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Fishing versus majority ideologies

A Southeast Alaska case

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Abstract: Fishing societies have socio-cultural similarities, often contrasting with the larger societies in which they are embedded. Interviews with long-time Southeast Alaska commercial fishermen show that, despite varying backgrounds, they hold in common a pattern of values and views concerning their relationship to the natural environment in which they spend their working lives. This paper describes these relationships and values, with emphasis on how they differ from those of agricultural peoples and from the larger U.S. society. Contrasting values in the larger society about man's place in nature highlighted by the Glacier Bay case may explain negative public perceptions of these commercial fisheries.

Key words: commercial fishing, place, environmental values

Introduction

This paper describes some Southeast Alaska commercial fishermen's 'sense of place', and considers how it differs from that of the majority culture. These are maritime people who spend much of their lives on boats. They have a profound connection to 'place', but one, I argue, that is easily disregarded by the larger society because it has to do with places on the sea, and because it does not fit comfortably with conceptions held by the majority culture. These differences can have real consequences, as is shown in the example of Glacier Bay.

The approach taken here includes elements of ecological anthropology and of the anthropology of 'place'. The anthropology of 'place' usually deals with the cultural meanings imputed to landscapes and human modifications of landscapes. I find this approach alone too restrictive because it omits the effects of the environment on the culture and because the sea is minimally susceptible to cultural modification.

In the media and public discourse, the relationship between commercial fishermen and maritime places is typically reduced to one of *locations* where fishermen go to extract an economic resource – e.g. 20 million pounds of halibut out of regulatory area 3A. The legal doctrines of "freedom of the seas" and fish as "common property resources" may impede recognition of further human connections to marine places. In addition, good fisheries management often requires ignoring at least the short-term effects on human societies built around the fisheries.[1] Like the media, anthropology has done little to recognize that the lives and cultures of some people are connected to marine places. Anthropology has documented the importance of "nomadic" landscapes to pastoralists and to hunting and gathering peoples. Little of this has been done for maritime people's relationships to the sea, possibly due to an orientation of anthropology to terra firma.[2]

After describing these fishermen's relationship to 'place', I consider another view, of commercial fishermen as *'out of place'* in the regions where they fish. I suggest that significant sectors of the American public regard commercial fishing as a questionable or even unacceptable activity, especially when conducted in an area conceptualized as 'wild nature'. Doubts about fishing increase as public perceptions of the Southeast Alaska region shift from seeing it as an undesirably cold and rainy "periphery" to a major summer tourist destination and iconized landscape of pristine nature. In addition to the Park fishing issue (see "Background"), indicators of public unease about commercial fishing include considerable misinformation and mistaken assumptions about these fisheries, almost invariably suggesting a negative view of them.[3] I suggest that this is because these fishermen's relationship to the environment conflicts with mainstream American views of the proper relationship of humans to wild nature, and also conflicts with the agricultural tradition that continues to inform American values.

[1] One fisherman phoned to express doubts about my plan to write about fishermen's 'sense of place' because "too cozy a view of fishing" can be detrimental to the essential matter of preserving fish resources.

[2] M. Estellie Smith states that maritime communities have been greatly neglected in anthropological literature (1977:2). There have been few studies of commercial fishing in Alaska, especially surprising considering the heavy involvement of Alaska Native peoples in this industry. Exceptions include work by Gatewood (1978) Langdon (1977,1980,1989), Mason (1993), Mishler and Mason (1996) and Wolfe (1984).

[3] Examples were collected from conversations and written sources. A list is available on request.

BACKGROUND OF THE STUDY

This study is based primarily on interviews with 55 long-term commercial fishermen[4] in northern Southeast Alaska and ten additional interviews for the same project conducted by Dr. Stephen J. Langdon. The interviews were part of a project funded by the National Park Service.[5] I subsequently obtained permission from the fishermen to use the interviews for a master's thesis (Brakel 1999). The study for the Park Service was occasioned by a plan to exclude commercial fishing from the 65-mile long Glacier Bay and, possibly in the future, from other Park waters, a total of approximately 940 square miles, including parts of Icy Strait and the Pacific Ocean from the Park's west coast to three miles offshore (USDOI 1998:3-3).

The lower Bay and the outer waters were encompassed when the Glacier Bay National Park boundaries were expanded in 1939.[6] These are important commercial fishing waters that have been fished since before 1900. A 1994 court decision determined that there was no statutory ban on fishing in Park waters except in several small areas designated by Congress as "wilderness waters."[7] However, under pressure from national environmental organizations and the Alaska Wildlife Alliance, the Park proceeded with regulations to exclude commercial fishing gradually from the entire Bay; the question of the outer waters would be reconsidered in 15 years (USDA 1998). In 1998 U.S. Congressional legislation sponsored by Alaska Senator Ted Stevens suddenly decided the matter along similar lines but provided financial compensation for those excluded and provided that the outer waters would remain open to fishing.

The interviews were conducted in 1996 and 1997, prior to the action by Congress. All interviewees fished both inside and outside of Park waters. I became involved partly because I had background knowledge of fishing. By living near the Park and talking with tourists in the summer I also had opportunities to hear outsiders' views of fishing.

[4] The term "fisherman" is used to refer to both men and women, in accord with common usage.

[5] The project title is "Human Use and Behavior of Fishers in Glacier Bay," Stephen J. Langdon, Principal Investigator. Working title of the report is *The History, Social Economy and Cultural Practice of Commercial Fishing in Glacier Bay National Park Waters.* Interviews conducted by Langdon were used as they appeared in the draft report.

[6] The boundary expansion of what was then a national monument was by presidential proclamation, so there is no legislative history showing the intent of the expansion into marine waters. Documents indicate that preservation of brown bear habitat was the primary purpose of the expansion (Catton 1995).

[7] In June 2001 the website of the Ocean Conservancy (formerly Center for Marine Conservation), stated that "overfishing so threatened the bay's resources that conservationists filed and won a lawsuit in 1998 to phase out commercial fishing in the bay." This statement is almost entirely false: the court case is the one just described, the issue was whether the Park Service had authority to allow commercial fishing in the Park, and the decision was as described here. There was no showing or indication that the fish resources were threatened by overexploitation. This is an example of the misinformation about the fisheries discussed in the section on "The view of fishermen as out of place."

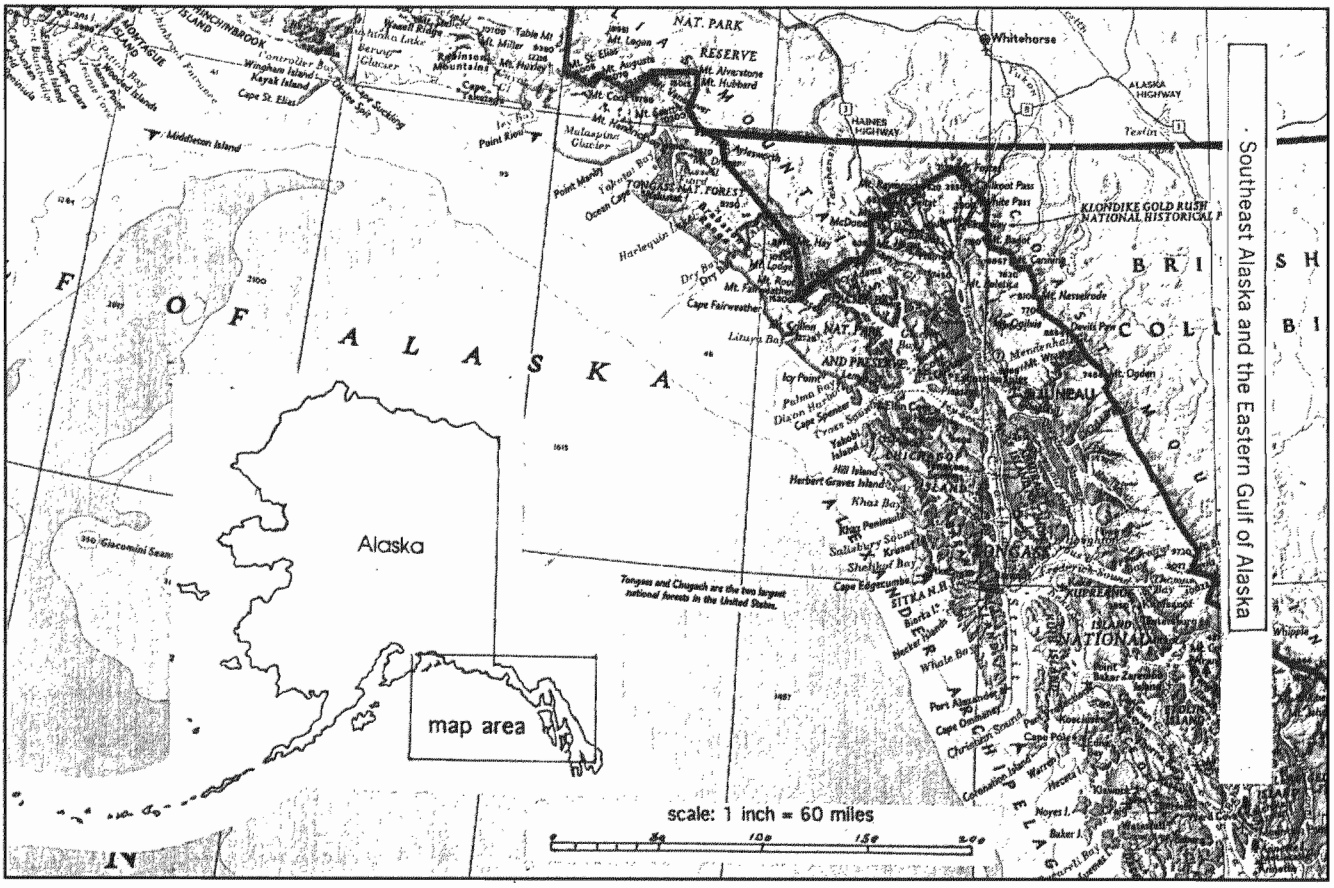
THE FISHERIES

A brief description of the fisheries in which these people are engaged is appropriate: salmon trolling (a hook-and-line fishery), salmon seining, halibut and black cod (sablefish) longlining, several crab pot fisheries, and other minor fisheries. Most boats used in these fisheries are between 30 and 60 ft. in length, and the fishermen are owner-operators or crew on owner-operated boats.[8] Some fish alone, with no crew. As in small-scale fisheries around the world, crews are paid in shares of the boat earnings. The waters fished include the inside passages of Southeast Alaska and the eastern Gulf of Alaska (see map). One individual's fishing range might include Chatham Strait, Icy Strait and Glacier Bay, plus the outside coast south to Sitka and northwest to Yakutat (the distance from Sitka to Yakutat is about 220 miles: 30 hours running time at a typical speed of 7 or 8 knots). A few boats make trips to the westward as far as the Aleutian Islands. Although these can be thought of as in-shore fisheries, some boats range as far as 30 or 40 miles off shore after black cod or king salmon. They are not involved in the large industrial-scale offshore fisheries, and vessels from those fisheries do not use local ports. The fisheries are managed by the Alaska Department of Fish and Game (ADF&G), the International Pacific Halibut Commission (IPHC), and (for offshore sablefish) the North Pacific Fisheries Management Council (NPFMC).

The fishermen interviewed live in the small Icy Strait communities of Pelican, Elfin Cove, Gustavus and Hoonah, or in the larger regional towns of Juneau and Sitka. Some who fish here live in other Alaska communities or in other states (mostly Washington and Oregon), but they were omitted from the interview sample. The sample was opportunistic but weighed toward long-term fishermen; three interviewees were retired. The majority of interviewees run their own boats, although for certain fisheries they may crew on other people's boats. The fishermen come from diverse backgrounds. Some are Alaska Natives, and many had family backgrounds of fishing. Others moved here from other parts of the U.S. and took up fishing as adults.

The Hoonah Tlingit people are the traditional owners of Glacier Bay, Icy Strait and nearby waters and much of their spiritual heritage derives from these areas. Consequently Hoonah Tlingit fishermen have a relationship to these areas beyond that described in this paper. Thornton (1995; 1997) has described the Tlingit relationship to 'place'. The Tlingit and Haida were a maritime people at the time of contact and became involved in the commercial fishing industry at its inception, well in advance of Native people in other parts of Alaska (Moser 1899). In the early 20th century the industry

[8] The State of Alaska limited entry program reinforced this ownership pattern, requiring permits to be owned by "natural persons" rather than corporations, and allowing an individual to own only one permit of each type. Some permit leasing is allowed. The Individual Fisherman Quota (IFQ) systems instituted for halibut and blackcod in 1995 restrict ownership of most IFQs to natural persons.



120 **Figure 1:** Southeast Alaska and the Eastern Gulf of Alaska

dispossessed Native clans and house-groups of their ownership of salmon streams (Price 1990). But by the 1920s commercial fishing had become the dominant economic activity in Southeast Alaska Native villages, serving as a vehicle of adaptation to the cash economy while enabling retention of some elements of traditional culture (USDI 1998:3-106-7).[9] The primacy of this industry among the Tlingit has declined in recent decades.

THE ANTHROPOLOGY OF FISHING

The fishing society discussed here has much in common with other fishing societies, but also has its own distinct character. The modest body of literature on the anthropology of fishing indicates that there are many similar patterns among fishing cultures in different parts of the world, patterns that sometimes contrast with the larger surrounding societies. This suggests that the ecological relationships involved in fishing have considerable power to shape the culture. Poggie and Gersuny (1974:66) observe:

> fishermen look upon their occupation and gain satisfaction from it in a much different way than do landbound workers. These ideational findings add further support to our contention that fishing is not simply an occupation, but a way of life, having more influence on the feelings of individuals and being more persuasive in their lives than most landbound occupations.

Despite the diversity of origins of the fishermen interviewed for this study, long fishing careers appear to have produced a considerable similarity in attitudes toward and involvement with the natural environment. The transmission of a local fishing culture to people who, in some cases, arrive on the scene as adults seems inadequate as an explanation for this consistency. Self-selection is clearly a factor.[10] Bourdieu's ideas (1990 [1980]) about the generation of a common culture through 'practice' and the development of 'habitus' suggest ways in which originally diverse people could come to share a substantial amount of common

[9] Links between commercial fishing and Tlingit subsistence life ways are demonstrated by data from the ADF&G Subsistence Division. A 1987 survey showed that commercial fishing households produced 83% of the subsistence harvest, considering all types of resources, for the community of Hoonah. Larger fishing vessels make subsistence trips that harvest for several households (Betts et al. 1994:8). Because Glacier Bay National Park is one of the few Alaska parks in which subsistence is not permitted, commercial fishing in and near Glacier Bay has been a way in which some Hoonah Tlingits have maintained ties to the area (USDI 1998:4-A-34).

[10] The psychological characteristics of fishermen are said to show remarkable cross-cultural similarities, typically describing them as "aggressive, courageous and independent" (Acheson 1981:297).

culture through work, and in response to the somewhat unusual natural and socially-constituted "objective conditions" of the fishing life.

Some reservations about this study are appropriate. A directed effort to identify differences based on different cultural and socio-economic backgrounds might have identified more of these, especially between Tlingits and non-Natives. It should be emphasized that the findings of this study apply to a particular set of fishermen: long-term commercial fishermen from the Southeast Alaska area.

THEMES FROM THE FISHING INTERVIEWS

Because the interviews were originally conducted for other purposes, people were not asked to reflect upon their relationship to 'place'; they were asked about their fishing biographies, their uses of Park waters, and observations about marine areas in the Park. But their involvement with these marine places emerged as one of the most salient aspects of the interviews. This is not surprising for several reasons. Fishermen must focus intently on the environment to find and catch fish, navigate, and avoid costly or dangerous mistakes. Some have fished for most of their lives in this area. And many said the opportunity to work and live in this natural environment was one reason why they fished. The selection of themes presented here is guided by the objective of showing how fishermen's way of relating to their surroundings differs from other ways.

Fishing is a way of inhabiting a place

The fishermen interviewed have spent much of their lives aboard boats in the area. The 55 people I interviewed had fished an average of 23 years; two had fished here for 60 years and were still fishing. Some started as children and more than a third had parents and/or grandparents who fished. It was not uncommon for three or more generations to have fished in the area.

Participation in these fisheries typically involves living aboard boats for at least several months each year. A few unmarried fishermen in the group live year-round on their boats. One man stated that his engine tachometer registers 2,000 hours a year; 12 hours of running per day would mean 166 days per year on the boat. Trips last from a few days to a few weeks, but completing one may simply mean off-loading fish, getting groceries, refilling fuel, ice, and water, and heading back out, a turn-around that might not be done in ones home port. The 'homey' atmosphere inside most boats suggests that they serve as homes, even if they are not the primary residence. Indicative of this, one fisherman, complaining about having his boat unnecessarily boarded at sea by fisheries enforcement officials said, "How would *you* like it if some people barged into *your* home, visibly armed, and demanded to see things?"

Working and living 24 hours a day on small boats in an often wildly moving environment has effects on the body. It calls for the development of habits and 'body wisdom', adaptations that not everyone who tries fishing can manage. People not accustomed to this can be exhausted, and prolonged seasickness will usually cause people to give up fishing. One person explained that "The first year is the big wash-out year." A retired woman who had fished with her husband said:

> The muscles that I built up through the years – to hold my body together for this rocking and rolling on the ocean.... I could walk just perfectly, unless it really got bad and it would throw me. I could walk, no problem at all. But now, as soon as I get where it's rocking and rolling, my body starts like it's just falling apart.

Sleep deprivation is common due to long work hours, or sometimes an inability to sleep soundly because of sea conditions, or a need to stay half-awake to monitor the situation of the boat. Problems with his legs prompted an older troller to sell his "hard riding" boat and buy a "1920s classic double-ended troller." This way of living, then, not only becomes written into the body, it also sorts people out into "fishermen" and "others."

Although fishing is often a hard-driving, ambitious endeavor, it is also a lifeway that tends to blend together in various proportions parts of existence that modern society tends to separate: work, recreation, sociality, travel, production for household use, and sometimes family life. Some couples fish together and children are sometimes included, although having children aboard was said to have been more common in the past. A man whose wife and daughter have fished with him said "I was basically born into fishing. I was on the boat at six months.... Three kids were raised on the boat. My mother rinsed diapers by towing them behind.... Right away we went to Pelican. We fished there to Lituya – my dad loved the area."

One consequence of being at home on a boat is that places where people fish, regularly traverse, or anchor at night can come to be regarded as "home places." A Pelican resident who has been on fishing boats since he was a toddler said of the bays west of Cape Spencer, "It's 50-60-70 miles away, but it's what we consider home." Asked what he likes about fishing, he gave several reasons and concluded: "Yeah - I feel fortunate we're one of the few to have access to do that – you know, live on the ocean, basically." A Hoonah Tlingit couple talked about fishing together in Glacier Bay:

> So Mary and I, we spent most of the summer in Glacier Bay.... *So Mary fished with you?* Yeah, she has – '74 – I hired her as my puller (laughs). We ended up getting married.... *You go fishing with him up there when you can?* She: Every year. We're lucky our parents take care

of our kids when we're fishing. He: So anyway, Glacier Bay became a part of me, every fall. It remains that way today.

Good stories are a valued part of fishing life. One fisherman said "It seems like every fishing trip has stories," and another stated, "There's some flat-out good storytellers [naming some] and their stories will get repeated." These stories are typically connected to places and are appreciated best by people who know the settings. The director of the Alaska "Communities of Memory" Project told me, "Those who fish told stories that centered on their boats, not their landedness or winter homes" (Partnow 1999 pers. com.). The many stories associated with places are signs of fishermen's history there, although no human modifications to the land or seascape can be seen.

The place itself is often a reason why people remain in the occupation

Asked what was important to them about fishing, responses fell into these categories:

- Independence
- Diversity, always something new
- Being outdoors, being "in nature"
- Seeing the country
- Being your own boss
- Catching fish
- Producing something real or good
- It's the only thing I've ever done
- Connecting to natural cycles
- Challenge
- Travel
- Liking the people
- Adventure
- Liking boats
- Feeling of freedom
- Enable one to live in a rural area
- Peacefulness of being at sea

Fishermen consistently mentioned that they liked seeing the places, being outside, the variety, and the interesting things that happened. The importance of places appeared also in what people said about particular locales, as they related information, observations, and experiences well beyond the scope of the questions they were asked. People experience a strong sense of differentiation among parts of the area:

> I really enjoy the Bay [Glacier Bay] ...it's really different than the rest of the places that we fish – you know, the Yakobi Island area – is *so* different than the Bay, and Yakobi and the Bay are so different than, like around in by Icy Point and Libby Island, and all that area – it's so different. And then when you get up west of Icy Point. *That* whole part is just so different – you know, they're just totally different areas, and, ah – each one has its own beauty.

Fishing was described as almost the only way to make a living in some small communities: "If I did something else I'd definitely have to leave." More occupational choices are available in Juneau and Sitka. Here are the answers of two Juneau and Sitka fishermen to the question of why they fished:

> 1) My parents would have sent me to college, but I wanted to fish. Occasionally I do some construction in the winter. I can't imagine being in a building with filing cabinets, and a window between me and the wonderful, beautiful outside world we have in Alaska.

> 2) I've always done it. It's a clean living, you get to travel, you see things. People pay thousands to see what we see – especially around Glacier Bay Park. The mountains – guys I know who fished up there almost 40 years still comment on the beauty of the Glacier Bay area, the Fairweathers, and so on. Southeast Alaska – the places I enjoy – good beaches, Khaz Bay with the old mining remains, Graves, Torch Bay, Dixon Harbor – you see different wildlife you don't see here.

In Elfin Cove in November I stopped to talk to someone I'd interviewed earlier. Getting his boat ready to head out into a gray and stormy-looking Cross Sound, he commented "People fish because they love the country." I'd done a lot of interviews by then and it fit, although it omitted the critical matter of economics. Corroboration of this attachment to place over and above the economic values is provided by a 1979 survey administered by the Institute of Social and Economic Research (ISER) to about 10% of households in Southeast Alaska. To ascertain willingness to leave the area for economic reasons, ISER asked: "If you could not work at your present job in Alaska, would you take similar work in Washington or Oregon if the pay stayed the same?" Region-wide, 50% were willing to leave. In the logging camps, 83% of residents would leave, but in the small fishing communities only 6% would leave, despite incomes in these communities that were less than half the regional average (Alves 1980:II-15).

The best kind of places are wild places with few people.

The fishermen prefer wild country to developed and domesticated country, reflecting both personal preference and their view of what is best for fish and wildlife habitat. They also prefer not to have too many other boats around competing for fish. Since wild nature is seen as an appropriate setting for human life, the separation of wild areas from domesticated areas expected in agricultural societies does not seem necessary. Asked to identify places that are especially important to them, good fishing, but also

wildness, wildlife, aesthetics, and the minimal presence of other humans were incorporated in explanations of why a place was important. One man said, "I like anchoring alone. This is one of the few places left where you can actually be alone. Especially when you're fishing in the winter." Another said, "Only about 200 fishermen fish that coast a lot. Besides that, it's beautiful there."

Although other factors are at work as well, fishing settlement style and the minimal terrestrial impact of the fishing-based society suggest a lack of interest in changing the surrounding natural environment.[11] A fisherman who had lived in several such communities remarked approvingly that, "most fishing communities I've lived in have had no cars."

Politically, fishermen have constituted an interest group for the maintenance of wild lands in the region, lending support for a number of protected land designations and opposing developments potentially impacting fish and wildlife habitat (Durbin 1999). The interview question, "Do you have any concerns about habitat or management?" brought forth many vehement statements, particularly critical of large-scale logging. The ISER survey identified occupational group differences that corroborate this orientation toward maintaining wild lands (Alves 1980). Since such views were considerably less popular in Alaska two decades ago, ISER's findings show that expressions of appreciation for 'wilderness values' in my 1997 interviews were not simply attempts to impress the Park Service.

Learning about places has economic value

Firth (1984) and others have pointed out that the mobility of fish resources and the 'common property' treatment of them create a barrier to capital accumulation among fishermen. Fishermen can own vessels and gear, but cannot own the basic productive resources. Consequently fishing knowledge, including knowledge of places, is all the more important, serving as a kind of substitute for capital. As Symes notes, "For small scale fishermen one of their most valued assets is their intellectual capital, consisting of detailed knowledge of the local fishing grounds and the behavior of the fish stocks.... (1996:12). Others suggest that environmental or place knowledge can be considered a technology of production (Thornton 1995:5). Hoonah Tlingit fishermen became skilled in seining for salmon in the difficult tidal currents of the Inian Island passes in Icy Strait. Permanent closure of most of Icy Strait to seining in the 1970s was a blow to Hoonah's economy and morale, and precipitated in the decline of the Hoonah seine fleet (Langdon 1980 and interviews).

Through an investment of time and money, long-time fishermen have built up a huge fund of knowledge about the ocean bottom, the complex and constantly changing tidal currents, and the living creatures in the water in a great number of places. The information required about a place depends on the species pursued and the type of gear used. Many kinds of timing are important and vary from one place to another. Tidal current patterns may take considerable time to learn because they vary from hour to hour and from one tide to another. A troller commented that "each area has its formulas. It takes a few years to learn an area, and Glacier Bay is one of those areas." A woman who used to troll on king salmon fishing grounds that begin 30 miles offshore said:

> It's like I can still close my eyes and I can see the Fairweather Grounds - what it was like on the bottom. Because I learned that whole bottom.... you know, the nips and the ups and downs and so on. I'm sure that all of the fishermen – the ones who tend to that part of the fisheries [can do this].

Before the era of accurate electronic position-finding technology, the knowledge of how to locate one's halibut grounds was highly protected private property; to some extent it still is. A Tlingit halibut fisherman talked about the powerful tide currents in the entrance of Glacier Bay and said, "We got to a point where we could set in between the [underwater] reefs without having to lose gear," but he declined to give details because, "We lost a lot of gear to learn that place." Information guarding of this kind is common in fisheries in many parts of the world.

Most boats, even ones built in the 1920s, now have sophisticated electronic equipment: sonar to help find fish, global positioning systems (GPS) for navigation and for relocating bottomfish and crab fishing sites and gear. This reduces the amount of trial-and-error learning required to become a competent fisherman and navigator, but as one fisherman commented, "Electronics make it easier for people who don't know a lot," and "give you a lot of freedom, but accumulated experience still means more than electronics."

Moving about over a large region

Most fishermen have large ranges that differ for each individual captain, and they make flexible use of that territory based on strategic choices. The area used by an individual can change substantially from one year to the next. Typically they prefer the flexibility of a large range, partly to cope with the variability of the ocean environment, volatile fish prices, and changes in regulations, and they will extend their range through exploration. While learning new places has potential economic benefits, it is also true that the sense of freedom, adventure, and the opportunity to see new areas are valued as part of this relationship to 'place'.

[11]Anderson and Wadel (1972) report similar settlement sites and patterns for North Atlantic fishing communities. People intent on practicing agriculture initially settled the community of Gustavus near Glacier Bay. The choice of a site with flat land and no harbor, and the sprawling settlement style, contrasts markedly with initially fishing-based communities.

A Hoonah fisherman described his mix of fisheries, requiring different areas including Glacier Bay: "One of the things about a fisherman is that it's the whole game plan on how you make a living for your family. It's halibut, salmon, crab; I do some gray codding and black codding and ring [Tanner crab] fishing... I can't afford to lose any more." The importance of territorial flexibility was emphasized in responses to a question about salmon caught on troll gear. Nearly everyone said the percentage of their catch coming from Park waters varies radically from year to year, based on the different routes the salmon take when migrating from the open ocean to inside waters, and on their own decisions about where to fish. A fisherman from Pelican remarked, "Several years ago you could hardly catch a coho on the south side of Cross Sound. The whole fishery was on the Cape Spencer side. Other years it's the other way around, and some years the fish are farther out." Since the Cape Spencer side is within Park waters, he added, "The main point is, it's damn good and important. I wouldn't want anybody to interpret that as, if I can't fish one place, I can go someplace else and make up for it. It's up to the fish."

The fishermen's orientation to a large region is reflected in their concerns about environmental conditions throughout their fishing ranges and beyond. Lots of concern was expressed about logging that might be occurring 200 miles or more distant from their home communities. Their regional orientation is also reflected in social relationships. Southeast Alaska communities tend to be isolated from one another but an exception is connections among fishermen. "Code groups" that share in-season fishing information and "running partners" commonly include people from different communities. People spoke appreciatively of encounters on the fishing grounds with old friends from distant towns, and of socializing in harbors and over the radio.

Wild nature is regarded as 'productive', and as a place to work.

Nature is seen as producing, without human aid, surpluses of fish and other resources that people can appropriate.[12] Although over-fishing is a clear danger, appropriations from nature are regarded as fine so long as the generative capacities of the natural systems are not diminished.

People who depend on local fisheries are less buffered from over-use and misuse of the resource than people in most occupations. Perhaps because there is an opportunity to assess feedback from the effects of economic activities over fairly short time cycles, they seem to think more about the sustainability of their activities than people in most modern occupations. Evidence of communication between fishermen and management biologists, and a fair amount of mutual respect, is interesting because the contrary is so frequently reported for other parts of the world. Contentious negotiations with Canada over transboundary salmon stocks and the threat of closure of Park waters have been an incentive for fishermen to state confidence in the management of fisheries by the Alaska Department of Fish and Game (ADF&G) and the International Pacific Halibut Commission (IPHC). My interviews for the Park report could have been seen as another opportunity to present this view. But aside from its use as an argument, "sustainability" clearly is one of the fishermen's values and concerns. This is particularly true for those who remember the 1950 – 1970s era of depressed halibut and salmon stocks. People frequently described themselves as contributing to sound management through providing information, having a voice in regulatory decision-making, and supporting decisions in favor of the resources. One man pointed out that most fish politics is not about catching more fish, but about *who* gets to catch them: allocation between gear and area groups and between commercial fisheries and the growing charter sport fishing industry. In fact, while interviews were being conducted, news reports stated that the longline fishermen's organization was concerned that the black cod quota could be too large, and fishermen on the IPHC advisory board suggested more conservative halibut quotas than those proposed by IPHC scientists (Associated Press 1998, Buckley 1998, Thompson 1996).

The environment is regarded as a source of subsistence food and materials as well. When interviews were conducted in the fall several people were preparing for or returning from deer hunts, and ADF&G data show that large quantities of subsistence foods are harvested by both Native and non-Native fishermen (Betts 1994).

The fishermen's preference for wild country and for the maintenance of fish and wildlife habitat has often put them at odds with development plans that mainstream society proposes for this area. Now they are realizing that their treatment of wild nature as productive of resources exploitable by humans puts them at odds with another set of ideas held by the dominant society. One woman worried that "We're heading toward a mentality that labels anybody who kills anything."

Observing changes in nature

In reviewing the data, the frequency with which people talked about variation and change in the natural environment was striking, particularly because the only questions asked about change had to do with technological changes. Relatively few significant changes were reported in technology except in electronics, primarily fish-finding and navigational equipment. Yet I heard a tremendous

[12] Salmon hatcheries are an intervention in the natural processes of reproduction. Some hatcheries are paid for by a "fisheries enhancement" tax on fishermen. Although no questions were asked about hatcheries, several people mentioned the benefits while others expressed unease about hatchery programs, stating concerns about genetic effects, diseases, etc. Further domestication of fish, such as salmon farming, was unequivocally opposed as dangerous to the stocks and contrary to fishermen's financial interests.

amount about changes in nature, changes on time-scales ranging from minutes to decades. To seemingly simple questions I received answers about dynamics, couched as experiences, observations, and theories. Geographic places were often described in terms of changes: the sudden arrival of a storm in that place, the dynamics of tides there, the silting in of a bay, the changing migratory routes of fish, changing sea mammal populations. The actors in these dramas were rarely people. Salmon were especially prominent, and came up repeatedly in discussions of habitat, environment, and fisheries management, suggesting that salmon may be 'good to think with'. One troller provided a dynamic description of how salmon heading for spawning streams come in from the Pacific, enter through Cross Sound and then Icy Strait, and the fishermen's need to apprehend their movements. Another said salmon trolling is "time-consuming and mental work. It's like a pool table out there – everything is moving. It's draining in that way." Variations in the water on the outside coast were a topic:

> One of the things that's really interesting in the water over there is the mixture of silt, fresh water and salt water. It's a unique ecosystem of its own. There's a lot of fringe effect there – you'll see a lot of variation in water temperatures, of 10 degrees even, going from the glacier runoff water to the much warmer ocean water. And what we call "feed" seems to like that stuff. There's lots of feed in that habitat. So it seems to be a good habitat for sea life – you know, birds, fish, marine mammals.... It's a dynamic thing, it varies a lot with the tides – the big tides flushing out of the Sound, and Alsek River, Dry Bay. You'll see the slate-colored water, glacial water coming into the bluer ocean water. You try – as a commercial fisherman – to figure out patterns of what fish'll be doing. And – I've never been able to get anything that works consistently, to figure it out. Basically, the fish are where you find them – and sometimes they're in the dark water, sometimes they're in the green water. But there is this really complex interaction in the salt water, and the wildlife that lives there.

Crab fishing produced slightly less dynamic descriptions than salmon based on their more stationary habits, but a Tanner crabber's description of fishing in Glacier Bay combined changes in crab distribution, tree distribution, competing marine mammal predator distribution, post-glacial uplift, changing ice conditions, weather, and mountain goat behavior. Another crabber said, "I like the season changes," and then described a heavy snowfall in Geikie Inlet.

The eastern Gulf of Alaska has many dynamic factors including plate tectonic movements, glacier movements, and large tides. Interannual variations in temperature and amplification of global warming exceed that at lower latitudes (Schimel 1999). Perhaps most significant is a difference between ecosystems on the land and those on the sea: on land, ecological processes tend to be in fixed locations, but on the ocean they can move around, often over great distances. In the years since these interviews, marine scientists have begun to make pronouncements about "ocean regime changes" (IPHC 1999). The fishermen's level of attention to changes is understandable in this environment. Significantly, no one talked about "the balance of nature."[13]

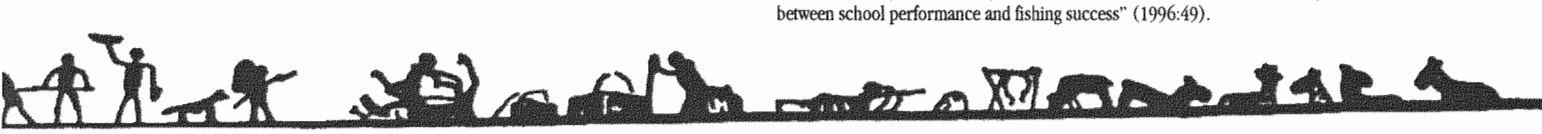
Their view of nature as dynamic and not necessarily in equilibrium affects these fishermen's models of nature, patterns of learning, and their views about knowledge. The fishing fleet harbors many experimenters and theorists, but while they try to apprehend trends and patterns, they often find they have not succeeded. People clearly stated that many of their theories about natural processes were tentative. 'Models of nature' could even get in the way when dealing with a highly variable environment. One person said, "In fishing you always need to be looking ahead, tuned into and focused totally on what *is*, as opposed to what *was*, what you expected, or what was supposed to be happening." M. Estellie Smith suggests that fishermen's conceptions of nature are closer to the notions of chaos and complexity in scientific thought than to the scientific underpinning of the traditional approach to fisheries management. She argues that most fishermen perceive natural processes as complicated, dynamic and sensitive to small initial perturbations (1996:208). I asked two fishermen to comment on her description of fishermen's views of the natural order. One replied "This place changes! And I can give you bazillion reasons... How many of these things happen *once*, like the king crab boom? This is a big rolling environment.... There's no two years alike, no matter what you're measuring."

Although a Dungeness crab fishermen complained that his was "a horrible fishery for the ease of learning where experienced ones set their pots," learning most fisheries requires extensive first-hand experience, partly because of the variability of the environment.[14] To the extent that people do receive instruction, Ingold's observation about the education of hunters applies: "the fine-tuning of perception and action that is going on here is better understood as a process of enskillment than as one of enculturation," for what is involved is "an *education of attention*. Indeed, the instructions the novice hunter receives – to watch out for this, attend to that, and so on – only take on meaning in the context of his engagement with the environment" (1996:40-41). A Tlingit Fisherman provided an example of such instruction:

> It was uncanny the way they read the tides out there. Sometimes my uncle would call me up and tell me "Watch the

[13] Kempton, Boster and Hartley (1995:42-45) describe 'the balance of nature' as one of the cultural models of nature they frequently encountered in surveys eliciting American environmental values.

[14] In Iceland fishing captains are required to have a license, and training begins with two years at the Marine Academy. Yet Palsson and Helgason say "No formal training can cope with the flexibility and variability in the real world. Therefore, there is little, if any, connection between school performance and fishing success" (1996:49).



> tides." And later on he would ask me. "What did you see?" And I said, "I saw some tide rips coming in." And he asked me, "Did you count them?" and "Which way they running?" He was grooming me, and I didn't know that.

Much of the knowledge gained through experience is not readily transferable from one person to another. Rather, it is implicit knowledge, activated only in conjunctions of circumstances, in practice. Borofsky (1994:340-41) cites neuroscience research by Knowlton, Ramus and Squire that distinguishes between two types of memory systems, explicit and implicit:

> One system stores in explicit memory the actual instances that are present...the other...stores implicitly information that is abstracted about the stimuli...in the form of rules".... [and] "such patterns, because they are stored in implicit memory, are not readily verbalized or made conscious. (1994:340-41)

Interviews are unlikely to elicit knowledge that is implicit and activated only in conjunctions of circumstances, but a Hoonah seine captain provided an example. Asked how he used to set and haul his seine in the powerful tide currents when the Inian passes were open to net fishing, he said, "I can see it, I just can't say... you know what's going to happen, and people ask you *how* you know - I just know!"

A troller claimed that with management changes, the inside waters' king salmon fishery nearly disappeared because it was too haphazard. Old-timers who fished only the inside waters "had lots of specific knowledge about tides and weather – then they'd look at a certain place and find fish." As they retired or died, "that knowledge has been lost from our gene pool." His comment recognizes the *embodiment* of knowledge in the individual person. People are not interchangeable; individuals have knowledge inside them, and they inevitably take much of it with them when they go. It is not codified and transferred as readily as most modern Western knowledge. The typical fishing society's egalitarian emphasis, respect for 'elders' among the fishermen, and respect for individual autonomy might be understood partly in terms of the importance of knowledge about an environment that becomes embodied in individuals through experience.

THE VIEW OF FISHERMEN AS 'OUT OF PLACE'

What follows will be a speculative part of this discussion. I suggest that mainstream American values seemingly uncomfortable with commercial fishing come from two important sources: an agricultural heritage and a newer set of values surrounding wilderness and wild nature. Informal research indicates that people with moderately 'environmental' and pro-wilderness views are likely to view the fishing industry as almost inevitably destructive to both fish stocks and "wilderness values." This distrust is understandably increased by the knowledge that many of the world's fisheries are over-fished. But worldwide problems with agriculture do not produce the same reactions; one never hears a suggestion that agriculture is an outdated human adaptation that should be abandoned. In Southeast Alaska some major fished species happened to be at near record high levels at the time of this study, a fact generally not recognized by those holding the values discussed here.

External perceptions of fishing should ideally be studied with carefully designed interviews and literature surveys. I did not conduct such a study because initially I did not intend to consider what non-fishers thought about fishing. But through conversations and literature I encountered factual errors about these fisheries that were so numerous and had such a consistently negative cast that I became curious about the conceptual frameworks that informed them. Misinformation seemed to be both a symptom and cause of negative views, prevalent among casual visitors to the region and almost equally so among those with reason to be better informed.[15] The high priority accorded by national environmental organizations to removing commercial fishing from Glacier Bay also seemed incongruous amid the many serious environmental problems facing the world. I believe that it is productive to view the terms of reality laid down in "environmental discourse" as stemming from fundamental human ecology and cultural understandings. Based on comparisons of the fishing values described in this study with literature describing environmental and landscape values in agricultural societies and in modern America, I suggest a perspective on how commercial fishing could become antithetical to many people's views. Perhaps these tentative conclusions will inspire an in-depth study of the bases of public opinion.

Values derived from an agricultural heritage

Some agricultural values that fit poorly with fishing are:

1) *Agriculture is more acceptable than hunting, thus aquaculture is more acceptable than capturing wild fish.* Popular media and environmental literature often advise eating farmed fish as more environmentally correct (Nash 1997; Newton and Dillingham 1997).

[15] Although trawl fisheries, with minor exceptions, are absent from the entire Southeast Alaska region, some park employees with several years of experience in Glacier Bay believed that large trawlers conduct fishing in the bay. Speaking with a leader of a national environmental organization who was a major proponent of excising commercial fishing from the Park, I learned that he believed fish stocks in Glacier Bay were seriously depleted, and despite his long and prominent association with Alaska issues he did not know that most Alaska salmon stocks recovered to high levels in the 1980-90s. A 1997 book about the depletion of world fish stocks authored by a marine biologist and published by Sierra Club Books described new management measures in the North Pacific halibut fishery and concluded with "The fish may even recover!" (Berrill 1997:92), yet around this time IPHC scientists estimated North Pacific halibut stocks at near an all-time high (Associated Press 1998).

2) *Wild nature should be separated from the human-used and controlled environment.* It has been argued that the concept of "wilderness" arose with the transition to agriculture and is foreign to hunter-gatherer peoples, (Hell 1996). Fishermen, somewhat like hunger-gatherers, make little distinction between wild and domestic places.

3) *Mobile and flexible use of territory is suspicious* (like the old agricultural distrust of nomadic pastoralists and the need to settle American Indians on reservations) (Bennett 1993:306-7).

There seems to be a perception by the public that attempts to regulate fishermen are futile. Although fishermen regularly comply with regulations that are exceedingly complex and frequently changing, the perception from the outside is different. A perception that they are 'out of control' may come not only from the agricultural heritage, but also from a modern expectation that people will be under a certain amount of observation, at least in their work life - the "panopticon" that Michel Foucault (1984) described. Fishermen's highly mobile and independent movements over a wide, undomesticated territory may provoke suspicion that they have escaped this. And, suspicions confirmed, when I asked why they like their occupation, almost everyone mentioned "freedom" and "independence," by which they meant many things including the freedom to move about. Moreover, Acheson's review of fishing anthropology says "a very large number of studies in widely separated cultures have mentioned the independent nature of fishermen" (1981:297).

Values associated with modern American nature ideologies

1) There are two kinds of nature, utilitarian and 'wild,' each treated very differently.

2) "Wilderness" is a sacred category that has to be kept pure.

3) Man is a visitor in wilderness and does not remain.

4) Humans should not appropriate resources from wild nature, and productive labor is not appropriate in the wild.

5) Work is not valued as a way of learning about nature.

Although these fishermen's values support maintenance of wild natural areas, and fishermen have been an important part of environmental movements in the region (Durbin 1999), fishermen are looked upon unfavorably by more distant environmental organizations. This perception has perplexed some leaders of Southeast Alaska conservation efforts (Kallick 1997, personal communication; Sisk 1998, personal communication). I suggest that modern Americans tend to view nature as divided into 'pristine' 'wild' nature and the rest of the earth that is used and lived in by people (Callicot 1994). This separation is combined with ideas of the appropriate relationship of humans to a now ideologically sacred category of wild nature. Fishermen mix those categories up by working and living in pristine nature. In this ideological context fishermen's value of "sustainability" is irrelevant, their ties to 'place' may be perceived as improper in wilderness, and the knowledge they accumulate through working in the environment is not valued.

William Cronon (1996) and Richard White (1996) point out that in modern America, productive *work* in wild 'nature' is considered destructive - any use is considered *ab* -use. Instead, *recreation* is regarded as the appropriate human activity in 'nature'. White sees this as implying the loss of a way of learning:

> Work once bore the burden of connecting us with nature. In shifting much of this burden onto the various forms of play that take us back into nature, Americans have shifted the burden to leisure. And play cannot bear the weight. Work entails an embodiment, an interaction with the world, that is far more intense than play (1996:74).

Charter sport fishing boats in Glacier Bay National Park are commercial operations; some are operated by a Park concessionaire. They take substantial quantities of fish but were not identified as a problem by national environmental organizations, perhaps because they are defined as *recreation*.[16]

Roderick Nash (1973) and others have noted the religious character of the ideology surrounding wilderness. It stands out in writing and films about Glacier Bay from the time of John Muir to the present. Wilderness, in this ideology, is a sacred category that has to be kept pure. Activities related to tourism and recreation, such as the cruise ship and charter sport fishing industries, do not defile the category, but commercial fishing does. Visitors to Glacier Bay rarely see actual commercial fishing boats because some fisheries occur in fall and winter, so they are more disturbing in concept than in direct experience. While problems and impacts of tourism are regarded as susceptible to mitigation, this is not the case for fishing. Neither arguments that fish stocks in Park waters were not depleted, nor proposals to reduce catches in Park waters to lower levels proved relevant. Commercial fishing was simply the wrong activity in sacred space.

The structuralist ideas of Mary Douglas (1970) and others are relevant to this discussion. Douglas wrote that, "dirt is matter out of place." Especially when categories are sharply drawn, violations of the structure of cherished ideas will trigger pollution behavior. Anomalous presences inside those categories must be

[16] Efforts to close commercial fishing were bolstered when the *marine reserve* concept was introduced into the discussion. Marine biologists saw it as a rare opportunity to establish a reserve. But contrary to accepted guidelines for the creation of marine reserves, the application of the concept to Glacier Bay was not submitted to public discussion and the purposes of a marine reserve there were not defined. Elimination of charter boat sport fishing and the effects of tourism on marine mammals were not considered. Again, recreational activities did not defile the category.

defined as either sacred or profane. In the case of commercial fishing, it's profane. The load of negative assumptions and erroneous facts about these fisheries and their participants indicate the level of ideological disturbance and serve to support the cause of cleaning up the anomaly.

CONCLUSIONS

Interviews for this study show that the relationship of a group of fishermen to the environment in which they work is a central aspect of the culture, and, for long-time fishermen, an aspect of individual being. Fishing is a way of inhabiting a place and attachment to 'place' figures prominently in occupational choice. These fishermen prefer wild natural areas, and regard them as productive of exploitable resources and as a place to work. Flexible individualized use of a broad region is part of this relationship to place. Knowledge about places, acquired through expenditures of time and money, is a form of 'intellectual capital.' Fishermen view the environment as complex and dynamic. The occupation develops attentiveness to variation and change in the natural world, and through experience people acquire knowledge about the environment, knowledge which is often implicit, activated by circumstances, and not readily transferable.

National environmental organizations could view these fishermen as allies based upon a convergence of interest in maintaining the wild natural environment. Instead they view the fishermen as 'out of place' in the natural environment, a view that appears to be common among members of the American public aware of these fisheries. An explanation is proposed for the level of discomfort with the fisheries based on the contrast between majority society values and fishermen's values and fishermen's relationship with the 'wild'." Some of the majority values disturbed by commercial fishing derive from an agricultural heritage. Perhaps more significant, aspects of fishermen's relationship to the 'wild' violate the categories of newer ideologies surrounding the concept of "wilderness."

A directed study of majority-society views of these and other fisheries would be valuable in expanding or modifying the perspectives presented here. Majority views can have real consequences, as in the case of Glacier Bay. As an area comes to be identified with the category of "wilderness," working in and inhabiting that area is seen as a problem where no problem was perceived before. An increase in the number of people who see commercial fishing as 'out of place' seems inevitable. As large tourist corporations locate more operations here and forge links with smaller-scale operations like charter sport fishing, they may see commercial fishermen as a problem for other than ideological reasons, resulting in a powerful convergence of interests.

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