his ability to differentiate salmon by dint of taste, whether between farmed and wild fish, or among varying wild species. On a number of occasions, after tasting fish whose wild constitution he doubted, he convinced store managers to have their wild-labeled fish tested. To establish whether a given fish is truly wild, the substance is subject to laboratory procedures that register the artificial colorants that signal farmed fish. According to Danny, his suspicions were proved right in nearly all cases, and the falsely labeled salmon was taken off the shelves; the managers seemed grateful, if slightly harangued, by his constant vigilance.

Thus Danny felt vindicated when an article entitled "Stores Say Wild Salmon, but Tests Say Farm Bred" appeared on the front page of *The New York Times* and made its way around fishing circles. As Marian Burros reports in the article, "'fresh wild salmon' is abundant," in New York shops, "even in the winter when little of it is caught" (2005: 1). In fact, the newspaper found that this was indeed "a little too abundant to be true": Six out of the eight wild-labeled samples it had tested—some selling for as much as \$29 a pound—were actually farmed fish (2005: 1). Burros further notes that these findings "mirror suspicions of many in the seafood business that wild salmon could not be so available from November to March, the off-season" (2005: 1).

This report also reveals how salmon authenticity must be doubly demonstrated by Alaskan promoters. In addition to the work undertaken to establish wild Alaskan salmon as more natural and real than farmed fish, the attribution of wild itself must be confirmed as valid. This imperative for double authentication is by no means lost on the certifying bodies that speak for salmon: The MSC label, for instance, not only requires the certification of the entire Alaskan salmon fishery as sustainable, but also demands that the individual salmon products bearing the label have been independently verified to originate from the fishery, a step established through a separate "chain of custody" certification (see MSC 2007).

In addition, it reveals new dimensions in the perpetration of fraudulence with respect to salmon. Fraud has long been practiced in the industry: Fishers tell stories about the schemers who used to stuff rocks down the mouths of their fish to increase their poundage; and there are those fishing today who are known for having suspiciously high "chum percentages" in their red salmon deliveries, indicating that they might be purposefully trying to pass off lower-priced chums as reds to the processor. In addition, the intense competitiveness that often exists between fishers fosters an environment in which tall tales of jaw-dropping deliveries abound and fishers can be less than forthright about the secrets of their success. Once, during a set netting stint with Pat Kelly, Pat received a radio call from an acquaintance and fellow set netter across the Bay. The caller asked how we were doing, and reported that it was "pretty dead" over on his side, too—though the next day we found out he had actually "loaded up" that night. I was scandalized when I heard this, particularly since I knew the caller, and knew he was friendly with Pat. "He lied!" I exclaimed in disbelief. But Pat himself seemed decidedly

less shocked by the incident. "No one *lies* in Bristol Bay," he clarified, smirking at my naïveté: "It's called bullshitting."

Yet such forms of deception, which are deeply woven into much fishing practice in the Bay, are decidedly different from the kind of fraud that inheres in the mislabeling of quality salmon. The longstanding forms of insincerity play with distinctions between surface and depth, the way in which outward appearance can mask that which might be uncovered if one probes a bit—whether by reaching into an especially heavy sockeye's belly to find the rock hidden within or gossiping to find out how many pounds a friendly adversary caught the previous day. Detecting farmed fish labeled as wild, in sharp contrast, requires reaching into the depths of substance where natural and artificial pigments known as carotenoids can be revealed (Burros 2005). While the origins and constitution of fish in the supermarket case might be perceptible to experts in salmon texture and taste like Danny, they are largely imperceptible to all others. In either case, their presence or absence—and thus the true identity of the substance—can only be determined definitively through laboratory analysis.

Consumption in the Trenches

For consumers, the fact that many battles of this war of words are waged on supermarket shelves not only heightens the importance of designations like the organic label but also fosters reliance on expert authority to interpret and navigate such distinctions. To whom are the scientific findings, reports from medical experts, and assessments of third-party auditors and certification groups that pepper wild salmon promotions addressed? Accompanying the ascendancy of consumer focus groups and ethnographic studies conducted for marketing purposes, both of which attempt to

facilitate the translation process described above, has been the rise of what scholars have termed the "reflexive consumer" (DuPuis 2000). As Melanie DuPuis argues in her discussion of milk consumption, the reflexive consumer is one who listens to and evaluates varying claims about food made by interest groups, media outlets, experts, sources from the alternative and conventional medical establishment, and family and friends (2000: 289). In short, this consumer is not an activist but rather a kind of researcher who seeks out and takes in information in order to make everyday purchasing decisions.

Reflexive consumption with respect to seafood is strikingly illustrated by the growing popularity of seafood buying guides designed to help consumers make informed purchases and dining decisions; the guides are often available in pocket-sized form such that they can be easily retrieved while, for instance, standing at the seafood counter. At a recent barbecue I attended one humid summer afternoon, a friend of mine named Melanie, five months pregnant at the time, unfolded a sheet of paper she had stuffed into her maternity jeans when the fish came off the grill. It was a downloaded copy of the Monterey Bay Aquarium's seafood guide, produced through its Seafood Watch program (see Monterey Bay Aquarium 2007). She scanned down the extensive listings under one of three columns—labeled "best choices," "good alternatives," and "avoid"—to determine her dinner. Fortunately for her, I had brought the salmon that was being served from my personal Bristol Bay stash, and "Salmon (Wild-Caught Alaska)" is indeed listed as a best choice, followed by a blue asterisk that further indicates MSC certification. She piled it on her plate.

Yet Melanie might have left the barbecue hungry had the fish for dinner been tuna-unless its bearer had been sure to find out its exact species, harvesting method, and country of origin. While U.S. or British Columbia troll-caught albacore is considered a best choice on the Aquarium's guide, bigeye or yellowtail is only a good alternative, and longline-caught bigeye, yellowtail, or albacore is to be avoided altogether. In fact, this last tuna listing is accompanied by one of the alarming red asterisks that Melanie had obtained the guide expressly in order to avoid: "Limit consumption due to concerns about mercury or other contaminants," a little red star at the bottom of the document informs, directing guide users to a website maintained by the Oceans Alive organization. This website lists in brightly colored and numbered columns how many various fish meals can be safely eaten per month by younger children, older children, men, and women of childbearing years (Oceans Alive 2007). For women and children especially, this "Consumption Advisories: Fish to Avoid" page displays a long stretch of fire-enginered blocks each filled with a prominent zero, indicating that not a single meal per month of those particular fish is deemed safe. These disquieting advisories help explain Melanie's decision to avoid fish whose biographical and geographical particulars remain unspecified.

Consumers like Melanie, who seek recommendations to help them navigate such a complex array of seafood options, can even become reflexive consumers of the guides themselves, cross-referencing different versions and evaluating them on the basis of personal concerns as well as the reputations of the organizations. Despite its widely recognized authority, the Monterey Bay Aquarium's Seafood Watch program evaluates seafood options strictly on the basis of the ecological sustainability of the fisheries, aside

from the inclusion of the aforementioned red asterisks. Thus, buyers looking specifically for information on the health risks associated with particular fish are directed to sources that themselves synthesize the findings of multiple other analyses. For example, the organization Co-Op America boasts that its "Safe Seafood Wallet List" (Figure 7), which is organized almost exactly like the Aquarium's, "is the only source we know of that looks at both the health and environmental issues surrounding your fish choices" (Co-Op America 2007). As the organization explains, this tip sheet is itself a compilation of "the best data on environmental sustainability from the Monterey Bay Aquarium, along with the Environmental Working Group's data on toxins, plus information from the FDA, EPA, and others" (Co-Op America 2007).



Figure 7. Safe Seafood Wallet List. (Figure source: Co-Op America 2008)

Like the producers who must navigate the "alphabet soup" of government requirements if they want to legally process their own fish, as explored in the previous chapter, consumers at the other end of the commodity chain who seek knowledge of their seafood are drawn into the same welter of agencies and acronyms. Without in any way equating the experiences of these very different groups of people, it seems important to note that engagement with the information these agencies broker is a source of anxiety on both ends of the chain, if for different reasons. As the following chapter will examine more closely, consumers are often assumed to be powerful in their ability to bend the market to their dictates. So, too, the cosmopolitan who ravenously "eats the other" (hooks [1992] 2000) after he has assembled "the world on a plate" (Cook and Crang 1996) does so as an exercise of his crushing power and privilege. Yet the picture of a pregnant Ann Arbor Whole Foods customer pushing her supermarket cart while nervously poring over the columns of The Green Guide's Smart Shopper's Fish Picks (The Green Guide 2007), yet another buying leaflet, for how many "M's" are listed after a species—one M for moderate mercury contamination, two for high—hardly constitutes the anticipated image of control or dominion.

The intricate interplay between empire and anxiety that might be said to inhabit the aisles of Whole Foods bears striking resemblance to the ambiguities of power and material accumulation experienced in sixteenth-century Holland as interpreted by historian Simon Schama (1993). The shelves of Whole Foods, stocked with nature gathered from across the globe and full of attempts to furnish knowledge and maps of their origins, are not at all unlike the forms of "cultural acquisitiveness" that marked Holland's period of expanding wealth. As Schama notes, Roland Barthes construed this as a triumphant imperialism—"not just a form of cultural encyclopaedism but an exercise of power: art mobilized to service the appropriation of matter"—and a corresponding

"reduction of cosmology to catalogue: whatsoever may be measured, enumerated, exchanged, priced, processed and marketed" (Schama 1993: 479). However, through an analysis of Dutch still-life paintings produced at the time, Schama contests Barthes' view that the age was characterized by a larger "absence of terror" (1993: 482). Rather, he argues that the paintings evidence profound anxiety, a sense that the prosperity of the moment was, as Paul Claudel once expressed it, "an arrangement in imminent danger of disintegration" (Schama 1993: 480). While Whole Foods shoppers may be less discomfited by qualms about the "propriety and durability of wealth" (1993: 482) than those of sixteenth century Antwerp, they seem much more preoccupied with the propriety and durability of matter itself.

The Matter of Distinction

Despite their importance for understanding contemporary consumption patterns, risk-society anxieties over the integrity of natural world are hardly the only forces fueling consumers' interest in wild salmon from rural Alaska. Like the twentieth-century petit-bourgeois subjects of Bourdieu's France (1984)—not to mention the Bristol Bay fishers discussed in the previous chapter, whose relationship to quality handling practices has the effect of positioning them as good or bad producers—Whole Foods shoppers make their individual seafood choices within a larger landscape saturated with social meanings, moral valences, and status markings. The forms of knowledge like those contained on the back of the Wild Choice package, such as maps of the Bristol Bay region or facts about Kotzebue, do not merely inform the consumption decisions through which social distinction is pursued or achieved. Often, they prove the matter of such distinction themselves.

In Douglas B. Holt's (1998) analysis of the consumption practices of "high cultural capital" (or "HCC") consumers, such as highly educated professionals with some money but greater status, he records countless examples in which material objects were employed by HCCs as vehicles for the exhibition of knowledge. As he writes, "for HCCs, evaluating consumption objects is a primary, sometimes even dominant aspect of consuming. Thus, in many HCC interviews the mention of even the most mundane of consumption objects (e.g., water!) led, with little prompting, to lengthy soliloquies..." (1998: 17). This suggests, pace Michael Goodman (2004), that the elaborate information conveyed on quality salmon wrappers is deeply enmeshed with what is being sold, at least for HCC consumers distinguished by their "application of detailed knowledge and the accompanying enthusiasm these minutiae bring forth" (Holt 1998: 15).

Holt argues that HCCs' performance of this knowledge constitutes a mode of "connoisseurship" through which they reconfigure mass cultural objects, an approach not unlike their pursuit of "authenticity" through which they seek to avoid the trappings of mass culture altogether (1998: 15). Much like Cook and Crang, Holt asserts that HCC consumers, as self-styled cosmopolitans, "locate subjectivity in what they perceive to be authentic goods, artisanal rather than mass produced, and auratic experiences that are perceived as removed from, and so minimally contaminated by, the commodity form" (1998: 14). Holt's study, intended to test Bourdieu's theories in a North American context, convincingly demonstrates that such consumer orientations largely fall along class lines.

If status differences and solidarities are forged and negotiated through the display of knowledge in sites of consumption, they are similarly entangled in the realm of

production. The ease with which some employ the latest industry lingo—terms like organic, flash-frozen, ocean ranching, or Arctic keta, for instance—serves as a potent marker to others of their connectedness to valorized discourses and interpersonal networks. For example, at one point during the Dillingham processing workshop, Kim Murphy, the wife of set netter Pat Kelly, pulled me aside to express how aghast she was by how "out of touch" some of the presenters seemed with their rural audience. Kim, an artist in her fifties with a tell-it-like-it-is manner, quickly began to break down the style of one particular presenter, Troy Franklin, an economist who had spoken during the product development panel. "He just kept saying 'fill-it' this, 'fill-it' that, not even noticing that no one knew what he was talking about!" she said, her voice rising in irritation. Kim was referencing Troy's unusual pronunciation of the word "filet" or "fillet," which I did notice and agreed sounded funny, even though I'd heard it spoken that way before—as far as I could tell, fill-it actually seemed to be the standard pronunciation for filet in seafood business circles, oddly enough.]

But Kim had overheard an exchange between meeting participants that made her especially angry at what she considered Troy's obfuscating industry-speak. According to her, several attendees were talking among themselves about the earlier panel discussion during the lunch break. One had specifically referenced Troy's presentation, agreeing that, "yeah, it really seems like we need to start doing these fill-it things, I guess." To Kim, this indicated that unless the participant was making an exceedingly deadpan joke, he had no idea that a fill-it was the same thing as a filet, which is by no means an uncommon term in the region. This also seemed to me the most likely interpretation of the events she had relayed. I must confess that when I first heard fill-it bandied about in

conversation at salmon industry conferences it took me a while, and more than a few context clues, to realize that this was not a new technical term for a novel product form but merely another pronunciation of a more familiar word.

Thus, even as the categories that structure salmon industry discourse are formulated with an eye to the presumed knowledges and practices of others, they wind up revealing and reinforcing vast differences among the people who are producing, marketing, and consuming as much as they build shared points of reference. Moreover, the specialized vocabulary created by marketing intermediaries to translate the realities of production into the imaginaries of consumption, and vice versa, often serves to exclude the participation of fishers themselves in this project. The representation of Erma's village of Egegik on the map of Whole Foods consumers, then, offers shoppers knowledge of a distant production locale, but does so as much as possible through the categories and concepts that are most readily readable by Whole Food shoppers themselves. While the traffic in political-ecological imaginaries is a two-way street, the traffic signals often strictly appear in the language of a certain class of consumers.

Chapter Seven

Other People's Plates

On a Saturday morning late in the summer of 2007, I pulled the sputtering pickup I'd borrowed from my neighbor into the gravel driveway of Jammin' Salmon, a small fish processing business in Dillingham that had grown since my primary period of fieldwork ended in 2004. It was owned and managed by Grace Crandall and her family. The family had put a large part of their savings into the business, and had constructed an addition onto Grace's parents' home to house the processing facility. Grace and her father, Frank Hollis, had attended the Dillingham processing workshop described in earlier chapters. Like so many other workshop attendees, they spoke at the time about how the sharp downturn in salmon prices paid by the major seafood processing companies operating in Bristol Bay had inspired them to pursue their own processing and marketing ventures. But unlike most participants, Grace and Frank had actually managed to turn these dreams into a working commercial operation. For this reason, Grace was known as the "star student" by workshop organizers, someone who'd put the lessons learned throughout the training course into on-the-ground action.

I'd come to Jammin' Salmon that morning because I'd been invited to join a tour of Grace's facility that was already scheduled to take place. Climbing out of the truck, I walked past several insulated totes used for fish chilling and transport sitting outside the wing of the house devoted to the business, as well as a refrigerated freezer van located

across from its entrance. When I pushed my way through the clear plastic flaps that hung in the doorway of the outer processing room, I saw that the tour group had already arrived: ten to fifteen middle and high school students from across the Bristol Bay area, and their two adult chaperones. The students were participants in the annual salmon camp organized by a regional economic development group. The two-week-long salmon program was meant to expose area youth to the many different fisheries careers and opportunities possible in the region. They had just come from a several-day stint with biologists doing salmon counting and sampling on a lake to the northwest of Dillingham. And they were scheduled to tour the Dillingham cannery later on that afternoon.

Production was still underway at Jammin' Salmon at this point in the summer, but it had slowed down considerably over the prior few weeks along with commercial fishing in the district. Grace would later tell me that her husband, who ran the family's drift boat operation, would finally come home for the season along with their son later on that day. At moments during the students' tour, Grace's adult daughter added to her mother's overview of the business and helped supervise the guests, but for the most part she spent her time working on preparing an order. After learning about how fish was processed at the facility, Grace told the students, they too would have the chance to join the processing crew in readying some fish for sale.

Grace described in very clear terms the process by which salmon was transformed into the smoked product put out under Jammin' Salmon's own label and the fish custom processed for other distributors. Although the teenagers seemed somewhat less interested in her discussions of DEC permitting and detailed record keeping than perhaps the adult visitors present, they listened politely and kept conversations among themselves to a

minimum. As Grace spoke about the extensive tests and precautions in place to guarantee food safety for seafood products, she explained to the group that these were done to make sure that "you, the consumer, or anyone who's going to eat it doesn't get sick." "If we don't have these records," she added, "the DEC can shut us down."

Throughout her presentation, Grace made an effort to describe her work in ways that the students would find meaningful. She directed the group's attention to the small family smokehouse on the edge of the driveway, which was visible from the back door of the processing room, and then compared her commercial production to that done for the smokehouse. Grace noted that Jammin' Salmon smoked fish was prepared "like strips" and "like at home" in that it was salted, and she made reference to the practice of many area residents for preparing their staple salmon strips that calls for adding as much salt to fish brining in a bucket so as to make a potato float. But she was quick to note that her commercial product was nevertheless "different from the smokehouse" in that brown sugar was added as well, and the product tasted sweeter as a result. In a conversation with me later on, Grace explained that she and her family had developed her Jammin' Salmon smoked products by taking her father's old cottonwood smoke recipe and "adapting" it for the commercial equipment and larger production batches. "It took a while," she commented, but they "eventually worked it out." In her remarks to the students, she clarified that it wasn't possible to sell the fish from the "traditional smokehouse" like the one out back for which no records are kept-even though "we know it's good," she suggested of the group collectively.

After her production overview, Grace asked the students if they wanted to help process some salmon, and they perked up at the prospect of the activity. She explained

that they would be putting smoked salmon bellies into vacuum sealed pouches, and labeling each package with a sticker that included information about the production date, time, place, and weight. Salmon bellies are strips of fatty flesh on the bottom of the fillet that are generally removed from the final product. A rounded section with a small fin protruding at the center, they disrupt the smooth lines of the fillet pack, and, as Grace explained it to the students, don't look "nice." The bellies used to be thrown away, she said, because there hadn't been a commercial market for them until recently. But a producer in the Alaskan community of Homer had found a buyer in Norway, where, at least as Grace relayed it, consumers appreciated the bellies' high oil content. So Jammin' Salmon had contracted to supply the Homer distributor with bellies to ship to Norway. On the basis of this experience, Grace said, they'd also started to develop local markets. Although most people in the region put up their own salmon—that is, cut, dry, and smoke it themselves—Grace relayed that there had actually been interest in purchasing items like the bellies and even extra fish heads from places like the Dillingham hospital. So "when grandpa and grandma are sick...and they don't like spaghetti," Grace added, the hospital can boil a king salmon head and give them Native food.

The bellies being made that day at Jammin' Salmon were destined for Norway via Homer, however. Each pouch was to contain eight bellies. As soon as the students were handed the plastic bags and shown the trays of smoked fish lengths, they dove into the project with vigor. In fact, Grace found it a bit difficult to slow them down. The greasy bags were stacking up quickly left and right, their completion halted only by the somewhat lengthy, if entirely engrossing, process of vacuum sealing. The business had just purchased two small industrial sealers which worked by creating air pressure

differentials: the bag of bellies would sit for almost a minute unmoved while a motor whirred powerfully, and then in an instant it would crinkle into a glossy, tightly formed pack. The students were captivated with the process—as were the adults—along with the larger bagging task, but Grace's comments to her newly expanded crew suggested that the fast accumulating packages weren't coming out perfectly. She cautioned that any fish hanging over the lip of the bag would ruin the seal and have to repackaged.

Grace also tried to impress upon the students how important it was that the bellies were neatly aligned in the plastic. She urged the teenagers to take their time arranging the bellies in order to make the package look "nice" and "pretty." "We try to make things look pretty," she elaborated, "even the ugly bellies." The appearance of the front of the package was especially crucial in this regard, she said, reminding the students that, "that's the first thing you see in the store." The students seemed to attend to her words, but whether they changed their behavior is another matter. Grace chuckled and shook her head the following day when she told me that she and her family wound up having to redo over half of the packages that the students assembled that morning.

The Mirror of Consumption

The salmon-camp working tour of Jammin' Salmon offers yet another window onto the growing ways in which Bristol Bay producers are encouraged to incorporate attention to consumption into their everyday work. Prior chapters have explored the development and implications of this phenomenon in a number of different forms. As Chapter Five set forth, fishers' work to reconfigure the industry to make and market "quality" salmon suitable for sale in specialty niche markets often hinges on harvesting with an eye to end consumers. That chapter demonstrated how quality trainings geared to

reduce blemishes like bruising and gaping in the salmon flesh explicitly push industry participants to conceive of their catch as already the object of another person's plate. Chapter Six then showed how the marketing of quality fish often entails shifting the terms through which salmon are known to more closely align with end consumers' categories and expectations. This chapter explores another angle of the process: the relationship of producers' own practices and understandings of consumption to the broader reorientation of the industry.

The pages to follow trace the valorization of consumption that is reflected in and furthered by the pursuit of quality in Bristol Bay, and particularly through fishers' related efforts to sell their catch directly to end consumers. I draw attention to how salmon production is recast as a "service industry" of sorts as part of this larger transformation, and give some sense of when and how the industry began to shift toward this emergent model. At the same time, I show how this increased focus on matters of consumption makes for an unexpected reflection of certain traces of production in processes of exchange. As we will see, Bristol Bay fishers' understanding of production processes and themselves as producers cannot be separated from their own identity as consumers. The chapter details how production and consumption practices are tethered in the region, as well as how fishers pursue production as if a form of consumption. However, I argue that Bristol Bay fishers' own consumer identities—as well as their relationships to the stories about salmon composed to capture distant others' imaginations-are articulated through expressions of both identity and difference, shared sensibilities with and as consumers alongside assertions of alterity stemming from culture, place, and class. I conclude by considering what this means for the theories of market "reflexivity" that

have been proposed to understand some of the contemporary dynamics the chapter records.

The Mouth of Production

Consumption is preeminent in the notion of quality examined in previous chapters, and the figure of "the consumer" holds a great deal of explanatory power. In fact, the quality concept itself is often presented in industry accounts as a kind of catchall for consumer desire: "Quality is what buyers consider desirable in a product, a set of characteristics that makes eating the product an enjoyable experience," declares the salmon quality authority John P. Doyle (1992: 4). As academic analysts of the turn to quality have commented, the source of contemporary quality dictates is typically ascribed to the consumer. Moreover, the consumer who is presumed in these accounts is one whose voracious needs and vociferous demands are seen to drive production, representing what Stewart Lockie wryly calls the "invisible mouth" (2002).

The insistence on the primacy of consumption is pronounced in the salmon industry experts' analyses of market trends. For example, one presenter at the Dillingham workshop, the owner of a small, quality-oriented processing company who buys fish from Cook Inlet, went so far as to say that his company doesn't even think of itself as a "fish business," but instead as a "service business," geared toward meeting and exceeding customer wishes whatever they might involve. In its extreme attentiveness to the murmurs of consumer demand, this type of business is held up as a model for how the Alaskan salmon industry should—or must, as it is often more emphatically expressed reinvent itself. Terms like "buyer-driven" and "consumer-driven," concepts developed by academics to characterize post-Fordist industrial transformations, the rise of the so-

called service economy, and changes in the nature of commodity chains (e.g., see Gereffi and Korzeniewicz 1994), are frequently employed by conference speakers, workshop presenters, and other industry analysts in order to explain recent salmon market shifts to producers and the larger public.

Not only are consumption needs cast as paramount in these industry contexts, but they are also presented as ever expanding in scope and intensity. Indeed, over and over, in a wide variety of different arenas, Bristol Bay fishers are warned that, for this very reason, they must change their practices or be left behind in a competitive race toward market dominance. "To meet consumer expectations," Doyle contends, "[t]he old ways of handling and taking care of fish are no longer acceptable" (1992: 1). Seafood specialists Liz Brown and Gilbert Sylvia similarly emphasize that the demanding consumers and growing international competition make "old ways" inadequate: "Fishers and processors must meet these changing [consumer] demands and realize that harvesting and processing using traditional practices and simple 'rules of thumb' are inadequate to meet evolving international standards for seafood quality" (Brown and Sylvia 1994: 9).

Yet as geographer Becky Mansfield relates, recent scholarly work has demonstrated that in fact quality notions rarely emerge from consumption sites alone, and are more productively understood as "constructed through the interrelationship between consumers, producers, traders, retailers, and so on" (2003a: 11). In fact, the development of seafood industry quality is more obviously a product of changes in processing technologies and specific business strategies than preferences seeming to spring forth unmediated from consumers. Not only can quality standards in the wild salmon industry be traced to their development in the farmed sector (Doyle 1992: 4), but these

specifications themselves arose through pressures for capital accumulation—both among aquaculture and fish processing companies in Norway (Martinussen 1994: 21), as well as between Western and Japanese firms more generally (Bogason 1994: 72). Further, as Carol Morris and Craig Young point out, the stereotype in production circles of a consumer driven by exacting and near insatiable demands is actually based on very little evidence (2000: 113).

In light of these theoretical and empirical insights, the persistent attribution of quality configurations to the contours of consumer desire by those involved in Alaskan salmon production themselves seems especially significant. It draws particular attention to the fact that the figure of the "invisible mouth" comes close to what Marshall Sahlins identifies as one of the key ideological products of "the bourgeois economy":

The bourgeois economy made a fetish of human needs in the sense that needs, which are always social and objective in character, had to be assumed as subjective experiences of bodily affliction. The corollary to Weber's iron cage of rationality is an exquisite sensitivity to pleasure and pain, duly installed as the hegemonic motives of people's actions (Sahlins in Mintz 1993: 267).

Along with the reorientation of production to cater to the invisible mouth comes a parallel attention to its faintest utterances. At the Dillingham workshop, like almost all the other training programs I attended that sought to better familiarize fishers with their products' changing markets, presenters emphasized that producers lest not "turn a deaf ear to what the customer is saying," as Bob Bell put it. If, as we saw in the previous chapter, the consumer comes to know the producer by visualizing the literal and metaphorical maps through which production is emplaced and embodied, producers are nudged to know consumers by listening carefully to "what the market is saying" or "what the market is telling you," phrases that are endlessly repeated. In this fashion, circuits of

exchange are imagined across salmon industry settings as a communicative medium, like filaments of telephone wire encircling the globe, interlacing distant sites and linking farflung peoples and places. The connections that result might be fuzzy, abuzz with background noise, or, as is often actually the case in Bristol Bay and elsewhere in Alaska, subject to an annoying time delay that makes communication difficult. But, the depiction implies, if a producer listens hard enough, he or she will be able to make out the voice of the consumer on the other end. All ears strain for any whisper from the mouth of the consumer, expressing desire and specifying demand.

Although most Bristol Bay salmon fishers do not currently see themselves as primarily engaged in a "service business" geared solely to meeting such presumptive needs, as I will demonstrate shortly, it is not as if they dismiss wholesale the importance of consumer preferences nor the metaphors through which exchange is understood as a form of communication. In fact, as the popularity of the Dillingham workshop provides some indication, many fishers are eager to learn any details about the people who buy and eat their salmon that will help better cultivate them as customers. The workshop question mentioned in the previous chapter about how the "housewife" experiences Bristol Bay fish—specifically, what she will come to know about it from how it appears on the supermarket shelf or at the seafood counter—is one example of the abiding interest that producers exhibit in gaining information about the consumption practices of those on the other end of the commodity chain.

As this question further suggests, fishers tend to try to understand these consumers by putting themselves in the others' shoes. Like the anthropologists employed by large corporations in order to analyze the intricacies of consumer demand—as part of

his ethnography of such ethnographers, Robert Foster is instructed to participant-observe a Queens woman do a load of whites (2006a)—Bristol Bay fishers construct knowledge of their salmon industry interlocutors by relying on interpretive methods not unlike those Weber first outlined in his discussion of social action: attempting to understand the behavior of other people by virtue of one's own experience as a social actor (Weber [1922] 1978). For Bristol Bay fishers, however, this means a constant tacking back and forth between assumptions of sameness and difference, not to mention the construction and revision of ideal-typical consumer identities.

At the same time that producers are prompted to reorient their action to service consumption, then, the conjuring of end consumers this provokes has some unexpected implications. For example, across salmon industry contexts, "the consumer" is typically talked about as a "she," "the housewife" described earlier. Though much research has demonstrated the central role women play in household consumption decisions, the insistent conceptualization of the consumer as a housewife seems especially noteworthy in light of the frequent mentions in industry contexts that Alaskan salmon is much more likely to be consumed not in the home but in restaurants, at least in the U.S. The representation of the consumer as housewife, then, seems less a reflection of a statistical actuality than a representational choice laden with moral meaning. By depicting the consumer as a wife and mother who might be persuaded to choose salmon to cook for dinner, production is put in the service of family provisioning rather than anything that might smack of personal indulgence or selfish extravagance.

Moreover, this housewife is often referenced as the "American housewife," or even "the housewife in Peoria," or Topeka, or another seemingly generic middle-

American town. As indicated earlier, statistically speaking, the consumer of Bristol Bay salmon is far more likely to be Japanese, and the relevant buyer probably a Japanese wholesaler rather than housewife at that. These facts themselves are not entirely unknown to Bristol Bay fishers. Indeed, the workshop question about the housewife we have been examining actually came after an explicit discussion of the ongoing importance of the Japanese market for Bristol Bay salmon and a subsequent series of exchanges about how many times a fish is thawed and refrozen before it reaches, specifically, "the housewife in Japan." Yet this particular specification is somewhat unusual. Far more often the housewife invoked in industry conversations is defined as or assumed to be American—a vision that no doubt reflects industry participants' aspirations to break into the domestic market, not to mention a noteworthy streak of economic nationalism as well.

Reorienting Production

Although Bristol Bay fishers may have had some inkling of where their salmon traveled after they delivered it to the cannery in earlier eras of the industry—by all accounts those in the Bay during World War II took pride in the fact that the cans of salmon they churned out were going to feed American servicemen overseas—it was only with the dramatic expansion of the Japanese market in the 1980s that they were prompted to investigate the habits and proclivities of the people who were buying and eating their fish. Since then, the relationship of Bristol Bay fishers to Japanese buyers has been is a knotty one. Fishers have long bristled about the control Japan has had over the Bristol Bay salmon industry. To this day, area residents speak with much satisfaction about how they "kicked the Japanese off the high seas" through the passage of the 1976 Magnuson

Fisheries Conservation Act and its establishment of the 200-mile Economic Exclusive Zone (EEZ) extending from U.S. shores, where only American vessels are permitted to harvest. Before that point, Japanese boats at times fished for salmon within sight of Bristol Bay districts, much to the chagrin of Alaskan industry participants. A number of Bristol Bay residents and regional organizations lobbied heavily for the passage of the act. However, the prohibition of Japanese fishing in Alaskan waters had the subsequent effect of fueling heavy Japanese investment in Alaskan fishing industries. By the 1980s, many of the longtime processing companies doing business in Alaska were either directly owned or heavily controlled by Japanese firms.

Frustrations about sinking fish prices and allegations of corporate collusion often found their expression in the deployment of stereotypes about the Japanese and their business practices: shifty, nontransparent, inscrutable, conspiring. Such sentiments were echoed on the fishing grounds as well. In between drifts out on the water, one Dillingham resident told me that he'd taken a business class years before in which he had developed a model to explain decisions made by Japanese fish processing companies. At the same time his model drew upon statistical data and events that he had observed in his role as a producer, he firmly maintained that Japanese businessmen generally operated in an untrustworthy way, "smiling to your face while they're stabbing you in the back."

At the same time, fishers like this one are well aware that Japan has also been an important market for area salmon for many decades. In fact, until the industry downturn that became palpable in the early 1990s, Japan was the primary source of the Bay's unprecedented salmon earnings in the 1980s. At the same time fishers grumbled about Japanese control, they began to reap hefty profits as a result of the booming Japanese

economy and Japanese buyers' rising purchase of Alaska salmon, particularly the frozen Bristol Bay sockeye whose production surged along with new freezing technologies. Hence the deep ambivalence that pervades the ties between Bristol Bay producers and their Japanese consumers, and permeates how these relationships are talked about in turn.

During the growth of the Japanese market in the 1980s, industry analysts saw quite clearly that Japanese consumers of salmon shipped frozen had far different seafood eating practices and tastes than purchasers of canned fish from Europe at the U.S. As a result, a range of Alaskan salmon industry actors began to become acquainted with the intricate culinary cultures surrounding seafood consumption in Japan, as well its complex commercial networks of fish wholesalers and retailers, all of which Theodore Bestor (2004) has carefully examined in his recent work. It was during this time that representatives from the Marine Advisory Program, the same organization that hosted the Dillingham workshop, first began organizing trips to Japan for groups of fishers. Like the African flower growers described by Alberto Arce (1997), who were taken to observe end consumers in Holland so that they could better tailor their goods to the Dutch market, Alaskan fishers journeyed to Japan so as to gain a fuller understanding of the buyers, wholesalers, retailers, and consumers upon which they were quickly coming to depend.

The sense of cultural difference that inspired the field trips to Japan may have been informed by stereotypes and furthered in dealings mediated by abstract markets, but it was also forged through actual social interactions in sites of production. Japanese control of processing businesses led to reliance on Japanese workers for key production responsibilities. These workers' involvement in Alaskan facilities, perhaps somewhat paradoxically, arguably contributes to the sense among those in Bristol Bay of the

inaccessibility of Japanese norms. A prime example can be found in the production of salmon roe. To this day, Japanese technicians fly across the Pacific to Dillingham each summer for a season's work grading roe in the cannery egg house. They wear identical navy blue jumpsuits (no other cannery workers wear uniforms, save the standard-issue processing raingear) and live together in a single bunkhouse, widely known at the cannery as "the Japanese bunkhouse." Unlike the many other cannery workers who hail from countries around the world and speak mostly in their native languages, the Japanese graders are on hand because they are said to possess a very exclusive technical and cultural know-how. According to cannery managers, who during the time I conducted fieldwork were all white American employees (of a Seattle-based company of a Japanese conglomerate), past efforts to train other cannery workers in grading techniques had not been deemed satisfactory by corporate officials. In the cannery managers' view, those attempts failed because the Japanese grading system was far too complex and particular to be easily picked up.

Unlike the grading of fish performed by workers in the Dillingham cannery's fresh-frozen room—which is guided by a grid posted on laminated placards for all to see, listing parameters for grades Premium, A, B, and C in terms of categories like scale loss, odor, scars, belly cavity, and gill appearance—the grading of roe appears as a much more mysterious process. Although ASMI manufactures placards in both English and Tagalog for Alaskan egg house workers to guide them in roe handling (see ASMI 2007b), roe grading is typically left to the Japanese professionals alone. During my period of work in the Dillingham egg house, I stamped roe shipping cartons with particular grades as determined by the Japanese technicians. Aside from knowing there were two types of roe

being processed—*ikura* and *sugiko*, both represented on the boxes in Japanese characters—we workers understood little about the grading processes whose results we assiduously recorded in the form of symbols like stars, circles, and letters (see Image 32). We had heard the lowest grades were sent to Russia, while the rest went to Japan; and it was rumored that each pallet of stacked boxes was worth \$70,000, which made more than a few of us nervous when moving them around by forklift. This rumor also circulated among fishers as well, who wondered aloud, typically quite accusatorily, how the cannery could pay so little for chum salmon if its roe was apparently so valuable. Thus the material particularities that accounted for varying roe grades and the specialized knowledge enlisted in such classifications seemed as obscure to fishers and cannery workers as the means through which roe was priced and sold on the Japanese market.



Image 32. Boxing Pails of Roe for Japan, Dillingham. Photo by Karen Hébert.

Yet at the same time that the Japanese are often perceived in production contexts as holding complex and inscrutable preferences, their tastes are also acknowledged to share distinctive similarities with many in multicultural Bristol Bay. The preponderance of seafood in the Japanese diet is paralleled by the heavy reliance on fish and marine mammals by the Yup'ik Eskimos, a fact Yup'ik people themselves are quick to note. The cultures of consumption are imagined to have affinities in other ways as well. During one conversation with George Sugatuk, a Bristol Bay fisher who is Yup'ik, I asked why the market for the region's herring had changed so much in recent years. "The Japanese aren't eating it any more," said George matter-of-factly about the roe for which herring is primarily harvested, long gathered by area residents in the form of roeon-kelp which collects on certain beaches. "Tastes are changing over there. It's just like here. The young people don't want to eat the same foods as the old-timers."

I didn't press George to clarify his point, mostly because it was not difficult for me to supply my own examples of the general trend he gestured toward from my period of work in the Bay. Although hunting, fishing, and other forms of subsistence harvesting are pursued with gusto in the region, some suggest that the range of plants and animals taken is not quite as broad as it used to be. I myself had seen how certain subsistence foods were sought at present for reasons other than their taste. For instance, the subsistence walrus hunt, which was banned by the federal government for most of the twentieth century, had recently been reinstated for local Native people and was conducted each fall during my fieldwork period. Yet most of the Dillingham residents I spoke with about the hunt, who had come down to the boat harbor to greet the expedition upon its

return, confessed that they didn't especially like the taste of walrus, even as they happily shared in the hunt and took a piece meat home for their older relatives to cook.

The presumed differences and affinities that inform Bristol Bay fishers and rural residents' understandings of their salmon customers—as well as the assumptions and aspirations that guide their representations of who these customers are—are deeply inflected by their conceptualizations of their own identity. For Bristol Bay's Yup'ik commercial salmon fishers, the imagination of others' consumption habits often bears traces of a double consciousness, an awareness that their own practices and cultural identities differ from most of those living in Topeka or Peoria. Yet as the above examples suggest, this double consciousness can be marshaled to mark both similarity and difference alike.

Producers as Consumers

The foregrounding of consumption in the positioning of quality salmon thus has a number of multifarious and at times contradictory implications for producers in Bristol Bay. For example, fishers at the Dillingham workshop largely supported efforts to improve quality, seeing it as the most promising means to rebuild the industry and improve their own fishing earnings. Yet many nevertheless bristled to think that their fish could be so quickly dismissed as "poor quality." The workshop comment noted in earlier chapters—namely Ray Wilcox, Jr.'s admission that he was "tired of being told we have a bad product"—provides some sense of this. Most Bristol Bay fishers I knew did not by any means think of their salmon as a "bad product." They were, after all, its most regular and enthusiastic consumers. In the sections to follow, I will explore the

relationship between the production and consumption of salmon in the Bay, and then consider in more detail how this affects the reception of quality practices and ideals.

Most area residents I knew ate "fish"-a term virtually synonymous with salmon in quotidian usage-practically every day in one form or another, whether dried, halfdried, smoked, canned, jarred, pickled, or defrosted and cooked in one of any number of ways from a freezer that was inevitably stocked with a copious supply. On several occasions when I was preparing to leave for Michigan after a summer fishing season, mere acquaintances would check to make sure I had fish for the winter, as if to be without a store of the staple would be unthinkable. While a handful of area residents bought wholesale fish from the cannery that was flash-frozen in its industrial blast freezer and vacuum-sealed in heavy plastic, the vast majority did their own "home pack" instead, whether this entailed stocking freezers with fillets, putting up smoked fish, or both. Even the people who bought boxes of cannery fish wholesale seemed to supplement it with some of their own manufacture, or fish given to them by others. Unlike other wild foods taken in the region, like moose or caribou, which are not sold commercially, salmon may well have been available in Dillingham's two small supermarkets; but I never saw or heard of anyone purchasing fish from stores.

In contrast to most consumers buying wild Alaska salmon at Whole Foods, salmon is not a "specialty food" for the people of Bristol Bay. Rather, it is tightly woven into the very fabric of existence. If we revisit seafood expert John P. Doyle's quality manual, we are reminded that he hammers home the point quite explicitly to his readers that "salmon is not daily fare" for most consumers (1992: 1). No doubt this detail merits such insistent emphasis because this is exactly what salmon is for so many Alaskan

salmon fishers themselves. Yet salmon's status as daily fare across Bristol Bay might make it differently coded than it is for Whole Foods shoppers, but certainly no less special. In fact, it is the extraordinary ubiquity of salmon—as something that is ever and at once eaten, exchanged, analyzed, transformed through great amounts of work—that helps to provide some inkling of its tremendous importance in the region.

Some of the character of this import is actually brought into relief by the image of the salmon consumer so popular in producer discussions: the housewife seeking to provision her family. This figure manages to capture a number of critical dimensions of salmon circulation and preparation in Bristol Bay, if in mirror-image form. From the arrival of the first salmon to area waters each summer, fish serves as an object of provisioning that condenses a range of significant social relationships. Almost everyone in Dillingham seemed to participate in the yearly ritual of giving away their first king salmon caught, or pieces of it, to particular friends and relatives, thus establishing or reestablishing food-sharing bonds. Not only does this materialize and reproduce a wide range of kinship and associative ties, but it also provides a means for constructing, rejecting, recasting, and negotiating them. The same is true for salmon once it has been put up, since jars and bags of smoked salmon strips are distributed in a like fashion as well. Salmon in Dillingham can thus be interpreted as totemic in the Durkheimian sense to a certain degree, as an object whose pathways present a social group with an image of its own structure projected on to the natural world. Yet the fish-along with its capture, processing, and distribution—does not merely hold up a static mirror of the social group, since it seems to provide a means of reworking as well as objectifying social action.

Even more than catching fish, putting up fish is an activity to which an inordinate amount of energy and attention is devoted; it is also a highly gendered activity in Bristol Bay as well, particularly in its Yup'ik households. Whenever I bemoaned my own fishcutting skills, male fishers would often remark on how talented their wives were at this, so much better than themselves. During one such conversation, George Sugatuk told me that if I wanted to learn how to cut fish, I should go learn from his wife, Bernice. As George had promised, Bernice was a master with the *uluk*, the Yup'ik word for the semicircular bladed tool that in its Iñupiag name, *ulu*, is a popular tourist souvenir from Alaska. As I watched Bernice deftly split a large king salmon in two, remove its entrails, and summarily carve out a perfect fillet, fish cutting began to seem more like an art than a skill. Moreover, filleting was hardly the most challenging of Bernice's cutting tasks, which were predominantly geared toward producing long, even strips and scored salmon sides to be hung in the household smokehouse. Across western Alaska, the events featured at summer carnivals will often showcase a fish-cutting contest, with mainly female entrants, who compete against one another for both speed and the appearance of their finished product.

The pride Bristol Bay residents take in their fish preparation is nowhere more evident than in the contents of their smokehouses, which exhibit not only their cutting achievements but also their drying and smoking expertise. After I tried my hand with the *uluk* and produced a few sorry-looking if subtly improving fillets—despite Bernice's best efforts, I was not an especially quick study—she took me around to the side of her home to see her smokehouse. In its general appearance, the Sugatuk smokehouse resembled most found at Dillingham residences: a wooden shed not too much bigger than a large

outhouse, with a slanted roof, slat walls, and open areas lined with a loosely tacked screen of chicken wire. Smoke rose from a metal container on the ground. It was tidy and well maintained, but its chief visual attraction were the rows of glistening ruby strips that hung down from the beams in a mesmerizing display. Along with these strips hung whole sides of fish, still joined at the tail and slung over poles, whose flesh was cut in even scores and then made to separate slightly by pulling the attached skin taut (see Image 33 for an example of fish drying in the Nushagak River village of New Stuyahok).



Image 33. Salmon Drying along the Nushagak River. (Image source: McKittrick 2008)

The process of putting up fish in this fashion is an intricate one. Even more so than other facets of preparation alone, the particular drying and smoking methods given individuals use are handed down, tinkered with, talked about, and personalized. Of course all elements of the process are interrelated. Particular aspects of fish cutting, like how thick the strips or cuts are made, or how much space is created by the stretching of the skin, are critical to how it ultimately cures. Besides the features that might be compared to a recipe—like the composition of the brine in which salmon is first dipped (salted until a potato floats?), or the type of wood to be burnt for the smoke (cottonwood or alder?)—putting up fish relies on constant judgments that simultaneously take a variety of factors into account. These include the given pieces of fish themselves and how they appear, the direction of the wind, the presence or absence of flies, and especially the weather, since fish is more likely to spoil in rainy weather. I never saw or heard of anyone testing their fish with thermometers or bacterial counts as recommended at the Dillingham workshop and in other quality training sessions. Rather, people simply sniff for (what is to them) the telltale odor of that fish have soured, which means that the batch is good only for the dogs. Given the enormous amount of work—and some degree of good fortune—required for successful smoked salmon, the prizes awarded at local festivals, fundraisers, and cook-offs for the best smoked fish or the best salmon strips are special honors.

Even more than related processing activities like fish cutting alone, drying and smoking fish is an activity that is marked as women's work. While I have certainly seen men in Dillingham participate in putting up fish, they are usually working under the direction of female household members. And although local women actively participate in the commercial fishery (mostly as set netters or crew on the fishing operations of male relatives though sometimes as drift captains), I have witnessed a number of local women opt not to go out drifting during a particular season in order to put up fish instead. Indeed, this activity often requires time off from work or the sacrifice of money that might be made crewing, yet there is usually no question that someone will perform it. Like commercial fishing itself, it is greeted matter-of-factly as simply a part of what is done in Bristol Bay during the summer when the salmon run returns.

The Production of Subsistence

The omnipresence of fish and fishing alike as objects of conversation and practical activity in the region, along with the interest and intensity with which they are pursued, actually makes it quite difficult to convey the weightiness of what might be best expressed in Maussian terms as an all-encompassing total social fact. Despite the challenges of fully capturing the cultural significance of such a fact, a great deal of Northern scholarship has sensitively examined the critical importance of hunting, fishing, and gathering, as well as related practices of food making, sharing, and eating, for cultural transmission and identity formation among both Native and non-Native Northerners. In his work with the Kluane First Nation in Canada's Yukon Territory, Paul Nadasdy notes that his informants seemed to heartily concur when he told them, after being asked to give an anthropologist's "expert" opinion, that hunting and eating wild foods seemed to be the touchstone of contemporary Southern Tutchone Athabascan culture (2003: 79). Likewise, it is the overwhelming importance of fishing, hunting, and gathering—as well as the constant talk that surrounds them and the reflexive acknowledgment of their cultural significance—that is the subject of Chase Hensel's (1996) account of subsistence practices and discourses in the Bethel area of southwest Alaska, a predominantly Yup'ik region surrounding the Kuskokwim River just north of Bristol Bay.

Putting up fish as described above, not to mention fishing itself, is conceptualized as "doing" subsistence in Bristol Bay—just like picking berries, hunting and processing moose or caribou, maintaining traplines, and gathering gull eggs, to give but a few examples. In fact, images of fish hanging in summer smokehouses have become iconic

of subsistence, not simply in Bristol Bay, but indeed across Alaska. As others have detailed (Berger 1985, National Research Council 1999), "subsistence" itself in Alaska refers not to any eking out of a meager living off the land, but a set of highly politicized claims to resource rights by Alaska Natives based in a constellation of natural and social relationships and cultural traditions. Non-Native Alaskan residents are permitted to engage in most of these activities. In fact, the Alaska constitution mandates that the state's fish and game resources be equally available to all residents. Further, any aboriginal claims to special hunting, fishing, and gathering rights on state and federal land were nominally extinguished with the passage of the Alaska Native Claims Settlement Act (ANCSA), which, as described in Chapter Four, settled Native land claims by granting property in fee simple title to Native people as organized under Alaska Native for-profit corporations. But efforts to acknowledge the priority of Alaska Native subsistence rights over claims by other user groups gained traction throughout the 1980s and 1990s, and a series of high-profile legal battles put the subsistence issue in the statewide spotlight during that time.

By 2001, the *Katie John* case had gone all the way to the Supreme Court. Named after an Athabascan elder living along the Copper River who sought recognition of subsistence salmon fishing rights, *Katie John* became a contest between the state of Alaska and the federal government fought largely in the language of states' rights. The state insisted that its own constitutional provisions for equal access prohibited special consideration for the practices of Native and rural residents, whereas the federal government maintained that its responsibility to protect those interests superseded the state's obligations. The Supreme Court ultimately decided against the state of Alaska,

and in late August of 2001, then-governor Tony Knowles announced that the state would not appeal the decision. While the *Katie John* decision had noteworthy implications for the bureaucratic administration of natural resource management in Alaska, including the federal takeover of some state agencies to ensure subsistence priority was in place, it also had significant reverberations on the ground. Even more than in the past, the activities that constitute subsistence had come to be quite explicitly identified with Native cultural heritage, as well as the rights of an invigorated concept of the rural resident.

In Hensel's examination of subsistence in Bethel, he demonstrates how doing and discussing subsistence provide an arena for the construction and negotiation of ideologies and identities alike. Bethel, not unlike Dillingham, is a hub community that is "neither city nor Yup'ik village" (Hensel 1996: 7). The vast majority of Bethel's residents are migrants, whether from nearby Kuskokwim Yup'ik villages or outside the region and often the state, in the case of its sizeable non-Native (mostly Euro-American) population. Bethel is thus a space, Hensel argues convincingly, in which ethnicity is always at issue. He further suggests that this foregrounding of identity itself serves to heighten the visibility of subsistence as both practice and discourse. Amidst the many negative, racist stereotypes of Alaska Natives that persist:

There remains, however, one complex of Native practices that many white Alaskans envy and would like to master. This is the complex of hunting, fishing, wilderness travel, and camping skills, as well as systemic ecological knowledge now reified in the image of Natives as the 'original conservationists'....This envy is one of the reasons why subsistence is being reified as an identity marker: subsistence is one of the few aspects of Alaska Native life that is also valued by mainstream culture in Alaska. (Hensel 1996: 96-97)

Hensel's argument illuminates certain aspects of the practice of subsistence in Dillingham as well, at least to a degree. Dillingham and the Bristol Bay region more broadly share a number of noteworthy features with the neighboring Bethel area, as well as some crucial differences. Like Bethel, Dillingham is a cultural borderland, which I detail in Chapter Two. However, unlike the Kuskokwim Delta, whose Native population is nearly entirely Yup'ik Eskimo, the area that is now referred to as Bristol Bay encompasses Yup'ik, Athabascan, Alutiiq, and Aleut communities. Although Dillingham and its environs on the west side of Bristol Bay is predominantly Yup'ik, the community's role as a regional hub for employment and services means that it is home to Native residents who do not identify as Yup'ik. The categories of Native and non-Native themselves are thus remarkably heterogeneous in Bristol Bay, even if they remain the primary axis of ethnic identity.

In addition, as James VanStone argues in his 1967 monograph *Eskimos of the Nushagak*, the longstanding presence of the commercial fishing industry in the Bristol Bay region makes for a very different historical experience from other parts of southwest Alaska. Most notably, the industry brought its indigenous residents a much longer and more intensive engagement with the cash economy, as well as "first-hand contact with many different races and nationalities" (VanStone 1967: 63). The range and frequency of the intermarriage that resulted—among Yupiit, Aleuts, Athabascans, Europeans, Euro-Americans, Japanese, Filipinos, and Latinos, however these identifications might be bounded and defined—makes it much more difficult to conceptualize Bristol Bay residents as either Native, non-Native, or "bicultural," as Hensel does throughout his work. Moreover, noteworthy class distinctions transect these ethnic categories and segment the Dillingham social landscape.

Nevertheless, it is important to note that, just as in the Bethel described by Hensel, socially recognized distinctions of Native and non-Native are undoubtedly the most salient categories of identity at play in Dillingham. So, too, engagement in subsistence is framed by Native people as what it means to be Native, as well as by non-Native residents as what it means to be Alaskan, and more specifically what it means to but a rural Alaskan. Furthermore, in each region, the fact that ethnic identity is largely achieved through everyday practice rather than rigidly ascribed on the basis of genetic heritage or phenotype makes for an even more pronounced emphasis on the performance of subsistence itself. Hensel argues that subsistence in Bethel becomes an important marker for negotiations between Native and non-Native people but perhaps even more significantly among the members of those groups themselves. "At issue," he writes, "is not 'is she white?' but 'how white is she?'" (Hensel 1996: 14).

Subsistence in Circulation

Much as Hensel's argument would suggest, the status of fish as a "Native food" seems to be only heightened, rather than diminished, in the face of its extensive non-Native use and apparent appreciation in Bristol Bay. It certainly helps account for the particular difficulty of a situation faced by Zell Norgren and his wife Palescovia Norgren. Zell's given name is Axel, but since his childhood almost everyone has referred to him by his nickname. Like more than a few Dillingham residents, he if of Swedish, Norwegian, and Yup'ik heritage. Zell grew up fishing with his mother on the beach along the Igushik River, and had drift netted commercially with his father from the time he was a young boy. He continued to fish each summer with the help of his two grown sons. Palescovia,

Zell's wife of many years, was born and raised in a village on the Nushagak, not far from where the Norgren family had lived for many years before moving to Dillingham.

Not long before I arrived in Bristol Bay, the family experienced a great tragedy: the death of Zell and Palescovia's only daughter. A young woman in her early thirties with two small boys, Lynda Norgren had developed a very rare autoimmune disease. By the time the disease was diagnosed, Lynda's health had declined dramatically, and she died not too long after. In the wake of her death, a bitter battle ensued over the custody of her elder son, Tim, whose father lived in Tennessee. The father of Lynda's younger son, who had been her partner at the time of her death, was at the time caring for both brothers in Dillingham, along with help from Palescovia and Zell. According to a mutual friend, the Norgrens "pulled out all the stops" in their efforts to keep custody of their grandson, hiring expensive lawyers and arguing passionately that Tim need to be raised alongside his brother and as an Alaska Native. The family was apparently devastated when primary custody was awarded to Tim's biological father, with only a provision for summer visits back to see the Norgrens.

When I arrived in Dillingham, Tim had just returned to Alaska for the summer after having spent his first winter in Tennessee. Although the family was thrilled to have him home, there were a number of small reminders that things had changed since his departure. On several occasions during his first weeks back, Palescovia lamented to me quite fretfully that Tim no longer liked to eat fish. At first I thought Palescovia might be exaggerating the boy's dislike of local foods, until I myself saw him turn his nose at salmon, and tell his grandparents he wanted only pizza or Chinese food like he ate in Tennessee. For Palescovia, the grandson's newfound distaste for salmon may well have

been tantamount to her greatest fear, that he would move away and lose his Nativeness.¹³¹ Or perhaps she was upset because Tim's actions felt like a painful rejection of her role as a provisioner—and I must say a very good one. Palescovia was an accomplished cook, and appeared to really enjoy it when I complimented her on her meals and told her how delicious her fried king salmon tasted. If even a *kass'akuk* like me who had just arrived in Bristol Bay could appreciate such a well-prepared example of Native food, her own grandson's disavowal must have seemed all the more cutting.

My point here is that these various possibilities are actually very difficult to disentangle analytically precisely because identity, ethnicity, gender, kinship, and relations of care are all bound up very tightly in the procurement, preparation, and prestation of salmon in Bristol Bay. And the fact that the fish themselves condense and objectify such a wide range of meaningful activity makes them only more important in the local symbolic economy. The pleas and pitches the Norgrens employed to try to get their grandson to eat fish, which at times were peppered with facts about its levels of Omega-3s and other properties considered healthful by the medical scientists, seemed to have the effect of validating their own already elaborated valuation of the salmon rather than providing a basis for it.

Moreover, as they are figured in local discourse, fish are not merely objects of labor, but are simultaneously subjects in their own right, who too participate in the webs of relatedness, recognition, and obligation that link humans with one another and the non-

¹³¹ Tim's interest in Native food seems to have been reawakened in recent years. The last I heard, his uncle had taken a detour while on a business trip to the Lower 48 in order to satisfy the boy's homesick cravings, delivering a bag carried from Dillingham to Anchorage to Seattle to Nashville containing Palescovia's *akutaq*, a Yup'ik dish of whipped fat, sugar, and berries that is often called "Eskimo ice cream." Interestingly, Hensel makes the claim that dried fish and *akutaq* are among the more popular Native foods among non-Natives, pointing out that they "do not violate Western food categories" (i.e., they are not frozen or raw, etc.) (1996: 150).

human world. The briefest gesture to the vast literature on the intricate cosmologies that underlie relationships between hunter (or fisher) and the sentient beings that are their prey in Native American hunting and gathering cultures (e.g., Brightman 1993, Hallowell and Brown 1991, Nadasdy 2003)—much less the considerable discussion of this issue among Yupiit (e.g., Fienup-Riordan 1986, Fienup-Riordan 1990, 1998, Hensel 1996, Morrow and Hensel 1992, Morrow and Schneider 1995) or the extent to which these beliefs are held among those in Bristol Bay—gives some sense of the degree to which the region's salmon are closely identified with its human inhabitants, and vice versa. It is here that the rhetoric of ownership meets the language of kinship; the local fishing industry conversations that begin with the refrain of "our fish" (as in, "our fish are just as good as that Copper River stuff," or "our fish get intercepted by those Area M guys") seem to gesture at once to both possibilities.

Entangled Economies

Although commercial and subsistence fishing are occasionally at odds—as when, for instance, the local women described earlier must choose to do one or the other during a given season—the two pursuits are more often closely intertwined in daily life in Bristol Bay. For one, the same people generally participate in both, as a fair bit of subsistence activity happens before the commercial fishery gets into full swing. Indeed, whole families flock to the subsistence fishing area outside of Dillingham along Kanakanak Beach to put out their nets when the king salmon start running, typically by early June. (The commercial fishing industry does not usually get into full swing until late June.) King salmon are prized for eating and smoking locally, and these first fish of the season are greeted with much celebration and, as mentioned earlier, specially

distributed. Often, subsistence nets are laid out when waters are quiet and few if any fish have come in; along with those who check them after each tide, they lie in wait for the arrival of fish.

It was king salmon caught in the family subsistence net on Kanakanak Beach, for instance, that were cut into the strips drying in Bernice Sugatuk's smokehouse. During the time I fished on the Nushagak, Bernice worked alongside her husband and son on their drift boat. She made use of her deft fish cutting skills throughout the month of June so that she could put up most of the fish she needed for the year before heading out on the water to fish commercially. This temporal division of labor between subsistence and commercial operations is encouraged by the fact that early June is widely acknowledged to be the best time of the summer to dry salmon, and it tends to be breezier and less rainy than in the months to follow. As Jody Seitz notes in a study of subsistence salmon fishing in Nushagak Bay, the flies that show up in late June, "are considered to be a real menace to drying salmon," since they can "lay their eggs in the flesh and spoil it for human consumption," whereas in "early June steady winds throughout the district help dry the fish quickly and keep insects from congregating on them" (1990: 68). Her report indicates that area residents have long sought to be able to subsistence fish at this time besides the more favorable weather, "they were also able to harvest salmon in places more convenient for them and utilize family labor for subsistence while preparing for commercial fishing" (Seitz 1990: 74).

As Bernice's experience and the above details suggest, workers—especially teenage children, for example—often freely travel from subsistence to commercial operations and back, depending on where there is most need for help. In its basic

mechanics, the work done on the subsistence sites is fundamentally similar to that of commercial fishing. Both involve catching fish in a gill net, whether it is fixed on shore or adrift behind a boat, even if the subsistence nets are shorter and fishing districts and regulations somewhat different. And of course both involve picking the fish from the net by their gills. Although the pressures for faster picking are generally more pronounced on commercial operations, it is not as if speed and dexterity are unhelpful in subsistence contexts. When, on occasion, subsistence nets get swamped with a flood of incoming salmon, fish picking continues hurriedly until all the fish are removed, since they must be processed in some form before they spoil. The more dramatic of these episodes usually involve urgent calls to friends or family for help on one or more of the various steps of the process.

Each of them subject to management by the Alaska Department of Fish and Game (ADF&G), both subsistence and commercial fishing as they are currently practiced demonstrate noteworthy structural similarities. Although ADF&G is organized into separate divisions for subsistence and commercial pursuits, both activities are subject to regulatory regimes that govern when, how, where, and by whom taking fish is permitted. And both sets of rules are also subject to enforcement by "fish cops." Although participation in the subsistence fishery is determined by residency rather than permit ownership, some similar forms of proprietary control characterize both kinds of operations as well. Like the commercial set net sites that are held by particular individuals, certain spots on Kanakanak Beach have been claimed by given individuals and families for their own subsistence sites, and these claims tend to be recognized year after year.

Subsistence and commercial fishing are linked in other ways, too. A good portion of the fish put up for subsistence is actually caught on commercial operations, at least in Dillingham among those who commercially fish. Although a number of area families travel to subsistence fish camps upriver on the Nushagak during summer months, others stay closer to town, at least for certain stretches. Here, they can continue to collect subsistence fish from Kanakanak Beach or spots nearby, assist their relatives out on drift boats by serving as a home base, and get infusions of fish from these commercial operations.

This was the arrangement favored by the Nomura family, who I describe at the beginning of Chapter Five, during the time I fished with Joe Sr. Marie, Joe's wife, took on a lot of the responsibility for organizing the commercial operation's provisions. She made sure to pack the galley of their small Rawson drift boat with food she'd prepared for her husband, son, and nephew. When I joined the crew, I brought aboard what Marie had entrusted me to deliver: several bags full of dried salmon strips; some additional sandwich making materials; coffee and a large number of Splenda packets (I was warned that these were imperative for Joe's coffee); and a seemingly bottomless vat of a tasty meal she called goulash, macaroni in tomato sauce with ground moose meat.

While on board, at points when a trip back to the Dillingham boat harbor seemed likely, I saw how Joe and Marie's fifteen-year-old son and twelve-year-old nephew picked nice kings out of the catch to take home. They headed and gutted the fish on the boat's deck, cleaning off the blood and grime, but making sure to save the heads—these would serve as the basis for Marie's fish head soup. We would enjoy this dish, which was very popular locally, the next time we came back to town. Meanwhile, back at the

Nomura home, Marie listened for word from Joe on the VHF radio, readied foods for the crew's return, and tended her smokehouse, keeping an eye out for the bear that had paid an unexpected visit earlier that summer. Although Marie performed this role masterfully, the following year she opted to spend a good part of the summer drifting, and I saw her and Joe out on the water late into the season.

The flexibility in fishing patterns demonstrated by Marie's varying roles in the family fishing operation speaks to the creative designs and adaptive responses of many in Bristol Bay to the sometimes converging, sometimes competing demands of subsistence and commercial fishing. These sorts of negotiations are especially evident among area residents who spend much of the summer at places that dramatically concretize the intimate connections between subsistence and commercial pursuits: fish camps that also serve as seasonal bases for commercial fishers. The abandoned village site of Nushagak, for example, which is across the water and just a bit downriver from Dillingham, has long been a place where people congregate to put up fish for the summer. Now, it is a collection of cabins, only inhabited during the summer, that serves as a encampment for commercial set netters fishing the Combine Flats to the south—as well as others, usually their family members, who are engaged in full-time subsistence operations. The same is true for Igushik, known as the summer fish camp for those from the year-round village of Manokotak, which also serves as a frequent port of call for commercial fishers from Manokotak as well.

Although many summer residents of Nushagak are from "Outside" or other parts of Alaska, one extended family from the region occupies several of the small houses that dot the shoreline. The Kiskas are a predominantly Yup'ik family originally from the

Nushagak River village of Koliganek, where many Kiskas still live. I got to know Anna Kiska quite well over my time in Dillingham. The youngest daughter of the adult generation, Anna was raised in Koliganek but had moved to Dillingham quite a few years back after spending much of her twenties in Anchorage and Fairbanks. When I met her, Anna worked full-time for the local housing agency and took care of her three children, aged three, six, and ten. She set netted commercially on the Combine, as did her elder sister Lillian's family. Her sister Lillian was married to a Polish-American man originally from Connecticut, Bud Czarnecki, who had first come to Alaska to fish after serving in Vietnam. Bud ran his own set net operation, as did his and Lillian's fourteen-year-old son, while their sixteen-year-old daughter crewed for Anna.

A good part of the extended Kiska clan—Anna and her children, the Czarneckis, another Kiska sister and her family, and Anna's mother Matrona—would settle into a cluster of Nushagak cabins for the summer. While Anna and Bud and the teenage Czarnecki children were out on the fishing grounds, Lillian and Matrona would care for the younger kids, maintain the cabins, add wood to the fire in the *maqi*, or steambath, and, of course, put up fish. Matrona tended to the long drying racks located down by the beach and a nearby smokehouse, and made stinky (or stink) heads, a Yup'ik delicacy that calls for burying fish heads in the ground to ferment. The family was able to put out a subsistence net along the beach near the cabins (the subsistence net is pictured in the foreground of Image 34); and the camp enjoyed a steady stream of fish from the commercial operations as well, salmon on their way upriver that were diverted from their trajectory to distant diners in favor of consumers closer at hand.



Image 34. Subsistence Net at Nushagak. Photo by Karen Hébert.

These details from my own field experience confirm what a good deal of research in western Alaska has forcefully demonstrated: the interpenetration of subsistence and commercial modes of production, particularly with respect to fishing (Fienup-Riordan 1986, Jorgensen 1990, Langdon 1986, Lonner 1986, Wolfe 1984, 1986). In a 1984 examination of the effects of growing commercial salmon fishing in "subsistence-based" Yup'ik communities on the lower Yukon River, Robert J. Wolfe observes a tight "incorporation" of commercial and subsistence pursuits (1984: 160). Besides simply noting that families and even given individuals participate in both commercial and subsistence activities, his research indicates that involvement in commercial fishing actually registers a "positive association" with subsistence: The more access to cash people have, the more they tend to hunt, fish, and gather, activities which have come to depend on purchased commodities like guns, snowmobiles, and fuel (1984: 177). Much as I have tried to show for the families I knew in Bristol Bay, Wolfe finds that, for those on the Yukon, "given a choice between retaining and selling a resource, a fisherman in fact does both, keeping some and selling some" (1984: 175).

Production as Consumption

My work in Bristol Bay suggests that just as subsistence and commercial economies interpenetrate, participation in commercial fishing is often central to identity and social relationships in much the same way as the subsistence activities that have been well documented by Northern researchers. As we have seen, for most of those I knew in Dillingham, the two productive modes are indeed hard to disentangle. Salmon is a Native food, for instance, irrespective of whether it is caught in a subsistence or commercial net. Similarly, "fishing," seen to encompass engagement in both commercial and subsistence salmon fisheries as typically presented, was presented as part of what it meant to be Native by many of those I met in Bristol Bay. Fishing was repeatedly talked about as being "in the blood." Over the course of my research, I lost track of the number of times Dillingham residents made reference to their blood when trying to explain to me why they planned to go out drifting for another season, even though they had lost money by doing so for most of the past several years, in one case, or even if it meant they might have to quit their relatively high-paying year-round job, in another. Like the practice of subsistence by Bethel residents considered by Hensel (1996: 7-14), those from the Dillingham area acknowledged full well that going out commercial fishing served economic purpose; but they typically presented their decision to do it as one that was motivated by much more than economic interests alone.

In fact, as theorized in Chapter Three, "fishing" was often represented as an activity opposed to "work" by many in the region. For example, in his office at the Bristol Bay Native Association (BBNA), George Sugatuk had a few bumper stickers tacked to a bulletin board beside his calendar and other work-related announcements. The one I always noticed reads: "Work Is for People Who Don't Fish." Although George was widely known for being quite good at his year-round job at BBNA, I always took the bumper sticker to mean that, nevertheless, he would rather be on his drift boat rather than in the climate controlled space of the BBNA office with stacks of paper on his desk. In fact, this was a sentiment expressed quite frequently by many Dillingham fishers with full-time jobs in the off-season.

When I described the bumper sticker and its placement to an academic in Anchorage, however, he stopped me to clarify that this particular bumper sticker was meant to refer to sport fishing. Thus, the decal—along with others bearing analogous messages, like "Born to Fish, Forced to Work"—was popular with Anchorage fly fishermen and others who saw fishing, unlike work, as a form of recreation. I know full well that George is not an avid fly fisherman, and this is far from what "fishing" connotes in Bristol Bay, where there is little love for sport fishers. But the academic's comment draws attention to George's recontextualization of the bumper sticker phrase, his transformation of one message by which labor and leisure are opposed to another one altogether. This message emphasizes that some kinds of productive activity are not seen as "work" at all, at the same time they are by no means considered mere recreation either.

The presentation of fishing as something that is "in the blood" as well as an activity that one is "born" to do (in contrast to "work" performed for financial necessity)

highlights the extent to which fishing is rhetorically cast as something that is done without question, like eating, sleeping, or breathing. While fishing might be presented as an activity that one enjoys, it is more pointedly conveyed as something one does because he or she must—but not because the fisher is forced to by others or by second order rationalization. This way of representing fishing and one's involvement in actually dovetails quite closely with a portrayal that is widespread among both local and Outside fishers: fishing as an addiction. Despite the very different histories and relationships Dillingham residents and Yup'ik individuals and communities have to Bristol Bay salmon fishing, non-Native fishers, many from distant areas, some from fishing families, speak similarly about fishing as if something more akin to consuming than producing.

I struck up a conversation one time at the Dillingham boat harbor with the captain of a neighboring boat. After a few tides of closure, a big opening had just been announced, and fishers were out on their decks, readying their boats to head out into the district. Randy, a fisherman from Washington State, had fished in Bristol Bay since the 1980s. As he organized equipment on his deck, he reflected on the industry, the restructuring options on the table at the time, and his occupational future. The conversation turned to the Trade Adjustment Assistance (TAA) program described in Chapter One, which provides services and benefits to workers whose jobs have been lost or negatively affected by the passage of the North American Free Trade Agreement (NAFTA).¹³² To Randy, who had actually just finished some training in electronics in hopes of preparing himself for other kinds of work, the TAA and many other fisherman aid program were "a joke, all PR." He noted that many of them require you to sell your boat and change jobs if you pursue benefits, and joked that fishermen often "are a real

¹³² I examine the TAA program more closely in the following chapter.

problem" for those initiatives because "they always want to go back." He repeated the language I had heard elsewhere in explaining that, for those who do it, fishing is like "an addiction." While non-Native and nonresident fishers perhaps identify less strongly with area salmon themselves, their evaluation of their products and their engagement with their work similarly cannot be reduced to a function of perceived consumer preferences.

Other Consumer Demands

My findings indicate that fishers' identity as consumers, of both salmon itself and fishing practice, influences their production in critical ways. In fact, some of the strongest evidence for this claim can be found in fishers' fairly broad enthusiasm for quality itself. In addition to the very obvious and important financial motivations, their discussions of quality seem animated by a hope that their own attributions of value will be reciprocated on the other end of the commodity chain. In various industry forums, fishers claim to feel "embarrassed" or "ashamed" when they sell fish they themselves wouldn't want to eat, or serve to friends and family. From their vision of and interest in the housewife shopping for her family's dinner, we can see that fishers imagine that their consumers are bound up in relations of provision just as they are themselves.

Quality-oriented processors seize upon this homology in their efforts to instruct fishers in quality production techniques. At another industry workshop for fishers not unlike the Dillingham processing workshop in content and structure, a presenter from Kenai Wild, the new branding initiative for fishers on the Kenai Peninsula south of Anchorage, explained how they worked to increase the percentage of "number 1s" in the catch. They conveyed to Kenai fishers that commercial production now meant having a

"home pack mentality." According to the Kenai Wild representative, "awareness" among fishers had been increasing as a result of such educational campaigns.

Nevertheless, at the same time that quality fishing practices are furthered by explicit reference to producers' own role as salmon consumers, this also provides fishers with a practical and conceptual framework for rejecting certain processing company policies at the same time. The fact that salmon can be diverted to other paths than commercial production means that they are always subject to revaluation based on their positioning in another domain.

Moreover, fishers' own consumer demands at times lead them to refuse to sell their catch to processors altogether when they deem prices too low. This is especially true with respect to king salmon, which are highly valued locally for eating and smoking. Lately, fishers say, they have been keeping more of the king salmon they catch on their commercial operations for personal use. Once, during a particularly busy period of fishing, I clumsily deposited an enormous king salmon back into the muddy waters of the Nushagak River while trying to lift it onto a tender. A number of fishers present at the time tried to comfort me amidst their throaty guffaws. "Aww, don't feel so bad," a red-bearded fisherman in a grimy t-shirt called out. "That big, fat fish is better off at the bottom of the river, fertilizing the Nushagak, than getting sold to the cannery for next to nothing." His interjection sparked an animated exchange among those delivering their catch, about how little the cannery would have paid for such an impressive fish, and how "it's not even worth it to sell nice kings anymore"—"might as well take 'em home and eat 'em at the prices we're getting here."

Yet, more often, producers' identities as consumers themselves makes for a fraught relationship with buyers, as suggested by their ambivalent feelings about their Japanese consumers in the earlier section. Relying on the metaphor of market exchange as a vehicle for communication, fishers sometimes talk about low prices themselves as being "an insult" that they feel is a form of "disrespect." In these moments, the consumer is pilloried for her ignorance, not only of the value of the work the fishers do, but also of the natural wealth attributed to the fish themselves. Yet the consumer is just as often vaunted as begrudged in industry conversations-or at least a certain idealized version of the consumer. At the Dillingham workshop, yet another specialty processor on hand remarked that his firm has sought to "avoid commodity production" by "matching deserving customers with the products they expect." In this formulation, the market is painted as a vehicle of proper distribution through which people obtain their just desserts, or, in this case, entrées. Similarly, fishers often talk about seeking consumers who can "appreciate" their wild product, an idea that both confirms the association of specialty fish with worthy people at the same time it allows for the possibility that "the housewife in Peoria" can be "educated" about the benefits of Alaskan salmon, and thus converted as a customer.

As this suggests, producers' hybrid identities do not just lead them to accept or reject quality demands, but are inflected in any attempt to translate consumer demand. Fishers' home pack, for instance, can serve as a proxy for processing companies to school them in quality production, but this ultimately does not neatly mirror mainstream consumers' priorities or preferences. Unlike the home pack readied by Joe Nomura's son and nephew on the deck of his drift boat, it is unlikely that Whole Foods consumers

would the king salmon heads as part of their meal. While the Nomuras are themselves consumers of commodities for which they comparison shop on store shelves—everything from the Splenda in Joe's coffee to the oil that he puts in his boat engine, for instance they are actually not consumers of salmon as commodity. For them, as for fishing itself, Bristol Bay salmon are not merely one option among many in a competitive marketplace.

Other People's Plates?

When the Dillingham processing workshop resumed after the lunch break described earlier, Bob Bell and the other presenters who had supplied salmon samples were eager to get feedback on their developing products. After all, they told the group, who knew more about salmon than the people of Bristol Bay themselves? The workshop participants, many of whom had spent the better part of the lunch hour talking about the salmon samples, were quick to offer their opinions. After over a day and a half in the Bingo Hall, the meeting had developed a more comfortable and relaxed, if slightly restless, tenor; and the group discussion of the developing products took on a lively, animated tone as participants together searched for the words to pinpoint the intricacies of texture, flavor, and smell. Amidst a characteristically snappy evaluation of some salmon patties—which most people thought were way too dry—Jeri-Lynn Robinson stopped herself, declaring to Bob and the other presenters that despite their expertise in salmon, she and the rest of the group might not be the most helpful critics: They no doubt had very different tastes from the housewives of Peoria. The room giggled along with her when Jeri-Lynn remarked that, given their love of Native food, "we like stuff oily—we love it when the grease is rolling down our chins."

As Jeri-Lynn's comments suggest—and as is evident in Grace Crandall's discussion of Jammin' Salmon that began this chapter-producers grapple with the role consumption plays in their production in ways that foreground both identity and difference, shared sensibilities with and as consumers alongside assertions of alterity. The degree to which end consumers figure in their imagination of production, along with the important ways in which they reconfigure their action based on these presumptions, provides an indication of the growing significance of what Michel Callon has theorized as the increasing "reflexivity" of contemporary markets. However, my findings lead me to question Callon's assumption that the growth of reflexivity among economic actors represents any fundamental "collaboration," "co-operation," or seamless "coconstruction" of supply and demand (Callon, et al. 2002). While consumers' energies in learning about and choosing among new niche-marketed products are no doubt expanded by current market activity and harnessed as a resource for capital accumulation (see Foster 2006a for a useful discussion of this phenomenon), the disjuncture of producer and consumer interests and viewpoints is not reconciled through processes of qualification. Rather, I propose that the reflexive and recursive construction of supply and demand in contemporary economic practice more resembles a hall of mirrors, in which perspectives of perceptions of desires are endlessly refracted as they are continually reproduced.¹³³ At the same time that these reflections represent a communicative medium through which distanced and divergent perspectives are brought into mutual view and influence, their imperfect mediation and endless, always-partial reiteration highlights their constitution in differing productive relations and positions of power.

¹³³ This image recalls Robert Foster's use of Ulf Hannerz's conception of the "global ecumene as a network of networks": people's "perspectives on other people's perspectives—'their approximate mappings of other people's meanings' (Hannerz 1992: 43)" (Foster 2006b: 287).

I further argue that it is a particular formulation of value that leads Callon and others to a theoretical framework that ultimately does not adequately account for the transformations immanent in new economic forms, at least as they are exhibited in Bristol Bay. By failing to acknowledge the social nature of labor and desire, as well as the role of material nature in the creation of wealth, Callon's own theoretical framework merely reproduces the representation of highly singularized individual demand that is promulgated and valorized by capitalist markets themselves. In noting that Callon's analysis is limited by his consideration of value, I follow a recent critique by Daniel Miller, who argues that Callon tends to reduce value to price, and place it beyond the bounds of economic calculation rather than at the center (2002: 14). In fact, Miller seems to imply that Callon does this because he lacks a concept of value (2002: 2). I would instead suggest that Callon's approach is deeply informed by a very particular conceptualization of value, if one that predisposes him to see commingling and coincidence between supply and demand.

Upon scrutiny, Callon's arguments appear to rely heavily on a neoclassical model of value that privileges utility as expressed through demand. Unlike the theories of value generated by classical economists—which sought the basis for value in some form of costs of production¹³⁴—neoclassical accounts locate value in the subjective needs and desires of economic actors. As economist Peter Lichtenstein outlines in his survey of value theories, neoclassical models of value are rooted in the development of utility theory in the late nineteenth century. He argues that utility theory, in effect, served to replace a production-based value theory with a demand-based one:

¹³⁴ As Lichtenstein (1983) points out, classical accounts of value diverged in their assessments of these costs of production, which were seen, alternatively, as based in actual human labor (Ricardo), abstract human labor (Marx), or a combination of labor, capital, and rent (Smith).

For one thing, the neoclassical theory of supply and demand did not really join the classical cost-of-production theory of supply with the utility theory of demand. The twin blades of [Alfred] Marshall's scissors supply and demand—never really existed. What really happened was that utility theory came to be used to explain both the supply side as well as the demand side. The classical cost-of-production theory was dropped entirely and in its place was substituted a utility theory and opportunity cost theory of factor supply....The true classical idea of cost—the amount of society's labor diverted to the production of goods—plays no role whatever in neoclassical supply and demand theory. (Lichtenstein 1983: xii)

This formulation of value—which collapses the role of labor, and arguably nature, into expressions of consumer desire—is found among a wide range of actors, from theorists like Callon to many salmon industry analysts themselves. Indeed, as we have seen, salmon quality itself often functions as a mirror of neoclassical value, an everchanging reflection of the vicissitudes of shifting consumer preferences.

Yet the quest for quality in Bristol Bay reveals more than the parallel composition of supply and demand posited by the neoclassical model, and points as much to the limitations of this theory of value for understanding contemporary capitalism as it does to its prominence in everyday economic practice. As the material included in this and prior chapters demonstrates, efforts to reconfigure the commodity in the image of perceived demand are actually animated by contested and contradictory ideas about quality, broadly conceived, and competing paradigms of value. Despite the prevalence of the sense that the value of production is established by consumers, even among many fishers themselves, there are elements of the industry reorientation underway that call this into question at the same time.

Let me offer one additional example to those already outlined. One day when I dropped by my Dillingham neighbor Eric Redfield's house, Eric had an especially

sensational story to share. He had just gotten off the phone with Dave Grover of Wild Choice, the niche-market salmon purveyor detailed in the previous chapter. Eric paced around his kitchen agitatedly, evidently still wound up from the conversation. He had known Dave for years, and liked to contact him now and again to get the latest news from the salmon industry trenches. "Get this," Eric began, "Dave Grover and the Wild Choice folks were at Costco the other day, making a pitch for some new jerky product they're developing." He proceeded to launch into the following tale, no doubt embellished somewhat by his own storytelling flair. The version I heard recounted went something like this:

So, the Wild Choice people are giving their presentation, and somewhere in the middle the Costco rep interrupts them, saying, "You know, I'm not sure we have a use for this product, but I think the guys down the hall would love it." So he starts to take Grover and the others down the hall to meet the guys in the other department. But guess what? The guys down the hall are the *pet food* people! It's the *pet food department!* As soon as Grover figures this out he stops the Costco rep and tries to explain. "No, no," he says, "this stuff isn't for pets—it's high quality, and it's not cheap. No one would buy it just to give to their dogs." But the Costco guy just laughed and told him point-blank: "You'd be amazed at how much money people spend on their dogs. Trust me, the pet guys will absolutely love this stuff!" Sure enough, the Costco pet people couldn't say enough good things about these jerky chunks. They were totally convinced they'd sell. Can you believe it? *Pet food?!* All this focus on quality and our fish winds up going to feed some rich person's dog!

I agreed with Eric that there was something profound about this prospect.

Although area salmon have long been eaten by dogs—especially during the era when most transport in the region was done by dog team—this feed never included the products that had been most carefully and attentively crafted. Moreover, the dogs in this case functioned as needed workers, not just pets. I was about to raise this very point to Eric, but he shot up from the table and grabbed his cordless phone. This was one story he thought other Bristol Bay fishers needed to hear.

Conclusion

"Anybody who thinks they're going to survive in this industry status quo is going to be a dinosaur," Pete Koyama stated forcefully to the group assembled on the lower level of the Dillingham City Hall building. In the carpeted space of the City Council chambers—where oil paintings of past civic leaders lends a certain air of gravitas not found in many other Dillingham venues—a meeting of the Nushagak Fish and Game Advisory Committee was underway. Pete was one of the local Advisory Committee's most dedicated and vocal members. Made up of fourteen residents of Dillingham and its surrounding villages, the committee is one of the "local 'grass roots" bodies formed in each Alaskan region in order to evaluate proposals put before the state Boards of Fisheries and Game (ADF&G 2008b). This particular meeting had been convened so that the committee could determine its recommendations for individual proposals soon to be considered by the Board of Fish at its 2003 session on Bristol Bay. The committee members, who sat at the front of the room around a large table, were joined by other meeting attendees, including numerous ADF&G officials, a handful of interested fishers and members of the public, representatives from local media outlets, and the Nushagak Advisory Committee's official minute-taker at the time, me.

The prior summer had seen Bristol Bay salmon prices and harvest values barely nudge higher than their alarming lows the summer before. In response, individual fishers and various regional organizations had submitted a number of proposals for consideration

by the Board that would introduce significant structural change to the Bristol Bay salmon fishery if approved. Arguing in support of one of these proposals, Pete urged the committee to action. "Drift and set net permits are leaving the area," he said, referring to the longstanding permit drain from rural resident hands, so "we can either do nothing or be a little proactive." It was evident from the preceding discussion that many on the committee did not support the proposal in question, a measure to increase the 32-foot length limit on Bristol Bay drift boats. The same members opposed a handful of other proposals also associated with efforts to consolidate existing fishing operations or improve their economic efficiency, including one that Pete himself had authored. Their opposition was clearly a source of frustration for Pete. "I don't hear anything to turn the tide," he leveled at his fellow committee members.

The stated rationale for the boat lengthening proposal centered on the argument that bigger boats would enable fishers to better integrate quality harvesting practices into their operations. Pete drew upon this argument in justifying his personal support for the proposal. As he explained to the group, he was convinced that Bristol Bay had "lost [its] place in the world market," and would only find it again "in niche markets," whose capture he judged would be facilitated by measures like this one, which were aimed to promote quality. He noted that the fish pumps whose introduction had been proposed as a more quality-conscious means of transferring salmon from individual fishing boats to processing tenders—that is, replacing brailer bags with the method employed at many fish farms—require salmon to be floating in water, which takes up considerably more space and weight on fishing vessels. Further, Pete pointed out that recent industry surveys had indicated that many Bristol Bay fishers did not chill their catch because they

felt that the equipment required for that alone, whether large volumes of ice or more high-tech refrigeration systems, took up too much room on boats.

"The fishery is leaving us," Pete reiterated in pressing for change. He prompted his fellow committee members, almost all of whom identified as Alaska Native, to bear in mind the struggles of earlier generations of area residents to gain access to the commercial fishery in the first place. "Go back and look at the old folks who fought just to make sure they had a place in a cannery boat," he challenged them.

Despite Pete's impassioned pleas and skilled argumentation, the majority of the Nushagak Advisory Committee was unmoved by his pitch. It was a close vote, but the measure failed. As indicated earlier, with one noteworthy exception, most proposals like this one, grouped under the rubric of fishery restructuring, were voted down in 2003 by the Board of Fish, and then tabled at the Board meeting in 2006 for consideration in 2009 or 2010. There is now a separate committee charged with developing recommendations on the deferred proposals: the Board of Fisheries Salmon Industry Restructuring Committee. While proposals to increase boat length in Bristol Bay have been put forth for decades—which was an explicit topic of conversation in the Advisory Committee's discussion of the 2003 proposal—such measures never in the past had been framed in terms of fishery restructuring, much less the promotion of quality production techniques.

As this dissertation has sought to show, this shift both reflects broader underlying industry transformations at the same time it ushers new ones into being. Novel economic pressures and discursive configurations make for quite different debates than those that characterized past fishery policymaking, ones that have and may continue to result in different outcomes. The alterations in production by which natural resource commodities

are refashioned for changing markets does not simply affect their material form, we have found, but also the practices and relations of their producers, as well as the structural configurations of the regulatory regimes upon which they depend.

Further, the developments detailed across the prior chapters are likely to make future Bristol Bay fishery deliberations only more characterized by contestation. It seems noteworthy that proposals for change are now opposed through the very terms in which they are often promoted. In response to Pete's efforts to endorse the boat lengthening proposal as a means of effecting quality, for instance, fellow committee member Rodger Joseph, representing the Nushagak River village of New Stuyahok, disputed the contention that bigger boats were a boon in the pursuit of quality. He described a photo of a smaller Rawson fishing boat beside a big aluminum one that had been shown at a recent regional meeting devoted to restructuring issues—the same photo I included at the beginning of Chapter Four. As Rodger recalled to the rest of the committee, according to workshop presenters, salmon quality was better for fish caught on the Rawson. In fact, to my memory, the photo had not been presented to portray anything specifically related to quality, but rather to illustrate "capital stuffing," the arguable overcapitalization that had been incorporated into the Bristol Bay fleet. Yet Rodger's invocation of the image highlights the degree to which the impulses driving industry transformation in Bristol Bay are fraught with contradictory motivations, means, and consequences.

Such tensions evident in fishery restructuring debates, I suggest, reproduce those that attend the production of wild salmon in Bristol Bay more generally, as detailed over the course of the dissertation. At the same time that wild salmon is increasingly sought after in a global market increasingly awash with farmed supply, the very qualities that

constitute its wildness become its most significant commercial hurdles. Likewise, consumers' pursuit of wild fish itself can only be understood in relation to shifting salmon tastes that developed in tandem with rising farmed production. For producers, aims to restore industry profitability through the promotion of wildness typically entail a great deal of taming of unruly elements in their work and fish flesh alike.

Moreover, as Pete and Rodger's debate at the Advisory Committee meeting further suggests, shared histories, fears of loss, and aspirations for recovery are at the same time woven from threads composed of contradiction and difference. This suggests that the wild dreams that bridge the increasing appeal of wild salmon among consumers with the hopes of struggling Bristol Bay salmon producers are themselves fissured with disjunctures. These go even beyond the quite salient differences between the positionalities conferred by production and consumption to reflect the nearly infinite array of discontinuous viewpoints that accompany what Gayatri Spivak might characterize as "the *heterogeneity* of use-value as a private grammar" (1987: 162, emphasis in original). There is thus a sort of wildness embedded in the core mechanisms of capitalist production, which only amplifies the peculiar unruliness of the human and natural energies that are objectified for purposes of production in Bristol Bay.

Across the dissertation, we have seen how heterogeneous materials and relations are over and again abstracted for ends of accumulation, transformed into inputs like labor, property, and capital. Yet the chapters have also documented the ways in which those selfsame processes are endlessly interrupted as the transformations that propel them repeatedly prove incomplete. Residues of concrete, embodied entailments remain to

continually punctuate what might at first glance appear to be the smooth feedback loops that link production and consumption.

However, the "private grammars" riddled throughout commodity production stand in sharp contrast to the assumptions of private production so central to capitalist practice. As is especially manifest in the Bristol Bay salmon industry with respect to idioms of individual ownership, the presumption of production as an individual activity is generated with and through the production of commodities themselves. According to Marx, bourgeois political economy is founded upon the notion that "naturally independent, autonomous subjects" are brought "into relation and connection by contract"-a de-socialized picture he seeks to reveal as an "illusion," an apparent condition of nature that is in fact the historical product of capitalism ([1857-8] 1993: 83). In this vein, the dissertation has charted the emergence and elaboration in Bristol Bay of what Marx describes as "the unimaginative conceits" of the "individual and isolated...fisherman, with whom Smith and Ricardo begin" ([1857-8] 1993: 83). In addition, it has traced the further transformation of "socially determined individual production" ([1857-8] 1993: 83) in an era of increasing market reflexivity. In so doing, it suggests that acts of production and consumption alike are only made more seemingly private through their joining in the creation of singular commodities like quality salmon.

As much as the refashioning of Bristol Bay fish into a product fit for niche markets opens possibilities for fishers, then, it also rests upon and furthers familiar capitalist dynamics. Through the albeit partial incorporation of consumers' presumed preferences into production designs, and the increasing transfiguration of production conditions into points of sale, there is only an amplified sense of what Marx theorized as

the appearance of equivalence in exchange: of consumption and production needs mirroring one another in perfect synchrony. In Marx's analysis, of course, this illusory equivalence is a product of capitalist exchange itself, which conceals the underlying fact of capital accumulation that fuels production. With respect to the making and marketing of quality salmon, we find that the proliferation of concrete detail visible in exchange, no matter how accurately or earnestly developed, bears only fleeting resemblance to those concrete residues that unsettle capitalist forms. Moreover, the representational emphasis on highly particular expressions of material nature and human fabrication belies their ongoing abstraction as labor and raw materials—and diverts attention from the extent to which the reinvention of production is socially compelled at the same time it seems individually chosen.

For many fishers, the appeal of tailoring salmon to presumed consumer preference arguably lies at least in part in its promise to maintain fishing livelihoods without more sweeping restructuring, like a drastic downsizing of the salmon fleet. Even more stark is the contrast between the production of quality salmon and the alternative forms of commodity production, specifically those in the neoclassical sense, that have been proposed as of late for Bristol Bay. Not only has oil and gas exploration in area waters been reopened in recent years after a longtime moratorium, but the region has also become the site for a proposed mine that would be one of the largest in North America if developed. Hailed by its boosters as "one of the world's largest gold-coppermolybdenum deposits," the Pebble prospect near Lake Iliamna in Bristol Bay's headwaters is being aggressively developed by a company called Northern Dynasty

Minerals (2008). In 2007, Northern Dynasty entered into a partnership with the mining giant Anglo American, which pledged \$1.425 billion to bring Pebble into production.

As corporate mining interests have mobilized in support of Pebble, a fairly well funded coalition of environmental organizations and fishing industry groups has formed in vehement opposition. The proposed mine has provoked fierce debate within Bristol Bay and beyond. A bill on the 2008 Alaska primary ballot, an effort impose water quality standards "on new large scale metallic mineral mining operations in Alaska," has arisen in direct response to Pebble (State of Alaska 2008). Pro and con Pebble television commercials have been aired statewide for over a year, and the issue is gaining increasing visibility in nationwide and international media outlets. Both sides frame their interventions in terms of salmon—whether mining is represented as a needed means of economic diversification in the face of falling fishing earnings, or as a threat to the renewable resource upon which Bristol Bay's economy and ecology both depend.

As the debate over Pebble indicates, the economic reinventions imagined for the resource-producing region are not limited to the remaking of its salmon industry, even as they are irretrievably informed by it. Not unlike prior modes of commodity production in Bristol Bay, the visions of opportunity that accompany those of mineral development—of the concomitant capture of markets, profits, labor, and nature—are laced with pitfalls of risk. In the case of Pebble, however, these are as literal as the two-mile-wide open-pit mine that has been proposed, and potentially as toxic. Metaphors of extinction thus take on a new valence as the wildness that is simultaneously caught, created, and never quite corralled in Bristol Bay salmon production is rendered altogether more fragile in the shadow of a prospect for resource extraction on an entirely more massive scale.

Works Cited

Achesor	n, James L.
	1975 The Lobster Fiefs: Economic and Ecological Effects of Territoriality in the
Adam, E	Maine Lobster Industry. <i>Human Ecology</i> 3: 183-207.
	1998 Timescapes of Modernity: The Environment and Invisible Hazards.
	London: Routledge.
	b, Alaska Department of Fish and Game
	2006 2006 Bristol Bay Salmon Season Summary. King Salmon and Dillingham, Alaska: Division of Commercial Fisheries.
	2007a 1996 Alaska Commercial Salmon Harvests and Exvessel Values.
<u> </u>	http://www.cf.adfg.state.ak.us/geninfo/finfish/salmon/catchval/blusheet/96exvesl.
I	hp. Accessed on September 8, 2007.
2	2007b 2006 Alaska Commercial Salmon Harvests and Exvessel Values.
	http://www.cf.adfg.state.ak.us/geninfo/finfish/salmon/catchval/blusheet/06exvesl.
I	hp. Accessed on September 8, 2007.
	2007c Alaska's Commercial Salmon Fishery.
	http://www.adfg.state.ak.us/special/salmonfishery.pdf. Accessed on February 4,
	2004.
	2007d Alaska's Salmon Management: A Story of Success.
	<u>http://www.adfg.state.ak.us/special/salmonmngmnt.pdf</u> . Accessed on August 10,
	2008.
2	2007e Chum Salmon. <u>http://www.adfg.state.ak.us/pubs/notebook/fish/chum.php</u> .
I	Accessed on April 9, 2007.
2	2007f Sockeye Salmon.
<u> </u>	http://www.adfg.state.ak.us/pubs/notebook/fish/sockeye.php. Accessed on March
]	15, 2007.
2	2008a 2008 Bristol Bay Inseason Sockeye Salmon Harvest Timing (as Compared
t	o 2007 and 5-Year Average).
	http://www.cf.adfg.state.ak.us/geninfo/finfish/salmon/catchval/charts/bbaysock.ph
ł	<u>p</u> . Accessed on August 3, 2008.

2008b Advisory Committees.

http://www.boards.adfg.state.ak.us/advisory/index.php. Accessed on June 14, 2008.

2008c Bristol Bay Salmon Fisheries - by District. http://www.cf.adfg.state.ak.us/region2/finfish/salmon/maps/bb_all.php. Accessed

on August 3, 2008.

2008d Division of Commercial Fisheries: Bristol Bay Fisheries. <u>http://www.cf.adfg.state.ak.us/region2/finfish/salmon/bbayhome.php</u>. Accessed on June 18, 2008.

2008e Management Regions, Commercial Fisheries. http://www.cf.adfg.state.ak.us/regnmap.php. Accessed on August 3, 2008.

2008f Salmon Species Descriptions. <u>http://www.cf.adfg.state.ak.us/geninfo/finfish/salmon/species/salmon_species.php</u> . Accessed on August 3, 2008.

ADF&G, Alaska Department of Fish and Game, Section of Boards Support, 2008g Board of Fisheries Photos.

http://www.boards.adfg.state.ak.us/fishinfo/member/mempics.php. Accessed on August 12, 2008.

Agrawal, Arun

1998 *Greener Pastures: Politics, Markets, and Community among a Migrant Pastoral People.* Durham: Duke University Press.

—

2005 *Environmentality: Technologies of Government and the Making of Subjects.* Durham: Duke University Press.

AIFMA, Alaska Independent Fishermen's Marketing Association 2008 Alaska Independent Fishermen's Marketing Association. http://www.aifma.org/. Accessed on August 9, 2008.

Alaska Department of Commerce, Community and Economic Development 2007 Community Database Online.

http://www.commerce.state.ak.us/dca/commdb/CF_COMDB.htm. Accessed on May 30, 2007.

Alaska Finfish Farming Task Force

1990 Report to the Alaska Legislature. Juneau: Alaska Finfish Farming Task Force.

Alaska Fisheries Development Foundation, Inc.

2007 History and a Few Achievements. <u>http://www.afdf.org/history.html</u>. Accessed on April 9, 2007.

Alaska Fisheries Marketing Board

2007 Alaska Fisheries Marketing Board. <u>http://www.alaskafisheriesboard.org/</u>. Accessed on September 10, 2007.

Alaska Sea Grant

2003 MAP Helps Salmon Fishermen with Federal Assistance Program. *Fishlines* 23(12).

2008 Salmon Quality (for Fishermen).

http://seagrant.uaf.edu/map/workshops/justintime/sqfishermen.pdf. Accessed on August 13, 2008.

Alaskan-Adventures

2008 The Alaskan Coho. <u>http://www.alaskan-adventures.com/alaska-coho.htm</u>. Accessed on August 3, 2008.

Amariglio, Jack, and Antonio Callari

1993 Marxian Value Theory and the Problem of the Subject: The Role of Commodity Fetishism. In *Fetishism as Cultural Discourse*. E. Apter and W. Pietz, eds. Ithaca: Cornell University Press.

Anagnost, Ann

2004 The Corporeal Politics of Quality (Suzhi). *Public Culture* 16(2): 189-208.

Anchorage Times

1980 Limited Entry Fiasco. In The Anchorage Times. Anchorage, Alaska. Anderson, James L.

1997 The Growth of Salmon Aquaculture and the Emerging New World Order of the Salmon Industry. In *Global Trends: Fisheries Management: Proceedings of the Symposium Global Trends, Fisheries Management, Held at Seattle, Washington, USA, 14-16 June 1994.* E. Pikitch, D.D. Huppert, and M.P. Sissenwine, eds. Pp. 175-184. Bethesda, Maryland: American Fisheries Society.

ANKN, Alaska Native Knowledge Network

2008 Alaska Native Languages. <u>http://www.ankn.uaf.edu/npe/anl.html</u>. Accessed on August 7, 2008.

ANLC, Alaska Native Language Center

2008a Alaska Native Languages. <u>http://www.uaf.edu/anlc/languages.html</u>. Accessed on March 20, 2008.

2008b Alaska Native Languages: Alutiiq. <u>http://www.uaf.edu/anlc/langs/as.html</u>. Accessed on March 20, 2008.

2008c Alaska Native Languages: Central Alaskan Yup'ik. http://www.uaf.edu/anlc/langs/cy.html. Accessed on March 20, 2008.

2008d Alaska Native Languages: Inupiaq. <u>http://www.uaf.edu/anlc/langs/i.html</u>. Accessed on March 20, 2008.

2008e Alaska Native Languages: Unangax[^].

http://www.uaf.edu/anlc/langs/al.html. Accessed on March 20, 2008.

Apostle, Richard, Gene Barrett, Petter Holm, Svein Jentoft, Leigh Mazany, Bonnie McCay, and Knut Mikalsen

1998 *Community, State, and Market on the North Atlantic Rim: Challenges to Modernity in the Fisheries.* Toronto: University of Toronto Press. Appadurai, Arjun

1986a Introduction: Commodities and the Politics of Value. In *The Social Life of Things: Commodities in Cultural Perspective*. A. Appadurai, ed. Pp. 3-63. Cambridge: Cambridge University Press.

1986b *The Social Life of Things: Commodities in Cultural Perspective.* Cambridge: Cambridge University Press.

1996 *Modernity at Large: Cultural Dimensions of Globalization*. Minneapolis: University of Minnesota Press.

AQS

2004 Progress Report on the Alaska Quality Seafood® Program. Accessed on November 26, 2006.

2006 Alaska Quality Seafood: Certifying Quality Every Step of the Way. <u>http://www.alaskaqualityseafood.com/</u>. Accessed on November 28, 2006.

Arce, Alberto

1997 Globalization and Food Objects. In *Images and Realities of Rural Life: Wageningen Perspectives on Rural Transformations*. H.d. Haan and N. Long, eds. Pp. 178-201. Assen: Van Gorcum.

Arendt, Hannah

[1958] 1998 *The Human Condition*. Chicago: University of Chicago Press. ASMI, Alaska Seafood Marketing Institute

2003 Foodservice Flash, November 2003.

http://www.alaskaseafood.org/foodservice/enews_november03.htm. Accessed on August 27, 2008.

2005 Annual Report 2003-2004. Juneau: Alaska Seafood Marketing Institute.

2006a Alaska Seafood. <u>http://alaskaseafood.org/</u>. Accessed on December 1, 2006.

2006b Alaska Seafood - Quality and Handling Training Program.
 <u>http://www.alaskaseafood.org/fishingprocessing/training/main.html</u>. Accessed on November 15, 2006.

- 2007a Cook It Frozen! <u>http://www.cookitfrozen.com/why_cif.html</u>. Accessed on March 15, 2007.
- 2007b Technical and Quality Control. http://www.alaskaseafood.org/industry/qc/index.html. Accessed on March 27, 2007.

2008a Harvesting Alaska Salmon. http://www.alaskaseafood.org/information/fisheries/pages/harvest-salmon.html. Accessed on August 3, 2008. 2008b Seafood Species.

http://www.alaskaseafood.org/information/species/index.html. Accessed on August 3, 2008.

n.d. Alaska, Naturally: Alaska Salmon Menu & Marketing Guide: Alaska Salmon Marketing Institute.

Babcock, Bruce A., and Quinn Weninger

2004 Can Quality Revitalize the Alaskan Salmon Industry? Ames, Iowa: Center for Agricultural and Rural Development, Iowa State University.

Barry, A., and D. Slater

2002 Technology, Politics and the Market: An Interview with Michel Callon. *Economy and Society* 31: 285-306.

Bataille, Georges

[1967] 1991 *The Accursed Share*. Volume 1. New York: Zone Books. Bayne, Rachel E., and Ellyn Ferguson

2003 Wild Fish So Far Elude 'Organic' Label. In Salem Statesman Journal. Salem, Oregon.

BBAHC, Bristol Bay Area Health Corporation

2004 Bristol Bay Area Health Corporation: Celebrating 90 Years of Healthcare Delivery & 30 Years of Tribally Directed Healthcare in Bristol Bay. Dillingham: Bristol Bay Area Health Corporation.

2008a Dillingham. <u>http://www.bbahc.org/dillingham.html</u>. Accessed on August 7, 2008.

2008b The Bristol Bay Region. <u>http://www.bbahc.org/region.html</u>. Accessed on March 21, 2008.

BBEDC, Bristol Bay Economic Development Corporation

2007 Partners. <u>http://bbedc.com/about/partners.html</u>. Accessed on June 20, 2007.

BBNA, Bristol Bay Native Association

2001 Draft Minutes - November 7 Teleconference Meeting. Beyond the 2001 Salmon Season: Saving the Wild Salmon Industry. Dillingham, Alaska: Bristol Bay Native Association.

BBNC, Bristol Bay Native Corporation

2008 Welcome to BBNC. <u>http://www.bbnc.net/</u>. Accessed on August 2, 2008. BBRSDA, Bristol Bay Regional Seafood Development Association

2008 Bristol Bay Regional Seafood Development Association.

http://www.bbrsda.com/index.cfm. Accessed on August 9, 2008.

BBSFRS, Bristol Bay Salmon Fishery Restructuring Study

2002 Summary of Town Meetings to Obtain Public Input, Naknek and Dillingham, Alaska, June 18 and 20, 2002.

2003 The Future of the Bristol Bay Salmon Fishery. Dillingham: BBEDC, Bristol Bay Economic Development Association.

Beaglehole, J.C., ed. 1967 The Journals of Captain James Cook on His Voyages of Discovery Volume III, The voyage of the Resolution and Discovery, 1776-1780, Part One. Cambridge, England: Published for the Hakluyt Society at the University Press. Beck, Ulrich 1992 Risk Society: Towards a New Modernity. London: Sage Publications. Beck, Ulrich, Anthony Giddens, and Scott Lash 1994 *Reflexive Modernization: Politics, Tradition and Aesthetics in the Modern* Social Order. Palo Alto: Stanford University Press. Berge, Aslak 2005 Salmon Fever: The History of Pan Fish. Bergen, Norway: Octavian Publishing. Berger, Thomas R. 1985 Village Journey: The Report of the Alaska Native Review Commission. New York: Hill and Wang. Bestor, Theodore C. 2004 *Tsukiji: The Fish Market at the Center of the World*. Berkeley: University of California Press. Bhabha, Homi K. 1994 Of Mimicry and Man. In *The Location of Culture*. Pp. 121-131. London: Routledge. Bjorndal, Trond, Gunnar A. Knapp, and Audun Lem 2003 Salmon--a Study of Global Supply and Demand. Volume 73. Rome, Italy: Food and Agriculture Organization of the United Nations (FAO). Black, Lydia T. 1984 The Yup'ik of Western Alaska and Russian Impact. *Etudes/Inuit/Studies* 8(Supplement): 21-43. Black, Lydia T., and R.G. Liapunova 1998 Aleut: Islanders of the North Pacific. In *Readings from Southwest Alaska:* An Anthology. J. Branson, ed. Pp. 9-15. Anchorage: Alaska Natural History Association. Bogason, Sigurdur 1994 Implementing an ISO 9000 Quality System in a European Seafood Company Operating Internationally. In *Quality Control & Quality Assurance for* Seafood : A Conference, May 16-18, 1993, Newport, Oregon. G. Sylvia, A.L. Shriver, and M.T. Morrissey, eds. Pp. 72-79. Corvallis, Oregon: Oregon Sea Grant Bourdieu, Pierre 1984 Distinction: A Social Critique of the Judgement of Taste. Cambridge: Harvard University Press. Bowbrick, Peter 1992 The Economics of Quality, Grades, and Brands. London: New York. Branson, John, ed. 1998 Readings from Southwest Alaska: An Anthology. Anchorage: Alaska Natural History Association. Brightman, Robert Alain

1993 *Grateful Prey: Rock Cree Human-Animal Relationships*. Los Angeles: University of California Press.

Brown, Liz, and Gilbert Sylvia

1994 Trends in Seafood Quality Assurance. In *Quality Control & Quality Assurance for Seafood: A Conference, May 16-18, 1993, Newport, Oregon.* G. Sylvia, A.L. Shriver, and M.T. Morrissey, eds. Pp. 9-14. Corvallis, Oregon: Oregon Sea Grant.

Buck-Morss, Susan

1995 Envisioning Capital: Political Economy on Display. *Critical Inquiry* 21: 434-467.

Burbank, Jane

2007 The Rights of Difference: Law and Citizenship in the Russian Empire. In *Imperial Formations*. A.L. Stoler, C. McGranahan, and P. Perdue, eds. Santa Fe: School for Advanced Research.

Burke, Timothy

1996 *Lifebuoy Men, Lux Women: Commodification, Consumption, and Cleanliness in Modern Zimbabwe*. Durham: Duke University Press.

Burros, Marian

2005 Stores Say Wild Salmon, but Tests Say Farm Bred. In The New York Times. New York.

Busch, Lawrence, and Keiko Tanaka

1996 Rites of Passage: Constructing Quality in a Commodity Sector. *Science*, *Technology*, & *Human Values* 21(1): 3-27.

Callon, Michel, ed.

1998 *The Laws of the Markets*. Malden, Massachusetts: Blackwell. Callon, Michel, Cécile Méadel, and Vololona Rabeharisoa

2002 The Economy of Qualities. *Economy and Society* 31: 194-217. Campbell, Lyle

1997 *American Indian Languages: The Historical Linguistics of Native America*. New York: Oxford University Press.

Captain Correia's Wild Alaska Salmon

2008 Captain Correia's Wild Alaska Salmon...Harvesting Wild Salmon from Alaska's Cook Inlet for Your Table. <u>http://www.wildalaskasalmon.com/</u>. Accessed on August 13, 2008.

Carlson, Stefanie M.

2005 Bristol Bay Salmon Drift Gillnet and Set Gillnet Fisheries: Permit Holdings and Participation Rates by Age and Resident Type, 1975-2004 CFEC Report 05-2N. Juneau: Commercial Fisheries Entry Commission.

Carrier, James G.

2007 Hidden Hands in the Market: Ethnographic Explorations of the

Production-Consumption Nexus in a Globalised Economy. University of Sussex. Carrier, James G., and Daniel Miller

1998 Virtualism: A New Political Economy. Oxford: Berg.

Cassini, Gio. Ma. (Giovanni Maria), 1745-ca. 1824

1798 Le Coste Norde Ouest Dell' America E Nord Est Dell' Asia : Delineate Sulle Ultime Osservazioni Del Cap. Cook.: Rare Maps Collection, Alaska & Polar Regions Collections.

Castells, Manuel

1996 *The Rise of the Network Society*. Volume 1. Cambridge, Mass.: Blackwell Publishers.

1997 The Power of Identity. Volume 2. Malden, MA: Blackwell.

1998 *End of Millennium*. Volume 3. Malden, MA: Blackwell Publishers. Castree, Noel

1996-1997 Invisible Leviathan: Speculations on Marx, Spivak, and the Question of Value. *Rethinking Marxism* 9(2): 45-78.

CDQ, Community Development Quota Program

2007 CDQ Website. <u>http://www.cdqdb.org/index.htm</u>. Accessed on June 20, 2007.

Center for Pacific Northwest Studies

2008 Pacific American Fisheries Records: Company History. http://www.acadweb.wwu.edu/cpnws/paf/pafhist.htm. Accessed on May 17, 2008.

CFEC, Commercial Fisheries Entry Commission

2002 2002 Survey of Bristol Bay Salmon Drift Gillnet Fishery Permit Holders: Preliminary Survey Responses. Juneau: State of Alaska, Commercial Fisheries Entry Commission.

—

2004a Bristol Bay Salmon Drift Gillnet Fishery Optimum Number Report Juneau: Alaska Commericial Fisheries Entry Commission.

- 2004b Executive Summary: Bristol Bay Salmon Drift Gillnet Fishery Optimum Number Report Juneau: Alaska Commercial Fisheries Entry Commission.
 - 2007a Alaska Supreme Court Cases Affecting Practices of the Commercial Fisheries Entry Commission (CFEC). Accessed on June 3, 2008.
- 2007b Basic Information Table S 03T Salmon, Drift Gillnet, Bristol Bay. <u>http://www.cfec.state.ak.us/bit/x_s03t.htm</u>. Accessed on May 26, 2007.
- 2007c Permit & Fishing Activity by Year, State, Census Area, or City. http://www.cfec.state.ak.us/gpbycen/2006/00_ALL.htm. Accessed on September 10, 2007.
 - 2008a Alaska Commercial Fisheries Entry Commission Estimated Permit Value Report. <u>http://www.cfec.state.ak.us/pmtvalue/x_s03t.htm</u>. Accessed on July 1, 2008.

2008b Commercial Fisheries Entry Commission. <u>http://www.cfec.state.ak.us/</u>. Accessed on June 1, 2008.

Chakrabarty, Dipesh

2000 *Provincializing Europe: Postcolonial Thought and Historical Difference.* Princeton, N.J.: Princeton University Press.

Cherry, Drew

2007 Maruha-Nichiro Merger Complete, Creating \$8 Billion Seafood Giant. *IntraFish*.

Chin, Elizabeth

2000 *Purchasing Power: Black Kids and American Consumer Culture.* Minneapolis: University of Minnesota Press.

CIS, Alaska Community Database Community Information Services 2008 Metlakatla.

http://www.commerce.state.ak.us/dca/commdb/CIS.cfm?Comm_Boro_Name=Me tlakatla. Accessed on August 12, 2008.

Clark, Joe, and Joe Faith

2005 Nukalpiaq. Victoria, B.C.: Trafford Publishing.

Clark, John H., Robert D. Mecum, Andrew McGregor, Paul Krasnowski, and Amy M. Carroll

2006 The Commercial Salmon Fishery in Alaska. *Alaska Fishery Research Bulletin* 12(1): 1-146.

Clemence, John

"Establishing Programs to Measure Quality". In *Quality Control & Quality Assurance for Seafood: A Conference, May 16-18, 1993, Newport, Oregon.* G. Sylvia, A.L. Shriver, and M.T. Morrissey, eds. Pp. 104-108. Corvallis, Oregon: Oregon Sea Grant.

Co-Op America

2007 Living Green.

http://www.coopamerica.org/programs/livinggreen/safeseafood.cfm. Accessed on March 15, 2007.

—

2008 Safe Seafood Wallet List.

http://www.coopamerica.org/PDF/TipSheetSafeSeafood.pdf. Accessed on August 12, 2008.

Colt, Steve

1999 Salmon Fish Traps in Alaska: An Economic History Perspective. Anchorage: Institute for Social and Economic Research, University of Alaska, Anchorage.

Comaroff, Jean, and John L. Comaroff

2000 Millennial Capitalism: First Thoughts on a Second Coming. *Public Culture* 12(2): 291-343.

—, eds.

2001 *Millennial Capitalism and the Culture of Neoliberalism.* Durham: Duke University Press.

Cone, Joseph, and Sandy Ridlington

1996 *The Northwest Salmon Crisis: A Documentary History.* Corvallis: Oregon State University Press.

Cook, Ian, and Philip Crang

1996 The World on a Plate: Culinary Culture, Displacement and Geographical Knowledges. Journal of Material Culture 1(2): 131-153. Cooley, Richard A. 1963 Politics and Conservation: The Decline of the Alaska Salmon. New York: Harper & Row. Coronil, Fernando 1995 Introduction to the Duke University Press Edition. In *Cuban* Counterpoint: Tobacco and Sugar. F. Ortiz, ed. Durham: Duke University Press. 1997 The Magical State: Nature, Money, and Modernity in Venezuela. Chicago: University of Chicago Press. 2000 Towards a Critique of Globalcentrism: Speculations on Capitalism's Nature. Public Culture 12(2): 351-74. 2007 After Empire: Reflections on Imperialism from the Américas. In Imperial Formations. A.L. Stoler, C. McGranahan, and P. Perdue, eds. Pp. 241-274. Santa Fe: School for Advanced Research. forthcoming Pieces for Anthrohistory: A Puzzle to Be Assembled Together. In Anthrohistory: Trans/Formations of Disciplines. C. Bhimull, D.W. Cohen, F. Coronil, E. Murphy, and J. Skurski, eds. Pp. 1-10. Ann Arbor: University of Michigan Press. Cronon, William 1991 Nature's Metropolis: Chicago and the Great West. New York: W. W. Norton. 1992 Kennecott Journey: The Paths out of Town. In Under an Open Sky: Rethinking America's Western Past. W. Cronon, G. Miles, and J. Gitlin, eds. Pp. 28-51. New York: W.W. Norton. 1996 The Trouble with Wildnerness; or, Getting Back to the Wrong Nature. In Uncommon Ground: Rethinking the Human Place in Nature. W. Cronon, ed. Pp. 69-90. New York: W.W. Norton & Co. Crutchfield, James Arthur, and Giulio Pontecorvo 1969 The Pacific Salmon Fisheries: A Study of Irrational Conservation. Baltimore: Johns Hopkins Press. Dahl, Östen 2008 Feature/Chapter 138: Tea. http://wals.info/feature/138. Accessed on August 6, 2008. Division of Commercial Fisheries, Alaska Department of Fish and Game 2005 2005 Overview. Juneau: Alaska Department of Fish and Game. Dolgon, Corey 1999 Soulless Cities: Ann Arbor, the Cutting Edge of Discipline: Postfordism, Postmodernism, and the New Bourgeoisie. Antipode 31: 129-162. Dorry, Niaz

2001 Wild Vs. Farmed Fish; the Blue Revolution Blues. *The Fishermen's Voice* 6(8).

Doyle, John P.

1992 *Care and Handling of Salmon: The Key to Quality.* Fairbanks, Alaska: School of Fisheries and Ocean Sciences, University of Alaska Fairbanks.

Dudley, Kathryn Marie

2000 Debt and Dispossession: Farm Loss in America's Heartland. Chicago: University of Chicago Press.

Duffield, John, David Patterson, and Chris Neher

2007 Revised Final Report: Economics of Wild Salmon Watersheds: Bristol Bay, Alaska. Missoula, Montana: Trout Unlimited.

Dumond, Don E., and James W. VanStone

1998 Paugvik: A Nineteenth-Century Native Village on Bristol Bay, Alaska. In *Readings from Southwest Alaska: An Anthology.* J. Branson, ed. Pp. 35-47. Anchorage: Alaska Natural History Association.

Dunn, Elizabeth C.

2004 *Privatizing Poland: Baby Food, Big Business, and the Remaking of the Polish Working Class.* Ithaca: Cornell University Press.

DuPuis, E. Melanie

2000 Not in My Body: BGH and the Rise of Organic Milk. *Agriculture and Human Values* 17(3): 285-295.

Economist.com

2006a Economics A-Z: Commoditisation.

http://www.economist.com/research/Economics/alphabetic.cfm?letter=C#commo ditisation. Accessed on October 31.

—

2006b Economics A-Z: Commodity.

http://www.economist.com/research/Economics/alphabetic.cfm?letter=C#commo dity. Accessed on October 31.

Eggers, Doug

2006 Run Forecasts and Harvest Projection for the 2006 Alaska Salmon Fisheries and Review of the 2005 Season. Anchorage: Alaska Department of Fish and Game, Division of Sport Fish, Research, and Technical Services.

Elias, Norbert

[1939] 1994 *The Civilizing Process*. E. Jephcott, transl. Oxford: Blackwell. Emberg, Truman

1985 *Frolic Welcome*. Dillingham, Alaska: Maxine Emberg, Publisher. Endal, George S.

1952 Salmon Industry Betrays Nation. In The Beacon of Dillingham. Dillingham, Alaska.

Environment and Natural Resources Institute, University of Alaska, Anchorage

2001 Evaluating Alaska's Ocean-Ranching Salmon Hatcheries: Biologic and Management Issues. Anchorage: University of Alaska, Anchorage.

Escobar, Arturo

1999 After Nature: Steps to an Antiessentialist Political Ecology. *Current Anthropology* 40(1): 1-16, 27-30.

Ess, Charlie

2004 Trident Buys Norquest as Processor Ranks Thin: Acquisition Merges Major Salmon Players. *National Fisherman* 85(5): 15.

Fabian, Johannes

1983 *Time and the Other: How Anthropology Makes Its Object.* New York: Columbia University Press.

FAO, Food and Agriculture Organization of the United Nations

2008 International Trade in Fishery Commodities by Principal Importers and Exporters. <u>ftp://ftp.fao.org/fi/stat/summary/a3ybc.pdf</u>. Accessed on July 5, 2008.

FDA

2001 HACCP: A State-of-the-Art Approach to Food Safety.

http://www.cfsan.fda.gov/~lrd/bghaccp.html. Accessed on November 26, 2006. FDA Consulting Services, LLC

2006 Fish Glossary. <u>http://www.seafoodhaccp.com/fishglossary.html</u>. Accessed. Ferry, Elizabeth Emma

2005 Geologies of Power: Value Transformations of Mineral Specimens from Guanajuato, Mexico. *American Ethnologist* 32(3): 420-36.

Fienup-Riordan, Ann

1986 Traditional Subsistence Activities and Systems of Exchange among the Nelson Island Yup'ik. In *Contemporary Alaskan Native Economies*. S.J. Langdon, ed. Lanham, MD: University Press of America.

1990 *Eskimo Essays: Yup'ik Lives and How We See Them.* New Brunswick: Rutgers University Press.

1998 Yaqulget Qaillun Pilartat (What the Birds Do): Yup'ik Eskimo Understanding of Geese and Those Who Study Them. *Arctic* 52(1): 1-22. Fitzhugh, William W.

1998 Eskimos: Hunters of the Frozen Coasts. In *Readings from Southwest Alaska: An Anthology*. J. Branson, ed. Pp. 23-28. Anchorage: Alaska Natural History Association.

Foster, Robert J.

2006a The Work of the New Economy: Consumers, Brands and Value-Creation. Translations of Value: Society for Cultural Anthropology, Milwaukee, 2006a.

2006b Tracking Globalization: Commodities and Value in Motion. In *Handbook* of Material Culture. C.Y. Tilley, ed. Pp. 285-302. London: Sage.

2008 Commodities, Brands, Love and Kula. *Anthropological Theory* 8(1): 9-25. Fraser, Jerry

2004 Irrationalization. *National Fisherman* 84(12): 24.

Fresco, Crystal

2008 Cannery Workers' and Farm Laborers' Union 1933-39: Their Strength in Unity. <u>http://depts.washington.edu/civilr/cwflu.htm</u>. Accessed on August 9, 2008. Friedman, Thomas L.

2005 It's a Flat World, after All. *The New York Times Magazine*: 33-37.

Frow, John

1997 *Time and Commodity Culture: Essays in Cultural Theory and Postmodernity*. Oxford: Clarendon Press.

Gao, Bai

2001 Japan's Economic Dilemma: The Institutional Origins of Prosperity and Stagnation. Cambridge: Cambridge University Press.

Gereffi, Gary, and Miguel Korzeniewicz, eds.

1994 *Commodity Chains and Global Capitalism*. Westport, Conn.: Greenwood Press.

Getz, Christy, and Amy Shreck

2006 What Organic and Fair Trade Labels Do Not Tell Us: Towards a Place-Based Understanding of Certification. *International Journal of Consumer Studies* 30(5): 490-501.

Giddens, Anthony

1990 The Consequences of Modernity. Cambridge: Polity.

Gidwani, Vinay

2008 *Capital, Interrupted.* Minneapolis: University of Minnesota Press. Gilbertsen, Neal

2003 The Global Salmon Industry and Its Impacts in Alaska. *Alaska Economic Trends* 23(10): 3-12.

Goldsmith, Scott, Jane Angvik, Lance Howe, Alexandra Hill, Linda Leask, and with assistance from Brian Saylor and David Marshall

2004 The Status of Alaska Natives Report 2004, Volume 1. Anchorage: Institute for Social and Economic Research.

Goodman, David

2003 The Quality 'Turn' and Alternative Food Practices: Reflections and Agenda. *Journal of Rural Studies* 19(1): 1-7.

Goodman, David, and E. Melanie DuPuis

2002 Knowing Food and Growing Food: Beyond the Production-Consumption Debate in the Sociology of Agriculture. *Sociologia Ruralis* 42(1): 5-22.

Goodman, Michael K.

2004 Reading Fair Trade: Political Ecological Imaginary and the Moral Economy of Fair Trade Foods. *Political Geography* 23(7): 891-915.

Governor's Study Group on Limited Entry, State of Alaska

1973 A Limited Entry Program for Alaska's Fisheries: Report of the Governor's Study Group on Limited Entry. Juneau: State of Alaska.

Greenblatt, Stephen

1980 *Renaissance Self-Fashioning: From More to Shakespeare*. Chicago: University of Chicago Press.

Gruening, Ernest

1954 The State of Alaska. New York: Random House.

1955 Let Us Now End American Colonialism. Alaska Constitutional Convention, Fairbanks, Alaska, 1955.

Guimary, Donald, and Jack Masson

1990 The Exploitation of Chinese Labor in the Alaska Salmon Industry. In *Chinese America: History and Perspectives, 1990.* C.H.S.O. America, ed. Pp. 91-106. San Francisco: Chinese Historical Society of America.

Hadland, Jeff, and Brian Laurent

2008 Nonresidents Working in Alaska. *Alaska Economic Trends* 28(3): 4-15. Hallowell, A. Irving, and Jennifer S. H. Brown

1991 *The Ojibwa of Berens River, Manitoba: Ethnography into History*. Fort Worth: Harcourt Brace Jovanovich College Publishers.

Harvey, David

1989 The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change. Cambridge, Mass.: Blackwell.

2005 *A Brief History of Neoliberalism*. New York: Oxford University Press. Haycox, Stephen W.

2000 Owning It All in Alaska: The Political Power of a Rhetorical Paradigm. In *Land in the American West: Private Claims and the Common Good*. W.G. Robbins and J.C. Foster, eds. Seattle: University of Washington Press.

—

2002 *Frigid Embrace: Politics, Economics, and Environment in Alaska.* Corvallis: Oregon State University Press.

Hayden, Cori

2003 *When Nature Goes Public: The Making and Unmaking of Bioprospecting in Mexico.* Princeton: Princeton University Press.

Helgason, Agnar, and Gísli Pálsson

1998 Cash for Quotas: Disputes over the Legitimacy of an Economic Model of Fishing in Iceland. In *Virtualism: A New Political Economy*. J.G. Carrier and D. Miller, eds. Oxford: Berg.

Hensel, Chase

1996 *Telling Our Selves: Ethnicity and Discourse in Southwestern Alaska*. New York: Oxford University Press.

Hewitt's Photo Shop

undated Bristol Bay Fishing Fleet.: Michael Z. Vinokouroff Photograph Collection, ca. 1880's-1970's. PCA 243.

Hodgson, Aurora S., and Christine M. Bruhn

1993 Consumer Attitudes toward the Use of Geographical Product Descriptors as a Marketing Technique for Locally Grown or Manufactured Foods. *Journal of Food Quality* 16: 163-174.

Holm, Petter

2007 Which Way Is up on Callon? In *Do Economists Make Markets?: On the Performativity of Economics*. D. MacKenzie, F. Muniesa, and L. Siu, eds. Pp. 225-243. Princeton: Princeton University Press.

Holt, Douglas B.

1998 Does Cultural Capital Structure American Consumption? *The Journal of Consumer Research* 25(1): 1-25.

Homan, Frank

2006 30 Years of Limited Entry. Alaska's Fishing Communities: Harvesting the Future, Anchorage, 2006, pp. 3. Commercial Fisheries Entry Commission. hooks, bell

[1992] 2000 Eating the Other: Desire and Resistance. In *The Consumer Society Reader*. J.B. Schor and D.B. Holt, eds. Pp. 343-359 New York: The New Press.

Hughes, Jonathan

1982 The Great Strike at Nushagak Station, 1951: Institutional Gridlock. *The Journal of Economic History* 42(1): 1-20.

Ilbery, Brian, and Moya Kneafsey

2000 Producer Constructions of Quality in Regional Specialty Food Production: A Case Study from South West England. *Journal of Rural Studies* 16(2): 217-230. Johnson, Jeffrey Carl

1981 Cultural Evolution and the Organization of Work: Scarcity and Resource

Management in an Alaskan Fishery.

Jordan, David S., and Chas. H. Gilbert

1881 Observations on the Salmon of the Pacific. *The American Naturalist* XV(3): 177-186.

Jorgensen, Joseph G.

1990 Oil Age Eskimos. Berkeley: University of California Press.

Jung, Helen

2002 Endangered Fishermen. *Alaska Magazine* 68(6): 24-29.

Kamali, Nasser

1984 Alaskan Natives and Limited Fisheries of Alaska: A Study of Changes in the Distribution of Permit Ownership Amongst Alaskan Natives, 1975-1983. Juneau: Alaska Commercial Fisheries Entry Commission

Kaplan, Amy, and Donald E. Pease, eds.

1993 *Cultures of United States Imperialism*. Durham: Duke University Press. Keane, Webb

2005 Signs Are Not the Garb of Meaning: On the Social Analysis of Material Things. In *Materiality*. D. Miller, ed. Durham: Duke University Press.

2007 *Christian Moderns: Freedom and Fetish in the Mission Encounter.* Berkeley: University of California Press.

King, Bob

2003 An Historian's Perspective: A Brief History of the Bristol Bay Salmon Fishery, 1883-2002. In An Analysis of Options to Restructure the Bristol Bay Salmon Fishery: A Study Commissioned by the Bristol Bay Economic Development Corporation. M.R. Link, M.L. Hartley, S.A. Miller, B. Waldrop, J. Wilen, and J. Barnett, eds. Pp. 4-14.

Kirsch, Stuart

2001 Lost Worlds: Environmental Disaster, "Culture Loss," And the Law. *Current Anthropology* 42(2): 167-199.

2007 Indigenous Movements and the Risks of Counterglobalization: Tracking the Campaign against Papua New Guinea's Ok Tedi Mine. *American Ethnologist* 34(2): 303-321.

Knapp, Gunnar

1998 The Salmon Industry: Twenty-Seven Predictions for the Future. <u>http://www.iser.uaa.alaska.edu/ResourceStudies/predictions%5F2.htm</u>. Accessed on July 4, 2008.

2002a Challenges and Strategies for the Alaska Salmon Industry. http://www.iser.uaa.alaska.edu/iser/people/knapp/Knapp%20Salmon%20Presenta tion%2001.pdf. Accessed.

2002b The New Challenge for Wild Fisheries. IntraFish November: 4.

2004 Projections of Future Bristol Bay Salmon Prices. Anchorage: Institute for Social and Economic Research, University of Alaska, Anchorage.

—

2006 Trends in World Salmon Markets and Their Implications for the Alaska Salmon Industry. Presentation given to the Alaska Department of Fish and Game, Juneau, Alaska, 2006.

Knapp, Gunnar, Cathy A. Roheim, and James L. Anderson

2007 The Great Salmon Run: Competition between Wild and Farmed Salmon. TRAFFIC North America. Washington, D.C.: World Wildlife Fund.

Knecht, G. Bruce

2006 *Hooked: Pirates, Poaching, and the Perfect Fish* New York: Rodale. Kollin, Susan

2001 *Nature's State: Imagining Alaska as the Last Frontier*. Chapel Hill: University of North Carolina Press.

Kopytoff, Igor

1986 The Cultural Biography of Things: Commoditization as Process. In *The Social Life of Things: Commodities in Cultural Perspective*. A. Appadurai, ed. Pp. 64-94. Cambridge: Cambridge University Press.

Krauss, Michael E.

1979 Na-Dene and Eskimo-Aleut. In *The Languages of Native America: Historical and Comparative Assessment*. L. Campbell and M. Mithun, eds. Pp. 803-901. Austin: University of Texas Press.

Kripke, Saul

1972 Naming and Necessity. In *Semantics of Natural Language*. D. Davidson and G. Harman, eds. Dordrecht: D. Reidel Publishing Co.

Langdon, Stephen J.

1995 Stabilizing Bristol Bay Drift Gillnet Permit Ownership by Alaska Natives: An Assessment. Anchorage: Alaska Village Initiatives.

Langdon, Steve

1980 Transfer Patterns in Alaskan Limited Entry Fisheries: Final Report for the Limited Entry Study Group of the Alaska State Legislature. Juneau: Alaska State Legislature.

1982 Managing Modernization: A Critique of Formalist Approaches to the Pacific Salmon Fisheries. In *Modernization and Marine Fisheries Policy*. J.R.

Maiolo and M.K. Orbach, eds. Pp. 95-114. Ann Arbor, Michigan: Ann Arbor Science Publishers.

1986 *Contemporary Alaskan Native Economies*. Lanham, MD: University Press of America.

Lantis, Margaret, ed.

1970 Ethnohistory in Southwestern Alaska and the Southern Yukon: Method and Content. Lexington: University Press of Kentucky.

Latour, Bruno

1993 *We Have Never Been Modern*. New York: Harvester Wheatsheaf. Lears, T.J. Jackson

2003 *Something for Nothing: Luck in America*. New York: Viking. Lee, Benjamin, and Edward LiPuma

2002 Cultures of Circulation: The Imaginations of Modernity. *Public Culture* 14(1): 191-213.

Lichtenstein, Peter M.

1983 An Introduction to Post-Keynesian and Marxian Theories of Value and Price. Armonk, N.Y.: M. E. Sharpe.

Liljeblad, Sue Ellen

1978 The Filipinos and the Alaska Salmon Industry. *Alaska in Perspective* 1(2): 1-10.

Link, Michael R., Marcus L. Hartley, Scott A. Miller, Bob Waldrop, Jim Wilen, and Jim Barnett

2003a An Analysis of Options to Restructure the Bristol Bay Salmon Fishery: A Study Commissioned by the Bristol Bay Economic Development Corporation. A Study Commissioned by the Bristol Bay Economic Development Corporation.

—

2003b An Analysis of Options to Restructure the Bristol Bay Salmon Fishery: A Study Commissioned by the Bristol Bay Economic Development Corporation.

Lipietz, Alain

1987 *Mirages and Miracles: The Crisis of Global Fordism*. London: Verso. Locke, John

[1690] 1952 *The Second Treatise of Government*. Indianapolis: The Bobbs-Merrill Company.

Lockie, Stewart

2002 'The Invisible Mouth': Mobilizing 'the Consumer' in Food Production-Consumption Networks. *Sociologia Ruralis* 42(4): 278-294.

Lonner, Thomas D.

1986 Subsistence as an Economic System in Alaska: Theoretical Observations and Management Implications. In *Contemporary Alaskan Native Economies*. S.J. Langdon, ed. Lanham, MD: University Press of America.

Loy, Wesley

2004 Fish Plant Closure a Campaign Issue. In Anchorage Daily News. Anchorage.

Macinko, Seth, and Daniel W. Bromley

2004 Property and Fisheries for the Twenty-First Century: Seeking Coherence from Legal and Economic Doctrine. Vermont Law Review 38(3): 623-662. MacKenzie, Donald, Fabian Muniesa, and Lucia Siu, eds. 2007 Do Economists Make Markets?: On the Performativity of Economics. Princeton: Princeton University Press. Mansfield, Becky 2003a Fish, Factory Trawlers, and Imitation Crab: The Nature of Quality in the Seafood Industry. Journal of Rural Studies 19(1): 9-21. 2003b From Catfish to Organic Fish: Making Distinctions About Nature as Cultural Economic Practice. Geoforum 34(3): 329-342. 2004 Organic Views of Nature: The Debate over Organic Certification for Aquatic Animals. Sociologia Ruralis 44(2): 216-232. Marine Advisory Program 2004 Keeping Your Net Wet: Business Tools and Resources for Alaska Salmon Harvesters. Fairbanks, Alaska: University of Alaska Fairbanks. Marine Harvest 2007 Welcome to Marine Harvest. http://www.marineharvest.com/newsread/news.asp?wce=index. Accessed on June 7, 2007. Martin, Andrew 2006 Free or Farmed, When Is a Fish Really Organic? In The New York Times. New York. Martinussen, Terje E. 1994 Internal Marketing of Quality and Marketing Orientation at the National Level: Cooperation between the Norwegian Government and the Industry. In Quality Control & Quality Assurance for Seafood: A Conference, May 16-18, 1993, Newport, Oregon. G. Sylvia, A.L. Shriver, and M.T. Morrissey, eds. Pp. 21-28. Corvallis, Oregon: Oregon Sea Grant. Marx, Karl [1894] 1991 *Capital: A Critique of Political Economy*. B. Fowkes, transl. Volume 3. New York: Penguin Books in association with New Left Review. [1857-8] 1993 Grundrisse: Foundations of the Critique of Political Economy. M. Nicolaus, transl. New York: Penguin Books in association with New Left Review. 2008 Chapter 48. The Trinity Formula. http://www.marxists.org/archive/marx/works/1894-c3/ch48.htm#n48. Accessed on June 1, 2008. Marx, Karl, and Friedrich Engels [1888] 1978 Manifesto of the Communist Party. In *The Marx-Engels Reader*. R.C. Tucker, ed. New York: Norton. Mauer, Richard 2007 Feds Eye Stevens' Home Remodeling Project. In Anchorage Daily News. Anchorage.

Mauss, Marcel

[1950] 1990 *The Gift: The Form and Reason for Exchange in Archaic Societies.* W.D. Halls, transl. New York: W. W. Norton.

McCay, Bonnie J., and James L. Acheson, eds.

1987 *The Question of the Commons: The Culture and Ecology of Communal Resources.* Tucson: University of Arizona Press.

McCullough, Nicole Susan

2001 The 1951 Bristol Bay Salmon Strike: Isolation, Independence and Illusion in the Last Frontier.

McGoodwin, James R.

1990 *Crisis in the World's Fisheries: People, Problems, and Policies.* Stanford, Calif.: Stanford University Press.

McKittrick, Erin

2008 "Salmon Strips Drying in New Stuyahok."

http://www.aktrekking.com/pebble/Nushagak/NushagakPhotos.html. Accessed on August 12, 2008.

Meek, Barbra A.

2006 And the Injun Goes How!: Representations of American Indian English in White Public Space. *Language in Society* 35(1): 93-128.

Miller, D.

2002 Turning Callon the Right Way Up. *Economy and Society* 31: 218-233. Miller, Daniel

1987 Material Culture and Mass Consumption. Oxford, U.K.: B. Blackwell.

1998 A Theory of Shopping. Cambridge: Polity Press.

Miller, Gwenn A.

2006 "The Perfect Mistress of Russian Economy": Sighting the Intimate on a Colonial Alaskan Terrain, 1784-1821. In *Haunted by Empire: Geographies of Intimacy in North American History*. A.L. Stoler, ed. Pp. 297-324. Durham: Duke University Press.

Miller, Marc L., and Jeffrey C. Johnson

1984 Hard Work and Competition in the Bristol Bay Salmon Fishery. In *Work in Market and Industrial Societies*. H.A. Applebaum, ed. Pp. 203-223. Albany: State University of New York Press.

Mintz, Sidney W.

1993 The Changing Roles of Food in the Study of Consumption. In *Consumption and the World of Goods*. J. Brewer and R. Porter, eds. Pp. 261-273. London: Routledge.

Mintz, Sidney Wilfred

1985 *Sweetness and Power: The Place of Sugar in Modern History.* New York, NY: Viking.

Monterey Bay Aquarium

2007 Seafood Watch.

http://www.montereybayaquarium.org/cr/seafoodwatch.asp. Accessed on March 15, 2007.

Montgomery, David R.

2003 *King of Fish: The Thousand-Year Run of Salmon.* Boulder, Colorado: Westview Press.

Moran, Warren

1993a Rural Space as Intellectual Property. *Political Geography* 12(3): 263-277.

1993b The Wine Appellation as Territory in France and California. *Annals of the Association of American Geographers* 83(4): 694-717.

Morris, Carol, and Craig Young

2000 'Seed to Shelf', 'Teat to Table', 'Barley to Beer' and 'Womb to Tomb': Discourses of Food Quality and Quality Assurance Schemes in the Uk. *Journal of Rural Studies* 16(1): 103-115.

Morrow, Phyllis, and Chase Hensel

1992 Hidden Dissension: Minority-Majority Relationships and the Use of Contested Terminology. *Arctic Anthropology* 29(1): 38-53.

Morrow, Phyllis, and William Schneider, eds.

1995 When Our Words Return: Writing, Hearing, and Remembering Oral Traditions of Alaska and the Yukon. Logan, Utah: Utah State University Press.

Moser, Jefferson F.

1898 The Salmon and Salmon Fisheries of Alaska: Report of the Operations of the United States Fishing Commission Steam Albatross for the Year Ending June 30, 1898. Bulletin of the United States Fish Commission. Washington.

1902 The Salmon and Salmon Fisheries of Alaska: Report of the Alaskan Salmon Investigations of the United States Fish Commission Steamer Albatross in 1900 and 1901 Bulletin of the United States Fish Commission. Washington.

MSC, Marine Stewardship Council

2007 Chain of Custody. <u>http://www.msc.org/html/content_1167.htm</u>. Accessed on March 25, 2007.

Murdoch, Jonathan, Terry Marsden, and Jo Banks

2000 Quality, Nature, and Embeddedness: Some Theoretical Considerations in the Context of the Food Sector. *Economic Geography* 76(2): 107-125.

Myers, Katherine W., Robert V. Walker, Nancy D. Davis, and Janet L. Armstrong 2004 Diet Overlap and Potential Feeding Competition between Yukon River Chum Salmon and Hatchery Salmon in the Gulf of Alaska in Summer. Final Report to the Yukon River Drainage Fisheries Association. Seattle: High Seas Salmon Research Program, Fisheries Research Institute.

Nadasdy, Paul

2003 Hunters and Bureaucrats: Power, Knowledge, and Aboriginal-State Relations in the Southwest Yukon. Vancouver: UBC Press.

forthcoming Wildlife as Renewable Resource: Spatiotemporal Topology and the Politics of Wildlife Management in the Yukon. In *Resources and Their Temporalities*. E.E. Ferry and M. Limbert, eds. Santa Fe, New Mexico: School of Advanced Research Press.

Naske, Claus-M.

1973 An Interpretive History of Alaskan Statehood. Anchorage: Alaska Northwest Publishing Company.

National Organic Standards Board, Aquatic Animal Task Force

2001 Recommendation on Operations That Produce Aquatic Animals. National Park Service

2008 Klondike Gold Rush: Frequently Asked Questions.

http://www.nps.gov/klgo/faqs.htm. Accessed on May 19, 2008.

National Research Council

1999 What Is Development in Western Alaska? In *The Community Development Quota Program in Alaska*. Washington D.C.: National Academy Press.

Naylor, Rosamond L., Josh Eagle, and Whitney L. Smith

2003 Salmon Aquaculture in the Pacific Northwest: A Global Industry with Local Impacts. *Environment* 45(8): 18-28.

Naylor, Rosamond L., Rebecca J. Goldberg, Jurgenne H. Primavera, Nils Kautsky,

Malcolm C. M. Beveridge, Jason Clay, Carl Folke, Jane Lubchenco, Harold Mooney, and Max Troell

2000 Effect of Aquaculture on World Fish Supplies. *Nature* 405: 1017-1024. Nelson, Richard K.

1983 *Make Prayers to the Raven: A Koyukon View of the Northern Forest.* Chicago: University of Chicago Press.

Ness, Carol

2004 Organic Label Muddies the Waters. In San Francisco Chronicle. San Francisco.

Newell, Dianne

2003 Beyond Chinatown: Overseas Chinese Intermediaries on the Multiethnic North-American Pacific Coast in the Age of Financial Capital. In *Finance, Intermediaries, and Economic Development.* S.L. Engerman, ed. Cambridge: Cambridge University Press.

Nicholson, John W.

1995 *No Half Truths: Reminiscences of Life in Bristol Bay, Alaska, 1906-1995.* Anchorage: Publication Consultants.

NOAA, National Oceanic and Atmospheric Administration

2006 NOAA Fisheries Glossary. NOAA Technical Memorandum NMFS-F/SPO-69. Silver Spring, Maryland: NOAA.

2008a eLandings Reporting: Frequently Asked Questions. http://www.fakr.noaa.gov/elandings/faq.htm. Accessed on August 13, 2008.

2008b Noaa Aquaculture. <u>http://aquaculture.noaa.gov/</u>. Accessed on June 29, 2008.

Norris, Frank

1984 North to Alaska: An Overview of Immigrants to Alaska, 1867-1945. Alaska Historical Commission Studies in History. Anchorage: Alaska Historical Commission.

Northern Dynasty Minerals Ltd.

2008 Welcome to Northern Dynasty.

http://www.northerndynastyminerals.com/ndm/Home.asp. Accessed on August 19, 2008.

Northern Economics

2003 An Assessment of Wealth in the Status Quo Fishery In *An Analysis of Options to Restructure the Bristol Bay Salmon Fishery: Study Appendices.* B.B.S.F.R. Study, ed. Pp. E1-E53. Anchorage: Northern Economics, Inc.

Northwest Fisheries Science Center, NOAA Fisheries Service

2007 Salmon Hatchery Questions & Answers.

http://www.nwfsc.noaa.gov/resources/search_faq.cfm. Accessed on March 14, 2007.

Nutreco

2007 The Nutreco Time Line.

http://www.nutreco.com/index.php?option=com_content&task=view&id=126&It emid=267. Accessed on June 7, 2007.

O'Bannon, Patrick W.

1982 Technological Change in the Pacific Coast Canned Salmon Industry, 1900-1925: A Case Study. *Agricultural History* 56(1): 151-166.

1987 Waves of Change: Mechanization in the Pacific Coast Canned-Salmon Industry, 1864-1914. *Technology and Culture* 28(3): 558-577.

O'Connor, James

1998 Natural Causes: Essays in Ecological Marxism. New York: Guilford. Oakley, Karen

1989 The Permit Drain in the 1980s: A Study of Recent Transfers of Entry Permits for Alaska's Limited Fisheries. Juneau: House Research Agency, Alaska State Legislature.

Oceans Alive

2007 Consumption Advisories: Fish to Avoid.

http://www.oceansalive.org/eat.cfm?popup=true&subnav=healthalerts. Accessed on March 25, 2007.

Olson, Julia

2006 Changing Property, Spatializing Difference: The Sea Scallop Fishery in New Bedford, Massachusetts. *Human Organization* 65(3): 307-318.

Om Organics

2008 USDA Organic Label. <u>http://www.omorganics.org/images/usda.gif</u>. Accessed on August 12, 2008.

Ong, Aihwa

2006 *Neoliberalism as Exception: Mutations in Citizenship and Sovereignty.* Durham: Duke University Press.

Orca Bay Seafoods, Inc.

2008 Keta Products.

<u>http://www.orcabayfoods.com/product.asp?ProdId=6&nav=1</u>. Accessed on August 12, 2008.

Ortiz, Fernando

[1947] 1999 Cuban Counterpoint: Tobacco and Sugar. H.d. Onis, transl. Durham: Duke University Press. Ostrom, Elinor 1990 Governing the Commons: The Evolution of Institutions for Collective Action. New York: Cambridge University Press. Oxford English Dictionary 2007 Chum. http://ets.umdl.umich.edu/cgi/o/oed/oedidx?q1=chum&type=Lookup. Accessed on April 9, 2007. Pacific Marine Expo 2008 Pacific Marine Expo 2008. http://www.pacificmarineexpo.com/08/Public/MainHall.aspx?ID=16149&sortMe nu=101000. Accessed on August 12, 2008. Partnow, Patricia 2001 Making History: Alutiiq/Sugpiak Life on the Alaska Peninsula. Fairbanks: University of Alaska Press. Patton, Michael, and Dan Robinson 2006 Employment in the Alaska Fisheries. Alaska Economic Trends 26(2): 4-13. Peter Pan Seafoods, Inc. 2008 About Us: Company Information. http://www.ppsf.com/about/company info.aspx. Accessed on July 5, 2005. Petterson, John S. 1983 Policy and Culture: The Bristol Bay Case. *Coastal Zone Management* Journal 10(4): 313-330. Pioneers of Alaska 1922 Ritual for Grand and Subordinate Igloos. Anchorage: Pioneers of Alaska. Thirtieth Annual Session. Anchorage: Grand Igloo, Pioneers of Alaska. 1939 1945 Report of the Grand Igloo Pioneers of Alaska. Juneau: Pioneers of Alaska. Prahalad, C. K., and Venkat Ramaswamy 2004 The Future of Competition : Co-Creating Unique Value with Customers. Boston: Harvard Business School Press. Putnam, Hilary 1975 The Meaning of 'Meaning' In Mind, Language and Reality: Philosophical Papers, Volume 2. H. Putnam, ed. Cambridge: Cambridge University Press. Quinn, Thomas P. 2005 The Behavior and Ecology of Pacific Salmon and Trout. Seattle: University of Washington Press. Raven, Peter H. 2000 Introduction. In *Nature and Human Society: The Quest for a Sustainable* World. N.F.o. Biodiversity, ed. Pp. 1-8. Washington, D.C.: National Academy Press. Reedy-Maschner, Katherine 2007 The Best-Laid Plans: Limited Entry Permits and Limited Entry Systems in Eastern Aleut Culture. Human Organization 66(2): 210-225.

Reichert, Josh

2004 A Gathering Storm Imperils America's Coastal Waters. In The Times Union. Albany, NY.

Rettig, R. Bruce, and Jay J.C. Ginter

1980 Limited Entry as a Fishery Management Tool : Proceedings of a National Conference to Consider Limited Entry as a Tool in Fishery Management, Denver, July 17-19, 1978. Seattle: University of Washington Press.

Richtmyer, Richard

2004 State to Sell ASI Plant at a Loss. In Anchorage Daily News. Anchorage. Robards, Martin D., and Joshua A. Greenberg

2007 Global Constraints on Rural Fishing Communities: Whose Resilience Is It Anyway? *Fish and Fisheries* 8: 14-30.

Robinson, Fiona

2000 Arctic Keta Conquers Beef Belt. In Seafood Business, Vol. August. Romero, Simon

2006 Big Tires in Short Supply. In The New York Times. New York. Romie, Paul, and Michael E. Davis

1995 Oral History Interview. Dillingham, Alaska.

February 23, 1995 Oral History Interview. Dillingham, Alaska. Sachs, Jeffrey D.

2007 The Promise of the Blue Revolution. *Scientific American* 297(1): 37-38. SAFE, Safe and Fear-Free Environment, Inc.

2008 Welcome to SAFE. <u>http://www.besafeandfree.org/</u>. Accessed on August 7, 2008.

Salmon Tools

2007 Tools for the Salmon Industry. <u>http://www.sfos.uaf.edu/salmontools/</u>. Accessed on May 23, 2007.

Salomone, Paul, Slim Morstad, Tim Sands, Charlotte Westing, Tim Baker, Fred West, and Chuck Brazil

2007 2006 Bristol Bay Area Annual Management Report. Fishery Management Report No. 07-22. Anchorage: Alaska Department of Fish and Game, Divisions of Sport Fish and Commercial Fisheries.

Schama, Simon

1993 Perishable Commodities: Dutch Still-Life Paintings and the 'Empire of Things'. In *Consumption and the World of Goods*. J. Brewer and R. Porter, eds. Pp. 478-488. London: Routledge.

Schiefer, Gerhard W.

1997 "Total Quality Management and Quality Assurance in Agriculture and Food". In *Quality Management and Process Improvement for Competitive Advantage in Agriculture and Food : Proceedings of the 49th Seminar of the European Association of Agricultural Economists (Eaae), February 19-21, 1997, Bonn, Germany.* G.W. Schiefer and H. Ralf, eds. Pp. 139-156. Bonn: Universitat Bonn-ILB.

Seitz, Jody

1990 Subsistence Salmon Fishing in Nushagak Bay, Southwest Alaska. Juneau, Alaska: Alaska Dept. of Fish and Game Division of Subsistence.

Selkregg, Lidia

1998 Alaska Region Profiles, Bristol Bay Subregion. In *Readings from Southwest Alaska: An Anthology*. J. Branson, ed. Pp. 1-8. Anchorage: Alaska Natural History Association.

Silverstein, Michael

1996 The Secret Life of Texts. In *Natural Histories of Discourse*. M. Silverstein and G. Urban, eds. Pp. 81-105. Chicago: University of Chicago Press.

Silverstein, Michael J., and Neil Fiske

2003 Luxury for the Masses. *Harvard Business Review* 81(4): 49-57. Sivaramakrishnan, K., and Ismael Vaccaro

2006 Introduction. Postindustrial Natures: Hyper-Mobility and Place-Attachments. *Social Anthropology* 14(3): 301-317.

Slater, Don

2002 Markets, Materiality and the 'New Economy'. In *Market Relations and the Competitive Process*. J.S. Metcalfe and A. Warde, eds. Pp. 95-113. Manchester, U.K.: Manchester University Press.

Smith, Neil

1984 *Uneven Development: Nature, Capital, and the Production of Space.* New York, NY: Blackwell.

Snyder, Gary

[1983] 2005 *Axe Handles*. Berkeley: Shoemaker & Hoard Publishers. Special Committee on Sustainable Aquaculture

2006 Report of Proceedings (Hansard). Vancouver: Legislative Assembly, Province of British Columbia.

Spivak, Gayatri Chakravorty

1987 Scattered Speculations on the Question of Value. In *In Other Worlds: Essays in Cultural Politics*. New York: Routledge.

State of Alaska

1990 An Act Prohibiting Finfish Farming; and Providing for an Effective Date. CH091.

2003 \$50 Million Salmon Industry Revitalization Plan Announced.

State of Alaska, Division of Elections

2008 2008 Primary Sample Ballots.

http://www.elections.alaska.gov/Sample_Ballots.php. Accessed on August 19, 2008.

State of Alaska Office of Economic Development

2007 Seafood Marketing Presentation.

http://www.dced.state.ak.us/oed/seafood/seafoodmarketing/marketingpresentation /concepts.htm. Accessed on January 28, 2007.

State of the Salmon

2007a Assessments. <u>http://www.stateofthesalmon.org/page.php?pgID=26</u>. Accessed on May 30, 2007.

2007b Endangered Listings.

http://www.stateofthesalmon.org/page.php?pgID=24. Accessed on May 30, 2007.

Stoler, Ann Laura, ed.

2006a *Haunted by Empire: Geographies of Intimacy in North American History.* Durham: Duke University Press.

2006b Intimidations of Empire: Predicaments of the Tactile and Unseen. In *Haunted by Empire: Geographies of Intimacy in North American History*. A.L. Stoler, ed. Pp. 1-22. Durham: Duke University Press.

2008 Imperial Debris: Reflections on Ruins and Ruination. *Cultural Anthropology* 23(2): 191-219.

Stoler, Ann Laura, and Carole McGranahan

2007 Introduction: Refiguring Imperial Terrains. In *Imperial Formations*. A.L. Stoler, C. McGranahan, and P. Perdue, eds. Santa Fe: School for Advanced Research.

Stolt-Nielsen S.A.

2006 Stolt-Nielsen S.A. And Nutreco N.V. Reach Agreement to Sell Entire Shareholding in Marine Harvest to Geveran Trading Co. Ltd.

Strange, Susan

1986 Casino Capitalism. Oxford, U.K.: Blackwell.

Sylvia, Gilbert, James L. Anderson, and Emily Hanson

2000 The New Order in Global Salmon Markets and Aquaculture Development: Implications for Watershed-Based Management in the Pacific Northwest. In *Sustainable Fisheries Management: Pacific Salmon*. E.E. Knudson, et al., ed. Pp. 393-405. Boca Raton: Lewis Publishers.

TAA

2007 Overview of TAA for Farmers and Fishermen. <u>http://www.taaforfarmers.org/GeneralInformation00.htm</u>. Accessed on June 12, 2007.

Taylor, Charles

2002 Modern Social Imaginaries. *Public Culture* 14(1): 91-124.

Taylor, Joseph

1999 *Making Salmon*. Seattle: University of Washington Press.

The American Heritage Dictionary of the English Language

2008a Eskimo. <u>http://www.bartleby.com/61/24/E0212400.html</u>. Accessed on March 20, 2008.

2008b Gurry. http://www.bartleby.com/61/95/G0319575.html. Accessed on August 13, 2008.

The Dispatcher

1951 ILWU Gilnetters: Hardy Men in Arduous Occupation. In The Dispatcher. San Francisco.

The Green Guide

2007 Smart Shopper's Fish Picks. Accessed on March 15, 2007. The New York Times

2006 When Is a Fish Like a Carrot? In The New York Times. New York. The State of Alaska

2008a State of Alaska Oceans Policy: EEZ Aquaculture.

http://www.adfg.state.ak.us/special/oceans/policy_eez.php. Accessed on June 29, 2008.

2008b The Constitution of the State of Alaska.

<u>http://ltgov.state.ak.us/constitution.php?section=8</u>. Accessed on June 1, 2008. Thompson, E. P.

1964 *The Making of the English Working Class.* New York: Pantheon Books.

1967 Time, Work Discipline, and Industrial Capitalism. *Past and Present* 38: 56-97.

Thwaites, John E.

ca. 1896-1913 Cannery Ships, Bristol Bay, Alaska.: AMRC. General Photograph File.

Thwaites, John E.

undated Exterior of Church on Hill in Nushagak.: Michael Z. Vinokouroff Photograph Collection, ca. 1880's-1970's. PCA 243.

Tide, Cathy, and Nancy Free-Sloan

2006 Executive Summary: Changes in the Distribution of Alaska's Commercial Fisheries Entry Permits, 1975-2005. CFEC Report Number 06-2N-EXEC Juneau: Alaska Commercial Fisheries Entry Commission.

Townsend, Joan B.

1970 Tanaina Ethnohistory: An Example of a Method for the Study of Culture Change In *Ethnohistory in Southwestern Alaska and the Southern Yukon: Method and Content.* M. Lantis, ed. Pp. 71-102. Lexington: University Press of Kentucky.

Trident Seafoods

2008 Harvest Diagram.

http://tridentseafoods.com/company/harvest_diagram.php. Accessed on July 22, 2008.

Tsing, Anna Lowenhaupt

2003 Natural Resources and Capitalist Frontiers. *Economic and Political Weekly*: 5100-5106.

2005 *Friction: An Ethnography of Global Connection*. Princeton: Princeton University Press.

Turner, Christy G., II

1988 Ancient Peoples of the North Pacific Rim. In *Crossroads of Continents: Cultures of Siberia and Alaska*. W.W. Fitzhugh and S. Kaplan, eds. Pp. 111-116. Washington D.C.: Smithsonian Institution Press.

U.S. Congress Office of Technology Assessment

1983 Agricultural Postharvest Technology and Marketing Economics Research: A Technical Memorandum. Washington, D.C.

U.S. Patent and Trademark Office

2007 Arctic Keta Salmon Quality Certified.

http://tess2.uspto.gov/bin/gate.exe?f=doc&state=sqliv5.4.2. Accessed on January 27, 2007.

UFA

2007 UFA Update: Why Asmi Doesn't Bash Farmed Fish. <u>http://www.ufa-fish.org/update/02/120602.htm</u>. Accessed on April 10, 2007.

Unknown

undated A Group of Native Orphans at the Kanakanak Government Orphanage: Otto William Geist Collection

Vertical File Photograph Collections-Towns-Kanakanak.

USDA

2006a Country of Origin Labeling. <u>http://www.ams.usda.gov/COOL/</u>. Accessed on December 6, 2006.

2006b The National Organic Program.

http://www.ams.usda.gov/NOP/indexNet.htm. Accessed on December 4, 2006. Van Maanen, John, Marc L. Miller, and Jeffrey C. Johnson

1982 An Occupation in Transition: Traditional and Modern Forms of Commercial Fishing. *Work and Occupations* 9(2): 193-216.

VanStone, James W.

1967 *Eskimos of the Nushagak River; an Ethnographic History.* Seattle: University of Washington Press.

1970 Ethnohistorical Research in Southwestern Alaska: A Methodological Perspective In *Ethnohistory in Southwestern Alaska and the Southern Yukon: Method and Content.* M. Lantis, ed. Pp. 49-70. Lexington: University Press of Kentucky.

VanStone, James W., and Winston L. Sarafian

1972 The Records of the Russian-American Company as a Source for the Ethnohistory of the Nushagak River Region, Alaska. *Anthropological Papers of the University of Alaska* 15(2): 53-78.

Washington Department of Fish and Wildlife

2007 Salmon Facts. <u>http://wdfw.wa.gov/outreach/fishing/salmon.htm</u>. Accessed on April 9, 2007.

Weber, Max

[1922] 1978 The Definitions of Sociology and Social Action. Part 1, Chapter 1. In *Economy and Society: An Outline of Interpretive Sociology*. G. Roth and C. Wittich, eds, Vol. 1. Berkeley: University of California Press.

Welch, Laine

2006 2006 Alaska's Salmon Catches to Top \$300 Million. In SitNews. Ketchikan, Alaska.

Wells, Ward W.

ca. 1950a Fishing Boat in Bristol Bay.: AMRC. Ward W. Wells Collection.

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ca. 1950b Fishing Boat.: AMRC. Ward W. Wells Collection.

ca. 1950-1959 Putting Salmon Off Boat at Cannery.: AMRC. Ward W. Wells Collection, Anchorage Museum at Rasmuson Center. Whatmore, Sarah, Pierre Stassart, and Hank Renting 2003 Guest Editorial: What's Alternative About Alternative Food Networks. Environment and Planning A 35: 389-391. White, Bruce 2006 Alaska Salmon Enhancement Program 2005 Annual Report. Fisheries Management Report No. 06-19. Juneau: Alaska Department of Fish and Game. White, Richard 1991 The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815. Cambridge: Cambridge University Press. 1995 *The Organic Machine*. New York: Hill and Wang. Whole Foods Market 2007a Overview. http://www.wholefoodsmarket.com/company/index.html. Accessed on January 27, 2007. 2007b Whole Foods Market. http://wholefoods.com/. Accessed on January 27, 2007. Wilen, James E. 1988 Limited Entry Licensing: A Retrospective Assessment. Marine Resource *Economics* 5: 313-324. 2000 Renewable Resource Economists and Policy: What Differences Have We Made? Journal of Environmental Economics and Management 39: 306-327. Williams, Raymond 1977 Marxism and Literature. Oxford: Oxford University Press. Williams, William Appleman 1972 From Colony to Empire: Essays in the History of American Foreign Relations. New York: J. Wiley. [1959] 1988 The Tragedy of American Diplomacy. New York: W. W. Norton. [1980] 2006 Empire as a Way of Life. New York: Ig Publishing. Wolfe, Robert J. 1984 Commercial Fishing in the Hunting-Gathering Economy of a Yukon River Yup'ik Society. Études/Inuit/Studies 8(supplement): 159-183. 1986 The Economic Efficiency of Food Production in a Western Alaska Eskimo Population. In Contemporary Alaskan Native Economies. S.J. Langdon, ed. Lanham, MD: University Press of America. Yinka Déné Language Institute 2008 Siwash. http://www.ydli.org/langs/siwash.htm. Accessed on May 20, 2008. Zelizer, Viviana A. Rotman 1994 The Social Meaning of Money. New York: BasicBooks.