Cooperation and quality of life among Bering Sea fishermen and their families

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Declaration

This thesis has been composed by me. This thesis is my own work except where indicated. This thesis has not been submitted for any other degree or professional qualification.

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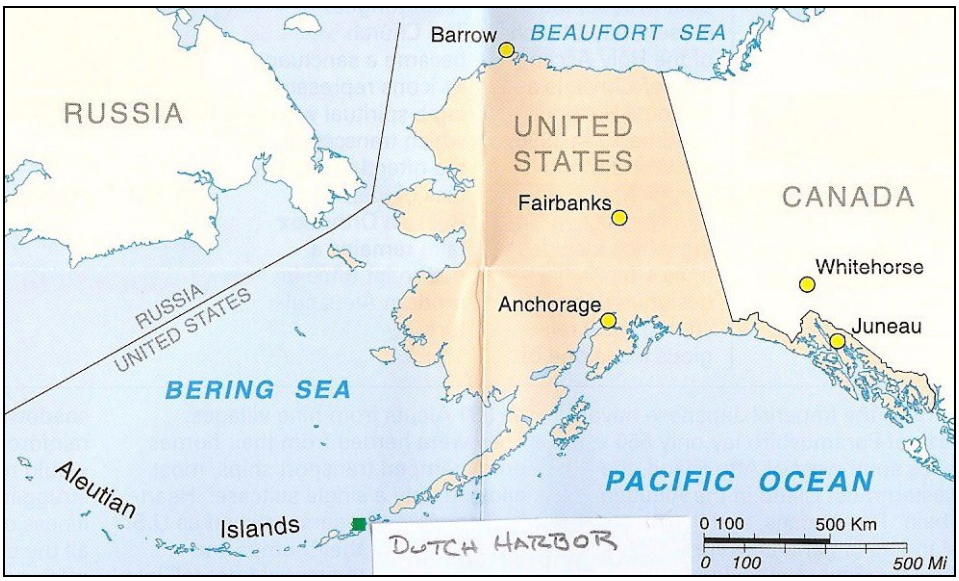
Abstract

Bering Sea pollock fishing is characterized by high levels of physical risk, uncertainties in wages and schedule, close and extensive interdependence on other workers, and long absences from home. This occupation leads to a way of life which is full of extremes and has unusually strong effects on the family. This study examines the effects of the occupation on the quality of family life and working life through a teamwork perspective. It is a study of the slow breakdown in cooperation among families and the enhancement of cooperation in the work setting. The breakdown in family cooperation reduces the family's ability to respond to its members' needs for love, inclusion, and intimacy, and has important consequences for the quality of family life. The enhancement of cooperation in the work setting contributes to the creation of important social benefits such as trust, agreement, and a sense of inclusion. These social outcomes, and improved task performance, positively influence the quality of working life. Major themes include anthropology at home and among peers, family adaptations to occupational influences, the role of story-telling in building cooperation and commitment in teams, generosity and relaxed social accounting strategies in adult socialization, and the importance of extremes in evaluating the quality of working life.

Introduction



I. Introduction to contexts

Bering Sea pollock fishermen work at a fascinating and demanding occupation. It is strenuous work characterized by high levels of physical risk, uncertainties in wages and schedule, close and extensive interdependence with other workers, and long absences from home. Trawling for pollock in the Bering Sea is an occupation with many extreme fluctuations. The absences from home are long as are the presences. The work itself can be strenuous, unpleasant, and dangerous and it can also be very boring, routine, and exhilarating. There is little about this occupation to which moderate descriptive terms apply. "The mode of work and the life style of fishermen are inextricably intertwined" (Poggie and Gersuny 1974:9). Tunstall comments on the unusually strong effects of work on non-work and calls trawl fishing a "total occupation" (Tunstall 1962:12). This occupation leads to a way of life which is full of extremes. It is at times life or death and feast or famine.

At sea, these fishermen live and work together in very close proximity for weeks or months at a time. The marine environment isolates workers on one boat from contact with outsiders. The boat is bounded in a way that makes it a bit like a social laboratory. This boundary, together with the occasionally severe demands of the occupation, provides an especially good environment for observing social behavior. Artifice and pretense are stripped away. Basic social interactions like competition and cooperation are in full view.

Family life is also made extreme by the impact of the occupation. Men are absent from home for months at a time and then they are present for almost equally long periods of time. Transitions between work and family happen two or three times every year. These are transitions on a large scale and the social processes involved are magnified in intensity. Small details and nuances are easy to see. In the following thesis the details, illuminated by collective action and teamwork theories, lead to a description of the occupation with a focus on the quality of life both at home and at work.

A. The fishery

The Bering Sea is an extension of the North Pacific Ocean bounded by the Aleutian Islands to the south and Bering Strait to the north. Its animal resources, including at least 450 species of fish, crustaceans, and mollusks, 50 species of birds, and 25 species of marine mammals have supported populations in Asia and North America since prehistoric times (National Research Council 1996:7).

Walleye pollock (Theragra chalcogramma), or Alaska pollock, are found throughout the North Pacific and in very large concentrations in the Eastern Bering Sea. Pollock have been harvested in the Eastern Bering Sea since the 1950s. The fishery changed significantly in 2000 when allotments, or quotas, tied to the catch histories of individual boats came into effect. (For an introduction to the Bering Sea pollock fishery and a brief history of its management see Fluharty 2000; Ianelli et al. 2006:38-43; National Research Council 1996:162; Woodby et al. 2005:48-50.)

The winter season, or "A season," begins on January 20 and runs until the end of March. The "B season" begins in the middle of June and closes on November 1. Fishing boats are allowed to catch 40% of their quota during A

season and 60% during B season. The winter season is the most important time of the pollock fishery. Pollock come together in the winter to spawn. Large schools make them easier to find and catch and the roe they contain is sold in addition to the flesh. B season takes much longer, in recent years roughly five months. In addition to a more dispersed population of fish, high rates of salmon by-catch (accidental catch) have resulted in the closure of important fishing areas. When an area is "closed" it means that boats are prohibited from fishing in that area. Closing areas leads to longer travel and search times to find fish, increased fuel consumption and its accompanying costs, and older, lower quality fish delivered to processing plants on shore. Winter season trips often take three days. Summer season trips require twice that time.

B. The owners

King crab boomed in the 1970s and Kodiak was the center of Alaskan fishing. By the late 1970s boats were catching crab in the Bering Sea as well and the fleet was increasing rapidly. Dutch Harbor began to grow in relative importance. When the king crab crashed in the early 1980s fishermen looked for other ways to get a return on their investments. Some looked to less valuable species of crab such as brown crab. Some looked to other fisheries. Many crab boats built with the house forward were converted into stern trawlers. The Makushin was converted even as it continued to fish for crab. A steel gantry was welded on deck, a ramp was cut in the stern, trawl winches were mounted, and a larger engine was installed. It fished the ever decreasing crab seasons and trawled for pollock in between.

C. The processors

The 1980s were the peak of the joint-venture era in places like the Shelikof Straits near Kodiak. Pollock were caught by many of these American owned, converted crabbers, called catcher boats, and processed in foreign owned floating factories. Fish were caught but not actually brought on board these catcher boats. Instead, the fish were transferred, while still in the back of the net. The back of the net, the cod end, was detached, transferred, and hauled aboard the processor, or

mother ship. There the net was emptied and returned to the catcher boat. The factory did the processing and the catcher boats searched for more fish to catch.

Not only were fishermen looking for alternatives to crab but so were processors. As exploiting crab became less and less profitable, shore plants such as those in Dutch Harbor, began to process pollock and cod. When the Shelikof pollock stocks crashed, boats fished in the Gulf of Alaska and in the Bering Sea for pollock. Many of them delivered on shore rather than at sea. Holding capacity became important for a catcher boat. Joint-venture fishing required no holding capacity at all as the caught fish were not brought on board. Catch and delivery to shore-based processors meant that fish not only had to be caught but also brought on board and refrigerated until they were delivered to the plant. The greater the holding capacity the greater the amount that could be delivered. Boats like the Makushin, which had been built for crab and modified to trawl for pollock, were further modified (i.e. increased hold capacity, refrigeration) to deliver on-shore. Of the hundred-odd catcher boats delivering on shore today only one was built specifically for that purpose. The other boats have been modified, sometimes more than once, as the circumstances of this and other fisheries have changed.

Modifications like increasing a boat's towing power and expanding its holding capacity were expensive. Many of these owner-operators started selling part of their boat to a processing plant. This provided them with capital to make modifications and tied them to a plant thereby securing a market for the pollock they were catching. The occurrence of this practice varied considerably from plant to plant. Today some plants such as Trident Seafoods virtually own their entire fleet while others such as Unisea own none of their fleet.

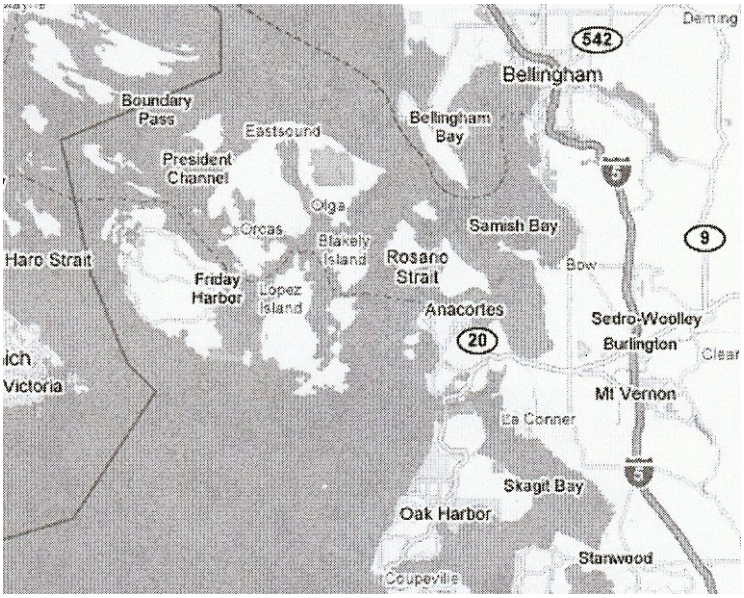
This short historical description serves to situate the work crew, deck hands and skipper, who along with their families are at the center of this research. I spent the majority of my time living, playing, and working with them. They are the picture in the foreground. Levels of context such as the fishery, owner, markets, and the processing industry form the background of this research.

D. The community

The external factors relevant to the fisherman's work life have been introduced. The description of Anacortes which follows is intended to provide

some background to the community in which the family resides the entire year and to which the fisherman returns between fishing seasons. The community is a source of family expectations and it is where the family seeks support, in various forms, to cope with the demands of the fishing occupation. These two themes will be more fully addressed in the course of the thesis.

Anacortes is a town of roughly 16,000 residents located in the northwest corner of Washington State. It sits at the north end of Fidalgo Island, an island in Puget Sound, 90 miles north of Seattle. The waters of Puget Sound are the Pacific Ocean which controls the geography of the area to the north, south, and west. East of the island are the wide flats of the Skagit river valley.



This part of the northwest coast was once inhabited by a variety of Native American groups. Fidalgo Island, as well as surrounding lands, was originally home to the Samish and Swinomish nations. Dutch settlers moved into the area in the 19th century and it is still known for the cultivation of tulips. Anacortes was officially incorporated in 1891. The fishing industry was booming and Anacortes became a center for processing fish (canning salmon and curing cod). There were fifteen canneries in Anacortes by 1915. Lumber was also an important industry in the development of the town. The timber industry also played an important role in the economic development of the town. It still exists today though in a reduced way. Taking advantage of a natural harbor formed by the island and the coast,

Shell Oil and Texaco built refineries in the late 1950s. Refining remains the area's largest industry (Anacortes Chamber of Commerce 2007:9).

Tourism is also an important part of the local economy. The area itself is breathtakingly beautiful. Various festivals and a host of outdoor entertainment options related to the sea such as sport fishing, kayaking, and sailing are available. Anacortes also has a ferry terminal which connects it to the San Juan Islands and to Victoria, British Columbia through the state ferry system. It is therefore a tourist destination in its own right as well as a jumping-off point for a host of other destinations. Boat building is still a part of the economic base as are various services which support the nearby military base, Whidbey Island Naval Air Station. Its mild weather and beautiful setting have also made Anacortes an attractive retirement destination.

The 1960s saw a sharp increase in housing to accommodate retired people coming to the area. The perception is that Anacortes' population has changed significantly, that it has gotten older, because of this influx of retirees. I have seen no statistical evidence of this and it does not feel that way to an outsider. The town contains vibrant areas and some that are less so. It does not seem unusually old or unusually young.

Aside from the early Dutch settlement, whose presence is felt more strongly in other communities than in Anacortes, two more recent sources of European immigration continue to exert an influence on the town. These are the Croatians and the Norwegians. The Norwegians came at the turn of the 20th century and the Croatians a bit later. Both were attracted by the fishing industry. Both have a visible presence in the community. A Croatian dance company is based in Anacortes. And both have an importance presence today in the fishing industry. The role Norwegians have played in shaping the occupational culture in this area is addressed later in the thesis. Native Americans make up a tiny percentage of the population today, 1.1% (U.S. Census 2000:1). Their presence is felt politically rather than culturally. They continue to be involved in highly publicized legal initiatives to regain the use rights to traditional lands and waters. Additionally, some of the largest (and gaudiest) structures in the area are Native American owned casinos.

Anacortes has had a long and important association with the fishing industry. Historical momentum accounts for the fact that it continues to "face" west, towards the ocean, out of all proportion to the importance of fishing to its economic base. In 2000, Anacortes residents owned 100 vessels that were involved in local coastal fisheries and 109 vessels that were involved in Alaskan fisheries. In the same year, 164 residents served as crew in Alaskan fisheries (NOAA no date: 7). In only the rarest of cases can residents make a living solely through participation in local fisheries like Puget Sound salmon and Dungeness Crab. The numbers of owners and crew involved in Alaskan fisheries are dominated by seasonal salmon fishing. This means that the number of Anacortes residents who derive their main livelihood from fishing is very small. In 2000, only 91 residents identified themselves as commercial fishermen in all of Skagit County. (NOAA no date: 2) In 2007, the city of Anacortes counted 40 jobs in the combined category of fishing, agriculture, forestry, and mining (Anacortes Chamber of Commerce 2007:9). In any event, relative to 6,520, the number of employed workers in Anacortes in the year 2000, it is a very small percentage of residents who derive their main livelihood from commercial fishing (U.S. Census 2000:3). Anacortes also faces east and south in important ways. Eastward lie the greater infrastructure and economic opportunities of Mount Vernon, Burlington, and Sedro Woolley, and further south the even greater resources of Seattle. When residents go shopping for clothes, cars, boats, and household appliances, or want to see a film at the cinema, they leave Anacortes for one of these towns to the east or south. There are various recreational opportunities not associated with the sea, such as hunting and camping, which lie in this direction as well. And finally, when the marine climate gets to be too much, residents of Anacortes pack up and head east, over the Cascade Mountains, to the "dry" side for some sunshine. In these ways, this community's identity is oriented in various directions.

II. Rationale for Project

Genesis of the project, motives

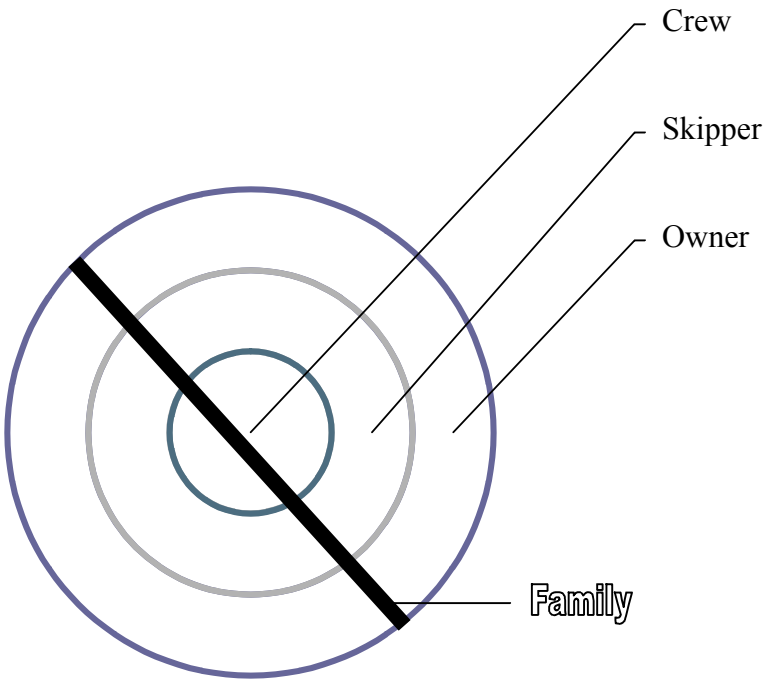
This project grew out of my own experience as a pollock fisherman. Prior to engaging in this research I had spent six years in this particular fishery and eleven years in various Alaskan fisheries. This provided me with an understanding of this occupation and way of life as well as a great empathy for those involved. It also stimulated my interest in some of the consequences of these extreme experiences for the actors in their homes and at work. Of particular interest was the relationship between work and family. These fishermen seem to be terribly unsuccessful at managing their family lives. I heard the same kind of story over and over again. Almost every father I know in this fishery is either divorced or remaining in their marriage solely in order not to lose contact with their children. I wondered if there was something about the fishermen themselves or about the occupation that would account for this. I had been dealing personally with the challenges of fishing and family for several years. This topic was of particularly strong personal, as well as professional, interest to me. The other broad area of interest, the other half of the work-life balance, was the social interaction out on the deck of a trawler. I was amazed at the level of trust, agreement, and cooperation that could exist among deck hands. There was substantial cooperation even among crewmen who spent every awake, non-task-related moment on the boat engaged in conflict with each other of one sort or another, including coming to blows. I was also interested in the risk taking behaviors I observed and wondered how they all were related.

My interest in undertaking this research was to focus on the views and perspectives of these actors in an attempt to understand how they manage the various chunks of their lives. Part of the attraction of the family topic was that they are poor at managing this aspect. They know they are often unsuccessful in this area and the topic of the difficulty of family life and fishing arises constantly. These fishermen say that "fishing and families don't go together well," but they do not say why. They offer a few guesses but none of them have any conviction. One of my motives then was to learn something that might help fishing families. I was

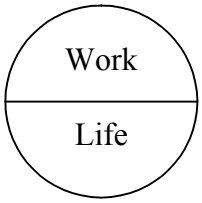
looking for knowledge that might empower these fishermen and their families and help them to be more successful or at least to understand why they were not. I am not a social worker trained in family counseling. But I do not need to be in order to offer some practical suggestions as to how family life might be more successfully managed. I had the suspicion that these fishing families were struggling with challenges that were not entirely unique to pollock fishing or other related occupations. Although the scale is bigger in these families, and thus hopefully it is easier to see what is at work, transitions between work and family are important and difficult in the lives of many. I was also motivated by a desire to learn something about managing work and family that would be widely relevant.

My motives as regards the work experience were twofold. These fishermen, like many manual laborers, have little voice. I was motivated by the desire to be their voice and make recommendations with that voice that might improve the quality of their working lives. I also had the feeling that what I was experiencing on deck was a rare form of teamwork never approached by anything else I had done. My second motivation was to take the tools of social and behavioral sciences to see how this teamwork measured up. If it measured up well, and this thesis will demonstrate that it does, then the way in which deck hands on a Bering Sea trawler collaborate may be relevant for other work teams.

III. Relevance to the actors



This thesis is a crew-centered account of Bering Sea pollock fishing. The diagram shows my conception of how this life looks. The crew is at the center and around the crew is a layer which includes the skipper. This is the most intimate social context at work. The next social context is the owner. Other more peripheral contexts include the processing industry, markets, fishery, ocean, management regime, and political system. The family is not a layer of context but rather cuts through them at 90 degrees. It intersects directly with the crew, skipper, and owner levels and indirectly with all of the other contexts. The family is directly affected and directly affects the levels of crew, skipper, and owner. What happens on the boat affects what happens in the family and the other way around. The family's contact with other levels is indirect and mediated primarily by the fisherman.



Many people speak about work and non-work life as if they were two half circles touching each other along the diameter and forming one whole circle, presumably equaling a life. This makes them appear to be somehow equals and is reinforced by the expression "work-life balance." This image conjures up a scale with one measure of work on the left side and an equal measure of non-work life on the right side. The implicit notion is that equal measures of work and non-work comprise a balanced life. Rather than two half circles which touch in one dimension, work and life are better conceived of as intersecting in a variety of dimensions. There is not one single point of intersection but rather a variety of many contacts between the two. Perhaps an image in three dimensions, like a sphere, would better suggest the idea of gradations of interaction. Important components of life such as family, friendships, leisure, and civic engagement do not interface with all aspects of a fisherman's work life in the same way or to the same extent. Neither does a deck hand interface with all aspects of a skipper's life to the same extent. A deck hand has far more direct access to what a skipper does than what a skipper thinks. And a deck hand has more access to what a skipper thinks about fishing than what a skipper thinks about God and life and existence, for example. I cannot capture this complexity with a diagram. Standing in the middle of this social geometry is the fisherman. I am trying to reconstruct his world from his perspective in terms an outsider will understand.

These then are the everyday frames of life for these fishermen. From outside, the deck hand almost fades into invisibility within the web of nations, oceans, species, fleets, processors, owners, and skippers. Almost like termites in a termite hill we marvel at the edifice and ignore the workers. But these fishermen do not see themselves as details in the great picture. They are the center, the main subjects, of their own lives.

For reasons of space I will not discuss these outer social levels. I hope that will occur in a series of future articles. What I have attempted in this piece of

writing is to center the crew, include the first work context which is the skipper, and the first context in another dimension which is the family. Given the unusually significant impact of work on non-work, an occupational ethnography of Bering Sea pollock fishing must include a detailed treatment of the family. The guiding perspective, the point from which all else is viewed and measured, is that of the deckhand.

IV. Significance to researchers

I hope this research makes a unique contribution within the anthropology of fishing in four ways. The subject is large-scale, industrial, multi-crew fishing. The focus is on those doing the actual work of fishing. The research is located in Alaska. The research focuses on the important roles of both men and women. I had hoped this research would make a significant contribution to anthropology more generally by focusing on well-being and quality of life issues. I think it does make some contribution in this area. It also makes contributions to the anthropology of work and of work and families. These are discussed in later sections of the thesis. The comparative use of other occupational literature is mentioned here as well.

Uniqueness of the research

Within the anthropology of fishing	Within anthropology generally
Industrial, multi-crew Crew centered Alaskan Balanced focus on both men and women	Well-being and quality of life orientation Work Work and family

A. Within the anthropology of fishing

1. Large-scale, industrial, multi-crew fishing

The literature of anthropology is filled with beautifully told ethnographies of fishing communities. The story of the fishing is sometimes more and sometimes less important to the author's main interest in community. In both cases, these communities are often populated by small scale fishermen often laboring alone and seasonally, primarily for subsistence. Their production and consumption are oriented to the household, community food needs, and local markets (McGoodwin

1990:40; compare with a definition of peasant agriculturalists in Spencer 1996:418). They are fishing primarily for the use value of fish. When they catch more than they can consume, or store for later consumption, they, or often their wives, exchange the fish for money or other goods which meet their household needs. The women are responsible for processing and selling the fish and sometimes baiting and repairing gear (e.g. Baks and Postel-Coster 1977; Busby 2000:53-71; Weibust 1958:26). In this case, the household as a whole runs the fishing business. Men, women, and children have their areas of specialization. Together they form a business team. (For the officially unrecognized way in which this continues to be true in fishing families in Atlantic Canada see Binkley 2002; Neis 1996.)

Much of fishing today is oriented towards producing for more distant markets including the world market. Fishermen are paid in money rather than in fish and they often work in teams of three or more rather than alone. These teams are no longer made up of their wives and children. They are made up of other men who are sometimes related but often complete strangers to each other. These industrial fishermen work in larger boats, further off shore, and are often away from home for weeks or months at a time rather than for hours or days. There are important differences between more traditional, often solitary, small-scale, household oriented, fishing and modern, industrial, multi-crew fishing. Different working conditions influence processes of interaction among fishing crew members and with their families and communities. These conditions also influence patterns of presence and absence at home, perceptions of risk and uncertainty, and various accompanying social changes.

"Detailed descriptions of modern fishing are relatively scarce" says a survey from 1978 (Norr and Norr 1978:164). This statement is still true today. The exception, as will be noticed in the table below, is the North Atlantic. This area was the first to be fished with modern techniques and is now overfished (Hutchings 1999). Much of the sociological research in this area today deals with the changes to communities and families as a result of the decline in fisheries (e.g. Binkley 2002; Newell and Ommer 1999).

While there are still many small-scale fisheries in the world, and anthropologists who continue to research them, the trend is toward industrial fishing and global markets (e.g. Buckley 1997). (For discussion of how to define small-scale and artisanal fishing see Allison and Ellis 2001:377; Pollnac 1985:190-191; Whitmarsh et al. 2003:489; compare with Binkley 1995:41.) Small-scale fisheries are increasingly connected to a global market for fish of various kinds. For those interested in what is increasingly the future of fishing, this research is relevant.

Studies of peasant and industrial fisheries

Peasant, captain alone or with one crew	**Peasant, multi-crew**
Africa	*Africa*
Liberia – Haakonsen 1992	Benin – Jorion 1988
Namibia - Tvedten 2002,	Cote d'Ivoire – Delaunay 1992
Asia and Pacific Is.	Ghana – Christensen 1977, Odotei 1992
India – Busby 2000	Liberia – Haakonsen 1992
Indonesia – Spyer 1997	*Asia and Pacific Is.*
Malaysia – Firth 1943,	India – Blake 1977, Norr 1975
Firth 1966[1946]	Japan – Sawada and Minami 1997
Thailand, Laos – Fraser 1974	Malaysia – Firth 1943,
Trobriand Is. - Malinowski - 1948	Firth 1966[1946]
Australia	Philippines - Russell and Alexander 1996
Europe and Mediterranean	Thailand, Laos – Fraser 1974
Portugal – Cole 1991	*Australia*
Spain – Sanmartin 1982	*Europe and Mediterranean*
N.America and Caribbean	England – Lummis 1977
Caribbean – Price 1966	Greece – Just 2000
Chesapeake Bay – Ellis 1984	Italy – Cattarinussi – 1973
New York – Kassner 1988	Lebanon – Starr 1977
S. America	Norway – Weibust 1958
Brazil – Robben 1989,	Portugal – Weibust 1958
	Scotland – Baks and Postel-Coster 1977
	Shetland Islands – Goodlad 1972
	Spain – Pi-Sunyer 1977, Lourido 1984
	Sweden – Löfgren 1984, 1989
	N.America and Caribbean
	Alabama – White 1977
	Alaska – Olson and Hubbard 1984
	California – Swezey and Heizer 1984
	Grenada – Epple 1977
	Newfoundland – Nemec 1972,
	Faris 1972[1966], Stiles 1972
	North Carolina – Dixon et al. 1984
	St. Kitts – Aronoff 1967
	S. *America*

	Brazil – Robben 1989, Forman 1970, Cordell 1974 Ecuador – Middleton 1977 Venezuela – Breton 1977
Industrial, captain alone or with one crew *Africa* *Asia and Pacific Is.* *Australia* *Europe and Mediterranean* *N.America and Caribbean* Alaska – Van Stone 1967, Miller and Johnson 1981 Maine – Acheson 1974 New Brunswick – Pool and Stewart 1988 Nova Scotia – Binkley 2002 *S. America*	**Industrial, multi-crew** *Africa* *Asia and Pacific Is.* Sri Lanka – Alexander 1977 *Australia* *Europe and Mediterranean* England – Duncan 1963, Horobin 1957, Tunstall 1962 France – Menzies 2000, 2002 Greece – Bernard 1967 Italy – Cattarinussi – 1973 Poland – Horbulewicz 1973 Spain – Zulaika 1981 *N.America and Caribbean* Alabama – White 1977 Alaska – Gatewood 1984, Knutson 1991, Mishler and Mason 1996 British Columbia – Menzies 1990, 1991, 1994, 1999 Mexico – McGoodwin 1976, 1979 *S. America* ***North Atlantic*** Atlantic U.S. – Kaplan 1988 Iceland – Palsson and Durrenberger 1982, 1983 North Atlantic - Andersen (ed.) 1979, Andersen and Wadel (eds.) 1972, Norway – Barth 1963, 1966, Heath 1976 Nova Scotia – Binkley 1995, 2002 Rhode Island – Poggie and Gersuny 1974 Scotland – Knipe 1984 Shetland Islands – Cohen 1977, 1987, Byron 1980, 1988 Sweden – Löfgren 1972, 1984

2. Crew centered

This study is centered on the actual crewmen who do the work of fishing on deck. Within the literature on industrial fishing anthropologists have rarely shown an interest in making the deck hands, and the experience of doing actual fishing work, the focus of their research. Anthropologists, often with an interest in economics, have examined how **fisheries and their boats fit into a greater system.** The system of choice has usually been **economic** (e.g. Firth 1946; Robben

1989:52). Frederik Barth's work, while straddling a number of categories, must be included here. Barth was interested in the greater economic and demographic impact of various Norwegian fisheries (Barth 1963:14-15). Economists have used fishing as an example of a common pool resource and examined the dynamics of the interactions between competing boats (Gordon 1954; Hardin 1968; Ostrom, Gardner, and Walker 1994). For other anthropologists the system of greater interest has been the **community**. This is certainly true of Cohen's beautiful work in the Shetland Islands, Faris's work in Newfoundland, and Knipe's work in Scotland (Cohen 1987:145; Faris 1972; Knipe 1984). Cohen spent some time at sea but his focus stayed on the community as can be seen in this statement. "…the fishing crew should be regarded as 'the community-at-sea' rather than as a qualitatively distinct and discrete entity" (Cohen 1987:145). In a similar example, for Clegg, Ringrose, and Cross, fishermen were just one component of their greater study of marriage patterns in the Outer Hebrides (Clegg, Ringrose, and Cross 1998). Core concerns of these sorts of studies include the community, politics, markets, the fishery, and owners. Deck hands, skippers, and families are peripheral concerns.

There is a large body of written work which is concerned with fisheries **management**. This includes ecologically based studies (e.g. Stone 1997). Within this context too, fishermen, modern and traditional, are just one population of organisms interacting with other populations and the natural environment in the area under study. Management goals are often biological or economic and include maximizing capital and the sustainability of natural resources (Buckley 1997:3; Hilborn et al. 2003; Menzies 1999:6). The core concerns of these research projects include the fishery, ocean, politics, markets, and occasionally workers. The social experience of fishing tends to be of peripheral concern if acknowledged explicitly at all. (Exceptions within this genre include Menzies 1999; Miller and Van Maanen 1979; Whitmarsh et al. 2003.)

It seems that most ethnographers who have ventured onto fishing boats have seldom made it past the wheelhouse onto the deck. Many have chosen to focus their research on the boat's captain or ***skipper***. There has been a debate concerning the contributions of the skipper, the "skipper effect," to the economic

success of the boat. (For a summary of this debate see Bjarnason and Thorlindsson 1993; Russell and Alexander 1996.) Palsson has written on the education and training of the skipper (Palsson 1994, Palsson and Helgason 1999). Andersen, Gatewood, and others have discussed the practice of information sharing among skippers (Andersen 1972, 1973; Gatewood 1984, Orth 1987, Stiles 1972). Barth, and Heath who re-interpreted his data, studied Norwegian herring boats and the decision-making processes of the skipper vis-à-vis other boats (Barth 1966:6-11, Heath 1976:35-38). In these studies, core concerns include skippers, other fishing boats, owners, the processing industry, management, and markets. Families, deck hands, and the social experience of fishing are peripheral concerns. Reg Byron's work is an exception (1980, 1988).

Finally, some researchers who have gone out on deck to see what the work experience is like have simply focused on other subjects. Jeremy Tunstall, a sociologist who wrote one of the most important essays on industrial fishing in Great Britain, made three trips on fishing boats. While he did make some comments on crew life and family life, his primary interest was in social class and this steered him towards a focus on the development of labor unions and the role that media played in this process (Tunstall 1962). Barth's work (1966:6-11) was also crew-centered in important ways. But his interest was not in the experience of fishing. He was interested in testing economically-based transactional models which would generate and thereby explain social forms. He described roles and status positions but he did not discuss how it felt to inhabit them. (For a critique of Barth's study see Knutson 1991.) There are some exceptions. Most of these are short pieces written with a focus on the actual fishing crew (Byron 1980; Cohen 1977; Duncan 1963; Knutson 1991; Menzies 1990, 1991, 2002; Orbach 1977; Prattis 1973). Their contributions will be discussed in a later section.

Social scientists have put fishing crews at the center of relatively few written analyses. There has been relatively little interest in what the experience of actual fishing means to those who do the work. Perhaps this is related to access. Economic modeling, such as Heath's analysis, can be done at a distance without ever speaking with a fisherman or going out on a fishing trip. Once on board, it is likely easier to access skippers than the actual deck hands. Even at this level the

usual focus has been on the boat as a unit within a system, model, or game which includes other boat-units. Whatever its cause, the consequence is that, as social scientists, we have very little idea of what the on-board experience of modern, industrial, multi-crew fishing is really like.

Why should we care? The last twenty years have seen an enormous emphasis on revising fisheries management policies. There are calls for more changes. These changes in policy have important consequences for the actual workers in the fishing industry. Without a detailed understanding of their work life and experience we cannot know how future policy changes will affect them. Attempting to understand the implications and consequences of policy options is central to responsible policy making.

In the absence of much academic attention, fiction and journalistic non-fiction accounts are important sources of information about the work experience of workers in modern, industrial multi-crew fisheries. This is especially true in the Bering Sea, both among crabbers and trawlers, where no sociological research has been done. The accuracy of these accounts is easier to evaluate after having done actual research in similar fisheries.

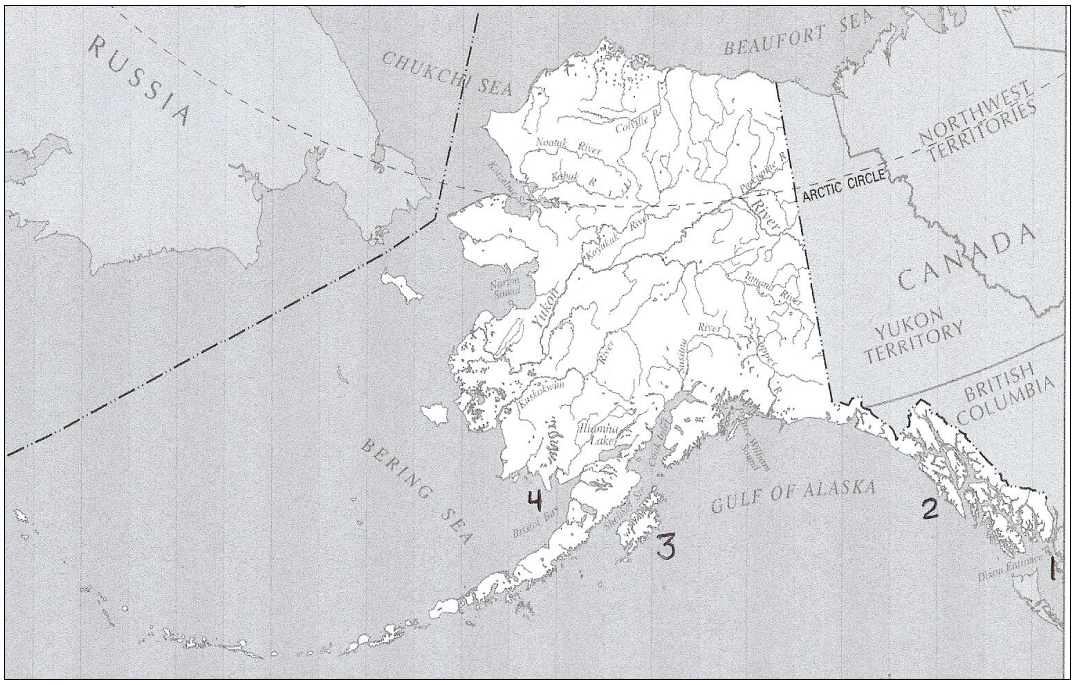
	Non-fiction Accounts	**Fictional Accounts**
Bering Sea fishing	Lost at Sea – Dillon 1998 Sweatshop Memoirs – Matthews 1997 Working on the Edge – Walker 1991	Polar Star – Cruz Smith 1989
Other fishing	Cape of Storms – Popham 1957 Distant Water – Warner 1983[1977] Lovely She Goes – Mitford 1969 The Deep Sea Fishermen – Villiers 1970 The Perfect Storm – Junger 1997 To Endless Night – Brookes 1955	

3. Alaska

This thesis makes a geographical contribution to the anthropology of fishing. Anthropologists have worked in northwest North America for well over one hundred years. Its people continue to occupy the interests of anthropologists today. Industrial fishing for salmon and halibut has existed in Alaska since the late 19th century (Atkinson 1988). Yet it has received relatively little attention. In

contrast to the extensive research on north Atlantic fisheries, the north Pacific has been relatively ignored. Menzies has written about salmon and halibut fishing in British Columbia, Canada **(1)** (Menzies 1990, 1991, 1999). In Alaska, research has been published on fisheries in Southeast Alaska **(2)** (Gatewood 1984, 1989, Gmelch and Orth 1990, Knutson 1991, Olson and Hubbard 1984), Kodiak island **(3)** (Mishler and Mason 1996) and in western Alaska **(4)** (Miller and Johnson 1981, Van Stone 1967). Although they are important fisheries, neither Bering Sea crab nor ground fish fisheries, like pollock, have been researched. To put this in perspective, in 2005, 3,524.9 million pounds of pollock were landed in the US accounting for 37% of the nation's total catch. In second place was Menhaden at 13% (National Marine Fisheries Service 2005).

While there are popular accounts of fishing in Alaska, no anthropologist or sociologist seems to be interested in offshore Bering Sea fisheries. This is a problem for a researcher interested in comparisons among modern industrial fisheries. This research will make a geographic contribution to the anthropology of fishing.



4. Balanced focus on women and men as important actors

In writing this account I have been aware of the **focus on men** within anthropological accounts of fishing. Accounts which portray women as important actors in fisheries are relatively rare (e.g. Cole 1991; Nadel-Klein and Davis 1998). Many pre-1980 accounts either treated women as unimportant or passive in relation to the dominant men or excluded them in discussions of this occupational community (Davis 1986:131-2; Neis 1999:32). Some other accounts like this one, which deal specifically with fishing families, have included women as important players (Binkley 1995, 2002, Davis 1986, Thompson 1985). Even when discussing the family, some authors have virtually ignored the contributions of women, or portrayed them more as audience members than as participants (e.g. Cattarinussi 1973:40-41).

I hope I have succeeded in portraying the women of these families as they really are. They are generally the most important actor in the family. They are active in setting goals, planning for the future, and in directing these tasks. They assume super-ordinate roles such as teacher, organizer, and manager vis-à-vis their men. They are the leaders of these families regardless of what their fishing husbands may choose to believe. While they are not sovereign, they are by no means junior partners. The role of junior partner falls on the men of these families, not the women, as will be discussed later. While their main sphere of activity is the household, this realm does not simply experience the consequences of the man's occupation. The man's work situation is also deeply affected by the quality of his home life. The influence is felt in both directions.

I have not tried to make my discussion of the work setting gender neutral. No women work on the Makushin. I have spoken with one woman worker that I know of in the entire fishery. She, like the women in Kaplan's (Kaplan 1991:233) and Allison's research (Allison 1988:231), prefers the term fisherman to any other. I have exclusively used the male form when describing the workers of the Makushin because they are all males. To change this to a gender neutral term, in the absence of observing women at work in this situation, gives a false impression. The impression is that interactions would have been the same regardless of the gender of the participants. My very brief contact with literature in the area of

mixed gender work teams (e.g. Atlis et al. 2004:421) suggests that this is false. Social interactions within mixed gender work teams are even more complicated and interesting than within single gender teams. While this would be an extremely interesting avenue for future study, it does not represent what I have observed and what exists on the Makushin. While women can certainly do this job, the work team on the Makushin would have looked different if they were.

There is another male bias that I could not overcome. I am a man. Although I lived with a fishing family and spoke extensively with wives and girlfriends of fishermen, I still spent more time with the men of these families than with the women. Regardless of my efforts, I do not think I succeeded in portraying or even understanding these women's perspectives on family and fishing to the same extent that I grasped the men's. This same sort of bias, in the other direction, can be felt in studies of offshore oil workers' families done by female researchers (Austin et al. 2002; Austin and McGuire 2002). In the end, my particular ethnographic knowledge is only a small part of some greater whole. The greater whole, as it concerns the relationship between the occupation of Bering Sea pollock fishing and family life, would be greatly improved by the activity of female researchers.

B. Within anthropology generally

Quality of life orientation

I hope that **focusing on quality of life**, both working life and family life, will be one step towards balancing anthropology's generally negative focus. Thin calls this a "pathological bias" because the focus is on problems, such as suffering and sickness rather than on positive goals to be attained such as health and well-being (Thin 2002:32). Goals which are formulated in a positive way are relatively rare. The unstated goal is a reduction in various pathologies. Rather than formulating a goal such as, "we should all be very friendly towards each other," for example, goals are stated negatively such as, "we should try and reduce the number of murders, assaults, and thefts." This point of view does not argue that there are no bad things in life. It argues for an approach which values both positively stated goals and negative pathologies.

The thesis is organized by an image of life satisfaction. Substantial research supports strong links between job satisfaction, family satisfaction, and overall life satisfaction (e.g. Bamundo and Kopelman 1980; Lee 1978; Sekaran 1983). Work and family are two of the most important positive contributors to overall life satisfaction (Duxbury and Higgins 1991:61). They can also be important negative contributors alone and in combination. This paper uses the broader terms "quality of work life" and "quality of family life", of which job satisfaction and family satisfaction are important components, in order to allow for both the positive and negative experiences which influence one's overall quality of life. The broad approach of this thesis is to look for clues to an overall quality of life in the two areas, which are under an individual's control, most likely to hold the most influence. It is possible that factors such as genetic programming are at least as influential as work and family for overall life satisfaction. (Lykken and Tellegen (1996) come to this conclusion.) But neither an individual nor an occupational choice has any influence over genetics. Work and family are areas in which an individual has some measure of control over one's quality of life. These are also the two areas in which the quality of life of this occupational community is most likely to differ from that of the greater population. The occupation is less likely to influence how satisfied individuals are with their standard of living than, for example, neighborhood, national government, appearance, and intelligence which all contribute their share to an overall quality of life. Values for these and other variables are not likely to deviate widely from those found by studies of the general population of the United States (e.g. Campbell et al. 1976). My interest is to understand the influence of this occupation on the quality of life of these fishermen. A deep look at the work and family contexts seems the best way to do this. I will also try to describe the strategies which these actors employ to pursue a higher quality of life.

C. The comparative use of other occupational literature

Bering Sea pollock fishing is an occupation with a mixture of features that is difficult to find in other occupations. There are very few occupations which match all of its important aspects such as long, repeated absences and the conflicting rhythms they create, wage uncertainty, and schedule uncertainty. Not

surprisingly, the occupations which come closest to Bering Sea pollock fishing are other modern, industrial fisheries (e.g. Binkley 1995, 2002; Orbach 1977, Tunstall 1962, Zulaika 1981) and whaling (Lynn and Sawrey 1959). These studies concerned fisheries which have similar absences and uncertainties to Bering Sea pollock fishing. However, the notion has persisted that this type of work setting can be described without discussing its relationship to the home setting. Consequently, while relevant fishing literature has been rich in insights, it has been relatively meager in volume.

There are also other occupations which have one or more aspects in common with this kind of fishing. Research on these occupations has offered helpful suggestions and insights into the behavior and experiences of pollock fishermen and their families. In analyzing this material I have consulted research among families in other fisheries, the military (general, submariners, surface navy, prisoners-of-war and soldiers missing-in-action), the offshore oil industry in the Gulf of Mexico, Norway, Canada, Britain, and Australia, the merchant navy, long-commute mining and logging, long-haul trucking, air-traffic control, and the police.

Interest in the effects of occupational stressors on families began with research in the United States during the Great Depression of the 1930s. Interesting contributions were made linking unemployment and job insecurity to declines in being a husband and father (e.g. Angell 1936; Cavan and Ranck 1938).

Research on the special aspects of family adaptation related to long absences really got going during WWII with families of American soldiers (Boulding 1950; Duvall 1945; Hill 1945, 1949; also Lipman-Bluman 1975). Most of this family sociology research focused on the coping patterns of wives and dealt with families undergoing one-time separations of one year or longer. Pollock fishing is different in both the repetition of the absences and their shorter duration. This literature was useful in a suggestive way rather than as a source of theory to be extended to another case.

The Viet Nam war gave another boost to this type of research in the United States (e.g. Hillenbrand 1976; Macintosh 1968; McCubbin 1979; Reinert 1978; Stoddard 1978). Some of it was concerned with the very special cases of those

taken prisoner or missing in action. (e.g. Hunter 1978; McCubbin & Dahl 1976; McCubbin et al. 1976; McCubbin et al. 1980; Nice, McDonald, and McMillian 1981). Again the absences here were much greater than fishing families experience. Relatively few studies can be found which address the long, regular, and frequent family separations which accompany the choice of a military career. In most cases this meant a naval career. With the exception of Decker (1978) it took some time after the end of the Viet Nam war for that focus of research to come into fashion in the United States (e.g. Blaisure and Arnold-Mann 1992; Morrison & Clements 1997; and Angrist and Johnson 2000).

The significant exception has been the study of submariners' families. Various types of submarines are related to various lengths of absences. Pearlman's study group had very similar schedules to these Bering Sea Pollock fishermen (Pearlman 1970). Of all the military literature, research that dealt with submariners' families was the most useful (e.g. Boynton and Pearce 1978; Isay 1968; Snyder 1978).

Literature on the family life of police (Maynard, Maynard, McCubbin, and Shao 1980) and air traffic controllers (Repetti 1989, 1993, 1994; Rose et al 1978) was consulted because of the high stress which is part of the job and is comparable to, or at times exceeds that, which these pollock fishermen face.

I considered long-haul trucking and long-commute logging and mining, thinking that in their periodic absences there was something similar to pollock fishing. Though the absences tend to be much shorter than those required by pollock fishing, there were some similarities in competing rhythms, and wage and schedule uncertainties. Research was plentiful on various types of miners (Cottrell 1986; Dennis 1969[1958]; Finn 2001; Gouldner 1955; Luxton 1980; Sauer 1979; Trist et al. 1977) and loggers (Brinkerhof and White 1978; Davis 1950; Freudenburg et al. 1998; Williamson 1977). There was less available on long-haul trucking (Hollowell 1968; Sauer 1979; Taylor 2006), long-commute mining (Shrimpton and Storey 1992), and remote logging camps which are much more like pollock fishing than the daily commute from home that many miners and loggers do. What I could access was integrated into broader discussions of long-commute work and used for comparison purposes with offshore oil work or as

examples of areas where offshore oil research findings might be applied (e.g. Gramling 1995:30).

Of all the related occupations I considered, merchant seamen, or the merchant navy, had the most in common with Bering Sea pollock fishing as relates to family stressors. This is primarily due to similar periods of absence. In general, wages and work schedules are much more predictable than they are for fishermen. There is a body of literature regarding this occupation going back over fifty years (e.g. Lynn and Sawrey 1959 (and Whalers); Moreby, 1975; Richardson 1956; Weibust 1958). The most useful research, as relates to family life, has been done by Craig Forsyth alone and in collaboration (Forsyth 1986, Forsyth and Bankston, 1984, Forsyth and Gramling 1990). More recently, the research of Michelle Thomas has been very useful (Thomas 2003).

Only the military has done more study of work-family interaction than offshore oil. Research has been done in a variety of locations from the Gulf of Mexico (e.g. Shrimpton and Storey 2001) to the North Sea (e.g. Clark and Taylor 1988; Clark et al. 1985; Lewis et al. 1998a, 1998b; Moore 1988; Parkes et al. 2005; Solheim 1988) to Australia (e.g. Parkes 2004). This research has two primary limitations. First, similar to my research, very little attention has been given to children and their experiences. Secondly, the variety of jobs in the offshore oil industry has not been adequately acknowledged. Trades and occupations as different from each other as drillers, caterers, and medical officers have been conflated into one category (e.g. Collinson 1998). These two problems are being remedied. Mauthier has looked at the experiences of children (Mauthier et al. 2000) and a large two volume study of offshore oil work in the Gulf of Mexico in 2002 has divided offshore oil work into six categories and looked at each separately including as they relate to non-work aspects of life (Austin et al. 2002, Austin and McGuire 2002).

Offshore oil has some important similarities with pollock fishing such as the regular repetition of absences, long term earnings uncertainty (boom-bust cycles), and varying levels of physical risk. But the important difference, the length of absences, is *very* important. A schedule of two weeks away and two weeks home is typical and this allows a family to pursue certain interaction

strategies, such as alternating authority and contingent authority which were mentioned above, that are not successful with the three to five month absences that pollock fishing families experience. So again, this literature was suggestive. It was not useful for theoretical extension as much as for confirmation that what I have observed is consistent with what other researchers have found in varyingly similar occupational settings. There has been a relatively recent increase in international offshore oil work which has sent families from the Gulf of Mexico to places in the Persian Gulf, Indonesia, and Africa (Gramling 1995: 29). Their schedules run from 30 up to 90 days away from home. These schedules are much closer to pollock fishing than the traditional 14 on 14 off. Unfortunately, I was not able to access research among these offshore oil workers and their families.

V. Cooperation

The theme of cooperation provides a way of organizing a lot of these data. An observer might suggest that these families require the cooperation of their members in a variety of ways. Of greatest importance is the cooperation, especially between the fishermen and women, in the production of intrinsically valuable goods such as trust, affection, and intimacy. From the actors' perspective these fishermen and their families want to cooperate with each other in the production of these valuable social products. However, the demands of the job compete directly with these family goals especially through long absences and differing rhythms. These stressors have a variety of effects, most importantly on difficult transitions. The difficulty of transitioning hampers the family's ability to cooperate even when they are physically together. The substitutes which the family relies on in the fishermen's absence compete with him when he is present as well. These factors cause conflict. This is the story of the slow breakdown of cooperation within these pollock fishing families. The theme of cooperation is a way of pointing out the most important aspects of this fairly broad ranging discussion.

In the work setting, the challenging physical environment, lack of substitutes, structure of rewards, and the penalties for non-cooperation all promote close and extensive cooperation related to task performance. Additional aids to

cooperation are found in the social and cultural contexts as well as within specific practices. The socialization of a new hire is carried out in order to integrate the new teammate as quickly as possible. Although socializing a new hire stimulates status competition and conflict among teammates, it is broadly conceived as an exercise in cooperation building. When it succeeds in this attempt, the foundation is laid for yet another possible increase in group solidarity and cooperation. This takes place through the practice of collaborative story-telling. Many deck hands see the experience of exceptional cooperation as the most meaningful part of their work experience.

The mixture of competition and cooperation within a boat crew also provides a template for viewing other, wider fishing contexts. Variations on this theme exist among skippers within a cooperative (coop), boats within a fleet, and fleets within a management area of the sea (e.g. Andersen 1972; Duncan 1963, Gatewood 1984). Whatever their degree of opposition, cooperation and competition are fundamental activities in many social groups. They are important ways of knowing our own identity and our place within a greater whole.

The family section is about the influence of pollock fishing which disrupts, and at times dominates, what is a very important setting for cooperation (i.e. producing love, inclusion, intimacy, and a healthy environment for children). The work section is about the production of exceptional cooperation which holds together, and at times dominates, very independent individuals. In both cases the characteristics of the occupation have important consequences for cooperation in the lives of these fishermen.

VI. Contents

I want to tell two stories. The first story is about families. This is a terribly challenging occupation for families, especially with small children. Families tend to form when the advantages of the occupation offset the disadvantages. When children come along the disadvantages become greater than the advantages. The family is trapped in a lifestyle and level of earnings. The stressors, and the families' attempts to deal with them, lead to negative intermediate consequences and, finally, the break up of the family is virtually assured.

Following a chapter on methods, the story of the breakdown of cooperation within these families is told in six sections. After an introduction, part two describes the specific characteristics of the occupation that cause the most stress. These are wage uncertainty, schedule uncertainty, long absences, and differing rhythms. Part three describes how these stressors manifest themselves in difficult transitions, guilt, compensating behaviors, and infidelity. Part four introduces a theoretical perspective which views the family as a group engaging in collective action. Part five applies this perspective to the material and makes an analysis. Part six notes some of the strategies these families employ in response to pollock fishing's effects, notes the effects of changes in technology on the family, and situates this analysis comparatively within the literature on work and families particularly in long distance commute occupations.

The second story is about the work group with particular focus on the deck crew. Teamwork is essential on board. Individual members are not specially gifted as teammates. But because of the nature of the task environment basic, successful teamwork is facilitated and occurs. There is also the potential for higher levels of cooperation. When this cooperation occurs, it offers instrumental benefits such as increased performance and intrinsic benefits such as camaraderie and trust.

After an introduction, part two is about defining and assessing teamwork. There is also a description of the particular physical, social, and cultural contexts in which it occurs on the Makushin. The career of a teammate begins with a period of socialization. The new hire is familiar with the culture of the occupation generally as a result of prior fishing experience. As he joins the crew of the Makushin he is socialized into a particular organizational culture. Socialization and training are addressed in part three. Part four is about the practice of telling deck stories and what that achieves for the deck hands individually and collectively. The career of a teammate ends when he leaves the boat. This event is portrayed, in part five, through an examination of quality of working life.

Together these two stories point to the enormously important role that cooperation and interpersonal commitments can play in the lives of individuals. Positive lessons can be taken from examining how cooperation is built in the work setting and how it breaks down in the family. Improving cooperation and

deepening interpersonal commitments in work and family settings holds great potential for raising one's overall quality of life.

Methods

This is a chapter about the research methods employed in this project. The discussion begins with a few comments on how my research focus and tactics were influenced by what I learned in the field. Then I attempt to account for myself by briefly describing the research schedule, actors involved, and methods employed. This is followed by an example of how my analytical choices were narrowed by a methodological decision in my research proposal. The remainder of the chapter deals with an outstanding feature of this research: my prior experience in this context. I discuss the advantages, disadvantages, and risks related to this prior familiarity.

I. From proposal to write-up

I took two broad research questions with me as I planned this research project. ***What is the quality of working life and home life among Bering Sea pollock trawl fishermen? How do they, and how might they, pursue better quality of life at home and at work?*** Along with this broad orientation towards exploratory research from a quality of life perspective there were several key questions to be addressed:

1. How do these small teams function, make decisions, and collectively cope with risk and uncertainty?

2. In what ways does the fishing family interact with this extreme occupation? How does it function, make decisions, and collectively cope with uncertainty in the presence and absence of the fisherman? How does life in the family and community affect the fisherman when he is working far away from home?

A proposed schedule for research flowed directly from the requirements of these questions. I would need to spend time in a working situation on the boat in close contact with these fishermen. I would also need to spend time with the families, preferably living with one or more, and some time in the community.

This has been an occupational ethnography from the very beginning. This was never intended to be a community study in the way that so many ethnographies have been traditionally focused. This was to be a study of the social processes and structure of the work team generally with special attention to the areas of decision-making and risk. And this was to be a study of the consequences of this occupation for quality of home life and the influence of the affected home life on the work situation. As I saw the increasing isolation of the fishermen from their community it became clear that most of its effect is indirect through the family. I did not need more time in the community, I needed more time with the families and the fishermen.

In both cases I entered the field with my eyes tuned to the themes of risk, uncertainty, team function, and decision making. These interests were complemented by a broad interest in experience and a desire to understand and convey the meaning of lived experience the way the actors approach it. This gives a researcher quite a bit of flexibility. As I got into my research I found that some of my guesses were better than others. I thought that risk and decision-making, for example, would lead me to a rounded understanding of the social life on board. They did not. Risk and danger in the work setting are topics which I address but they are not central to this thesis. They play a relatively insignificant role in the quality of home life for both men and women. Observing and participating in decision-making was also illuminating. It occurred to me that the sense-making (Louis 1980:239-244; Weick 1987:123-6) that precedes decision-making is the interesting part of the greater decision-making process. Once sense has been made of a situation, once the actors know what it means, the tasks of generating possible courses of action, understanding their consequences, and choosing between them is relatively straightforward. Power, status, and trust play their most interesting roles during the sense-making process. I had the same sort of experience with decision-making in the family sphere.

Flexibility is one of the strengths of anthropological method or what Blaikie calls "abductive strategy." In contrast to the strategies of induction, deduction, and retroduction, the abductive strategy seeks to "…describe and understand social life in terms of social actors' motives and accounts." It seeks to

"…discover everyday lay concepts, meanings, and motives." The goal is to "…produce a technical account from lay accounts and to develop theory and test it iteratively" (Blaikie 2000:101). This strategy is consistent with a relativist position that social phenomena are constructed in the interaction between actor and observer. I did not enter the field to prove or disprove a specific hypothesis or explanatory model. I entered the field wanting to explore my own interests and with some ideas about what would be significant for these actors. This flexibility meant that actor priorities and perspectives could shape and guide my inquiry.

I was fortunate that I was not forced to change my actual research questions. Changing research questions is actually quite normal in anthropology. Research is in many ways driven by actors' perspectives and priorities. These can be difficult to know in advance of actual field research. My time in the field showed that my research questions were not only important and interesting to me, but also of central importance to the actors. Given my previous experience in this context a change in research question would have surprised me. I did change my tactics. When I found that risk and decision-making were not going to carry me to my goal, I looked for other paths. In the work setting I realized that the processes of new member socialization, building trust and agreement, and the implications of the physical, social, and cultural contexts in which these occur would successfully lead me to an understanding of the elements of the working life which were important to these actors. In the home setting I realized that a perspective on the family as a team producing intrinsically valuable goods such as love and intimacy lead me to an understanding of the implications of the fisherman's presences and absences. Uncertainty, which I had previously assumed to be so central, remained important but not the most important aspect of the family. I think it was more important for me personally than for most of these fishermen.

This is the short history of the research. The research questions remained unchanged. But the key questions to be addressed on the road to those research questions were modified by the experience of research. These then are the key questions which were addressed in this research project:

1. How do these small teams function, achieve their tasks, socialize new members, cope with risk and build trust, agreement, and cooperation?

2. In what ways is the fishing family affected by this occupation? How does the occupation support and compete with the goals of the family? How does the family function and collectively cope with the presence and absence of the fisherman? How does family life affect the fisherman's working life?

A. Schedule

When I proposed this research I expected to be in the field for approximately 13 months. I planned to work and observe on a Bering Sea pollock trawler for the summer season of 2004 (July to October). Then I would return with the fishermen to the town of Anacortes, in Washington State, and live there during the period between seasons. I called this a cycle and I anticipated engaging in three of them. I would fish again in the winter and return to the community for several months of research and then begin the writing up process. Then I would return to the field, fish once more during the summer of 2005 followed by a short stay in the community, and then leave the field for good.

Many research instruments, including very costly ones like the Hubbell telescope, fail to fully meet their users' initial expectations. I am the research instrument in this project and I became a father in the summer of 2005. This event has altered many activities in my life including my research. Everything went according to plan until the spring of 2005. I spent the 2004 summer season on a pollock trawler. Then my wife joined me and we spent the fall living with a fishing family. I returned north with the other fishermen for the winter season but had a shorter time in the community, alone, than the two months I had planned on. I returned home and started the writing up process until my daughter was born. Several weeks after her birth I returned to the field for the summer fishing season and then a brief visit, again alone, to the fishing community. I left the field and returned once more for the winter fishing season of 2006 and then I left the field for good.

As is typical for those doing research "at home" my leaving the field is a relative term. (Menzies (1994:787) feels like he is gone only temporarily.) I have continued to speak by telephone and exchange correspondence with individuals I lived and worked with. I have also sent drafts of parts of this thesis to them for comment. Speaking on the phone creates a bit of a dilemma. Am I still an

anthropologist actively engaged in research or am I a friend and former colleague who has finished his research project? During my time in the field I made clear what my research intentions were. But I do not preface every conversation or email with a request for consent. In fact, it does not even enter my mind. Only afterwards, and after reflection, does it occur to me that something I heard might be useful. Will this end once I have finished writing up?

A final note on the schedule: I found it extremely valuable to return to the field after a time of organizing my notes and beginning to write. It is amazing that with so much data collected there can still be important gaps in what we know. I was able to identify some of these gaps and then be much more focused as I returned to the field. I found this very valuable.

B. Actors

My time on the boat was spent primarily with the skipper and crewmen. I worked with eight fishermen during the period of my research. Working and living in close contact with the actors was essential in order to get the kind of information on social process and interaction I was seeking. A fishing boat is a social setting of some transparency to an insider. Proximity and fatigue make it very difficult to hide aspects of one's personality from each other. It is so difficult that after a very short time everybody stops trying. This makes for an excellent field in which to observe elements of behavior such as competition and cooperation which are part of all human behavior. The problem is getting in. Once that has been achieved, a wonderful range of human interaction is on continual and open display.

Studying the families of these fishermen is not so easy methodologically. They no longer come from close little fishing villages where everyone lives near each other and neighborhoods are segregated by occupation (e.g. Tunstall 1962:93). Nevertheless, it was possible to collect a good deal of information from partners and wives as well as from the fishermen themselves. The voices of children are silent. This was a trickier proposition than I had anticipated. Many of these pollock fishermen are fathers. Many of them are divorced. When they divorce the children go to live with the mother. I spoke often with fishermen fathers and their wives or girlfriends with whom they had no children. The

children lived at the mother's house. It was this way in the house that I lived. The fisherman's son lived with the son's mother in another part of the country while he and his second wife lived where I was researching. Research among the children of these fishermen would be an interesting and important project in its own right. I had expected casual contact with children in the houses of fishermen. To try to pursue them in another home was more than my schedule and energy level could handle.

C. Methods employed

Participant observation was an important component of the research. It was important because it facilitated verbal interaction such as very informal interviewing. Both working and living with the actors was important. So much of what happens on the boat happens in a really micro-social setting. These vital observations are made meaningful by broader contexts both historically and culturally. The history of commercial fishing in the north Pacific is relatively brief. There is quite a bit to be gleaned from various accounts of European fishing during the last several hundred years. The ethnographer in North America has a wide range of resources available for comparing micro-social observations to broader cultural and societal observations. Anthropology, sociology, psychology, and economics have produced varied and fascinating broad cultural descriptions. It is a luxury that I have tried to use. Few anthropologists have gone into the field with so much culturally specific knowledge already at their finger tips. I have especially used resources on the subjects of family functioning, leadership, and teamwork which apply to this broad cultural setting.

Working as a fisherman was also an important source of learning (cf. Knox 20054-5). Much of the learning which occurs on a fishing boat, and elsewhere, is imitative and requires no use of language. A researcher has to use his or her body just like the actors use theirs in order to learn what they know and experience what they do. There is no other way. Interviewing fishermen about their work is no substitute for feeling the work for oneself. Especially in a work situation which is so physical. Sea sickness, smashed fingers, a sore back, and stiff hands are all signs of learning to fish. They also attune a researcher to significant aspects of experience which might otherwise be overlooked. Working as a fisherman

organized my research in a variety of ways. There were advantages and disadvantages. I had access to the bodily experience of the work as well as the micro-social interaction that took place in a variety of work settings. I could not have written an occupational ethnography without these data. Being a full participant allowed me to use my own reaction to the experience as data. This is similar to the auto-ethnography of Strathern (1987), Mascarenhas-Keyes (1987), Menzies (1994), and Knutson (1991). On the other hand, I had less time for reflection, a problem that Kaul (2004:2) also described. I could not walk away from a work task to record my thoughts and observations. I could take breaks only that made sense within the work context. And when the work was fatiguing, or the weather was horrible, I forgot about the research and focused on surviving just like the others. Finally, because of my level of participation, because I worked like a non-researcher fisherman, I ran a heightened risk that my informants would forget my role as observer (Gans 1982:305; Knox 2005:5; Robinson 2004:25-26).

Informal interviewing was also very important in studying the homes of these families. Wives and fishermen were very open to talking about the consequences of the occupation for their lives and their children. I feel like the presence of my wife, and living with a fishing family, were helpful in this way. Not only did she interact according to her own interests but she helped to characterize me as an audience for information. Her presence helped to characterize me as a collaborator. I was raising topics that were not only professionally interesting but also personally interesting as evidenced by the presence of my wife by my side. She helped me to be seen as a sympathetic audience. She, a fellow fisherman's wife, was clearly an empathetic audience. My standing was helped by association as well. My attempts to speak with children of fishermen would be helped in a similar way if I sat down to talk with them and had my own child with me.

I had intended to use diaries among fishermen's wives and girlfriends and I did not. I had planned to introduce the idea during my time on land in the fall of 2004. I liked the idea then and I still like it today. But I felt like diaries were not to be my first resource but rather something to come in addition to, and after a period of time spent doing, informal interviews. I feel like I never got beyond this

stage. There was always so much interesting material to discuss, so many examples, and so many stories to hear. I felt like it was going to be hard to sell the idea of a diary. I was getting answers to all of my questions face-to-face. I now believe that diaries could be a very useful research tool for a few topics: Topics such as how a woman's feelings and perceptions change over the course of an absence or presence and the potential for a discrepancy between how a woman thinks and feels about her husband's job and how she thinks that she thinks about it. I realize that the first can also be addressed by asking a woman to recall how her feelings change during a period of absence and presence. And the second question is beyond the scope of this research project. Employing diaries, even just a few, would require a substantial investment of time not just on the part of the informant but also on that of the researcher.

Life histories were very useful and collecting them was not difficult. There are many settings and times on the fishing boat where boredom and fatigue make conversation easy. We would sit around, in desperate need of some sort of mental stimulation, trying to mine the furthest recesses of each others' minds and histories for some new, interesting, and hitherto undiscovered morsel of information. Remembering and recording what was said was a challenge. The fatigue, or at times alcohol, which made self-disclosure so easy also made remembering and recording what was said a considerable challenge.

An example of an analytical consequence of a methodological choice

The methods I employed had an impact not only on what sort of data I generated but also on how I would analyze those data. I wanted to discuss the impact of fishing on families. My choice of a life stage approach rather than a more static typology of household types was influenced by my method of data collection. I chose close and long-term interaction with a fairly small group of actors over a wider more superficial population. I lived with and interacted with these fishing families and collected life histories rather than attempt a wider data collection through questionnaires, for example. I think stages give a better understanding of the phenomenon than types do. In terms of research goals this is also the type of goal I was interested in. Rather than cataloguing the wide variety

of configurations of pollock fishing families, I was and am interested in how the same aspects of the occupation impact all pollock fishing families at all times. It's not the wide variety within families which is of interest but rather what they all have in common – that is, the common experience of the impact of pollock fishing – how this impact is felt and what its consequences are. However, having conducted my research according to this approach, I basically locked myself into this type of analysis. I could not argue for a family typology even if I thought it appropriate, which I do not, because I do not have enough cases to support it.

This was not a consequence which I considered when I chose this method of data collection. I certainly will in the future. Methods have consequences not just for the types of data which they can generate but also for the ways in which those data can be analyzed. Analytical options are already closed to you when you choose a method. They are not as broad as you think. This has not put me at a disadvantage for this particular thesis. But it has narrowed the type of future outputs in which this research could be useful.

II. Research "at home": Advantages, disadvantages, and risks of ten years prior experience

This project was an ethnographic study "at home" (Jackson 1987; Messerschmidt 1981; Peirano 1998). "At home" has more than one meaning. Increasingly within anthropology there is a trend towards researching within one's own culture. Thus, "at home" means you and your informants share your national culture. There are also various levels of culture or subcultures such as occupational, organizational, village, town, city, or region, and familial sub-cultures which exist within a larger national culture. An ethnographer researching within his or her own regional or occupational culture, for example, could be "at home" in a way that another researcher, also a member of the national culture, would not.

I am not the first anthropologist to do research within multiple levels of home cultures, but my pre-research experience in this particular context was somewhat exceptional. I had ten years experience as a commercial fisherman in Alaska before I began the research. I had spent seven winters fishing on the

Bering Sea, most of them working on pollock trawlers. I had spent years trying to balance the demands of the occupation with the desire for a successful family life. I had well developed social networks of former colleagues and friends and I had developed a deep interest in the situations that these fishermen and their families often face. Most researchers do not have this level of familiarity with a context prior to study. While there are undoubtedly more, I have come across four exceptions. Gamst worked as a hoghead (railroad engineer) for six and one half years before writing an ethnography of the occupation (Gamst 1980). Richardson worked on British and American merchant ships for nine years prior to conducting his research (Richardson 1956:190). Young was a policeman for many years before doing his research (Young 1991). And Menzies grew up fishing with his father prior to conducting research among fishermen in northern British Columbia, Canada (Menzies 1994). Neither Gamst nor Richardson, in these works, make observations regarding the effect of previous experience on the research. Young called full-time work as a police officer while pursuing academic research a "conflicting and paradoxical existence" (Young 1991:vi). For Menzies, the process holds complexities and contradictions.

The extent of my prior experience in, and familiarity with, the research context has had advantages, disadvantages, and risks. There were trade-offs. There were advantages in gaining access and cooperation, in understanding, empathizing, and advantages in analysis. There were also disadvantages in data collection, analysis, and writing. There were risks in overestimating my level of "insiderness."

Advantages	**Disadvantages**
Access Cooperation Understanding Analysis: Knowing what is typical and exceptional; disproving evidence Noticing change and continuity	Old interpretations based on prior experience - leads to lazy data collection. The familiar feels natural, agreed upon – leads to lazy data collection Descriptive writing; skipping steps

Research design reflects not just the interests of researcher and audience but also levels of **access** and cooperation. "It's not easy to get first hand knowledge from a deep-sea fisherman who is neither vain nor loquacious" (Wood

1911 in Tunstall 1962:280). Fishermen in general, whether Bering Sea fishermen or in Tunstall's case Hull trawler men, are not easy populations to access. The fishing occupation is defined by taking place at sea. When fishermen are on shore they are often extremely busy (Kaplan 1991; Knipe 1984:13). As in other occupations, a thoroughly actor-oriented study of fishing must include a lot of research in the natural setting at sea. Unlike many other occupations, these fishermen go away every time they go to work. My familiarity with the occupation and my social network was very important in my gaining access to a fishing crew. It was clear to me before the research that I needed to not just observe on a boat but to work as part of a crew. While it is possible for almost anybody to get a job in some entry-level fisheries in Alaska, even an anthropologist, it is not possible in this fishery. In short, I expected my familiarity would be important in getting access and it was confirmed.

Gaining initial access is only the first step in social research. **Cooperation** is also crucial to a researcher who wants to study the small-scale, face-to-face interactions where the building of trust and the social shaping of experience, by captain and crew, are carried out. My familiarity with the language, culture, and specific work setting helped me to gain the cooperation of my informants. During the period of my field research I observed a newly hired Polish fisherman struggle to communicate and integrate himself into the crew. I did not have this same struggle. My knowledge of their problems and perspectives made it easy to identify, and empathize, with them. While they were at first curious and probably a bit skeptical about my motives I was able to win their trust by competently doing my job. In addition to my research interests, I had a clear and understandable economic role which made sense to the actors. (Kaul 2004:3 also found this helpful.) Gaining their trust as a competent fisherman and friend was an important step in gaining access to their wives and girlfriends.

Familiarity with the lives and experiences of the actors under study is the goal of ethnographers. In this regard I had a substantial **head-start**. As I look back on what I have learned and look ahead at the questions which are still unanswered I would like to have more research time. There are many topics I would like to address and topics I would like to look into more deeply but could

not because I just ran out of time. I am amazed at what other researchers accomplish. I am a native in terms of national and occupational cultures. I understand and speak the same dialect of the same language as my informants and understand the relevance of all but the most idiosyncratic of their customs. In this way familiarity was an advantage. It allowed me to dive right in relatively quickly and easily. It allowed me to pursue some topics in a depth that would not otherwise have been possible in the available time. These were some of the advantages of familiarity regarding data collection.

My prior experience in this context had other advantages for data analysis and therefore for collection indirectly as well. Doing research in this context made my previous fishing experiences useful. They do not become as valid as what I actively observed during this research period. But they do constitute a background or an archive of cases against which I could test and evaluate current events and experiences. This was helpful in a number of ways. First it helped me to understand when an event was typical or exceptional. When I noticed something I would ask myself: "Does this stand alone or demonstrate a more general rule or phenomenon?" When I came up with an explanation I had a whole archive of cases through which to look for exceptions to my new rule and disproving evidence. You play this game: If my rule is true of this case then it must be true of certain other types of cases. And then I can go through my memory to see if I know of other cases and how they support or disprove my new rule. Related to recognizing typical versus exceptional events was the help my experience provided in recognizing change and continuity. I think change is easier to notice and continuity tends to get rather taken for granted. I first started pollock fishing during the open access period or Olympic system.[1] The social dynamic on board has changed in some ways since the introduction of fishing quotas. And there are other phenomena which do not make sense today except as artifacts of this

[1] The Olympic system refers to a period of time when access to the fishery was open. A seasonal quota was set for Bering Sea pollock and anyone could participate. All boats competed against each other in a race to catch as much fish as they could before the quota was reached. Today access to the fishery is restricted. Individual catch quotas came into effect in 2000. Boats no longer compete against each other for access to the resource. They fish each season until their quota, or allotment, is reached or until the fishery closes.

previous era. This kind of an occupational memory is helpful in noticing social change and continuity.

My familiarity also had its **disadvantages** in data collection, analysis, and writing up. I can no longer remember many of my first impressions of fishing or of pollock fishing. I was not struck by the unfamiliarity of my research setting as so many anthropologists are. These first impressions are fascinating and can be important to the reader as he or she tries to create a picture of the ethnographer through whom all of these impressions have been processed. I lack some of the critical distance of an outsider. (Cassell 1977:413 sees this as typical of peer group research.) There are probably some things which I take for granted and ordinary which would stand out to a total stranger to fishing and the sea. There are questions that I should have asked and did not. A lot of the fishing life was familiar enough to me that I did not approach it with an open mind. I would record an event and my interpretation of it based on my previous experience without checking to see in which ways my informants disagreed with me. I had old interpretations and it did not always occur to me to verify and update them. This lazy procedure would not have been an option had I been new to the situation and at a loss to explain much of what I was experiencing. In some ways my familiarity may have caused me to be less thorough in my data collection than I could have been.

In terms of cooperation, demonstrating familiarity and competence is by no means the only way to gain cooperation. Outsider status can be the basis for a beginner – expert type relationship. The ethnographer in a new situation can show their need for the superior knowledge of the insider in order to learn how to cope with the unfamiliar surroundings. Offering an informant the role of expert can be a fruitful dynamic for a social research. I also believe that my prior familiarity with the research context is a disadvantage for writing up. I think that my descriptions may not be as complete and well-rounded as they might be. At times I struggle to think about how an outsider would read this thesis and think about the lives that are described in it.

The social networks that helped me to gain access also imprisoned me in some ways. Information about my past was available to my informants either

directly or through our common social network. I think that some found it difficult to take me seriously at first. And I know I found it difficult to play the researcher when that role diverged too greatly from my previous roles of colleague, acquaintance, and friend. This was made more difficult by the fact that I will have a future with some of these informants as well. It is still difficult as I write. I will continue to know and have contact with some of the individuals I write about. It makes me a little nervous writing about certain subjects. I do not want to make them angry with me. And I do not want to betray the trust that some of them have put in me. Making the actors anonymous is a joke. They will recognize themselves and their friends and be recognized by their friends. And I have talked with these men and women about some very personal and sensitive topics related to families. Including some of their comments and descriptions of their situations and choices is what this ethnography is about. They have to be included. But then they will be recognized by their neighbors and colleagues and I will have betrayed their trust. So I cannot include them. They all want copies of the book and they deserve them.

This is the flip side to collaboration. There is no power difference between my informants and me. They are not afraid to criticize me or what I write. They are comfortable demanding information from me. They are comfortable saying no to me. What happens to me in the future if I write something that they do not like? Will this be my first and last research project with Bering Sea pollock fishermen? Mascarenhas-Keyes was right when she said to expect a "heightened exposure of self" (Mascarenhas-Keyes 1987:187).

It's a different situation from Victor Turner writing in English about Africans for an audience in Europe and North America. None of his informants will read what he writes. As far as jeopardizing relationships in Africa he can write whatever he wants. My research setting is like an anthropology professor doing an ethnography of his or her university department. It makes you think twice about what you are going to write. Certain subjects will cost you to write about them. This experience is not typical of traditional ethnography. But I think it will become more and more common in the future. And it is not all bad. There is the advantage of collaboration. And there are issues of accuracy. A commonly

used technique in interviewing is to allow the interviewee to read and correct/comment on a transcript of the interview. I have found it responsible, polite, and helpful to allow some of the informants to comment on drafts for this thesis.

My **familiarity also had risks**. As a participant observer interested in the meaning of experiences for actors, it is important to try and place myself in their shoes. I try to imagine what they think and feel about an experience. One starting point for this exercise is to begin with my own thoughts and feelings. The more similar my participation is to an actor's the more valuable this exercise becomes. The closer my background is to an actor's the more confidence I have in imagining what the experience means to him or her. As a working fisherman my participation was virtually identical to the actors I was studying both as a worker and as the husband in a family. My background was also relatively similar to many of these actors. This made the exercise of self-reflection very valuable. (Knox 2005:6 found this to be true in her research as well.) It also increased the risks. One danger of this sort of auto-ethnography is that I equate my experience too closely with the experience of the actors.

The meanings we attach to an experience are shaped not only by our backgrounds, which may be quite similar, but also by our unique personalities and by our future expectations. It is typical, when we attempt to put ourselves into someone else's shoes, to try to filter out the effects of background and personality. The better we know someone the more successful we may be. There is at least one more component to making sense of experience and that is future expectations. In this area my situation is very different from that of the informants. I am a temporary fisherman and a husband and father of a temporary fishing family. No matter how exactly we can duplicate the experiences of our informants we can not duplicate the experience of their future expectations. We cannot walk a mile in what their future feels like. I have experienced the excitement and boredom of fishing in all its vivid colors. But I have not had those experiences within a future frame that locates me on a fishing boat until the end of my working life. The same is true of family adaptations to the occupation. I know what it is like to struggle with readjustment to a family I have been away from. But I do not know what that

readjustment feels like to someone who imagines having to repeat this for the next twenty or thirty years. That must be different in important ways. One risk of participant observation in an "at home" context is that I become overconfident in the level of my "insiderness" and forget that I am always an outsider in important ways.

Conclusion

This chapter has been an overview of methods employed in this research project. The outstanding feature of this research is my prior experience in this context. This familiarity gave me access and enabled me to formulate research questions which really were central to the lives of these actors. Nonetheless, the experience of research altered my path to answering those questions in important ways. I am satisfied with my decision to do research at home. As a result of my time in the field, I am aware of the advantages, disadvantages, and risks related to this prior familiarity.

Family

Bering Sea pollock fishing is a terrible occupation for staying in touch as a family. As a fisherman, you go away from home for months at a time, and you cannot stay in touch with your family because even your cell phone only gets reception when you are in town. The boat is in town for just a few hours a week and it is either the middle of the day, the kids are in school, and you are too exhausted to hold a conversation with your wife or it is the middle of the night and everyone at home is asleep. You come home after months away feeling exhausted and meet your wife who is exhausted and your children who hardly know you anymore. You never catch up on what you have missed. You never really fit back into the family before it is time to leave again.

As a fisherman's wife, you lose your man for months at a time when you become virtually a single-parent family. This means double the work for you, including new responsibilities you have never had to deal with before and no relief. It is lonely. All your friends have men who are home weekends and evenings. He gets angry when you go out with someone for a few drinks while he is away. Evenings and weekends when you would really like to have him around, your man is unreachable. At two in the morning when you really need to sleep he feels like talking. The kids are not sure what to expect from him. You can never make any vacation plans. He is always missing birthdays, school holidays, and special events. It does not get much better when he is at home. He wants to relax, play, and generally take a vacation instead of giving you a break, taking over disciplining the children, and investing time in you. When he is away fishing you are dying to have him come home, but after a couple of weeks of his lying around doing nothing you are just about ready for him to leave again. Whatever special times you do have together do not seem to make up for all you have missed out on while he was away. Your relationship does not seem to be going forward at all. The children are growing up and he hardly knows them.

The families of the Makushin fishermen are split into five categories for description and analysis. The effects of pollock fishing are not felt equally by all families. There are many reasons for this. One way of getting a handle on a large portion of the variety of experience is by forming life-stage type categories. Families within the same life-stage tend to feel the influence of this occupation in similar ways. This is not a life-cycle or series of stages through which all pollock fishing families inevitably must pass. (See Miller 2001; Hayes 2000:685-688 for a description and critique of family life-cycle schemes.) These are simple categories which facilitate description and analysis.

The description and analysis in this family section are structured in the following way. First, there is an introduction. This is followed by an actor generated description of family life and the important stressors of Bering Sea pollock fishing including absences from home, uncertain work schedule, and wage uncertainty. To the actors' list I add the important stressor of competing rhythms. Part III is a section on the important effects of these job stressors including difficult transitions, guilt, compensating behaviors, and infidelity. In part IV I set out a theoretical perspective for understanding the pollock fishing family. The family is a team or a group which has formed to pursue collective goals. In this fourth section I have moved from actors' terms and descriptions to the language of the social sciences. Part V is an application of this framework to the material these fisherman and their families have given us.

The intent is to examine the quality of family life in relation to the occupation of pollock fishing. Sadly, this is mainly a story of how and why these families with children split apart. My interest in telling this story is to offer a description in two directions. I describe the effects of this occupation's stressors on the family as a whole and the family's responses to them, and I describe the effects of the diminished quality of family life on the work setting and its ramifications.

I. Introduction

The households of these fishermen are situated economically slightly above the middle of American society. All families live in houses which they own and

have two or more vehicles. Five of the fishermen have a high school education. Two have some level of university education. In eight out of the last nine seasons, the fisherman's contribution to the family's earnings placed them either at or above the median income for Alaska, where they work, and Washington and Oregon, where they live. According to the U.S. Census Bureau, for the year 2003 median income for four person families was: Alaska $72,110, Washington $61,059, and Oregon $55,892 (U.S. Census Bureau 2005). I have a feeling that their incomes are comparatively good over a lifetime as well. At the time of this study wives/partners in six of the six families worked outside of the home.[2]

The cultural characteristics of North American society in general may already be familiar to the reader. This is a vast literature and the following list is not meant to be comprehensive. (See Arens 1976 on American football; Baer and Grabb 1993 on regional culture; Bellah et al. 1985 on three strands of American culture; Montague and Morais 1976 on models of success; Motley 2004 on Manhood; Putnam 2000 on civic life; Schwarz and Merten 1975 on equality and identity; Wendland 2003 on heroes.) Aspects of broader North American culture relevant to this study will be discussed as they arise. At this point, we turn to aspects of family life which are specific to this occupation and which relate directly to the question at hand.

This topic was selected because of its centrality and importance in the lives of these actors. These fishermen all acknowledge that **Bering Sea pollock fishing has negative consequences for family life**. Two of them, with over 50 years combined fishing between them, said that they each knew of one couple who had "made it work." They did not explain exactly what they meant by "made it work." But they were clear that these successful couples were exceptional and that in this occupation the overwhelming majority of families did not stay together. These same concerns are voiced by workers in other occupations (e.g. offshore oil in Austin et al. 2002:159; merchant seamen in Forsyth 1986:57).

[2] Following Parkes I make no distinction between married couples and those cohabiting in long-term relationships. Wife/mother and Husband/father will be used to refer to married couples and to families of unmarried couples (Parkes et al. 2005:434).

A. Actors and categories

In my two years of research on board seven fishermen, including skippers, were on the boat for at least two full seasons with me. I will refer to them as Cody, Buddy, Karl, MacPhail, Ryan, Bart, and Wilson. They vary in age from 55 to 32 years old and in family stage. Three are currently married, two live with girl friends of more than one year, one does not live with his girlfriend of more than one year, and one lives alone and is not considered to be in or have been in a family.

Category 1	living with partner or first wife, no children (1)
Category 2	living with partner or wife and young children (1)
Category 3	Separated or divorced from partner or wife, living alone or with children. (1)
Category 4	Separated or divorced from partner or wife; living with another partner or wife; no children (2)
Category 5	Separated or divorced from partner or wife; living with another partner or wife; young children present (1)

The wide variety of members in some of these fishing families recommends a definition of family according to function rather than to structure (Reiss and Lee 1988:24 in Day 2003:25). According to an actors' definition, a partnership becomes a family when the goals of providing sexual intimacy and economic cooperation are pursued. For them, a family can exist in the absence of children (Duvall 1967:10-11). These families are goal-oriented (Day 2003:26). The exact nature of the goals is discussed below. Bering Sea pollock fishing on a catcher boat is not an entry level fishing job. These are career fishermen old enough to have children or to have seriously thought about having them. Five of these six men in families are fathers.

The effects of Bering Sea pollock trawling on the social lives of single men is a topic of great relevance to them and also of great interest to me. Instead of the single man's life, I have chosen to focus on fishing and family life because this boat is filled with men with families. In another Alaskan fishery with different demographics, summer salmon fishing for example with many single men and also single women, the focus could be different. But in this case, even for the single man on the boat, pollock fishing's negative consequences for the family is a topic

of great relevance. It is a topic which comes up daily in jokes, stories, and conversation. Simply wondering aloud what is going on at home on a Saturday night can be enough to start a discussion of fidelity, infidelity, children, and family life.

These fishermen acknowledge that pollock fishing offers advantages to a single man. (Compare with offshore oil in Austin et al. 2002:195; contrast with Collinson 1998:311.) Many of them started fishing as single men and they remember how well the job and lifestyle fit together. Lean times at sea were followed by fat times on shore accumulating experiences and possessions that would have been beyond their means in a land job. Fishing, as Tunstall put it, was a way of saying, "'No' to their inferior position in the class system." Fishing provided these men an intermittent life on shore but at a much higher economic level than would otherwise have been possible. The fisherman, while ashore, "can be king for a day, wearing new suits, riding in taxis, drinking whiskey" (Tunstall 1962:117). Although the choice of clothing is different, this statement is as true today in Dutch Harbor and in Anacortes as it was in Hull, England forty years ago.

These fishermen will also acknowledge that pollock fishing can be an attractive occupation for a married couple without children. It is more difficult to manage than it was as a single man, but the benefits still outweigh the disadvantages. Two week absences from home are seen by some men working in offshore oil as improving the marriage relationship by relieving boredom (Lewis et al. 1988b:175). Every two weeks they have another honeymoon. This falls under the "absence makes the heart grow fonder" category. However, if children are added to the family situation, the negative consequences of fishing become greater than the positives until the fisherman changes jobs or the ultimate negative consequence occurs, that is the family splits. This is an actor perspective and my research supports it. This perspective is also supported by research on nonstandard work schedules and marital instability (e.g. Presser 2000:107-8). This formulation is as clear as actors get on the topic. The *why* question is answered with "fishing" but it does not get more detailed than that. Exactly how the family declines and fails is not clearly understood, nor are the possible remedies. The questions then for both actor and observer are how does fishing specifically influence the family

in negative ways, how can a successful family life coexist with this extreme occupation, and what strategies could be pursued to improve the quality of family life.

Four of the six fishermen who have families have been divorced. All of these divorces occurred when their family was in category two and while they were pollock fishermen. Buddy, who is category two, has reported low levels of marital satisfaction dating back for many years. MacPhail, whose family is in category one, reports high levels of family satisfaction. In his case, this theory predicts that the negative consequences of fishing will not cause the family to fail as long as he and his girlfriend remain in category one. It may fail for other reasons, of course. If he marries her before the kids are out of the house (and thus her kids become his) or if they have a child together and so transition to category two the stressors of pollock fishing will cause their family to split. Category five families are in an equivalent situation to category two families. Actors define a failed family as one that splits apart in a formal or informal divorce or one that has very low levels of marital satisfaction for several years. In their words a failed family has split or is one that they would not want to be in.

An influential study by David Olson has fostered the belief that the presence of children negatively impacts marital satisfaction in the United States (Olson et al. 1983). It is sort of a "blame the kids" explanation. One *might* argue that these fishing families break up because of declining marital satisfaction relating to parenthood and not because of fishing's effects at all. This is not correct and represents much too simple a theory of causation. Studies have generally confirmed that irrespective of the presence of children, modest declines in marital satisfaction are typical during the early years of marriage. Moreover, White and Booth suggest that having a child *deters* divorce and permanent separation (White and Booth 1985). For a convincing critique of Olson see Miller (2001) and see Olson himself (1983:178-9). For other studies supporting the "blame the kids" argument see Belsky and Rovine (1990) and Cowan et al. (1985). Both are strongly critiqued on methodological grounds by Kurdek (1993). (See also MacDermid, Huston, and McHale 1990.)

B. Houses

The houses of these families are in most ways typical of the neighborhoods in which they are situated. As is typical in this part of the country, houses display their owners' wealth on the outside as well as on the inside. Exterior walls are ornamented with paint or siding which contributes little to the physical requirements of the building. Windows have beautiful frames both inside and outside. Flower gardens situated between the house and the street are meant to be observed by those standing outside the house. Exterior lighting fixtures and even mail boxes provide platforms for displaying wealth and status. Within this general context, these fishing family houses are not abnormally ostentatious on the outside. They blend into their neighborhoods. The one notable difference is the existence of an outlying building – the shop.

One enters the front door of these houses into the living room. Cooking and eating areas are adjacent to this common living area. There is also a small bathroom that can be directly accessed from this area. Sleeping areas and other bathrooms tend to be in another part of the house either behind (further away from the front door) the common living area or on a different floor, often upstairs. The houses often "face" in two directions. One face, turned towards the street, is decorated for public consumption. The other face, often facing a private space like a garden or yard, is functionally organized to be the main living area. Houses that are situated on a lake or have a view of the sea turn their private, functional face in this direction. Occasionally, as when the street is between the house and its view, both faces are turned in the same direction.

These homes are not decorated in a nautical theme. They do not contain pictures of fishing boats, big catches, or mermaids. There is in fact very little to give away the occupation of the owner. They reflect the identity of the woman to a much greater extent than that of the man. The furnishings are noteworthy in only one way. A lot of money is invested in home entertainment. Expensive stereo systems, televisions, entertainment systems, and large music and film collections are the norm. This seems to be more evident in the homes of fishermen than in other homes. This may be influenced by the effects of the occupation. In response to the limited entertainment options available at sea, fishermen invest heavily in

entertainment when on shore. In response to their relative isolation from the community, they invest in leisure activities which can be pursued privately.

This expensive equipment is within sight of anyone who enters the home. The living areas of these houses are all organized around a television set. Couches and chairs form a semi-circle, almost a sort of theater, with a television set where a stage would be. A low table in the center holds a plant, the newspaper, and various magazines. When the fisherman is at home, this table holds the various remote controls needed to operate the diverse pieces of entertainment equipment. Values such as thrift and industry are not on display. Instead of filling their living areas with self-made objects displaying one's skill and investment of time, costly entertainment equipment is chosen and displays a fisherman's success in the work environment. These expensive toys are more than simple investments in the fisherman's own leisure. (Similar entertainment equipment is found in the bedrooms of the adults and children.) They are typical attempts to compensate their families and themselves for the deprivations endured because of pollock fishing.

These fishermen and their wives do not have separate bedrooms. Although the bedroom is shared by them, it is clearly the woman's space. In American houses generally, shared bedrooms are divided into two spaces. Couples generally agree on which side of the bed "belongs" to whom and this does not change. The presence of a small night table and the floor directly surrounding the bed belongs to the occupant of that side of the bed. Even though the man is often absent, the layout of these bedrooms continues this pattern. However, one notices that the woman's area is disproportionately large in comparison to the man's area. One also notices that the woman's area is largely reserved for functional uses and the man's for display. The woman uses the fisherman's area to display photos of him alone and with her and their children. Some of these bedrooms contain virtual shrines to the absent fisherman with a space set aside for pictures, letters received during this season, small gifts being collected to be sent off to the man at sea, and various other items being held for him until the time he returns. At the very least it is an attempt to keep the physically absent fisherman psychologically present in some form.

In terms of function, the bedroom and virtually the entire home, is the woman's sphere. The man has very little space of his own within the center of the house. He creates a physical space for himself in the extremities. This can be in the garage, the basement or cellar, or in an out-building. The organization of internal space by the woman and family is invisible from the outside. What is often visible from outside is the man's effort to create a space for himself. A consistent feature of these houses is the existence of a building separate from the house.

This separate building, a fisherman's main space, is called his shop. The meaning is related to the word workshop. This is a work area designed to simulate work areas on the boat. They vary in size from one-car garage sized spaces to self-standing buildings as big as the house itself. I know one pollock fisherman whose shop is actually bigger than the family's house. This is the man's area and its organization and layout are under his control. There is no feminine touch visible here. The calendars printed by tool manufacturers featuring immodestly or unclothed women models adorn the walls of these shops. These are clear markers, almost warning signs to women, that this is masculine space. There is at least one work table (work bench) and a vast array of tools. The tools and machines present reflect the particular interests of that owner. They are often exactly identical in type and manufacturer to those found on that fisherman's boat. These areas feel somehow familiar and similar to work spaces on the boat.

These shops are sites for household maintenance work as well as longer term projects in which the fisherman is interested such as restoring old cars, motorcycles, and boats. Virtually all of these fishermen engage in some kind of mechanical, maintenance or restoration work. Shops may also be used as storage areas for the various toys (e.g. bicycles, motorcycles, boats, cars) which a fisherman has bought for his family or himself. Shops have stereo systems, sinks, and refrigerators in which beer is kept. Some have toilets. They do not contain kitchens and televisions. These are spaces for temporary retreat, not for permanent residence.

In addition to the self-standing shop, these houses are also diverge from the community norm in that they are all situated on larger-than-average pieces of land.

This is not simply a reflection of prosperity but also of values. It may show a valuing of space and may reflect these fishermen's, but not their families', relative isolation from their communities. In households dominated by women, men seem to have retained substantial decision-making power regarding house building or purchasing. Once the house has been acquired by the family, it is clearly shaped by the woman. In at least two of these families, land adjacent to the house is used to store wealth. I know many pollock fishermen who have bought adjacent lots of land, built on one of them, and used the other as a garden or let it grow wild with the knowledge that it might be sold in the future for a profit. In this way, money earned at this extreme and uncertain occupation is invested in terra firma.

II. Stressors

The occupational life of these fishermen has some special characteristics which affect their family lives in ways that are different from many other occupations. The most important of these special occupational characteristics are **long absences from home, schedule uncertainty,** and **wage uncertainty**. A seemingly obvious omission is risk. Risk management is dealt with in detail in the crew section. Because it is not a significant factor for the fishermen of the Makushin they believe it is not a significant factor for their families. There is evidence that the effects of job related risk on the family are mediated by the fishermen. If it is not significant for the fishermen then it is not significant for their families. This was confirmed by their wives. (See fishing families in Smith (1988) and military families in Morrison and Clements 1997.) Far more important than risk are the effects of the absences and uncertainties regarding schedule and wages. To the actors' list of important stressors I add the notion of competing rhythms between work life and home life. (These stressors are typical of other fisheries, for example Dixon et al. 1984:39.)

The work-family relationship is bi-directional. These families do not passively absorb the influence of this occupation. They also exert influences which are felt in the work place. The influence of family on the work setting will be addressed later in the thesis. (For general treatments see Allen et al. 2000; Frone et al. 1992a, 1992b, 1997; Gutek et al. 1991; Netemeyer et al. 1996; among

offshore oil families see Shrimpton and Storey 2001:14; among fishermen see Tunstall 1962:164-5.)

A. Long absences from home

Work Schedule

B season 2004:	Fishing	15 weeks	31 July - 11 Nov.
	Shipyard/Time off	7 wks/ 2wks	11 Nov, 2004 - 8 Jan, 2005
A season 2005:	Fishing	13 weeks	8 Jan - 9 April
	Time off	11 weeks	9 April – 27 June
B season 2005:	Fishing	19 weeks	27 June - 5 Nov.
	Time off.	8 weeks	5 Nov, 2005 - 12 Jan, 2006
A season 2006:	Fishing	11 weeks	12 Jan. - 4 April

Here is the work schedule for the period of research. July 31, 2004 the Makushin left Seattle for Dutch Harbor, Alaska. (I joined it two days earlier.) It returned on November 11. The boat arrived in Anacortes, Washington at 2am on Wednesday, after almost three and a half months away, and the crew began unloading it five hours later at 7am Thursday so that it could be hauled out on that morning's tide. It was in a shipyard until January 8 when it again sailed for Alaska. A season was over on April 9. The crew had a break until June 27 when they flew up to Dutch Harbor, Alaska for B season. They finished and flew back home on November 5. There was no shipyard between November 2005 and January 12, 2006 when they again left home for Alaska. They returned home on April 4 and were off until June 4 when they flew back to Dutch Harbor for a five month season. In 2005, those who worked 100% of the time (some of the crew positions shared time working 50% or 66%) were home for 20 weeks and away for 32. This was a typical year for these men. They are gone for 2-4 months at a time and then home for 2-3 months at a time.

When they are gone, their absence is "relatively complete" (cf. Poggie and Gersuny 1974: 86). Reliable telephone communication is possible only during the few hours they are at the dock each week unloading their catch. Surface mail is also reliable. These pollock fishermen are absent for longer periods of time, and more completely, than their cohorts who work land jobs in Anacortes. The required long periods of absence from home is the occupation's most significant stressor and, in combination with other stressors, demands complex and difficult

family adaptations. It is a very visible way in which the occupation's demands compete with the family's interest in having the man present.

B. Schedule uncertainty

> Several crewmen shook their heads in disapproval when we heard that Buddy's wife had taken the kids to visit her parents and would be gone when he arrived home. He would arrive home on Wednesday and they would not return until Sunday evening. He suggested that he might drive down on Saturday and join them but ended up not doing so. He hadn't known until a few days before exactly when he would be home. She had the trip planned (visiting is a popular activity of these fishing families when the man is gone) and didn't want to cancel it. It was a bitter pill for him to swallow after a season away from his family on the Bering Sea.

These fishermen and their families often do not know when a season will begin and end. The Bering Sea pollock fishery is regulated on a quota system. Each shore based processing plant is provided with fish by a cooperative of boats. Each coop controls a quota of fish based on the catch histories of each boat in the coop. Both A and B seasons officially open and close on fixed dates. But these broad parameters are only one of many factors in determining a fishing boat's schedule.

There are a number of other variables which affect the length of a boat's season. These include (1) the speed of the fish processing, (2) suspension of operations (either fish catching or fish processing) due to mechanical problems at the plant or on the boats, illness or injury, and bad weather, and (3) unpredictable variations in the speed of fishing due to difficulties in finding and catching fish. Because of this schedule uncertainty, the fishermen of the Makushin do not make any plans with their families for several weeks immediately after the projected ending date of the season.

For example, in 2005, the starting date for B season (the date the plant declared that they wanted to start processing fish) was repeatedly changed right up until the beginning of June when the crews bought plane tickets. Previous statements had varied from July 20 to July 1. July 5 was ultimately chosen. It was estimated that it would take until October 5 to catch our quota so work schedules were drawn up and plane tickets purchased to reflect this. In fact it took until the

last week of October to do so and we fished right up until November 1 on the uncaught quota of another boat. The crew had about four weeks advance notice of when exactly they were going away to work for three and a half months which turned out to be four and a half.

There were tremendous uncertainties regarding the shipyard schedule during the research period. These were a result of the particular management of this boat and not as a result of the fishery itself. I do not know how typical they are across the fleet. Nevertheless, their effect on these families was strongly negative. These families did not know when the husband/father would be around which made future planning impossible. During one stretch of fieldwork I left the boat for what I thought would be three weeks. I ended up spending six weeks at home with my bags packed and ready to go on five days notice the whole time. This was stressful for my family and me.

When viewing these work schedules, the eye is immediately drawn to the amount of time not spent on the boat. One looks at 2005 and sees that actually 20 weeks is a lot of time off. Unfortunately for the fishermen and families they often did not know ahead of time just which 20 weeks these would be. They spent a lot of time wondering and waiting to hear when the man would have to leave. It would be different if on January 1 an accurate, fixed work schedule for the year was made available. This is not entirely possible. These fishermen and their families never know exactly when they are going away, how long they will be gone, and when they will be coming home. This is experienced as stressful to these fishermen and their families (Larson et al. 1994). In their study of Navy families Morrison and Clements state that "perceptions of control exert an important influence on the magnitude of strain reactions" (Morrison and Clements 1997:322). (Among offshore oil see also Austin and McGuire 2002:128; Parkes 2004:10; among merchant seamen see Thomas 2003:15, 42.)

Explaining it to the kids

The wives of fishermen can understand the reasons behind schedule uncertainty. It is much more difficult for young children to understand. They feel let down by their father if he does not come home when he says he will. One fisherman explained the situation to his children by saying that his boss had lied to him. This was his way of translating the real situation into a language his children could understand. His children learned quickly and pretty soon, when he would say "I'll be home on the 18th," they would reply, "but what if they're lying to you?" His explanation made him a partner who shared their disappointment rather than the one causing it. And it was truly out of his control. The uncertainty of not being able to tell his family when he would be coming home and the disappointment it caused his children were strongly negative experiences. "I used to hate the job for that reason alone" he said.

C. Wage uncertainty

The uncertainty surrounding wages, both how much and when they will be paid, negatively impacts these fishing families. They do not know how much money will be earned this year or in future years. It is typical to be paid as late as June for work that was done in January. It was mentioned in the introduction that earnings from Bering Sea pollock trawling have been *relatively* stable in the last few years, relative, that is, to other fisheries in the Bering Sea such as king crab, tanner crab, and Bristol Bay salmon (Appendix 1). These fisheries have seen wide fluctuations in price and catch in the last few years. The earnings of pollock fishermen, like all fishermen who fish for more than just subsistence, are also at the mercy of processing plants and markets. Markets set the prices of fish roe (via auctions) and of fish carcasses (through contracts tendered to fishermen by processing plants).

In the big picture, these pollock fishermen are like all fishermen whose livelihood is subject to the health of their target populations, by-catch species, and other potentially impacted species, such as marine mammals. These families never know for sure if there *will* be another season. There is a history of failed pollock and other fisheries even in the rich waters of the Bering Sea. For these fishermen, many of whom have participated in various other fisheries such as crab, looking backwards on a successful past is very different from looking forward into an uncertain future.

Stories of the bust

1- In 1980 American fishermen in the eastern Bering Sea landed 130 million pounds of king crab. In 1981, 33 million pounds were landed. In 1982, 3 million pounds were landed and in 1983 the fishery was closed for lack of sexually mature adult crab (National Research Council 1996:165).

2- Pollock was fished around Bogoslof Island, in the Bering Sea, beginning in 1987. Men on the Makushin told stories about the gigantic schools "fish 600 feet thick" they found in this area. In 1991, 264,760 metric tons were harvested. The next year only 160 mt were harvested. The area has not recovered (NOAA no date:1).

3- Shelikov Straits near Kodiak Island was the site of another pollock boom and bust in the 1980s remembered well by some of the Makushin crew. One of the Makushin skippers recalls celebrating with another fisherman in a borrowed truck in front of the ships bar. "We saluted the future of fishing! We will never fish it out – a lifetime of fish! We caught them all in five years." These are the stories that form the oral history of this fishery. These are the stories which attach a personal meaning to the fishery's economic uncertainty.

The earnings of these fishermen are also impacted by ownership decisions. For example, following "A" season in 2005, much to the crew's dismay, the Makushin participated in an experimental fishery. It was projected to go as long as 30 days. It ended up lasting only seven days and paid nothing because no fish were found. The crew paid their share of fuel and food expenses out of the previous season's earnings.

Financial uncertainties, in combination with other factors like poor planning and the lack of a savings scheme, put pressure on the household. They make future planning difficult or impossible. When the wives of offshore fishermen in Rhode Island, USA were asked what they disliked about their husband's job "can't make plans," " pay unpredictable," and "doesn't see children much" were tied for third most frequent response (Poggie and Gersuny 1974:87). The wives of the Makushin fishermen generally agree. While they fail to see some of the contributing factors, they experience wage uncertainty as stressful. (Long hours and danger were the most frequent responses in the 1974 study.)

Pollock fishing does have **advantages for a family**. None of the families of these fishermen would be considered economically needy. There are usually enough earnings to support a family with several months of "time off" each year. It also forces a woman into male roles and traditional areas of responsibility. This

can have the positive outcomes of new competencies, increased independence, and an increased sense of authority (Rook et al. 1991:166). This same dynamic can be seen in military families (Boulding 1950:66; Isay 1968:650) and in offshore oil families (Austin and McGuire 2002:24; Clark and Taylor 1988:131). When the man's return is immanent these wives often are apprehensive at the thought of having either to relinquish this increased independence or of having to fight in order to keep it. (Compare to military families in McCubbin and Dahl 1976:139; merchant seamen in Forsyth and Gramling 1990:189-191; and offshore oil in Lewis et al. 1988b:183.)

"Time off," time spent on land, does not necessarily mean non-working time. The boat is hauled out of the water for maintenance and repair annually or bi-annually which means at least two months of work. Nets that need to be maintained or rebuilt are shipped down to the Seattle area between seasons and worked on by the crew. This can mean anywhere from a week to several weeks of unpaid work. And then there are periodic training classes that must be attended such as those relating to safety, first-aid, CPR, fire-fighting, stability, and cold-water survival, for example. If a fisherman is licensed as a captain, mate, engineer, or seaman there may be additional regular training required to maintain that licensing. During the period of research those fishermen living closest to Seattle were up at 5am and away from home for 12 hours in order to put in an eight hour work day in the Seattle shipyard. Workers who lived farther away drove into Seattle on Monday morning, lived on the boat, and drove home on Friday.

Time at home is another advantage for a family. Long absences from home are often followed by long presences at home. MacPhail's partner (they are a category 1 family) suggested in a positive way that the quantity of time he was away was in some way offset by the quality of the time he was at home. "When he's away he's completely gone, but when he's home he's completely home." The subjective truth of her statement is not discredited by observing that this "positive appraisal" is a widely employed coping strategy among offshore oil families (Clark and Taylor 1988:1-2).

D. Competing rhythms

In addition to the actors' own observations I add another important stressor of this occupation. The extreme work rhythms compete and conflict with the family's own rhythm. This has negative consequences for the family.

The schedule of a family with children is organized around the work week, the school week, and the school year. The fisherman's schedule is organized around tides, tows, trips, and seasons. When he is home his schedule is organized by the countdown until he must leave again. The family's rhythm is steady and predictable. The rhythm of pollock fishing is fluctuation from one extreme to its opposite. The family needs money regularly and the fisherman earns periodically. The family needs him around regularly, dependably and his presence is intermittent and unpredictable. The rhythm of family life and the rhythm of pollock fishing compete and conflict in a variety of ways. (Compare to offshore oil families in Collinson 1998:315, Lewis et al. 1988b:174, Parkes et al. 2005:420, to mining families in Luxton 1980:47-51, and to fishing families in Knipe 1984:139.)

Four forms of competing rhythms

These fishermen return home in April and November and enter the feast stage of their work-life rhythm. The family is not in its feast stage. These families tend to have feast stages, or extended times of celebration or special activity, when there are school holidays (cf. Austin and McGuire 2002:124). That is primarily around Christmas and New Years and during summer vacation. A month or two before the end of a school term with the likelihood of exams and projects coming due is not an ideal time to pull the kids out of school for a special celebration. But this is precisely what these fishermen want to do when they arrive home. They work nights, weekends, holidays, and school vacations when the family has "free" time and they are "free" when the family is engaged. The rhythms compete.

Competing rhythms may take a second form. These fishermen come home after three or four months away and want to get caught up on many aspects of life on shore. Family is not the only thing they have missed. They want to catch up on relationships with friends, hobbies like hunting and fishing, and following their

favorite sports teams (Binkley 1995:95, 2002:54, Austin and McGuire 2002:24). The family does not need to do any other catching up. The husband/father is the only person they have been going without. Now that he is home, they want his time and special attention. The fisherman may have different expectations for how he will spend his time at home. Hard work and "hard play" is central to the occupational culture of these fishermen. (Compare to offshore oil workers in Austin et al. 2002:62.) This difference in expectations often causes problems and guilt. If the fisherman spends time on other interests the family is upset. If the fisherman focuses on the family and ignores his other interests then he becomes dissatisfied. Asking the family to let him go off with his buddies on a hunting trip as soon as he gets home is going to cause dissatisfaction. But the family will cause him unhappiness if it asks him to ignore those desires altogether (cf. Lewis et al. 1988b:172). The rhythms compete and finding a balance is not easy.

This third form is also common in other long-commute occupations, like offshore oil work. The fisherman comes home and wants a vacation. He wants a holiday from work and feels entitled to one. The change of setting alone makes a bit of a break. The wife/mother has been enduring **her own "season" as a single parent** (Fricke 1973b:135). She cannot leave her work setting and wants her husband to give her a break or at least share the household responsibilities. She feels entitled to it (Austin and McGuire 2002:32; Binkley 1995:58-60, 119; Lewis et al. 1988b:180; Solheim 1988:149,153). It is time they both took a break. But someone has to run the household. This form of competing rhythms can cause significant problems if it is not properly negotiated. It leads to feelings of overload and role conflict on her part and anger and withdrawal on his part (Perry-Jenkins et al. 2000:986). Some of these wives feel additionally burdened by the man's presence. He does not represent a break for her but rather an extra "child" to be cared for (Binkley 2002:60, Lewis et al. 1988b:188). A former fisherman's wife/mother described her decision to divorce as follows. "Having a little boy [her son] and a big boy [her husband] was too much. I had to choose between them. I let the big one go."

Fourthly, the fisherman comes home and wants to spend time with his family. The wife feels pressure to reduce her social engagements and modify her

schedule. His needs must come first. What is a family feast for the fisherman becomes a "wider social network" fast for the woman. (Compare with other fishing families in Binkley 2002:14, 54; Ellis 1984:521; and with merchant seamen families in Thomas 2003:61-2.) Visiting is an important activity for these families while the man is gone. (For other fisheries compare with Poggie and Gersuny 1974:84-85.) A wide social network is important to her and to the family when the fisherman is gone. She knows she will need it in the future. (Compare to merchant seamen in Forsyth and Gramling 1990:188-89; military families in Decker 1978:129; Pearlman 1970:946; and offshore oil in Clark and Taylor 1988:133-135; Solheim 1988:149.) Rather than maintaining it while the man is home she feels pressure to ignore it (Moore 1988). What she really wants to do is to keep her network active and perhaps include him to some extent. But the fisherman's time away encourages feelings of isolation from the community. He is not interested in making new expensive social investments. He wants to focus on the family during his time at home and wants the family to be available for him. (See Shrimpton and Storey 2001:11; Solheim 1988:158 on how absences from home lead to isolation from the community among offshore oil workers; among merchant seamen Forsyth and Bankston 1984; among Canadian fishermen Binkley 2002:54.) The woman adapts and she and, ultimately, the family suffer.

The myth of the return home

In public, in the presence of non-fishermen, and sometimes even to each other these pollock fishermen depict their lives as alternating between times of true feast and deprivation. Fat times at home are expected to follow, and in most ways compensate for, lean times away at sea. This public version is partly true and partly myth. It is true that in basic ways time at home is a feast. Fishermen can get adequate sleep, they are not in extraordinary physical danger or discomfort, and they have access to a wide variety of food, drink, and entertainment not available on the boat. They can also participate face-to-face in the family social relationships which are important to them. The activities most talked about are playing with their children and sex with their partner. This joke summarizes and promotes the public version of the return home.

Interrogator: "Hey Pekka, what's the first thing you did when you arrived home after the fishing season?"
Pekka: "I made love to my wife."
I: "What's the second thing you did when you arrived home after the season?"
Pekka: "I made love to my wife again."
I: "What's the third thing you did when you arrived home after the season?"
Pekka: "I took my boots off."

In the private version, the times of feast do not always live up to expectations. While the public version can be true at times and for certain families, especially without children, there is another at least as common reality. Karl reports that after a couple of months away from home fishing his wife has said to him, "Don't take it personally if I don't want to sleep with you the first night you're home." (Among military families see Blaisure and Arnold-Mann 1992:182.)

The failure of private reality to meet public expectations applies not only to the first few hours of the return but to the days and weeks of family reintegration as well. Another common joke alludes to this difficulty.

Interrogator: Was your wife pretty sad when you left?
Fisherman: Nah, about a month after I come home she starts asking me how soon I'm leaving. "Isn't it about time for you to go fishing again?," she says.

The experience of **the feast at home is ambivalent and often falls short of expectations** for both husband and wife (Binkley 2002:53). The wife spends months wanting him to be home and then relatively quickly wants him to go away again. The fisherman spends months wanting to be home and then, relatively quickly, wants to be away. Ambivalence and failed reunion expectations are widespread among families involved in fishing and other long-commute occupations. (Among military families see Decker 1978:119; Isay 1968:648-9; Rienerth 1978:171; among offshore oil families see Austin and McGuire 2002:25-27; Clark and Taylor 1988:127-30; Lewis et al. 1988a:106; Lewis et al. 1988b:168; Parkes et al. 2005:420-1; among fishing families see Andersen and Wadel 1972:143; Binkley 1995:62; Tunstall 1962:163-4.) For an experienced fisherman

the demands at home can be more stressful than the pressures of work at sea. The boat can be a bit of an escape (Tunstall 1962:133; compare to Hochschild 1997:103-114; Nolan 1973:95).

These are the aspects of Bering Sea pollock fishing which can cause the most stress for these families. They are long absences from home, schedule uncertainty, wage uncertainty, and competing rhythms. Whether they do or not depends on additional factors. Mitigating or exacerbating factors are part of the following discussion of how individuals and families experience and react to these stressors.

III. Effects of job stressors

A. Difficult transitions

The wife of one of these fishermen (family category 1) said to me, "If he says he'll be gone for eight weeks it doesn't mean he'll be gone eight weeks, it means twelve. There's the eight weeks he is away, the two weeks before he goes when everyone is getting ready to adjust, and the two weeks after he gets back when everyone is trying to adjust. Eight weeks away doesn't mean eight weeks! It's a lot longer than that!"

Transitions are an important part of leaving and returning to the family even in occupations such as corporate executive (Boss et al. 1979:79). They are especially difficult and require special effort in these fishing families as in other long-commute occupations. (Among merchant seamen see Thomas 2003:18-21; among offshore oil see Austin et al. 2002:56; Austin and McGuire 2002:128; Clark et al. 1985:46; Clark and Taylor 1988:127.) Both the fisherman who leaves and returns and the family members who stay home have to make adjustments. Long absences from home, schedule uncertainty, and competing rhythms, as well as the presence of children in the family, contribute to this difficulty.

Research done among military families sheds light on the challenges that these pollock fishing families face. The level of schedule uncertainty makes planning transitions almost impossible. Unplanned transitions, occurring at unexpected times, are "usually experienced as more stressful to families" and are "more likely to have a negative influence" on the achievement of family goals

(Day 2003:58; McCubbin et al. 1980). Military deployments, similar to fishing seasons, "pose particularly difficult times of separation because they are imposed from outside of the family, they impact all family members, and notification of their onset varies" (Eastman et al. 1990:114). This difficulty was clear in the words of the fisherman above (page 62) who had to deal with his children's disappointment at his not coming home when he said he would. "I used to hate the job for that reason alone" was said to me with considerable anger.

Transitions can be so challenging that some families try to limit their number even at the expense of a longer unbroken period of absence from home. "Generally it's better to go straight through rather than break the season up. [My wife] gets used to having me around, helping with chores, and then when I go away it's hard on her." Karl's reasoning was if he comes home for a couple of weeks during the season she gets used to having him around again. This makes for two sets of transitions rather than one. Apparently the longer time apart is less of a problem for them than a second set of transitions. He did not say that leaving was hard for him. He only mentioned his wife. This type of omission is standard among these fishermen. I know that leaving home is difficult for Karl as well.

1. Leaving

"Even the easiest way of saying goodbye hurts so bad. That's where you say goodnight to your kids and put them to bed. And then they wake up the next morning to find out that you've gone to Alaska for 3 months. The worst way is saying goodbye at the airport. Then everybody is crying." (For similarities among merchant seamen see Thomas 2003:41-42.)

Saying goodbye is painful whether it is done slowly or quickly. The "fight about nothing" is a typical **leaving ritual**. A few days before the man is scheduled to depart the couple will have a fight. The substance of the argument is generally trivial. The timing of the fight is very predictable. It seems to be a way of beginning the final stage of parting. (See offshore oil families in Austin and McGuire 2002:36-37; Collinson 1998:317; Lewis et al. 1988b:177; Parkes 2004:8; Parkes et al. 2005:420-1.) It also helps to make the period of time just prior to departure especially stressful. (See military families in Morrison and Clements 1997:310.) Preparation of special food for the trip or the time away is another

ritual of leaving which I have observed. This might include baking cookies, for example, or preparing sandwiches or something special to pack in a lunch for the man's trip.

Adapting to the man's absence from home, for everybody, is at least as difficult as saying goodbye. The man has no family to support him. However, he has the change in setting and his work responsibilities to distract him. The woman and children remain in a place filled with reminders of the absent family member. However, they have each other for consolation and support during his absence. (Compare to merchant seamen's families in Thomas 2003:42; military families in Rienerth 1978:181-2; offshore oil families in Lewis et al. 1988a:109.) Families often try to plan a special event for just after the fisherman has left. Short trips and visits to friends or relatives are typical examples.

Loneliness, depression, isolation, and a sense of bereavement are typical experiences of these fishing families, including the men. They are shared by families in other similar occupations (cf. military families in Decker 1978:117, Duvall 1945, Isay 1968 and offshore oil families in Austin and McGuire 2002:36-38, Lewis et al. 1988b:168, Solheim 1988:151).

In my experience the time apart got progressively easier. The first two weeks were very difficult. Disorganization is how Hill described the first stage of reaction following a family separation (Hill 1971[1949]:249). After a couple weeks of disorganization, the separation took on a depressingly normal, almost indifferent, feel. It was sad to feel like being apart was the normal state of affairs. This indifference was observed in Pearlman's study of nuclear submariner families (Pearlman 1970:947). This feeling started to fade only when anticipation of the future reunion replaced it.

Saying goodbye, adapting to the separation, and anticipating the reunion are negatively impacted by schedule uncertainty. Uncertainty seems to contaminate hopes and positive expectations more than it does negative ones. Bad rumors seem more certain to come true than good rumors. These families generally assume that if the work schedule is changed it will result in more time at work rather than more time at home. Schedule uncertainty makes goodbyes feel like they are forever, makes adaptations feel like they must be forever, and mutes

even the joy of anticipating the future reunion. Important psychological markers such as reaching the half-way point of a separation are difficult to realize in the absence of a certain schedule. Anticipation of the reunion is subdued by the possibility of the return being postponed days or weeks at the last minute.

2. Returning

Anticipating the family's reunion and the changes it will bring can itself be stressful. For many wives this is "a critical time of accounting for their stewardship during the husbands' absence" (McCubbin and Dahl 1976:124). Every time her husband returns, the wife of one of the Makushin fishermen gets a headache a couple of hours after the reunion. (Compare to pre-reunion stress among military families in Morrison and Clements 1997:310 and among offshore oil families in Lewis et al. 1988b:176.)

Returning and adapting to life together again, after several months of separation, can be as challenging as leaving. Cody, father of two children, was divorced from his wife a couple of years ago. He describes coming home after a season as, "putting the family back together. I'd fill the fridge, cook the meals, catch up on bills, pay taxes, do projects around the house, and try and repair the relationships which had decayed at home. When I got home my wife [who did not work outside the home] would take a vacation from all household work until I went fishing again." By taking a vacation from household work Cody's wife was correcting what she perceived to be an inequity in their relationship directly related to the absences of fishing. This inequity can be a trigger, as well as the result of, marital distress (Grote and Clark 2001:282-283).

Cooking special foods and cleaning the house are typical **rituals of return** for these fishing families. Wives/mothers prepare the fisherman's favorite foods and fill the refrigerator with his favorite beer. They may do a special house cleaning before his arrival. (Compare to fishing families in Binkley 2002:13, 52 and offshore oil families in Austin et al. 2002:56; Austin and McGuire 2002:40; Lewis et al. 1988b:176.) Ironically, these rituals bear strong similarities to typical preparations for the arrival of a special guest. Below we will see that this is more logical than ironic.

Wilson has fished for almost twenty years and was recently divorced from his wife of 18 years. He was away fishing for seven months a year for most of his marriage. They have three children.

> "It's hard. I'd go away and she'd have a routine going. She was in charge. Then when I'd come home I just wanted to try and help out but to her that was interfering. You'd come home and be a disruption. It would take you a couple of weeks to feel good again about being home. Then a couple of weeks before you go, you start saying goodbye. You leave different people at different times getting ready to be gone for a while."

There are no quick goodbyes for fishermen and their families. It takes a long time to leave and an even longer time to return. Both the leaving and the returning are stressful (Blaisure and Arnold-Mann 1992:178). Wilson's experience of feeling "out of place," estranged, having difficulty in finding his role at home, and "interfering" with his wife's running of the household are shared not just by other fishermen but by other long-commute workers as well (Fishing: Binkley 1995:96; Orbach 1977:278-9; offshore Oil: Austin and McGuire 2002:24-26; Gramling 1989:56-57; Solheim 1988:151; merchant seamen: Thomas 2003:76-83).

When Wilson would come home both he and his wife wanted him to engage in the life of the household. I have mentioned that, according to Wilson, his wife perceived his efforts as interference. She both complained that he did not help out enough and at the same time that he was interfering with her task of running the household. His attempts to "help out" were insufficient and yet also interfered with, and threatened, his wife's way of organizing daily household life. Her ambivalence is typical of these wives' reactions and, as mentioned above, is not limited just to fishing. Some ambivalence comes from anger and resentment that he has been gone. Some comes from the threat to her recently increased independence and competence which his return represents. Wilson spoke of "wanting to help out" in contrast to taking over control of how the household operated. To him, taking over control of the household during his time at home was obviously incorrect. According to his logic, her permanent presence and his intermittent presence gave her rightful authority at all times. (See Lewis 1988b:181 for what an offshore oil worker means by "helping out" and Binkley

2002:65, 71 for Atlantic Canadian fishermen.) He accepted the position of junior partner.

As part of a successful adaptation back to the family, the fisherman must walk a very fine line. On the one hand he must do more than simply offer to help out. He must take on responsibilities in a way that gives his wife a break from her single parenting. But on the other hand he must not threaten or negatively reinforce the independence and competence she has shown in his absence. This is a challenge. The wife has more latitude. She must be strong and competent in his absence for the family to function. Here there is little argument. When he is at home she can play a weak or a strong role. A weak role fits the traditional picture of an industrial American family and will probably not meet with any complaint from the fisherman. A strong role, which really fits this occupation better than a weak role, can be successfully defended on the basis of her permanent presence in the home and thus greater expertise in household matters. She is the boss when he is gone and therefore the legitimate boss when he is present. This is necessary for these families to survive in this occupation. They require a strong woman at all times and a man who can adapt his expectations of what it means to participate in the family, and what that participation means to being a husband, a father, and be a man.

3. One pattern

Wilson recognized that he was often away from home. He could also see that his wife had put in place a way of organizing family life that was, of necessity, designed for his absence. Either his family's life is organized based on his absence and is upset by his periodic presence, or his family's life is organized for his presence and the family is weakened during his absences when a necessary set of roles is not being played. The family is less vulnerable in the presence of an extra player than in the absence of a needed player. So it is designed for his absence. The wife/mother is mainly responsible for this adaptation. Woman-centered households are a trait of fishing families specifically and also of long-commute occupations generally. (For fishing families see Andersen and Wadel 1972:143; Binkley 1995:49-62; 2002:54; Cole 1991:62-4; Knipe 1984:139; McGoodwin

1990:25; Orbach 1977:272-273; Tunstall 1962:162-5; in military families see Rienerth 1978:177; Stoddard 1978:160-161; in mining families see Sauer 1979:245-246; and in offshore oil families see Austin and McGuire 2002:23-24.) Wilson recognized the legitimacy of this choice even if he did not like it. When he was home he was an extra person without any *essential* family roles to play. Hence, Wilson's involvement was labeled interference. His family had only one pattern of normal interaction. Ironically, the types of family resources (i.e. strong, independent woman and good, close substitutes) and reorganizations which made for a successful separation adjustment also tended to hinder reunion adjustment. (Compare to military families in Duvall 1945: 80, Hill 1949:50-99, Rienerth 1978.)

Strategies available to other occupations do not seem to work for these fishing families. Offshore oil families provide an alternative to one single, relatively stable pattern of interaction. Among some of these families there exist two patterns of interaction or constructions of shared reality. "One of these defines lines of authority, areas of competence, and appropriate guidelines for interaction during the week the offshore worker is home; the other is in effect when he or she is offshore" (Gramling and Forsyth 1987:169; Parkes 2005:424). This is a strategy of *alternating authority*. Bering Sea pollock fishermen are gone for vastly longer periods of time than offshore oil workers whether they work the 7/7 schedule (7days away/7days home) of Gramling and Forsyth's research or the 14/14 which is more typical today. The long absences from home required by pollock fishing, especially when the family system includes the added number of players and complexity of children, excludes this as a viable alternative (cf. James 1951: 477; Thomas 2003:72). Forsyth and Gramling observed no merchant seamen couples in their study who succeeded at this strategy (Forsyth and Gramling 1990:190).

Contingent authority does not work for these fishing families any better than it did for the tuna fishermen Orbach studied (Orbach 1977:279). Contingent authority is a management strategy where the husband retains the authority even while he is away. The only male tasks and decisions made by the wife were those that could not be postponed until his return (Forsyth and Gramling 1990:185). The long absences also make this strategy unsuccessful (cf. Forsyth and Gramling

1990:191). This is a common strategy among fishing families with shorter periods of absence (e.g. Knipe 1984:138-41).

The family social system is not static. Families are "interactive systems that require constant adaptation, change, and response. One cannot get a family organized, arranged, thought out, and defined and then walk away as you would with a clock. Instead, on a daily or even hourly basis family members are changing and influencing the other family members" (Day 2003:53). The family is constantly "under construction" (Holstein and Gubrium 1995:896).

The outcomes of interactions accumulate over time. As American playwright Arthur Miller said, "all human interaction is 98% historical" (Day 2003:54). When interaction is viewed as social exchange no two exchanges can ever be perfectly repeated. The first exchange has brought with it gains, losses, and expectations which affect the participants future transactions. The participants themselves are changed by the experience as is their outlook regarding future exchanges. Their most basic decision, whether to cooperate with this exchange partner in the future or not, is affected. When interaction is viewed as drama, both audience and performer start learning about each other as soon as the performance starts. Each social expression conveys information to the other party which informs a continuously updated definition of the social situation. This definition in turn affects subsequent expressive performances (Goffman 1990[1959]:13-27).

Just as among merchant and military seamen, family members continue to be socially active in the fisherman's absence. "While he is away family and friends are making new acquaintances and friendships, children are growing; styles and fashions are changing" (Forsyth and Bankston 1984:125). The accumulation of their interactions (displays, exchanges) changes the family in the time the fisherman is away. The fisherman also experiences some social change while away at work. He is not exactly the same when he returns as when he left. (For Pacific Tuna fishermen see Orbach 1977:277.) When there are children in the home, as in five of these six families, more players are added to the interaction. More changes have occurred and thus more adjustments must be made. The fisherman cannot come home and just pick up the interaction with his family right where he left off. There is a problematic lack of information about each other to

say the least (Schofield 1985: 218-219). There is continuity during his absence but there is change as well. He and they have got a lot of catching up to do with each other. As the wife of a North Sea oil worker said, "Everything has to be started all over again, every time he comes back" (Lewis et al. 1988b: 184).

The family is also a complex system. The greater the number of participants, the greater the complexity and the greater the time and effort required to adapt to a new member or even an old returning member. Children make the family system exponentially more complex. The system must be rebuilt each time there is a change in the presence of a major role player, like the fisherman. Pacific tuna fishermen have to "get to know their wives again" after each trip (Orbach 1977:279). Studies of military families describe a process of family reorganization (Hill 1949: 249-263). The process of interaction, of living together as a family, is one of constant subtle adjustment and recalibration. It includes conscious and unconscious negotiation and agreement on knowledge and definitions including goals, guidelines, rules defining appropriate and inappropriate behavior toward one another and others outside the family, and notions of equity, fairness, and success. "In the marital conversation a world is not only built, but it is also kept in a state of repair and ongoingly refurnished" (Berger and Kellner, 1964:13). Like one version of social capital this common knowledge lubricates or reduces the cost of interaction (Coleman 1988:101-105; Putnam 1995). When this knowledge and familiarity is degraded by long absence, exchanges create friction, are costly, and less satisfying.

4. Accumulation of absences: no practice effect

The fisherman's absences from home are long and relatively complete. His presences are sometimes brief and incomplete. Readjusting to his presence home is not the only thing he and the family are occupied with. He may have work related tasks and other interests which compete with his interest in his family. The family is still in its normal life context with its various demands and outside interests. Time does not stop for the family and the fisherman to concentrate solely on each other. Family adaptation (family including the fisherman) and full reintegration may not be possible in the length of time he is home. Or given the

costs involved in adapting to his presence and then re-adapting to his absence, it might not be *worth* doing for the time he is at home.

Fitting into a family system that was designed for, and has evolved to meet the demands of, his absence is not always pleasant for a fisherman or his family. The difficulty in planning transitions, due to schedule uncertainty, makes adaptations even less likely to be successful. Nevertheless, the repeated unfamiliarity caused by these three and four months absences must be repeatedly overcome if the family is to remain whole, healthy, and with its members participating in ways which match general societal expectations. This is difficult even assuming the very best case scenario which is that the fisherman and family were fully re-integrated at the time of his departure. It is relatively rare to find a fisherman and family who are only overcoming the effects of his latest absence and not the accumulation of many absences and less-than-complete re-integrations. Less-than-complete re-integration, either chosen or of necessity, is the norm among these fishing families. And repetition of this cycle, unlike a form of practice which leads to improvement, leads to an accumulation that increasingly restricts the possibility of future success. (Compare with other fishing in Orbach 1977:278 and with merchant seamen in Forsyth and Bankston 1984:125.)

Clark and Taylor confirmed this lack of a practice effect among Scottish offshore oil workers and families. They found it unlikely that families they termed "novices" would gain experience with intermittent husband absence and start acting like "veterans." They reiterated the importance of **two alternatives to adaptation which are quitting the industry and divorce** (Clark and Taylor 1988:127). Solheim also confirms that among Norwegian offshore oil workers the transition periods are "a problem which increases over time, getting more marked the longer the offshore job lasts" (Solheim 1988:147). A more recent study in the United Kingdom supports this as well. Said one wife, "I find it difficult to hand over the car keys, the house keys, the check book after two weeks. And the longer I do it the harder it gets" (cf. Lewis et al. 1988b:175; Parkes et al. 2005:420; Solheim 1988:147).

5. The difficulty of family-reintegration: a child care example

Not only must the family adapt to the presence of the fisherman but he also must adapt himself to the family. Child care is an example of one of the many aspects of home life that fishermen and families must catch up on every time he returns. It is one of a variety of areas of expertise which the absent fisherman has lost, in varying degrees, and which he must reacquire if he is to fully re-integrate into the family. When Wilson comes home his wife is the expert on their children. She is current on the state of their lives and relationships to an extent that the fisherman is not. Wilson, like the other fishermen on this boat, comes home and wants to engage. He and his family have several options. My approach here is not to predict which choice he and his family will make. My goal is rather to describe the choices available within this family situation and the sequences which each choice sets in motion (cf. Austin and McGuire 2002:26; Lewis et al. 1988b:178).

Option #1: The wife teaches Wilson. She helps him catch up. The advantage of this approach is that it reduces the repetition of mistakes. He can learn from what his wife has done and avoid some of the errors of trial and error learning. It is a relatively fast and efficient way of learning. The disadvantage for his wife is that it requires her time and effort. She does not get a break when the man returns. She cannot just hand over responsibility for this area. She has to increase her effort before she can reduce it (when he takes over or at least shares responsibility for something as an equal). The other disadvantage for their relationship is that the situation of uneven knowledge and power is perpetuated. The extent to which this is felt as a problem depends on the couple and on the fairness of their equity rules. There are strong correlations between equity in relationships and marital satisfaction (Feeney et al. 1994; Grote and Clark 2001).

The unevenness of knowledge and power was originally created by his absence. It is perpetuated by the inequality of the teacher – student relationship. The teacher (in this case the wife) holds the power to decide what information to pass on and what to withhold. The teacher holds the power of interpretation. The student receives what the teacher decides to teach and in the way that she decides to teach it. The best result of option one is that the fisherman fully re-integrates in this area of family life but in an unequal way, as a junior partner, for example.

This option requires a special investment on the part of the wife every time the man returns.

Option #2: The wife does not to teach Wilson. He teaches himself. In this case, the wife/mother does not have to expend any special effort. She can take a break. The other advantage is that eventually she and Wilson will become equals as acquirers of expertise and in the authority of their knowledge. His interpretations and decisions will stand on the same epistemological ground as hers. She has made her discoveries earlier in time. But because he will repeat the self-teaching process just as she did earlier, his knowledge can be equal to hers. The disadvantage is that this method is not very efficient particularly when looked at from a team perspective. Sharing information is important for any organization's success. Trial and error is not an efficient method of learning. Option two requires more time and will result in more errors along the way than the first option. Furthermore, the whole family, not just Wilson, will experience the errors (pay some of the costs) of his self-teaching. Some of the burdens of adaptation are shifted from the wife-husband relationship to the father-children relationships. The wife will weigh the costs to herself and her family as a result of Wilson's self-teaching along side of the benefits she will realize through option two. Wilson will weigh the costs and benefits of the two options, to himself and to his family, as well. Being a junior partner, and asking for and accepting instruction from his wife, may cost him something in self-esteem and prestige within the family. This depends on his personality and the family's (and his) expectations for him in the child-care role. It may also save him time and save his family the errors of his self-teaching process.

Knowledge management

Wilson's self-teaching is necessary but not sufficient to equality of knowledge with his wife. His wife may manage to hold on to superiority if she can keep the power of defining what is "the right way" and what is a "mistake." This is the power of judgment. If she holds onto the power of declaring when Wilson is fully "caught up" (now he is doing things the "right way" rather than making mistakes) the inequality will remain. Through his self-teaching Wilson might discover what he believes to be "another acceptable way of doing a task," for

example. But as long as his wife holds the power to judge, his self-taught knowledge and his position are inferior to hers.

In option #1 there is an exchange between the fisherman and the wife. She gives Wilson information and he gives her authority, prestige, and status. Information is the most important resource in this interaction. It is periodically unevenly distributed because the fisherman is periodically absent from home. As long as he fishes, her resource of current expert knowledge of child care is periodically being replenished. She has a regularly recurring supply of knowledge and expertise available for exchange with him. He has a regularly recurring demand for it. She can essentially set the price. She can set the rule of equivalency in that exchange.

After a long enough period of time at home the real basis of this resource (differential knowledge) disappears. His knowledge and expertise may be equal to, or even greater than, hers in this area. At this point she has two choices. She may choose to accept that they are equal in this area and relinquish the authority and status she was receiving as an expert. Or she may choose to engage in management processes, an example of which was described above, which perpetuate what is now the appearance of power in the absence of a structural base. The real basis of this power will not be renewed until he goes away again and his absence causes the resource of knowledge to be distributed unevenly.

Anthony Cohen discussed these knowledge management processes in a different setting. "Management processes are concerned to affect the ways in which people perceive and therefore understand and react to situations" (Cohen 1977:184). The starting point was the uneven expertise or knowledge about childcare. The woman's ability to manage this situation, to create a sense of legitimacy about her judgments even once any real difference in expertise has ceased to exist, becomes an added resource. For power is not just structural. It has an interactional dimension. It is never absolute but is always contingent. "Thus, the reality of *Ego's* power is not intrinsic, but is contingent upon *Alter's* perception *and* recognition of it *as* power to which he must succumb. Ego may therefore effectively contrive the appearance of power without any prior exclusive structural base." Power doesn't consist "merely in some structural resource, but also in the

resource of management" (Cohen 1977:182-185). The appearance of power and legitimacy can be present even after the structural base has ceased to exist.

Both options one and two have disadvantages. However, one or the other is necessary, in a variety of areas of family life, if the family and fisherman are to fully participate as a family according to societal expectations. Participation in family roles according to North American societal expectations is not the only route to a functional family. Other ways of organizing family roles are practiced all over the world. Some of them seem to achieve a much better fit with livelihoods. I will discuss later the need for fishing families to adapt their role expectations in ways that fit this occupation. My point here is that these families are not functioning well when their members are not regularly participating in the pursuit of the family's goals according to their definition of participation. So, whatever the particular set of role expectations in a family, successful family function requires that the members are regularly re-integrated and full participants according to those expectations. Outcomes for the family can be strongly negative when the "catching up" type interaction of options one and two, including the perpetuation of inequality, is not limited to a transition period but becomes a longer term pattern. This can happen when neither of these options is employed.

Option #3: It is Autumn 2005 and the pollock fisherman has eight weeks at home. This is a best case scenario. He might also come home and the family does not know if he will be home for four weeks or four months. In Wilson's words it took a couple of weeks to feel good about being home again. Let's call this the catching up period. Successful reintegration in this context means that the fisherman is fully playing the roles which are allotted to him according to the family's expectations for itself. He plays all of his roles and the wife/mother does not play any of her periodically extra ones. In my thirteen years of fishing experience two weeks is a rapid reintegration even for a family without children. Pearlman describes a period of three to four weeks in his study of submariners' families (Pearlman 1970:947). Austin and McGuire observed among offshore oil workers that a period of three weeks was necessary to transition back after an absence of only twenty-eight days (Austin and McGuire 2002:28). For Wilson's family with three children, catching up in a couple of weeks is very optimistic.

"Feeling good" probably does not mean fully re-integrated. Then, two weeks before he leaves again, the withdrawal period begins. This means that the family is looking at four out of eight weeks (realistically much less) where the fisherman is fully playing his family roles. In such a situation the woman may decide that she does not want him to fully re-integrate, for he is not going to be home long enough (cf. Gramling 1989:55-56).

The transitions, especially when children are involved, cost too much. It is not worth the benefit of having the man fully re-integrated for just a couple of weeks. She has unconsciously chosen a third option. In fact, it does not seem like a choice to her. It is just the thing to do. The family avoids not only the costs of fully re-integrating the man but also the costs of dis-integrating the man when he leaves. Because he has not been fully re-integrated the family must not undergo a full dis-integrative adaptation. As far as transitions are concerned, it is cheaper both ways. As a result, **the fisherman is treated as a guest in his own home**. She will accommodate him and he will accommodate her and the family. Then he will go away to work and life for the family will be normal again. Forsyth and Gramling observed this strategy among merchant seamen as well (Forsyth and Gramling 1990:191-193). (Among fishermen see Binkley 1995:96, 2002:52-57; Orbach 1977:279; Tunstall 1962:162.)

This process repeats itself and, over time, a pattern of interaction emerges. Two things typically occur and they work together. First, the man slowly becomes less and less integrated into the family. These periods of partial re-integration accumulate. He is moved to the margin. Family members start forgetting how it was in the past when he was more fully re-integrated. This depends on whether or not he ever was fully integrated and if they were alive at the time to experience it. Secondly, the switch between ordinary time and extraordinary time occurs. What was once the "normal" configuration, man, woman, and children together at home, becomes exceptional and special. In the new "normal" configuration, the family's picture of its everyday life, the man is absent. The labels switch places. Ordinary time drags; the time the husband/father is gone seems long. Special time passes quickly; his time at home seems to be so short. Perceptions change expectations and expectations influence perceptions for everyone. In the end, he stops being a

full part of the family, socially and emotionally, and feeling at home, even when he physically returns.

Difficult transitions are the most significant effect of job stressors. They are, of the four effects we are examining, the greatest inhibitor to family functioning. They are not the only important effect of a job stressor. Though guilt does not directly affect family functioning, it causes fishermen to pursue a strategy of compensating behaviors. By the time they realize that this strategy is not working, and is in fact sabotaging their efforts, it is often too late to take any other effective action. A critical time in the family's life has passed. It is a time when a different strategy, quitting the job, for example, might still have been effective. Guilt is intrinsically painful for these fishermen. When viewed instrumentally, it leads them to pursue an ineffective strategy with negative consequences.

B. Guilt

Long absences from home seen in a negative light lead to the guilt and frustration many of these pollock fisherman experience regarding their families. Feelings of guilt, helplessness, and frustration are typical of other fisheries as well as of other occupations with long periods of absence (Orbach 1977:277; Blaisure and Arnold-Mann 1992:183; Nolan 1973:91-2). These fishermen feel guilty that they are away when their families need them. They feel bad about missing birthdays, graduations, and holidays. They feel frustrated that they can do so little to change that. Fathers on the boat constantly talk about the negative effects of their absence upon their children. It can be a heavy burden.

Their concern is largely supported in the literature on the effects of ***father absence***. The effects of father absence are generally negative and generally affect boys more than girls. (Among merchant seaman and whalers see Lynn and Sawrey 1959; among military families see McCubbin and Dahl 1976; Rienerth 1978:180-3.) Birth order of male children seems to play an important role. The oldest male child can experience some positive outcomes whereas for the younger male children father absence is strongly negative (Hillenbrand 1976). Effects such as difficulty in developing a masculine self-concept (Beaty 1995) and the development of a feminine semantic style (Longabaugh 1973) are part of father-absent boys' experiences. Father absence does not directly imply family

dysfunction. The effects are indirect, through a redistribution of roles, and often mediated by the mother's behavior in a variety of ways. For example, the mother acts as a surrogate father to her son and her son acts as a surrogate husband. This redistribution creates its own unique stresses and negative consequences (Longabaugh 1973; Sauer 1979:247-48). Another causal path is through the boundary ambiguity experienced by a family whose husband/father is psychologically present, through certain family behaviors, while physically absent (Boss 1977, 1980a, 1980b). Less attention is given to the children's role in the reciprocal relationship between a child and an intermittently present father (King and Sobolewski 2006:554). Amato and Gilbreth (1999) reviewed sixty-three studies of non-resident fathers and their children's well-being.

Cody reported a conversation he had with his adult son about growing up. His son remembers his father being gone. Cody asked him, "Don't you remember the fun stuff we did together?" His son said he did remember, but that his main memory is of his dad being gone. Cody said to me, "Even if I was home seven months out of the year he would still remember me as being gone." Cody said, "If I had it to do over again I'd have chosen to stay home – for the good of my kids." I had to prompt him into saying how much it hurt him to be away as well. He brought up the difficulties of long absences only as they pertained to the good of his children. We never did talk about what was good for his wife.

Every one of these fishermen recognizes when a ship mate has had what they call "a bad phone call home." This occurs when a fisherman has received troubling news from his distant family which makes him unhappy and he feels powerless to change the situation. All the men with families can understand these common feelings of unhappiness, guilt, and frustration. They are very sympathetic and accommodate many forms of unsocial behavior from each other when they know that a fellow crewman is having troubles with his family. These include irritability, impatience, apathy, and depression. Troubles at home can cause symptoms at work which closely resemble the effects of chronic fatigue and burnout (page 209). At times, I have experienced fishermen empathizing with and encouraging a fellow crew member to believe that the family will be alright and the hard times will eventually end (see Orbach 1977:274-77).

This is an example of how the family does not just absorb the effects of the man's occupational life. The family also exerts an influence on the occupational setting through the fisherman. A difficult situation at home can put a big strain on the work group thousands of miles away. During one summer season the crew regularly engaged in discussions about the skipper's surprisingly bad behavior. It was explained as a result of his ongoing divorce. His atypical behavior regularly caused increased stress and dissatisfaction among the crew. These discussions were the work group's way of coping with the negative effects of the skipper's home life. They were noticeably more patient with him than they otherwise would have been.

Unable to directly and immediately influence the lives of their distant families these fishermen do what to them seems like the next best thing. They employ compensating behaviors. These are consciously chosen to improve the situation for their family sometimes through an intermediary and sometimes through their own direct activity at a point in the future. They are unconsciously selected to ease their own guilt and unhappiness.

C. Compensating behavior

All the fishermen with families on the Makushin felt some level of guilt and employed compensating behaviors. (Compare with fishing families in Binkley 1995:60-63, 96, 2002:54; Knipe 1984:37; Tunstall 1962:162-3; with military families in Blaisure and Arnold-Mann 1992:182-3; with offshore oil families in Mauthner et al. 2000:150; Parkes 2005:426.) For the fishermen these behaviors were of limited success in coping with guilt. For the families as a whole there were unintended negative consequences. These behaviors catalyzed and accelerated the reversal of ordinary time and extraordinary time thus helping to further marginalize the fisherman within the family.

MacPhail was planning on working part of the winter (A) season 2004. He wanted to work less than a full season in order to reduce the time away from his family. His replacement quit at the last minute. This meant that he could not go home as planned but rather had to stay and work the entire season. MacPhail talked about how disappointed his partner was when he found out he was going to have to work all of A season. She had just filed her taxes and had a $4000 bill. He

said to me, “In order to take the sting out of having me away, I told her, ‘Just spend that $4000 and I’ll replace it when I get home’.”

MacPhail and I talked about Cody’s behavior towards his kids. MacPhail said, “I’ve told Cody in the past, when Cody complains that Sam [his son] doesn’t want to work, that he’s lazy, and just lying around.” MacPhail says he’s told Cody that “Sam is just spoiled, that Cody has spoiled him giving him all kinds of stuff. Sam had 3 cars when he was 14. I mean he’s not even legal to drive for another two years and he’s got 3 cars.” Cody was often away fishing and gave Sam cars, bikes, and a boat to compensate for his absence. MacPhail’s point was that Sam had been given more than he wanted, in fact he had been given more than he could even legally use, and that it had negative consequences for Sam. MacPhail’s focus was on the gifts. He did not discuss the negative effects of the absences which themselves had caused the guilt compensating behavior. Nor did he discuss any other causal factors, though he would certainly acknowledge that the negative consequences for Sam arise from more than simply the gift giving behavior of his father.

Cody also gave his wife money to spend on herself. He wanted to compensate her for his absence and she wanted to compensate herself. He put no limits on her spending. The household budget was enormous, he said, and she lost all self-control. “That’s why it’s there, to spend it,” she said, according to Fred’s wife. Cody had previously used the size of the household budget to help explain why he continued to spend so much time away from his family earning money. He needed to fish because the family needed the money to run the household. He was not seeing how his absences to fish were a causal factor in the uncontrolled spending at home. Cody was making close to 100,000 dollars a year, had a house that was paid for, a child in high school and a child in junior high and the family could not save any money. I have heard this type of complaint from more than one pollock fisherman. For Cody’s wife, his departure for Alaska marked the beginning of her own shopping season. “Every time I come home all the furniture in the house is different,” he said. After 16 years of marriage Cody put a limit on the money that would be available for the household budget. He said he was

"putting her on an allowance." The next thing I heard was that she had filed for divorce.

1. The example of feasting at home

The inversion of ordinary and special time

	At Home	At Sea
Before adaptation	Ordinary Time: Normal rules and expectations	Special Time: Extra-ordinary- rules and expectations
After adaptation	Special Time: Extra-ordinary rules and expectations	Ordinary Time: Normal rules and expectations

Cody said repeatedly that when he got home he "just wanted to play with my kids." He gave them more than just toys to play with. He would also take his children out of school to make trips, with his wife who did not work outside the home, to Hawaii or to visit family. They would make camping trips and do all sorts of fun activities. Fathers in these families often related to their children as playmates. He would try to squeeze all kinds of special times into his time at home. While on the boat Cody talked about his kids constantly. He felt terrible being away from them. He felt that he was depriving them of something that they needed and were entitled to, that is time with their father. And when he went home he would try to make up for it. He was also organizing these "feasts" for himself. He too was deprived of time with his family.

Cody's behaviors, which attempted to compensate his family and himself for his absence, accomplished at least two important things in his family. First, they put him in the role of instigator and organizer of fun. He was the one in charge of the fun, rule-breaking, special times and activities. That set his wife up as the one in charge of the not-so-fun, rule-enforcing, ordinary times. When Cody was home he would take the kids out of school and go on family trips. When he was back on the boat it was his wife's job to make sure they got their chores and homework done and got to school on time. When I suggested that it was not a fun role for her to play he agreed. It did not increase her marital satisfaction. This dynamic also occurs in the families of offshore oil workers. "He's a novelty – the

best thing since sliced bread." "…he's the hero sometimes, and I'm the villain," said the wife of an offshore oil worker (Parkes et al. 2005:426).

2. The re-labeling of ordinary and extraordinary times

Cody's behavior also facilitated the re-labeling of ordinary and extraordinary times and thus his own marginalization. When Cody was at home he broke the rules. He took the kids out of school for special trips essentially creating an unofficial school vacation while classes were in session. He gave them gifts behaving like it was their birthday or Christmas when it was not. In these and in other ways he marked the time when he was home as special and extraordinary. This also served to mark the time when he was away as normal and ordinary.

When Cody went away the family went back to their normal routine. When he was at home he was marginalized. It was only in his absence that he was, in a sense, a full player of his role. His primary role was to play the absent father. As we read above, his son remembers him according to what he did in his main role (being absent) not what he did in his marginal role (organizing special times and events while at home). This "normalizing" of the fisherman's absence is an important feature of what I am calling the ***fisherman as a guest in his own home*** arrangement of a Bering Sea pollock fisherman's family. The constant pressure towards this arrangement is a feature of this occupation's effect on the family. It works alongside other effects of the occupation and constantly tempts the family to stop trying something else, cut their costs, and adopt what Forsyth and Gramling termed "an inevitable path toward a nontraditional strategy, the periodic guest" (Forsyth and Gramling 1990:193). It confirms why they call it a stable family strategy (p.187) and the "predominant familial structure among merchant seamen" (Forsyth and Gramling 1990:191). Ellwyn Stoddard noticed this inversion of the normal and special time in the "matri-central" homes of military wives (Stoddard 1978:160-161). (Among offshore oil families see also Austin and McGuire 2002:31.)

This arrangement is not very far removed from the break up of the family, which is also typical of these fishing families. The husband/father is trying to compensate his family and himself for the negative aspects of being a Bering Sea pollock fisherman. What he calls his "real" life is on hold while he works on the

boat. He sort of "holds his breath" until he gets home. He believes that his family needs him and that they too are "holding their breath" while he is away. His compensating behavior accomplishes the opposite. The family ends up preparing for him like a guest, "holding its breath" while he is around, and going back to their normal routines once he has departed. (Compare to Austin et al. 2002:173; Andersen and Wadel 1972:143.)

There is something sadly ironic here. When these fishermen say that fishing is bad for their families they mean, but do not say, that it is hard to stay in touch relationally. They are, in a sense, biased against the value their earnings for their families' quality of life. When pressed, they admit that it is good for a family to have enough money but this does not seem to relieve their feelings of guilt. They overlook the positive value that their high earnings can have for their families, feel guilty about the negative influence of the occupation on their family, and therefore use their money to engage in these unintentionally sabotaging, compensating behaviors.

D. Infidelity

When these fishermen talk about long absences from home the topic of infidelity often comes up. Concerns are voiced in the form of jokes such as: "You don't have to be a fisherman's wife to cheat on your husband, but it helps," and, in reference to the periodic nature of their time on shore, "You don't have a girlfriend, just a turn." Concerns about infidelity show up in other fisheries and long commute occupations. (See Spanish trawlers in Zulaika 1981:33-64; offshore oil workers in Austin et al. 2002:277.) Both fishermen and their wives face the same temptations (cf. Parkes et al. 2005:422). Long absences deprive partners of sexual intimacy with each other while generating opportunities for sexual infidelity and the possibility of keeping it hidden from one's partner. All of these factors are associated with increased infidelity (Johnson 1970, Treas and Giesen 2000). Long absences can also generate anger at being deserted. This anger may lead to retaliation in the form of sexual infidelity. (See military wives in Isay 1968; MacIntosh 1968.) This is an example of how some strategies for coping with stress can lead to even greater stress (McCubbin et al. 1980:866).

Most fisherman and their wives insist on fidelity from each other while they are apart. These fishermen view infidelity by their wives as legitimate grounds for separation and the break up of the family. They do not always view their own infidelity, kept secret from their wives, as necessitating a separation or constituting a failure of the marriage.

Anacortes has a reputation in non-coastal surrounding towns for promiscuous women and physically aggressive men. I wonder if this is related to the fact that historically its economic base has been fishing. Perhaps, in the minds of the surrounding communities, fishing is associated with the absence of the town's men for long periods of time and thus with promiscuity. Sexual promiscuity seems to be attached only to women. Sex is their area of aggressiveness whereas fist fighting is allotted to the men.

Infidelity: a special arrangement

There is an exception to this rule of fidelity which bears mentioning. I do know of the family of a pollock fisherman who has employed an atypical strategy. He and his wife have an arrangement in which they tolerate infidelity while he is away fishing but not when he is back home. We heard recently that the wife had broken their agreement and was having an affair while he was home. This was causing a marital problem. This affair is probably both the cause and the result of marital dissatisfaction. This arrangement is an example of quite radically adjusting expectations or what might be described as an extreme form of role flexibility. These changes in roles and expectations have allowed this couple to adapt, at least until now, to long-distance fishing. These changes have undoubtedly also affected their identities as man and wife. (See Lipman-Blumen 1975 on role change as a system response to crisis.)

The preceding sections have dealt with stressors and effects. When they talk about work and family, the actors generally use a fuzzy and relatively simple theory of causation. In general, they do not know exactly how, but they feel like fishing directly causes families to split. In specific instances where there is an idea of causation, it is simple and direct. Infidelity, for example, is the result of long absences. From an observer's point of view causality is much more complex. Stressors can work in combination and sometimes not at all. Wage uncertainty alone, for example, must not be a stressor if there is proper financial planning and saving. Long absences, along with the inability to communicate adequately,

necessitate big transitions. They become more difficult when they cannot be planned in advance due to schedule uncertainty and when competing rhythms hinder agreement on priorities.

IV. Theoretical Perspective

Family	Fishing Crew
Immanent goods	Non-immanent goods
Intrinsic, Inherent value	Instrumental, Exchange value
Compliance via obligation	Compliance via compensation
Quality goals	Quantity goals
Input Targets	Output targets

The family is a group which engages in collective action. (For other applications of this perspective to families see Becker 1965, 1991; Berman et al. 1994; Hechter 1987:174-76; Pollak 1985.) A group, according to Michel Verdon, is a collection of individuals who are engaged in a single mutually oriented activity, or one set of interconnected activities, which has membership criteria. Verdon distinguishes groups from crowds which have no membership criteria, social categories in which the criteria used "are defined with respect to individuals not involved in the activity", and corporations in which "the members are not involved in any activity but in ownership." Verdon advocates defining a group according to one single activity and speaks of "group overlapping" when "individuals form the same group in different types of activities" (Verdon 1981: 804-805). For our discussion the family is a multi-goal, multi-activity group.

The family is formed to jointly achieve certain goals which satisfy the individual desires of the members and which cannot be obtained individually. According to Mancur Olson, groups form when individuals share a common or collective interest *that individual action will either not advance or not advance adequately* (Olson 1968[1965]:7). Forming a group is really a second choice. Any goal or interest that we can individually provide for ourselves we will. Shaw goes beyond Olson and states that groups may form of *self-interested individuals* who desire a good that may only be satisfactorily obtained collectively. Theoretically speaking, group formation must not conflict with individual self-interest as long as the fulfillment of that self-interest is dependent on a collective effort and not

possible individually (Shaw 1981:8). Hechter goes beyond Shaw's theoretical argument to offer specific examples of group formation based on individual self-interest such as rotating credit and insurance groups. (Hechter 1987:104-125) The topic of altruism which often comes up in discussions of family is not of interest here. It is a possible but not a necessary part of family group functioning.

The use of words like joint goals and common interests can hide the fact that groups form not only to create something but also to enjoy it either directly or in exchange for something else which they want. This has led some group theorists to use economic language which captures both the creation and the enjoyment aspects of collective behavior. Common goals and interests are referred to as goods which are produced and consumed. In this usage a group which has formed to further a common purpose is analogous to a factory which is built to produce a product or a good.

Immanent and non-immanent goods

These goods that groups produce can be divided into two important types. First, there are goods which have intrinsic or inherent value and satisfy their members' own wants directly. These are produced for the group members' own consumption. Hechter calls these immanent goods. There are other goods which have instrumental value. They are produced not for the group's own consumption but rather to exchange with non-members. They are instruments and only satisfy their members' wants indirectly. These are non-immanent goods (Hechter 1987: 42-43).

Money is an example of a non-immanent good. It is not inherently valuable. It is a pure instrument of exchange. In the case of these fishermen, who rarely if ever eat pollock (and never in the enormous quantities they catch), the fish they catch, often referred to by the processing industry as the boat's *production*, is also a non-immanent good to be exchanged for money and then further exchanged. A rare fish taco does not change their main reason for fishing which is instrumental.

Love, trust, and companionship are examples of immanent goods which groups like these fishing families form to produce and consume. The trust which exists (is produced) in my family could hardly be exchanged with a third party for

something else. It can only be enjoyed (consumed) by the members of our family group, we who produce it. Households "seek to 'consume' such things as the health of their members, bright and successful children, relaxation. These ultimate consumption goods are called 'commodities'." Households seek various goods and services "in order to use them within some type of a household 'production' process, to produce the final products desired by them, the sources of their satisfaction" (Berman et al. 1994: 209).

Public goods and excludable jointly produced goods

"Public goods" was the term Olson gave to goods, like this example of trust, which are produced by a group and from which potential consumers cannot be excluded. I cannot build trust with my wife, for example, and then exclude her from consuming it. "…the achievement of any common goal or the satisfaction of any common interest means that a public or collective good has been provided for that group" (Olson 1965:14-15). Michael Hechter makes a distinction between pure public goods and collective or quasi-public goods. He calls these "excludable jointly produced goods." Pure public goods, such as national defense and the system of property rights are perfectly non-excludible and non-rivalrous. There is no fixed supply. Nobody in the group, the group in this case is society, is excluded from the benefits of national defense (non-excludible), for example. My consumption of this good does not diminish any other member's consumption of it (non-rivalrous). A collective or quasi-public good is for a membership group which is a sub-set of society (Hechter 1987:10).

Olson saw the main problem of collective action, the production of public goods, as what others have called *free-riding*. If sharing in the consumption of the group's good is not contingent on one's contribution, the rational decision is to make no contribution. In this way one obtains the good for free which is preferable to obtaining the same good at some cost. When consumption requires some level of participation, Olson cites the Cournot theory which says that an individual will act in the interest of the group as a whole when his cost is not more than his gain. Essentially, individual participation is viewed as an exchange with the group. There will be no participation when the cost of contribution is higher than the benefit which is received.

Hechter agrees with Olson in general that the production of common, or public goods, are problematic. He avoids the free-riding difficulty by offering up an alternative to Olson's reason for group formation. Olson said groups form to produce public goods. Public goods are non-excludable. Rationally acting members will free-ride. Therefore, groups of rational individuals have trouble producing public goods. Hechter's alternative is that groups form in order to produce *excludable jointly produced goods*. Excludability relieves the problem of free-riding. A group member who does not contribute may be excluded from consumption of that good. Hechter does not have to engage in Olson's discussion of how group members balance group interest against individual interest. Individual self-interest is sufficient motivation to join a group which produces a desirable good that cannot be obtained alone. Individuals make their contribution (in compliance with group rules) because they are compensated with this desirable good.

The family group and the work group: group over-lapping

The same individual members of a group may produce both immanent and non-immanent goods at the same time. Both the fishing crew and the family are such groups with overlapping production activities. ***In the American family*** generally, and among these fishermen specifically, family formation and explicit goals are often set in terms of producing immanent goods (e.g. love, companionship). Along the way families can also achieve a variety of instrumental goals such as saving money through a shared apartment, building alliances between families, or providing the kind of informal retirement insurance common among American farming families where parents would have a residence and be cared for after passing the farm onto the next generation. Success in reaching goals is measured by quality. Examples include statements like, "we have a really close family" and "we're still completely in love." The emphasis is on inputs. "I want to spend more time with my children." ***In the work team***, group formation and explicit goals are often set in terms of producing non-immanent goods. The fishermen of the Makushin consistently said they were fishing for the money. They can make more money fishing than working on land. Success in reaching goals is measured by quantity. The emphasis is on outputs. "We caught our quota

in only two months." Along the way to producing this instrumental, non-immanent good, other intrinsically valuable immanent goods are produced. When I asked what they would miss upon quitting fishing the most frequent answers were the camaraderie and the friendship.

Rules and compliance

At least two things are necessary for all groups to work. Groups must have rules and they must be followed. Without rules you have disorder. Without compliance you have no contributions (e.g. free-riding). Jointly producing goods requires agreement on at least ***three types of rules***. These are rules about how to make rules, rules that coordinate production, and rules that govern access to the good once it is produced. ***Compliance*** is achieved either through compensation or obligation. "Compensation is based upon a strict quid pro quo, and the agent is paid for each compliant act. In obligatory groups, however, there is no quid pro quo: compliance is expected of members and, as such, merits no special attention or reward" (Hechter 1987:50). So, group members are either compensated for their contributions or they contribute out of obligation. Workers on the Makushin comply because they are compensated. If they do not engage in the group's production (if they do not work) they are denied access to that produced good (they do not get paid). Group ***solidarity*** is the group's capacity to get compliance without compensation. It is the group's capacity to oblige its members to contribute. The family is a group where members comply out of obligation.

Compliance through obligation

Individual compliance through obligation, or group solidarity, requires *dependence* and *control*. The more dependent a member is on the group, the more that member will be prepared to give (contribute) for a given joint good. The extent of one's possible contribution to the group is a function of dependence. But you are not going to pay for something that you can get for free no matter how badly you want or need it. Dependence is not sufficient for compliance. Controls are also required. Control must include both *monitoring* and *sanctioning*. The group must have the ability to monitor its members, punish the noncompliant, and reward the compliant. If members are dependent on the group, their compliance

will vary with the group's control capacity. If the group has an adequate control capacity, the extent member compliance will vary with level of dependence.

Marital infidelity provides an example. Fishermen are very dependent on their family. There are no close substitutes, exit costs are high, information about alternatives is difficult to come by, etc. But families have difficulty monitoring their fishermen's behavior when they are far away from home. Without this monitoring capacity non-compliance brings no penalty. I know fishermen who have been secretly unfaithful to their wives/partners. Because the family group did not know about the noncompliance, no penalty was imposed.

Now we move from theory to experience. The groups under discussion are these pollock fishermen's families. The collective action they are engaged in is the joint production of immanent goods such as love, affection and inclusion. Our goal in applying this framework is to move from a description of *what* happens to a deeper understanding of *how* it happens. Thanks to the actors' words we can also get an idea of what it feels like when it happens.

Presser, who wrote about marital instability and non-standard work schedules states, "To the extent that social interaction among family members provides the 'glue' that binds them together, we would expect that the more time spouses have with one another, the more likely they are to develop a strong commitment to their marriage and feel happy with it" (Presser 2000:94). This explanation is not valid for the experiences of these fishing families. They have a lot of time together. Yet they virtually always split up. Our analytical frame provides an understanding of how this can happen in the lives of these families. We see social interaction as something deeper and more complex than glue, and understand how it can come to act even like a wedge.

V. Application of the Framework.

This final section is structured in chronological form. Six statements (A - F) tell a typical story of the breakdown of cooperation in the family. Accompanying each statement are some comments from this theoretical perspective.

A. The family's main purpose is to make immanent goods with each other (Ben-Porath 1982:61). Such goods could be affection, intimacy, and a sense of inclusion or belonging. For families with children, a *positive home environment for the growth and development of children* can be a very important immanent good that they seek to collectively produce. Perry-Jenkins defines this type of positive home environment as "a family context that provides cognitive stimulation, emotional support, and safety" (Perry-Jenkins et al. 2000:985). This is a compound immanent good the production of which involves the production of many intermediate goods, such as those suggested in the definition, and many steady production roles filled by various players.

In the United States today, most of these roles are expected to be played by the two partners rather than by extended family, neighbors, or friends. Considerable role "heaping" with minimal sharing of roles among non-nuclear family members is the norm (Becker 1991: 347-349; Coontz 1992:7; Morgan 1996: 77-78; Seward 1978:17). This is concurrent with an increase in the already high geographic mobility (Boynton and Pearce 1978:133; Rienerth 1978:170). Families do not rely on obligating wider family networks and are likely to move away from them.

Expectations of how a family should behave come from many sources including family (especially parents), community (including schools), and popular culture through various media such as movies, television, and books (Waller and McLanahan 2005:54-57; Zhou 1997:79; Pyke 2000:241 respectively). With 98% of all US households having at least one television set *The Cosby Show*, for example, was, and still is, a prominent communicator of family expectations.[3] Whether an "ideological code" (Smith 1993:63) or "cultural propaganda" (Rumbault 1997:949) these mainstream family expectations include democratic rather than authoritarian relations, equity, active involvement in the domestic sphere by both partners, and an emphasis on psychological well-being, intimacy, and emotional expressiveness (Coontz 1992:4; Teachman et al. 2000:1244; Friedan

[3] "Television is the most widely shared experience in the United States: as of 1990, the Census Bureau reported that … those in an average household watched TV over seven hours per day. The only activity American children engage in more than watching television is sleeping" (Rumbaut 1997:949).

1986; Desivilya and Gal 1996:7; Skolnick 1991:17; Pyke 2000 respectively). A father's involvement in child raising is of increasing importance (Amatea et al. 1986:831; Casper and Bianchi 2002: 124; Coltrane 1996:5; Doherty et al. 1998; Hondagneu-Sotelo and Messner 1999:346). Pleck and Pleck refer to today's ideal father as an equal coparent (Pleck and Pleck 1997: 45-47). "American fathers are increasingly likely to be nurturing family men rather than the distant providers and protectors they once were" (Coltrane 1996:5). Parsons' depiction of males playing instrumental roles and females playing expressive roles in the nuclear family looks to be a relic of an earlier stage of the industrial revolution (Parsons 1956[1955]:45-54; Skolnick 1991:11; Broughton and Walton 2006). As Morgan puts it, "*Sexual* differences may be important … while *gender* differences are assumed to decline in importance" (Morgan 1996:77).

Solheim noted a similar trend in Norway (Solheim 1988). He describes a shift in the concept of family life away from the family as a practical household enterprise towards the family as a "special and exclusive sphere of personal intimacy and emotional support – a companionship of 'togetherness'." "The quality of the relationship between spouses tends to be measured in terms of personal involvement and closeness, rather than in terms of its effectiveness as a working partnership" (Solheim 1988:142-3).

B. The family can not produce immanent goods with the fisherman once he departs. The family either seeks substitutes to fill the fisherman's production roles or it goes without certain immanent goods. (For a military example see Isay 1968:649-50; for offshore oil see Austin et al. 2002:55; Clark and Taylor 1988:134; see Forsyth and Gramling 1990:187-89 on the replacement father strategy among merchant seamen.) When the fisherman departs, a family does not decide to suspend production of immanent goods as important as affection, intimacy, and a positive home environment for the development of children. Of course, the fisherman away at sea can no longer play his various roles in the production of those goods as he could while he was at home. The family seeks substitutes to fill the roles he cannot play. In roles for which there are no close substitutes the family must go without.

Role set expected of the husband/father in the production of a positive home environment for the development of children

Roles	Likely substitutes: child = Ego
1 main childcare consultant/advisor to the mother	Grandmother, aunt, friend of the mother
2 secondary care-giver to the children	Grandmother, aunt, older sibling
3 main financial provider and planner	Grandfather, uncle
4 physical house maintenance	Grandfather, uncle, neighbor
5 physical safety of the family	Grandfather, uncle, neighbor

For simplicity's sake let us say that the father plays five roles in the production of a positive home environment: (1) main childcare consultant/advisor to the mother; (2) secondary care-giver to the children; (3) main financial provider and planner; (4) physical house maintenance; and (5) physical safety of the family. In the case of this compound immanent good there is the possibility of finding close substitutes for all of the roles which the absent fisherman cannot play. In other words, it is possible for the family to produce and consume a positive home environment in the fisherman's absence. The fisherman does not relinquish the role of main financial provider when he goes fishing. His earnings may travel home to his family even as he is far away.

In the man's absence, the secondary care-giver and main childcare consultant/advisor roles might be filled the children's grandmother, aunt, an older sibling, or a friend of the mother. The physical house maintenance role might be played by a neighbor. The role of ensuring the physical safety of the family might be taken on by the wife/mother herself, as could the financial planner role, or shared with her father or a sibling perhaps.

These fishing wives/mothers take on all of the extra roles that they can for reasons of availability, reliability, and cost. However, when these new burdens become excessive the accessibility and quality of substitutes influences whether and how long she will continue to carry these increased role burdens (Burr 1972:413; Cottrell 1942:619). The tendency is for the woman to rely upon and involve her own family to a greater extent than her in-laws. (See a military example in Hill 1949:57; offshore oil examples in Austin et al. 2002: 159; Austin and McGuire 2002:21, 34-6, 118, 130; Clark and Taylor 1988:133-35; Lewis et al. 1988b:179; fishing examples in Binkley 1995:55,2002:71-2; Tunstall 1962:161.)

In the case of some immanent goods, like the feelings of affection between child and father, locating a close substitute for either party will be very difficult. Probably children will have few if any close substitutes for the father and the father will have very few if any close substitutes for his children. This makes them very dependent on each other and means that in most cases they will just have to go without certain immanent goods in each others' absence.

Finding a substitute for the unique roles played by one's own child is very difficult but not impossible. Divorce and remarriage are common among these fishermen. Step-children are common too. I have heard fishermen speak about their biological children and step-children, even with unmarried partners, in comparable ways. This is not an exact or cheap substitute in terms of time and social investment. But these fishermen have found substitutes with whom to produce some of the unique and important immanent goods which pertain to the father-child relationship.

The man and the woman have a better chance of finding close substitutes for each other, in the production of immanent goods, than for their children. During fishing seasons, this is particularly true for the woman. The woman may not even have to look outside of her family. In research with military families Rienerth suggests that children took up some of their father's roles such as "caring" for the mother (Rienerth 1978:173). The man's relative isolation makes it difficult to find anybody to interact with, let alone close substitutes for his most unique relationships.

In the case of other roles which need to be played infrequently and predictably, substitutes may not be sought at all. Main tax advisor, a role which has one performance per year and a highly predictable occurrence, is a role generally retained by fishermen no matter how many substitutes in other areas their families have found. Once a certain level of infrequency is reached, unpredictability is most determinant in dictating whether or not a substitute for a role will be sought. A substitute for the role of "person in the house who can fix the furnace once each winter when it quits" will be sought even though the performances are infrequent, and may not even occur at all. This is because they are very unpredictable. In cases such as this where a substitute, the repairman, will

be compensated, seeking knowledge of a substitute may be equal to engaging a substitute. Knowing that there is a furnace repair shop which serves your area is sufficient. In the case of a repairman, he or she will contribute to the jointly-produced good not out of obligation but in return for compensation. Activating and de-activating this role is quick and inexpensive.

The availability, reliability, and cost of the substitutes are questions specific to each environment. I would argue that 100 or even 50 years ago, when fishing families lived in tighter occupational communities, these substitutes were readily available, reliable, and cheap (e.g. Davis 1986, Fricke 1973a:2, Sawada and Minami 1997, Tunstall 1962:93). Additionally, and importantly, periodic reliance on substitutes was built into fishing family expectations. It constituted no deviation from the community norm and no failure to meet general expectations as it does today in the era of role-heaping. The incompatibility of role expectations in the domains of family and work today leads to guilt, dissatisfaction, and increased conflict in these fishing families (cf. Netemeyer et al. 1996:400). Men expect themselves, and are expected, to be something like involved, equal, co-parents fulfilling a great amount of the family's needs. At the same time, they are expected to be absent at work for seven to eight months a year. These conflicts have consequences not only at home but in other areas of life as well, including at work (Allen et al. 2000).

Through substitutes the family can continue to provide itself with important immanent goods in the fisherman's absence. To the extent that substitutes can be found, the family's dependence on the fisherman to fill these roles is reduced.[4] To the extent that dependence is reduced so is family group solidarity. The fisherman, when he is present, becomes less able to oblige the family to include him in the production of immanent goods like love and inclusion. When his ability to get compliance through obligation is weakened, he unconsciously moves towards getting compliance through compensation (Binkley 2002:54).

[4] There are other factors, besides the availability of close substitutes, which influence dependence such as lack of information about alternatives, costs of moving (entry/exit), and strength of personal ties (Hechter 1987:46-7).

Compensating behaviors

These fishermen believe that their absence stresses the family and they feel guilty. As I have mentioned, there are no substitutes for *all* of the roles they play, especially in the case of children. There are important immanent goods which their families must simply do without. To compensate for this deprivation in the area of immanent goods they offer their families what they can. They offer their families non-immanent goods. When they are *absent*, these men offer these goods, or promises of them, to consciously compensate their families for their deprivation. When they are *present*, these men offer non-immanent goods unconsciously as compensation as they feel a weakening in their ability to oblige their family to include them in the production of immanent goods. Leaving the unintentional negative results aside, even at best they cannot achieve much that is positive through these compensating behaviors. These intended compensations are an offer of an exchange good where co-production of an immanent good is desired. They may assuage the fisherman's guilt but they do nothing to address the family's deprivation in the area of jointly produced (with him) immanent goods.

MacPhail was saying he and his partner were having a beer at the Anchor Bar and the wife of a former fellow crewman walked in. She was angry that Ryan was away for four and a half months. "She said every word but divorce. That was a few days ago. Yesterday I saw Ryan driving her new BMW home."

That new BMW is not the immanent good that Ryan's wife was missing or expecting their family to produce together. But, even though the change in schedule was not his fault, Ryan was feeling guilty about being away for four and a half months instead of the expected three and a half.

This is confirmed in some research by Young (Young et al. 1995). "Intrinsic support" corresponds to the joint production of immanent goods and "extrinsic support corresponds to non-immanent goods. Children's life satisfaction was positively correlated with fathers' intrinsic support as seen in love, trust, encouragement, and discussing problems. Fathers' extrinsic support, measured in events such as going out to dinner, buying things, and seeing movies together was not related to children's life satisfaction. "Material rewards do not appear to have an appreciable effect on adolescents' overall satisfaction with life" (Young et al.

1995: 821). Children's life satisfaction, it appears, is negatively affected by their fishermen fathers' absences and is not impacted by the most typical sorts of compensating behaviors (extrinsic support) they engage in. Following the same line of reasoning, "nonresident fathers who spend time with children in extrinsic, recreational pursuits probably contribute little to their children's adjustment and development" (Amato and Gilbreth 1999:559). This is summed up by the 8-12 year old children of offshore oil workers who said that, "presents did not compensate for parents (nearly always fathers) spending time away from home" (Mauthier et al. 2000:150).

C. The substitutes become preferred and the family depends on the man mainly for non-immanent goods such as money. The family is forced to find substitutes to fill the father's roles or to go without certain unique goods such as the emotional climate between father and child. Where close substitutes for his roles are available, the family is no longer dependent on the fisherman for the production of these goods whether he is absent *or present*. Production goes on with or without him. Moreover, these substitutes will tend to become the preferred choice for reasons of social cost and reliability.

Relative to the fisherman's periodic and unpredictable absences, the family has little problem finding substitutes which are more reliably available. Proximity, availability, and reliability are themselves important criteria in the selection of substitutes. The families of the Makushin crew all live near at least one set of parents, sometimes both, and many live near siblings. These extended families, especially generationally extended, provide a lot of support.

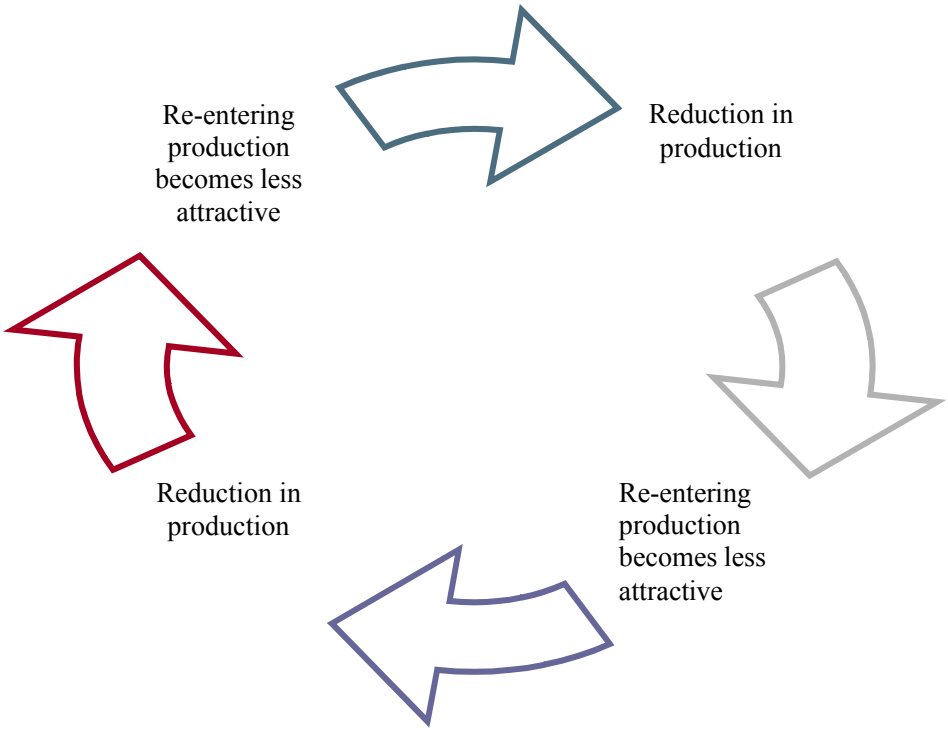
The substitutes' reliability makes them less costly as well. What we previously viewed as adapting to the fisherman when he returns and readapting to his absence when he leaves may also be described as entering into, and exiting from, the joint production of immanent goods. In the same way, seeking substitutes can be viewed as entering into production with the substitutes when the man leaves and exiting from production with them when the man returns. By remaining in production with the substitutes *even in the man's presence*, the family does not have to continually enter and exit into production with him and at the

same time exit and enter into production with their substitutes. They save on entry and exit costs twice. The savings are great.

Groups producing immanent goods, like the family, tend to have high entry and exit costs. "Since personal ties tend to arise with repeated interaction – and thus only in the course of time – they are akin to an irredeemable investment (or sunk cost) in the group" (Hechter 1987:47). (Compare with Pollak's "idiosyncratic capital" and Becker's "marital specific capital" Pollak 1985:582; Becker et al. 1977:1152.) Though personal ties are not severed in the fisherman's absence they are degraded. And the re-familiarization and re-integration necessary each time the man comes home is like an investment a large portion of which is simply lost each time he goes away.

As the family group size increases, adding children for example, these costs increase as well. Olson calls these the costs of organization which are "an increasing function of the number of individuals in the group" (Olson 1965:46-7). These high social costs provide the family an incentive to maintain their production with substitutes even when the father is present. Much of his contribution now falls somewhere between superfluous and, as Wilson's wife put it, interference.

We have stated that the outcomes of these incomplete re-integrations accumulate. This is because either there is not enough time to fully re-integrate the man into the family production group or because it is not worth fully re-integrating him based on the short time in which the benefit will actually be realized and the high costs of entry and exit. Another way of describing this accumulation of failed re-integrations is to say that the costs of re-entering into production with the man steadily rise. To the family, as the costs of leaving the substitutes and entering into production with the fisherman increases, the net benefit of remaining with the substitutes increases as well. It becomes steadily less and less attractive to re-enter into production with the fisherman. This is a form of positive feedback.



For these reasons of cost and reliability the family orients itself towards production with its substitutes and away from production with the itinerant fisherman. His repetitive long periods of absence continually create costs which the family gradually does not bear. The fisherman is gradually marginalized – a guest in his own house. Wilson said, "We just sort of slowly drifted apart. We didn't keep staying in touch."

D. The fisherman reduces his dependence on the family through membership in the work team. The fisherman has no close substitutes for the family. He does have partial substitutes. The fisherman's work group provides an alternate source for some of the immanent goods which he produces with the family when he is home. The explicit goals of the work group are the production of non-instrumental goods – the catch which is sold for money. But along the way various immanent goods are jointly produced (Pearson et al. 2003: 271). The work group is not an alternate source of every immanent collective good the family produces but it does serve as an alternate for some important ones such as trust, inclusion, affection, companionship, and even intimacy. Negative immanent goods, like mistrust and exclusion, can also be produced in the work group. These lead to increased work conflict and a lowered quality of working life both of which

are related to work family conflict and reduced life satisfaction (e.g. Duxbury and Higgins 1991:61; on the spillover theory see Evans and Bartolome 1984). Moss and Schwebel suggest that general, non-romantic intimacy is made up of five components (Moss and Schwebel 1993: 34). Four of the five are available to fishermen in the setting of the fishing crew. To the extent that fishermen find substitutes in the work group with whom they can produce (and consume) important immanent goods, they are less dependent on their family group for that same production. Family group solidarity is reduced from their side as well. Several studies suggest that the crew of a fishing boat is regarded or functions as a kind of a family (Andersen and Wadel 1972:144; Binkley 1995:90, 2002:54, 147-48; Menzies 2002:19). Unlike many fisheries (e.g. Aronoff 1967, Löfgren 1972; Nemec 1972) the crewmen on these pollock boats are seldom actual family members.

As members of a pollock fishing crew these fishermen have an alternate source for some of the immanent goods they need. This does not mean they favor this alternate over their primary source. They consistently state that they would rather be at home with their families than out at sea with the fishing crew. These statements represent many ideas including the desire to produce important immanent goods with their families. Certainly a variety of reasons account for this preference. Unlike the case of the family at home, the criterion of greater reliability does not favor their substitutes. Only during a season are their fellow crew men always available. Additionally, these are often potential substitutes that the fishermen themselves have not chosen. They may not be very close substitutes. But they are the *only* alternatives. There is nobody else around. This means that the quality of the immanent goods produced may be substantially less, even harmful, than what they would produce with their families.

For the fisherman, the crew is not a threat to replace the family whereas in the family's case, reliable substitutes for certain production roles do come to replace the fisherman. The family and work groups do not overlap in time or in place, especially as geographically spread out as the Makushin crewmen are. They do not compete perfectly with each other. So, although this alternate source of immanent goods (at work) reduces the fisherman's dependence on the family, and

thus family group solidarity, it does not provide him compelling reasons to favor the work group over the family. The family itself actually gives the fisherman a reason as it marginalizes him. As he is marginalized at home, the fisherman relies even more on the social benefits of membership in the work group (cf. Shamir and Salomon 1985:460). He comes to depend on his wife to provide child care for his children and to keep up with maintenance on the house in his absence.

He may also seek an alternate source *at home* for some of these immanent goods which he no longer produces with the family. His catching up on other areas of his life when he is home may also include reaching out to other potential substitutes to fill those lost production roles which once were played by his family. He may reach out to crewmates in ways he has not before. Maybe he looks for a club or the regulars in a bar with whom he can create and enjoy (produce and consume) a sense of belonging or the feeling of being part of a community. Or he may choose to withdraw and go without certain goods for a period of time. (Compare to air traffic control workers in Repetti 1994.)

E. The fisherman considers giving up his fishing job in order to improve the quality of his family life. This is a sign that he has not, or cannot, adapt his expectations to the periodic guest strategy. If the family has reached this point, his wife has already adapted to the demands of the occupation. While she may have started out attempting options one and two, she has probably been living option #3 for some time and adapted herself to the double burden this entails. If the fisherman adapts to a marginal and reduced role, the family can survive. If he does not adapt, and he chooses his family over his job, he considers quitting fishing. He sees that his previous two strategies have failed. His first strategy, which he considered normal family participation, combined with the stressors of this occupation, resulted in his family seeking and preferring substitutes. His second strategy, employing compensating behaviors, also failed. He did not get the joint production of immanent goods he unconsciously sought through compensation, he did not get rid of his guilt, and he further marginalized himself within the family.

As a last resort the fisherman considers quitting his job, taking a cut in pay, and working on shore. He wants to keep his family intact. He wants to help

jointly produce immanent goods such as love, trust, belonging, and a positive home environment for his children. But he is too late. The wife/mother's preference for the substitutes is too strong. Her adaptation to her new role is fixed. She does not want to go back. She has also grown more independent and competent in traditionally male areas of expertise as the result of stepping into some of his roles herself. Perhaps she is wary of his intrusion and of a possible loss of independence. A combination of factors is at work. The result is that his offer to quit fishing is not welcomed as good news but is rather seen as a threat. At this point, his role set in the family has shrunk to little more than main financial provider. This family differs from other single-parent families "only by virtue of the income from the male's job, and by the necessity to entertain an extended guest periodically" (Gramling and Forsyth 1987:170; cf. Clark and Taylor 1988:132). His worth to the family is mainly instrumental. If the woman works outside the home, as is the case in the six families on the Makushin, she may not be very dependent financially anyway. By quitting fishing he threatens the only thing they even partially rely on him for anymore.

In exchange for this reduced economic contribution when he stops fishing the family is offered more of his presence which the wife/mother no longer expects or needs. "You can't stop fishing! I don't want to go live in a trailer somewhere!" was reportedly the wife's reaction when one of the Makushin crewmen told her he wanted to quit.

These families fall into a financial trap. After a period of time in this job, and its higher-than-an-equivalent-land-job-income, they get accustomed to a certain lifestyle and the income level which sustains it. (Compare to merchant seamen in Thomas 2003:28-30 and offshore oil workers in Austin and McGuire 2002:18-19.) Or the family and the accompanying financial needs grow for a time before the full effects of the occupation are felt. At this point, the other job options on land will not sustain the household financially. Canadian miners call this the "golden handcuffs." In Australia it is known as the "driller's disease" (Shrimpton and Storey 2001:12).

To his children the fisherman's worth will not be purely instrumental. But the wife/mother is determinant here. She is the one who feels threatened. She

does not risk losing contact with her children by divorcing the fisherman. It is accepted that they will continue to live with her at least all of the time that he is working at sea. For her, divorce involves relatively minor adaptations. She has already been living the equivalent of a single parent life every time he goes away. It is a different story for the fisherman. He stands to lose a lot in a divorce both financially and in terms of contact with his children. I know fishermen who have stayed in an unsatisfying marriage simply out of a desire to not lose further contact with their children. The potential losses associated with divorce are much greater for them than for their wives.

In the end it is often the wife who makes the final decision to split. The exception is if she is sexually unfaithful and he finds out. She is the partner who bears the greatest burden of this occupation (Binkley 2002; Rienerth 1978:170-172). She is the one who must carry and then relinquish various husband/father roles in the family. She must do what Lewis calls the "double adjustment" (Lewis et al. 1988b:185-88). The fault is not hers alone, but the final decision to act often is. The man's "threat" to quit fishing is the final step in the split of the family. And then he, realizing that quitting fishing has brought him no gains but rather losses, looks for another fishing job. As noted in category five on page 52, the cycle may begin again.

F. The family splits. Ryan told his first wife that he would give up fishing to help their relationship. He says that she did not believe him at first. When he told her that he had found a job on shore she realized he was serious and told him the relationship was over.

Fred, deck hand on another trawler said, "Lots of fishermen have women who are constantly telling them 'quit fishing, quit fishing'. When they finally give up fishing, that's when the divorce comes. After years of bugging them to be home, when they are home they [the wives] find out that they can't live with them [the fishermen]."

To compensate for his absence Cody offered his family instrumental goods like money and cars. Toward the end of their marriage, his wife relied on him primarily for money. When he put a restriction on the money, she filed for divorce.

Bering Sea pollock fishing has negative consequences for the family. The demands of the job compete with the demands of the family. Under the influence of a combination of factors, cooperation in the production of immanent goods, the main task of the family, breaks down. The repeated long absences of the fisherman force the family to seek substitutes to fill his roles. The family's dependence on the fisherman is reduced as they find adequate substitutes. Family group solidarity declines. The man stops being a full member of the family production team and instead becomes a periodic guest. Out of guilt, and in response to his marginalization and the decline in family group solidarity, the fisherman offers non-immanent goods. The family accepts the goods but rejects the exchange. The fisherman reduces his dependence on the family through benefits he enjoys as a member of the work team. Family and fisherman become largely independent of each other in all ways except financially. When the fisherman cannot accept his marginalization and adjust his family expectations, but still values his family over his work, he considers quitting fishing. This triggers the split of the family.

The family was formed primarily to jointly produce immanent goods, such as affection, intimacy, inclusion, and a sense of belonging. Occupational demands negatively influence this cooperation. Once this foundation is degraded, the family loses its primary reason for remaining together. The only cooperation which remains is in the pursuit of instrumental goals such as paying off a home mortgage or saving enough money to help the children with the costs of education. Once the affective co-production of immanent goods has disappeared, the family is similar to a small, socially impoverished work team solely in pursuit of instrumental goals. The family team still comes under attack from occupational stressors even at this less ambitious level of cooperation.

A common goal, interdependency of task, and proximity are the three requirements of team formation (page 126). For this socially impoverished, instrumentally oriented, family, fishing's long absences from home make proximity and interdependency of task impossible. As a result, only one of the three essential pillars of team formation, common goals, remains. Sharing common instrumental goals is the only characteristic of a team which the family, in

this state, retains. This is not sufficient for team functioning (Katzenbach and Smith 2003[1993]). This is not enough to hold these teams together. Once the co-production of immanent goods has disappeared, these fishing families split apart.

VI. Conclusion

A. Summary

Bering sea pollock fishing has advantages and disadvantages for all families. For families with children, the most important consequences are negative when compared to the likely alternative occupations. For those living in Anacortes these include building construction work, shipyard construction, long-shoring, working in the local refinery, and working for the state ferry system. Some characteristics of the occupation, like long absences from home, schedule uncertainty, wage uncertainty, and competing rhythms are experienced as stressors. The length of his absences from home is the most significant family stressor. These absences make it necessary and difficult for the family to regularly adapt to his absences and presences. The competing needs and rhythms of work and family, and schedule uncertainty, increase the difficulty of making full adaptations. American husband/fathers possess an important role set in their families. These Bering Sea pollock fishermen's families are either weakened by the fisherman's absence or burdened by his presence. Families with children are too dynamic and too complex to be able to flip back and forth between various patterns of interaction. They evolve one main pattern of interaction which is designed for his absence. Because of this, they must decide between various options for re-integrating him each time he returns. The family may experiment with various options, but in the end, they will settle on the stable strategy of treating the fisherman as a periodic guest. They adapt their family expectations to fit the occupation by marginalizing the fisherman. In addition to difficult transitions, occupational stressors work together, and in combination with other non-fishing related factors, to produce negative effects such as guilt, compensating behaviors, and infidelity.

When viewed from a collective action perspective, we can see how these stressors and their effects contribute to the breakdown of cooperation within the

family. These families are formed primarily to co-produce immanent goods such as affection, intimacy, and a positive home environment for the growth and development of children. They rely on the two partners to play a large number of roles in the production of various immanent goods. The family cannot produce these goods with the absent fisherman so they seek substitutes. As substitutes are found, dependence on the fisherman and family group solidarity are reduced. As the costs of entering into, and exiting from, co-production of immanent goods with the fisherman continue to rise, the family comes to prefer its substitutes even when the fisherman is present. Guilt, frustration, and the decline in the joint production of immanent goods lead these fishermen to try to compensate their families. These behaviors fail their intentional and unintentional purposes. They do not reduce the family's deprivation in the realm of immanent goods. They do not reduce the fisherman's feelings of guilt. They do not induce the family to produce immanent goods with the fisherman through compensation. Instead, they have the unintended result of further marginalizing the fisherman within the family. The family's survival now hinges on the fisherman's ability to accept this marginalization and adapt to a reduced role in the family. He compensates himself in part through the benefits of membership in the work team. Ultimately, if he cannot adapt his expectations, and chooses his family above his work, he will consider quitting fishing. He will see this as the best strategy for improving the quality of his family life. His wife sees this as a threat. They have become virtually independent of each other except in certain instrumental areas like money. By considering quitting fishing, the fisherman threatens one of the few, possibly the only, remaining things for which his family depends on him. He offers them something in exchange, more of his presence, which they no longer need or expect. The family splits.

B. Responses: Strategies

These families do not passively accept the influence of this occupation on their lives. They have strategies for pursuing a better quality of family life. One could look at separation and divorce as strategies employed by individuals to improve their quality of life. The most radical family strategy is for the fisherman to quit his job. This often occurs in the later stages of family deterioration, as we

have seen. In this case it serves as the catalyst to the family's final separation. When it occurs earlier, and does not cause the family to split, it relieves the family of the stressors of this special occupation.

Families also pursue less radical strategies to improving their quality of family life. When the fisherman is absent for birthdays, they are celebrated at a time when he is around. This strategy is also used by Atlantic Canadian fishing families (Binkley 2002:13). The same is true even of holidays such as Christmas. Fishermen commonly fly their wives up to Dutch Harbor for a few days in the middle of a long summer season. The idea is to have 24 hours or so together while the boat is in town. Other crewmen take on the shore side responsibilities of the fisherman who is being visited. I have heard of wives being brought on board for a fishing trip. This allows for more time together. However, the fisherman cannot fully concentrate on his wife, as he is expected to carry out his work responsibilities during the fishing trip. I also know of men who fly up a child during an extended period of time on shore. It is common for large mechanical projects to be undertaken at the end of a season. I know of men who fly their sons up so that they can be together during this project.

The most costly and important strategy employed on the Makushin was to spend less time at sea. This boat had several strategies for job sharing. The two skippers and two engineers each worked 50% of a season. Deck hands rotated their work so that they worked 66% of the time. Along with the reduction in work goes an equal reduction in earnings. These fishermen and their families had decided to trade money for increased time together. Several other boats engaged in this same practice but most boats do not. As the summer seasons have grown longer in the last few years, now up to five months, some of these boats have chosen to start fishing even earlier so that they can take a two week break in the middle of the season. Job sharing is a significant response in that it substantially increases the amount of time spent at home. Taking a two week break in the middle of a five month season, however, does more for the fisherman's mental health and the quality of his working life than it does for the quality of his family life.

C. Changing Technology

There is the possibility that changes in technology will have an effect on the quality of family life. Cell phones have recently become reliable in Dutch Harbor and satellite phones have come onto the boats in the last several years. Most, but not all, of the potential benefit of cell phones is lost because their range is limited to near town. They are an improvement over waiting in line for a pay phone. They allow families to initiate contact by calling their men rather than always putting that burden on the men. The last hour of a fishing trip is different today than it was five years ago. Now, everyone on board wakes up as soon as the boat is within cell phone range. The 30 minutes or so before the boat reaches the dock are used to inform friends and families that they are back safely and again reachable by telephone. Patterns of family interaction could change significantly if the range of these phones extended to the fishing grounds. That does not seem likely due to the size of the market involved. With the satellite phone the boat can communicate from almost anywhere. The problem so far is the cost. It is too expensive to be regularly used. Short calls home for a child's birthday do not substantially raise the quality of family or working life. There is a potential disadvantage to the satellite phone. The buffer between work and home is lost. Many things are part of the return trip from the fishing grounds to the dock. There is the expectation of communication with home and a period of transition from the intensity of work interactions towards a different kind of interaction with the family. The satellite phone allows the fisherman to go from work to home in just a few seconds. The psychological transition cannot be made so quickly. The voice and demeanor of the fisherman, transmitted through the satellite phone, can be disturbing to the family not used to this version of their husband/father. Shamir and Salomon are referring to a similar phenomenon when they describe the journey to work as buffering the family from work-related stress (Shamir and Salomon 1985:457).

Work

I. Introduction

A pollock trawler returning to Dutch Harbor passes in front of the Makushin volcano.

The quality of working life and the quality of family life are strongly influenced by a Bering Sea fisherman's choice of occupation. In the preceding section we have examined the influence of this occupation on the quality of family life. It is now time to look at the effects of the work setting on the quality of working life. The ways in which the family's reactions to fishing affect the work setting will be discussed along with strategies of the work team for pursuing a better quality of working life.

High wages and the social benefits of teamwork are the two most critical contributors to the quality of working life in this setting. I will say only a little bit about earnings and focus mainly on social interaction on board the Makushin. Cooperation is the most important theme. Both working and living on board are

dominated by collective activities. The head (bathroom, loo) is virtually the only physical space in which a crewman can expect to be alone. Teamwork is the most common form of cooperation in this work setting and is a background for the various forms of competition. Membership in the work team, with the benefits it can bring, is the most important part of the work experience on the Makushin.

Cooperation is essential to fishing success and is strongly reinforced. While various sorts of social and relational competitions can be ignored or tolerated, there must be a minimal level of cooperation regarding task. Teamwork may exceed the minimal level of task cooperation. There are physical, social, and cultural elements of the work context which facilitate this. A special social investment, which takes place in the process of socializing a new hire and through the telling of deck work stories, is also required. These can work together to build exceptional cooperation whose intrinsic benefits far exceed even its instrumental ones. The story here is the building of exceptional cooperation and its importance, instrumentally and intrinsically, in the working lives of these fishermen.

This section on work begins with a definition of team and ends with an assessment of the quality of working life. After a short introduction to the work team, part two looks at how teams can be defined and teamwork measured. The different environments in which this work occurs are then described. These are divided into physical, social, and cultural contexts or frames. Part three looks at the socialization of a new teammate. The new hire is familiar with the culture of the occupation generally as a result of having prior fishing experience. As he joins the crew of the Makushin he is socialized into a particular organizational culture. The aim of this socialization is to shape the new hire into a cooperating member of the team as soon as possible. Within the practices of this socialization, status competition between older crewmen takes place and is modeled for the new hire. Socialization and training are addressed in part three. Part four is about the practice of telling deck stories and what that achieves for the deck hands individually and collectively, intrinsically and instrumentally. Important attribution work takes place in this practice. The ability to work safely in this environment gets attributed in large part to an individual's control (i.e. not breaking certain rules) and to the team which looks out for each other rather than to

luck or fate. Successes and positive feelings are attributed to teamwork. This further encourages the development of trust and agreement and dampens competition. Membership in the team ends when the worker leaves the boat. This event is described alongside an assessment of the quality of working life in part five.

Actors

There are three broad areas of expertise which are required of the deck hands on a pollock trawler.[5] These are maintaining and repairing the net, maintaining and repairing the boat's mechanical systems (engineering), and relieving the skipper at night. In other words, every boat needs a web man,[6] an engineer, and a night guy. Cooking must be done as well. (Given the quality of some of the food I have eaten on fishing boats I hesitate to use the term expertise.) Although cooking is often done by each man from time to time, one man generally is responsible. In the same way, relieving the skipper at night is often a shared responsibility.

Besides the skipper, there are three men who work on the Makushin. All are paid a share of what the boat earns. The engineer earns slightly more than the other deck hands and the skipper is paid roughly twice what the others earn. The share system binds the individual worker's financial success to that of the group and promotes cooperative behavior. It has a long history in fishing and "is the most ubiquitous means of compensating fishers around the world and is equally common in simple and modern societies" (McGoodwin 1990:33). Like other performance related incentives the share system plays an important motivational role. In a very real sense, even under the quota system, the harder and better you work the more you will earn. It is no longer a race to catch as much fish as quickly

[5] I am referring to catcher boats and not to factory trawlers. Factory trawlers both catch and process their catch. They go to sea for weeks at a time and employ dozens of workers with a wide variety of responsibilities. Deck crew work 12 hour shifts and in between times have access to satellite telephone, email, and various entertainment options. This is a fascinating social environment but one that is significantly different from the catcher boats on which I have worked and researched.

[6] Fish netting is referred to as web. A web man's primary responsibility is repairing and maintaining the fishing nets.

as possible. The challenge today is to catch the quota as efficiently and inexpensively as possible.

The earnings from Bering Sea pollock trawling have been *relatively* predictable in the last few years compared to other fisheries in the Bering Sea such as king crab, tanner crab, and Bristol Bay salmon (Appendix 1). This is especially true since the quota system took effect in 2000. Revenue sharing was included in contracts for the first time. Processors paid a share of roe revenues in addition to a base price for fish rather than simply one flat rate for everything. Steady and high wages have made this a desirable fishery to work in. A deck hand fishing in Alaska is hard pressed to do better than a pollock catcher boat.

The Makushin is not an entry level fishing job. Nobody is hired to work on the Makushin who has not previously worked on a pollock trawler. These jobs are not used to work one's way up the ladder. These are, in many ways, the top of the Alaskan fishing ladder. Although the work is at times strenuous, stressful, and dangerous these are jobs that men stay in for a long time. I know men in their forties and a few in their early fifties who still work on deck. But it is not a job that most can work in until retirement age. What keeps these men in the job is the money. It is certainly not the status. From Seattle to Dutch Harbor commercial fishing is a low status occupation. The romantic light in which fishing is sometimes portrayed may make these men heroes in Iowa or Kansas. But in Seattle they are all bums. (See McGoodwin 1990:26 who suggests that low status for fishermen in the eyes of their neighbors is a near universal phenomenon.)

Three of the fishermen on the Makushin come from fishing families. They got into fishing of one sort or another at a very young age. Their first experiences on fishing boats were simply accompanying their father at work. This was a period of occupational socialization and skill acquisition even though they were not working fishermen. They entered the industry as working fishermen in a similar way to men who did not come from fishing backgrounds. They entered through salmon fishing. (See table below.)

Salmon fishing is an obvious point of entry for several reasons. First, it is relatively safe. Salmon are fished in the summer and close to shore. The weather is generally good and shelter is within easy reach if surprised by a storm.

Secondly, there are opportunities. Salmon fishing does not pay a deck hand enough to sustain a single person for a whole year. One cannot be a full-time professional fisherman and only fish for salmon. Either one decides to be a full-time fisherman and looks for work in other fisheries, or one decides against fishing and looks for work in other industries. Either decision often leads to conflicts with the schedule of salmon fishing. This makes it a high turnover fishery. There is almost always one "green" fisherman on a salmon seiner each year. About the only work schedule that is compatible with summer salmon fishing is the school schedule. The summer break in the United States is roughly three months long. I know many school teachers, for example, who supplement their teaching income by fishing in the summer. Scheduling is the third reason why salmon fishing is so often a point of entry into the industry. It can be done by students as well as teachers. All of the crewmen of the Makushin, except for one, had begun their fishing career before they finished high school. They went to school for nine months of the year and fished during the summer. And when they graduated or dropped out of school, they were already partly established in the industry with some skills, experience, and contacts. Compared to further schooling or work as a manual laborer, fishing was an attractive option. (Compare fishing wages with earnings from other employment in Anacortes Chamber of Commerce 2007:9.)

After entering the industry through salmon fishing these fishermen decided to pursue deck work in other fisheries rather than remaining in salmon fishing and advancing towards a job as skipper and boat ownership. This is a career path that existed and still exists today. I am surprised that none of these men pursued that. However, in the mid-1990s there was a significant, although temporary, downturn in the most important salmon drift fishery in Alaska, the Bristol Bay fishery. And the prices for pink salmon, which make up the bulk of the purse seine catch, have fallen in the last 15 years and remain very low. Difficult conditions in the two most important Alaskan salmon fisheries have probably discouraged these men, earlier in their careers, from trying to advance within salmon fisheries. So, they tried to advance through deck hand positions in more lucrative, more demanding, and, especially in the case of crabbing, more dangerous fisheries.

The longevity of pollock trawler crews is partly explained by its position as an end point in Alaskan fishing rather than a step in building a career. (On the Makushin, the unusually high quality of the social benefits of team membership and the stability of ownership also contributed to crewmen remaining on the boat for unusually long tenures. (See pages 136, 219-223.) As these various crewmen worked at long-lining and crabbing during the 1990s, they would learn that there were steadier and comparable wages to be earned pollock fishing with less physical danger. When they were hired as deck hands on the Makushin, they had reached the top. No more moving was required. The only way to advance was within the fishery. (See pages 218-219 for a fuller discussion of advancement on the Makushin.)

The following table reveals that only one of the five crewmen described there succeeded in reaching the wheel house. The others left the boat or industry before being hired as skipper. Those who left the industry did not leave the sea completely behind. Their post-Makushin jobs (e.g. long-shoreman, ferry-boat deck hand, marine engineer) retain some connection to the water.

Career trajectories of the Makushin deck crew

Pre Makushin	A	B	C	D	E
	Salmon seining	Salmon tendering	Salmon seining	Salmon drifting	Salmon drifting
	Salmon drifting	Long-lining	Joint-venture pollock deck hand	Crab fishing	Crab fishing
	Net Building	Factory Trawler deck hand	Joint-venture pollock skipper	Factory Trawler deck hand	Salmon seining
	Bottom trawling				Joint-venture pollock deck hand
	Mid-water combo deckhand/cook				
Makushin deck hand	11 years	2 years	10 years	9 years	5 years
Post Makushin					
	Makushin engineer	Quit the Makushin	Makushin engineer	Quit the industry	Quit the industry
	Quit the industry	Pollock catcher-boat deck hand	Makushin skipper	Long-shoreman	Ferry boat deck hand
	Marine Engineer				

A day's work for these men varies enough that it makes more sense to describe some of the tasks they do in a normal trip rather than in a normal day. A trip starts and ends with the delivery of fish. It takes the processing plant roughly 12 hours to unload the catch of the Makushin. During this time groceries are bought and brought on board, fresh water is replenished, repairs are made to the nets or mechanical equipment on the boat, and the guys might run to the bar for a couple of beers. The run out to the fishing grounds is a rest period for the crew. The skipper had his rest period on the way in and at the dock. Other than the

regular chores associated with living, there is little work to be done. When the skipper decides to start fishing the hands put on their boots and slickers and head out on deck. It takes 20 minutes to set the ½ mile long net. The tow can take anywhere from 20 minutes to 20 hours. When the skipper decides to retrieve the net (haul back) the hands go back outside and make the boat ready to receive fish. It takes roughly two hours on the Makushin to haul back the net, spill the fish into the holds (dump the bag), and re-set the net again. Three times a full net of 120 metric tons and the Makushin is full and ready to head for town. Repairs to the net are made on the way to town if the weather permits. The engineer is responsible for delivering the fish at a temperature just above freezing. All hands take turns on wheel watch so that the skipper can rest on the trip in. (See Warner 1983:67-73 for a more dramatic description of a haul back on a factory stern trawler.)

II. Teamwork: definition, measurement, and contexts

The deck is the most important work setting for crewmen on the Makushin. Their performance on deck determines whether or not they keep their job, how secure that job is, and how much they earn. A fisherman's performance on deck goes a long way towards determining how he will be treated in living contexts. Social interaction on deck affects all the other interaction that takes place on board. This is the starting point for examining the quality of working life.

This is an exceptionally good team composed of members exceptionally unsuited to the role of being good teammates. In short, they are low on social competence, they dislike their jobs, and they are usually fatigued, sleep-deprived, and/or burned out and have serious problems at home. This is a team composed of men who are not especially good at getting along working together at a job they do not want to do in a place they do not want to be. In a purely task-oriented sense they are almost always a very good team and for some periods of time they are an excellent, "high performance" team. (See Katzenbach and Smith 2003:65-81 on the rarity of high performance teams.) The reason for this special cooperation lies not in the actors themselves but rather in their work environment. Not every element of the environment is an aid to cooperation. Aspects of the environment which are relevant to cooperation include physical spaces and task characteristics,

social hierarchy and communication, and national, occupational, and organizational levels of culture. Not only do these fishermen perform and coordinate their tasks well but their joint activity has by-products such as trust and camaraderie which are almost as important to the deck hands as the money they earn. "When you're stuck out here grinding away in the winter it basically comes down to the guys you're with," said MacPhail. These intrinsically valuable goods are an important aspect of job satisfaction for these fishermen. This is what they say they will miss more than anything when they quit. Characteristics of the *individual* team members are important in discussing specific examples of teamwork but are outside the scope of this discussion.

A. Use of literature

According to the Oxford dictionary of English second edition the word "team" means "two or more people working together." Its origin is the Old English reference to a "team of draught animals." Its application to the crewmen of the Makushin is appropriate as they often refer to themselves and other deckhands as "deck donkeys." "A group of players forming one side in a competitive game or sport" is the first meaning given (Soanes and Stevenson 2003:1809). I hope that comparisons between this work team and a sports team will be elaborated in a future essay on the skipper. Neither one of these dictionary definitions is detailed enough to be helpful analytically.

Within anthropology generally our starting point is the anthropology of work. Historically, the anthropology of work has had three main foci (Schwartzman 1993:27-46). There has been the broad perspective which looks at the influence of big institutions and organizations on society (Nash 1979; Burawoy 1979; Wallman 1979). There has been what is called "industrial ethnology." This has looked at organizational culture through occupations such cocktail waitresses, hogheads (train engineers), and police (Gamst 1980; Roy 1952, 1953, 1954; Spradley and Mann 1975; Van Maanen 1973, 1979; Young 1991). And finally, the anthropology of work has studied the organizing processes out of which a sense of organization unfolds and is enacted (McDermott and Roth 1978; Schwartzman 1984). This research makes a contribution within the last two traditions. It offers an industrial ethnography of an occupation heavily dependent on social interaction

and influenced by culture. And it goes deeply into the practices and processes of building cooperation and teamwork. Anthropology's traditional focus has been on the culture of whole societies and it has developed a body of theory with which to analyze cultural forms. This is an important part of making sense of small group interaction. Anthropology's theoretical tools are less developed where its interest has tended not to be, such as in the analysis of small group interaction. In this case, anthropology needs to borrow more highly developed analytical tools of small group analysis from other disciplines.

Among the social sciences it has been social psychology that has shown the most interest in the actual dynamics of various small groups. Business management literature has applied tools from psychology, social psychology, and sociology to a specific case of the small group which is the work team (e.g. Katzenbach and Smith 2003). While management literature is of some use to this discussion, it is limited in at least three ways. First, discussion is primarily targeted to teams involved with cognitive tasks. On the Makushin there is a very important physical component to the work. Secondly, there is not very much that is true of all work teams that really helps us to understand a specific example (e.g. the taxonomies of Devine 2002; Sundstrom et al. 1990). Thirdly, there is the general assumption that one group of teammates is engaged in one dominant kind of task and that different work groups often form to pursue different kinds of tasks. On a Bering Sea trawler however, the same group of teammates engage in a variety of tasks. Task varies while team membership is stable. This task switching in work groups is not a part of the general literature on teams.

There have been some collaborative efforts within the social and behavioral sciences which have looked specifically at work teams in very special high risk environments including surgical teams, airline flight crews, air traffic control teams, and control teams in nuclear power plants (e.g. Baker et al. 2005; Dietrich 2003; Dietrich and Childress 2004; Dietrich and Jochum 2004; Foushee 1984; LaPorte and Consolini 1991; Orasanu 1993; Sexton 2004; Weick and Roberts 1993). A Bering Sea pollock trawler is also a high risk environment and this literature is suggestive in many ways.

B. Defining and measuring a team

What is a team and what does it mean to function well as a team? There are practically as many definitions of a team as there are definitions of culture. Brannick and Prince define a team as "two or more people with different tasks who work together adaptively to achieve specified and shared goals. The central feature of teamwork is coordination" (Brannick and Prince 1997:4). Katzenbach and Smith state that a team is required in task situations which demand collective work products, shifting leadership, and mutual accountability (Katzenbach and Smith 2003:xxiv). Devine defines a team as "a collection of individuals who share a common goal, whose actions and outcomes are interdependent, who are perceived by themselves and others as a social entity, and who are embedded in an organizational context" (Devine 2002:291). Two important themes are explicit in these three definitions and a third is implicit. They are **common goal, interdependent tasks,** and **proximity**. These are central to the definition of a team. When they are not present in a work environment a team will not, and need not, form. They are in a sense both a definition and a demand. In task environments where a team is not required, other simpler types of work groups such as an "effective group" or a "single-leader unit" may be more appropriate (Katzenbach and Smith 2003:xx).

Stating that a team functions well implies a method of measuring performance. In the past, outputs such as tons of coal extracted or sales revenues have been used to compare the performance of teams. This is a crude measuring device. Many factors both internal and external are reflected in outputs.

Systems theory has been used to provide a more ecological description of teamwork. Analysis is structured by inputs, processes, and outputs. Team inputs include member attitudes, task characteristics, and other characteristics of the environment. Processes include the interactions and coordination necessary to achieve team goals. Team outputs are the intended and unintended results of the activity. They include performance measured in quantity and quality, team longevity, and "members' affective reactions" (Hackman 1990 in Mathieu et al. 2000:273). According to this perspective, teamwork encompasses the processes of interaction and coordination necessary to reach team goals (Baker et al. 2005: 3).

Team processes have been categorized in a variety of ways. These attempts have highlighted important themes such as cooperation, communication, coordination, team building, adaptability, shared situational awareness, performance monitoring, and feedback. (See Brannick and Prince 1997:10 for a review.) Dickinson and McIntyre have provided a framework for teamwork measurement which identifies seven core components of teamwork process. They are communication, team orientation, leadership, monitoring, feedback, backup behavior, and coordination (Dickinson and McIntyre 1997:19-26).

- Communication includes verification and understanding and is important in linking the other components of communication, such as monitoring others' performance and providing feedback.
- Team orientation refers to acceptance of team norms, group solidarity, and self-awareness as a teammate.
- Leadership is behavior, rather than traits or styles. (See Robinson 2002 for an overview.) These behaviors include direction, structure, and support of other team members. Team leadership can be shown by several members not just those in formal leadership positions.
- Monitoring is observing and being aware of the activities of other teammates. It implies an understanding not just of one's own task but also of the tasks of others. Monitoring provides the basis for feedback and backup.
- Teams learn and adapt through feedback. (See Weick 1987 for story-telling as a substitute for this type of learning.) Feedback is seeking, receiving, and providing information about teammates' performance. It can be crucial for coordination. (See Grote et al. 2004:113; March and Simon 1958:160; for other coordinating processes.)
- Backup behavior means helping other teammates to perform their tasks whether by correcting their errors or helping them to perform a task which they cannot perform or cannot perform alone. This is dependent on a level of task interchangeability among teammates and a shared mental model.
- Coordination is the final component of teamwork. Coordinating behaviors can be both implicit and explicit (Sexton et al. 2004:171).

Coordination is also indexical. When teammates are doing their individual tasks in a way that facilitates each other, anticipating and sharing performance-relevant information in an efficient way, it signals that these other components such as communication, monitoring, feedback, backup, leadership, and team orientation are adequately present. Coordination is felt by the teammates. Knowing how to coordinate one's actions within the team goes beyond a knowledge of rules and procedures. It is like having "a feel for the game." A deckhand does not walk off the deck after dumping a bag thinking that he should have done a better job monitoring or giving feedback. It either felt like the team worked well together or it did not. To the extent that trust exists, teammates feel confident that it will happen again. Coordination just feels good whether on a basketball court or the Bering Sea.

Trust and accountability must be present if cooperation is to endure. Teammates must know that the basis for past cooperation exists in the present as well. And the team must be able to enforce its own rules. As was mentioned on page 96 above, this requires the capacity to monitor and punish or reward members' behavior.

This discussion suggests that coordination is a secondary task. There is always a dual load when working in a team. There is the technical task and there is the social task of coordinating with others (Sträter 2003:177). To the participant these can almost blend into one. Information which is new yet "congruent with the task at hand" is incorporated immediately and without problem. *Alter's* answer to *Ego's* task relevant question is perceived as integral to *Ego's* task rather than additional to it (Hohlfeld et al. 2004:233). However, not all information, evidence of an unexpected problem, for example, is congruent with the task at hand. The technical and social tasks of working in a team can compete for cognitive capacity. In sum, measuring teamwork must include what happens in both the technical and social realms.

C. Work frames

1. A specific task

In the course of a fishing trip the crew of the Makushin are faced with a variety of tasks. An entire trip may take place without anything special happening. Every task falls within the normal routine range. There may also be trips with more intense work experiences when the task load increases from routine into what LaPorte and Consolini call the peak range (LaPorte and Consolini 1991:32-34). And there is the constant possibility of an emergency. The most common emergencies are fire, flooding, and man-over-board. These peak and emergency task situations fill the stories told by fishermen and non-fishermen alike. The possibility of life threatening situations forms a constant background to the activities of the crew especially during very bad weather. Deck hands eat meals quickly and nap whenever they can. All of these fishermen have had to dash out of the shower or hop off of the toilet to respond to an emergency. That being said, work on the Makushin is mostly routine.

Examples of routine tasks requiring teamwork are shooting and retrieving the net, loading the fish tanks, setting and landing the doors, splicing the third wire, and repairing the net. Peak task situations include crossed doors, an overfull and sinking bag, haul back in big sea and/or icing conditions, and engine, electrical, and hydraulic failures. Emergencies can include fires, flooding, severe stability problems, and man-overboard.

Pulling the fish on deck

Spilling the fish out of the cod end and into a fish hold.

These deckhands share the goal of catching their quota of fish as quickly and efficiently as possible while avoiding injury. That implies finding fish, filling the boat, and returning to deliver as rapidly as possible. This sequence implies a

host of sub- and sub-sub- tasks all the way down to the level of "make sure that there is enough fresh water on board."

For this discussion we will focus on the three part task of recovering the net, spilling the fish into the fish holds, and re-setting the net. These are called hauling back, dumping the bag, and setting or shooting the net. The goal on every trawler is to do this as quickly as possible while maintaining an acceptable level of safety. Because the layout of the Makushin, a converted crabber, makes this process relatively slow anything less than two hours to haul, dump a full bag, and set back is acceptable. Anything faster than that is a bonus. This is the specific time element which is implied by "as quickly as possible."

The sequence in which the following frames are discussed does not imply an ordering. No frame is "closer" to the deck hand than another. The physical, social, and cultural frames all act simultaneously and intimately. Common goal, interdependency of task, and proximity, are important parts of the work context. They will be discussed under physical frame as they are implied more or less directly by the technical demands of the task.

2. Task frames

a. Common goals

Several characteristics of the common goals on the Makushin are influential in aiding cooperation. First, the goals are clear and specific. The clearer the goal the more it aids teamwork. A clear and specific goal can be agreed on and committed to in a way that a vague goal cannot. This commitment is an important part of motivation. Additionally, when goals are clear, it is easier to see how individual sub-goals and sub-tasks add up to a greater common goal. This is also important for maintaining motivation when the greater common goal of filling the boat with fish is being worked on indirectly.

On the Makushin the goals are also tangible, easily measurable, and outcome based rather than input based. These fishermen do not work for forty hours a week and see how much they can get done. They work until the goal is accomplished whether it takes 90 minutes or nine hours. From the highest order goals to the lowest intermediate goals the tendency on a pollock trawler is towards outcome-based goals. Even the lowest-order goals such as leave the dock with the

right amount of fresh water (enough for the trip but not too much so that it negatively affects stability) are outcome based.

The many tasks are generally of short duration. Very few extend beyond the length of a trip. There are plenty of points where the crew can stop, or evaluate without stopping, that a goal has been achieved, feel good about it, and attribute that success to someone or something. It is relatively quick and easy to tell whether or not a goal has been reached. The degree to which knowledge of results is available to workers is known in the literature on work motivation as feedback (Hackman and Oldham 1976:258). The feeling of common achievement is both intrinsically valuable to the team members and instrumentally valuable to the team. Common achievement, when attributed to the team, builds trust, cohesion, and motivation, and "positive shared mental models" (Kraiger and Wenzel 1997:77). "When people do real work together toward a common objective, trust and commitment follow" (Katzenbach and Smith 2003:60-1).

The organization of rewards is an important component of any work environment (Kraiger and Wenzel 1997:74; Sundstrom et al. 1990:124). That is clearly true of the Makushin where rewards are based on group performance rather than individual performance. The share system binds the individual's financial success to that of the group. One's attitudes towards the team may vary but one's wages always depend on how well the team performs.

For deck hands working on the Makushin, aspects of common goals are an important aid to cooperation. It is relatively easy to see and agree upon what needs to be done. Task completion and success are easily measured. Rewards are given out based on collective performance.

There are exceptions to this rule. Collective work on the Makushin often involves the simultaneous pursuit of various common goals. For example, the goal of hauling back the net and dumping the fish as quickly as possible is pursued simultaneously with the goals of avoiding accidents to individuals, damage to equipment and the net, and maintaining the stability of the boat. When these goals compete, trade-offs must be made, such as when a section of the net is cut open in order to spill fish into the holds more quickly. This is done in the awareness that time is required to sew it back up before the net can be fished again. Weighing

competing goals against each other is not routine work. It is often unique problem solving which relies on judgment and experience. It is common for deck hands to disagree on which trade-offs should be made. When the importance of the competing goals is great, the disagreement can be quite intense. In these cases, the disagreement is settled according to the hierarchy within the team or, in very important situations, the skipper is consulted.

b. Proximity

Close physical **proximity** is a dominant characteristic of the work and living environment on a Bering Sea pollock trawler. Deck hands work, eat, and play together. Work and recreation take place in the same physical spaces. They spend all of their sleeping hours within fifteen feet of each other and many of their working hours even closer. The crewmen describe it as "living on top of each other." The boat is, in Goffman's terms, a total institution (Goffman 1968[1961]). (page 156) While aspects of both isolation from the rest of the world and crowded conditions are stressors (Landis 1968:578), other aspects are also aids to teamwork (cf. Horbulewicz 1973:71 on submarines). Isolation from the world makes deck hands highly dependent on each other. Whatever task help or social contact they are going to get is going to come from others on board. This can increase solidarity. In this case close physical proximity is both stressor and resource.

Working in close proximity and the face-to-face contact that is involved facilitates familiarity, and many measurable components of teamwork such as communication, monitoring, feedback, backup, and coordination. During most of the haulback, dumping, and resetting, deck hands are working side by side or within a few meters of each other.

Icing conditions make the work less pleasant

Proximity among deckhands is important in that in this setting it includes a ***shared visual field***. A shared visual field reduces the burden on verbal communication. In short, the visual channel is more efficient than the verbal channel (Williges et al. 1966:477). Indexical communications are possible (e.g. "a little higher, a little more to the right"). The use of signals which do not have to be translated into words to be understood, a raised thumb for example, frees up cognitive processing capacity and eases a variety of potential communication problems such as those inherent in implicit inference, lexical inference, and in acknowledging reception of information. (Cushing 1994 describes types of communication problems and their consequences in an aviation setting.)

Communication is not free. It requires cognitive energy and has cognitive costs (Dietrich 2004:188). Spare cognitive processing capacity is crucial to perceiving unexpected changes in the situation and environment and when dealing with non-routine communications and problem solving strategies. When capacity is full, unexpected information, or information that is "incongruent with the current task or attention of the addressee," even when crucial to safety or success, tends to get ignored (Hohlfeld et al. 2004:233). This can be dangerous.

In situations of high workload and stress, like emergencies and a lot of winter fishing, where cognitive capacity to process information is reduced and verbal communication is difficult due to noise or other mechanical cause (which can be very common during a Bering Sea gale), a shared visual field is a strong facilitator of communication and coordination. An individual deck hand, when under high task load, has less cognitive capacity to process information and coordinate his actions with the team's. Because of their proximity and shared visual field, the deck hands have economical coordination techniques available to them (Sexton et al. 2004:173). The skipper does not share this visual field with the crew. He must use very explicit (and more costly) means to communicate. Mostly he communicates through a two-way intercom called a loud hailer.

c. Interdependency of task

Interdependency within work groups has been characterized in a number of ways. Pennings saw at least four different bases for interconnectedness: task, role, social, and knowledge (Pennings 1974 in Van de Ven et al. 1976:324-325). Mohr focused on role interdependence (Mohr 1971). Thompson (1967) focused on the flow of work between team members. His influential scheme includes three varieties of task interdependence. These types are pooled, sequential, and reciprocal (Thompson 1967:54-65). Thompson's pooled interdependence is similar to Katzenbach and Smith's *single-leader unit*. Essentially individual efforts are pooled by a manager to achieve a goal. Katzenbach and Smith do not consider this arrangement to be a team at all. Teamwork suggests a mutual adjustment to other members in order to accomplish team goals. This adjustment can be sequential as in an assembly line or it can be reciprocal. Haulback, dumping the bag, and resetting on the Makushin requires the constant, multi-directional, and flexible adjustment of teammates to each other. A variety of two- and three-person tasks are involved which involve the simultaneous adjustment and coordination of one deck hand's actions to the others'. Tasks are reciprocally interdependent. This is the most intense type of task interdependency and requires constant and intensive coordination. (On the intensive work situation see Tesluk et al. 1997:203-4.)

The nature of task interdependency is a strong influence for cooperation. It demands constant cooperation at the task level. Any lack thereof is immediately noticed and cannot be tolerated. All sorts of competitions and outright conflicts can be tolerated except at the level of task. If there is not a minimal level of cooperation (and that minimal level is pretty high) there is no alternative except to stop fishing, head into town, and find teammates who can cooperate.

Joint success at the level of task need not create higher levels of cooperation. But it can, depending on to what or whom that success is attributed. In section IV we will see how the practice of story-telling does important attribution work. Story-telling harnesses the potential of this task interdependency and uses it to create higher levels of solidarity and cooperation. These not only enhance the task-oriented performance of the team but lead to the production of goods such as trust and camaraderie which are also intrinsically valuable.

3. Social frames

a. Familiarity

There had been very little turnover of employees on the Makushin prior to its sale in 2003. Some of the crewmen I worked with had worked together for eight years. (For more on career histories see pages 118-122. For the social benefits of team membership see pages 221-223.) That adds up to an enormous number of hours living and working in one another's presence. Unlike many other fisheries in Alaska, the makeup of these trawler crews is often unchanged for years and years. ***Familiarity*** has been shown to have important benefits for successful teamwork in terms of safety and productivity (Goodman and Garber 1988, Goodman and Leyden 1991). Familiarity among teammates leads to better anticipation and response to each others' actions (Sexton and Helmreich 2003:63). Because of increased familiarity, these teams require less communication to coordinate their actions (Krifka 2004:156). In one study of airline pilots, fatigued but familiar teams outperformed well-rested and unfamiliar teams (Foushee et al. 1986: v). Teams evolve over time (Morgan et al. 1986:15). This familiarity often shows up in teammates' referring to themselves in the first person plural (Sexton 2004:20). Familiarity essentially lowers the work load. It lowers the coordination demands on the individual which frees up attention and memory to devote to the

task load. It is a short cut to coordination which in this way leads to better task performance.

b. Absent family

An absent family is an important part of a fisherman's work context generally. It plays a role related to familiarity as was noted above. These fishermen strongly feel a sense of family deprivation. (For other fishing examples see Binkley 2002:59; Horbulewicz 1973:70-1.) Just as the family seeks what substitutes it can for the distant fisherman, these fishermen seek what substitutes they can for their distant family in their social relationships on board. This promotes familiarity and therefore indirectly the benefits of familiarity for cooperation.

c. Positive attitude towards the team

A positive attitude towards the team is important to successful teamwork (Baker et al. 2005:15; Grote et al. 2004:130-131). This is the team orientation to which Dickinson and McIntyre refer. A positive attitude towards the team is crucial in the process of building cooperation at non-task levels. The more positive an attitude towards the team the higher the chances that task success will be attributed to the group. When success gets attributed to the team, identification with the team, solidarity, and further cooperation in other goals are increased.

The Makushin is not an entry-level fishing job. By the time fishermen reach this level they have been selected by strong social and economic forces within the fishing industry. Of greatest importance are toughness and the ability to carry and cope with a heavy work load. These are selected by passage through such entry-level fisheries as long-lining and salmon seining in which teamwork, in relation to task, does not play so prominent a role. It is possible to become very skilled individually, and advance professionally as a fisherman, without good team skills. This was made clear in the case of a new hire during my research period. He was technically very skilled and experienced but was not socially competent in terms of the team.

The situation is similar in aviation. "In the United States, the labor pool is weighted heavily with pilots whose formative years were spent in high-

performance, single-seat, military aircraft. …pilots with this type of experience may bring an individualistic emphasis to the air carrier cockpit and that learning team member skills can only be accomplished slowly and painfully" (Foushee 1984: 892). Because technical skills are so important in these fishing crews, especially for the engineer and web man, it is hard to imagine that hiring criteria will shift drastically. Moreover, the hiring is done by the skipper and/or owner who are impacted by a crewman's technical skills more than his social skills. However, after this particular crewman quit, I heard the other deck hands saying that it was important to hire someone who not only had the right skills and attitude towards work but was also someone who "we can live with."

I have never heard attitude referred to in a work setting as much as in commercial fishing. It is hard to overstate the importance these fishermen attach to both task competence and positive attitude towards work and team. A negative attitude towards work and team is most likely an index of a worker's own level of job satisfaction. On the Makushin, a negative attitude can have negative consequences for one's co-workers' quality of working life.

d. Status hierarchy

In many ways the deck hands are the skipper's eyes and ears. This is especially significant because skipper and crew lack a shared visual field. Crewmen on deck have access to detailed information, such as how the cod end is hanging behind the boat, whether it is sinking, floating, or lying on its side, which the skipper can only guess at. Failure to exchange information, the failure of crewmen to update and correct the skipper, reduces the effectiveness of the team according to any measure, including that of Dickinson and McIntyre (page 127 above) who stress the importance of the monitoring and feedback aspects of communication.

The team's social status hierarchy, or status gradient, is an important context for communication and cooperation. Teammates on the Makushin play at least three types of roles. They play a functional (task) role, a communicative (coordinating) role, and a (social) positional role (Dietrich 2004:202-203). Task related knowledge on the deck comes from task function and not positional rank (LaPorte and Consolini 1991:32-36). As in the examples above, quite regularly a

deck hand will gain information which is important to the skipper, or even another deckhand, which he alone possesses. The deckhand must choose whether to speak in a way which matches his task function or his position. In a group with a steep status gradient, where the two positions are far apart, this becomes potentially problematic. The deckhand must choose between keeping quiet in accord with his social role or speaking up and thus playing a super-ordinate task role from a sub-ordinate social position. Even if he speaks up, according to research among flight crews, he will speak to his higher-ranked superiors in a more subdued and mitigated way (Goguen and Linde 1983 in Krifka et al. 2003:77, Linde 1988, Fischer 2000, Fischer and Orasanu 1999, 2000, Krifka 2004:156-9). He hedges his bets. He lowers the effectiveness of his words even when he does speak up. This is because of the penalties for stepping out of one's social role. A steep status gradient works in both directions. It causes lower ranking members to stay silent and causes higher ranking members to ignore input from their juniors. The status gradient, or in the case of an airplane "cockpit authority gradient" is "a causal factor of teamwork failure in incidents and accidents, when a junior crew member (lower rank and little experience) does not speak up or transfer important information to a crew member with superior status (high rank and experience) or when a senior crew member does not listen to important input from a junior" (Grote et al. 2004:131).

In the situation on the Makushin, our deckhand is forced to play the complicated game of weighing risks against each other. In this case he must weigh the risks (economic, productivity, and possibly physical) of keeping quiet or mitigating his expression versus the risks (social and professional) of speaking up. (See Orasanu et al. 2004:100 for a similar typology of risks faced by airline pilots.) He risks losing his job whether he speaks up (insubordination) or stays quiet (incompetence).

Three aspects of the work frame on the Makushin, one social and two cultural, resolve this potential problem and facilitate cooperation. First, there is no steep status gradient among the three deck hands. There is a considerable amount of shared competence and interchangeability. While there may be a "deck boss" there is not a great division between deck boss and deck hand. So information gets

shared among the deck crew in an unmitigated way. Secondly, these fishermen belong to a national culture of relatively low *power distance* (Hofstede 2001:79-144) which tends to value consultation in relationships over subordination. This is discussed further under cultural frames. Thirdly, although the occupational norm is a steep hierarchy between captain and crew, the Makushin has an organizational culture which contradicts this norm and keeps the status gradient relatively flat.

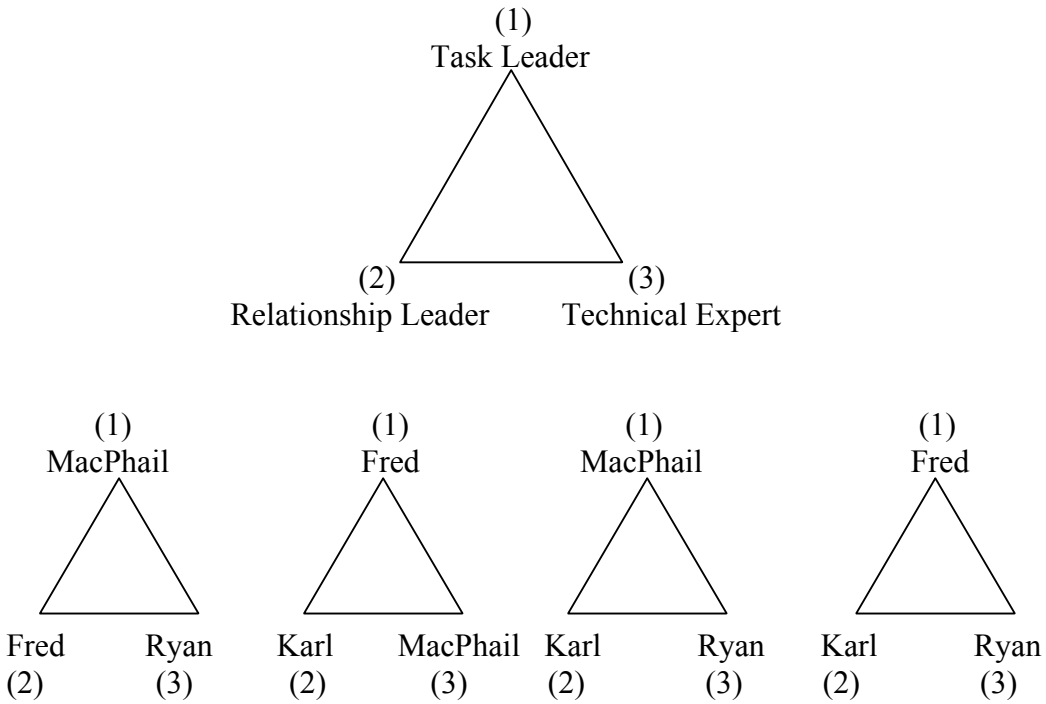
Therefore, first, the deck hands will give and receive corrections easily because the deck group is relatively egalitarian. This is part of the monitoring and feedback so important in Dickinson and McIntyre's concept of a team. Secondly, the deck hands will correct and contradict the skipper because of a relatively low power distance at the level of national culture. Thirdly, the skipper has made this even easier by cultivating a culture of collaboration on board. The deck hand who shares important information faces no risk in stepping out of his positional role. Poly-directional information flow is encouraged on the Makushin because of these frames. This makes the boat safer and more productive. (See Knutson 1991:78-79 for teamwork on an Alaskan salmon seiner with a steep status gradient.)

e. Complementary team roles

In the crew configurations where the team was functioning at its highest level of performance I observed that teammates had not only complementary skills but played complementary team roles as well. These roles were not assigned from outside the group. They were unconsciously agreed upon by the members themselves. This was an experienced crew and a familiar crew. Although the roles shifted regularly, for short durations, they always returned to one dominant configuration. MacPhail was the (1) task leader or organizer, Ryan was the (2) technical expert, the consultant on implementation, and Fred was the (3) relationship leader. All six of Robert Bales' functional problems of interaction systems (three task and three social-emotional areas) were being solved in this configuration. These are problems of orientation, evaluation, control, decision, tension-management, and integration (Bales 1950, 1951[1950], Bales et al. 1951). The task leader had prioritizing, organizing, planning, and motivational roles. The technician had a consulting role. And the relationship leader had facilitating roles. In Goffman's terms, the relationship leader is similar or the same as the go-

between/mediator in informal conversation. His or her job is to facilitate the successful working (execution) of the current definition of the interactional situation (1959:150). Unlike some teams in which managers and producers are different members, in this three man team all were equally involved in hands-on production.

The deck hands on the Makushin do not work a full season but rotate on and off the boat. Because of this I was able to observe several crew configurations. When Karl arrived and Ryan went home Karl did not take over his role in the group. MacPhail moved into position (3) as technician, Fred took over as (1) task leader, and Karl was (2) relationship leader. Ryan returned and Fred left. MacPhail moved back to (1) task leader, Ryan played the (3) role of technician/consultant, and Karl remained as relationship leader. Finally, when MacPhail left and Fred returned, Fred took his place as task leader and the other roles did not shift.



Three points are interesting here. First, the team had a fairly stable set of role responsibilities and plugged members into them. The skipper did not appear to play any role in this activity. Nor did the skipper affect how strongly the roles

were played. There was a time, for example, when Karl was upset with Ryan. Karl played his role as relationship leader at this time even more strongly than usual. Rather than integrating and relieving tension he tried to split the group by forming a coalition which excluded Ryan. Secondly, not only were the teammates capable of various technical tasks (low task specialization) but some (Fred, MacPhail) were also capable of various team roles (low role specialization). Finally, it seems that in this configuration, the role of chronic joker is always position two and the role of chronic complainer is either in position two or three (Bales 1950:260).

The observer

The ADF&G (Alaska Department of Fish and Game) observer fills the role of the non-person. The non-person is present during interaction of the team but is neither audience nor performer. The non-person is present in the front region but can move freely between regions. The non-person is treated by both performers and audience as "not there." I often observed deck hands having a conversation in the galley as if the observer sitting nearby was not there at all. There was not the slightest acknowledgement of his or her existence. The observers had learned to expect this treatment and rarely broke in to the conversation. On occasions when they did break in the deck hands would look at each other with surprise and annoyance. "Where did that voice come from? Who is that?" There were rare exceptions when the observer would move from "non-person" to "person." A characteristic of all these newly minted "persons" was that they would help clean up around the galley. They engaged in some of the crew-team's galley work and so became teammates in some sense and thus "persons."

4. Cultural frames

a. National culture

At the level of national culture there are at least two traits which influence cooperation. These are *power distance* and *uncertainty avoidance* (Hofstede 2001[1980]:79-208). Hofstede surveyed IBM employees in 66 countries during the period 1967-1972. His data suggest some interesting conclusions for work on the Makushin.

According to Hofstede, power distance reflects the fact that different societies handle human inequality in different ways. "Inequality can occur in areas such as prestige, wealth, and power; different societies put different weights on

status consistency among these areas" (Hofstede 2001:79). Within organizations, like fishing boats, inequality of power is formalized in relationships such as skipper-deck hand. Power distance, in this example, is the extent to which the deck hand accepts or rejects that power is unequally distributed. It is a measure of the "interpersonal power or influence between a boss and a subordinate as perceived by the subordinate" (Hofstede 2001:83). In high power distance cultures deckhands are very subordinate to the skipper and are not likely to approach or question the skipper directly. In low power distance cultures there is more consultation. A deck hand is more comfortable approaching and correcting or contradicting the skipper. In Hofstede's survey of 66 countries the US ranks moderate to low in power distance (Hofstede 2001:87). As was mentioned above, low power distance is important because it encourages a flat or egalitarian status structure. This in turn is an aid to cooperation with obvious consequences for team performance and safety on the Makushin. (See Helmreich and Merritt 1998:57-58 for similar influence among flight crews.)

Uncertainty avoidance is another trait at the level of national culture which frames work on the Makushin. Uncertainty avoidance, unlike risk avoidance, is the extent to which individuals feel threatened by, or can tolerate, uncertain or ambiguous situations" (Hofstede 2001:146). Rules are a way in which organizations reduce the uncertainty caused by the behavior of their members as well as outsiders. In cultures high in uncertainty avoidance this leads to, among other behaviors, the strong emotional desire to have rules respected. There is a need to resolve ambiguity quickly and to leave as little as possible to chance. It can result in strict adherence to rules for their own sake even in cases where following them is no longer what is best for the organization. Hofstede's data show the US to be low in uncertainty avoidance (Hofstede 2001:151). This suggests a general predisposition towards adaptability and flexible judgment rather than strict adherence to rules. Fishermen are likely self-selected to be low in uncertainty avoidance. An individual who feels especially threatened by uncertain and unknown situations would not enjoy working on the sea for long. The Makushin deck hands had this trait (uncertainty avoidance) in common. While many of the tasks are partly routine, working conditions related to weather, seas,

and the loading of the boat are continually changing and trade-offs between competing goals must be constantly evaluated. Tolerance of uncertainty and broad agreement on how to handle it are aids to cooperation.

Low uncertainty avoidance is reflected at the organizational level by an emphasis on certain types of rules. Hale and Swuste analyzed safety rules by means of three categories. They described rules defining goals, rules defining how decisions about an action should be arrived at, and rules defining concrete action (Hale and Swuste 1998:166). These categories are also valuable for thinking about rules on the Makushin in general. The Makushin stresses rules governing goals and outcomes and has relatively few rules defining concrete actions and procedures. This emphasis is consistent with a non-routine work environment and with the broader cultural tendency towards adaptability and flexible problem solving. Strategies must be designed and updated to solve continually changing problems. Success is measured in outputs rather than correct application of procedures.

b. Occupational culture

There are many traits at the level of occupational or professional culture which distinguish these pollock fishermen from other members of North American culture to varying extents. (Miller and Van Maanen (1982:35-38) and Lummis (1977) give good introductions to this topic with material from different fisheries.) As in other occupations, these traits tend to bond members in a common identity and create a sense of community. Professional norms and values are exemplified by senior members and passed on to new recruits. Much of the story-telling which takes place on the Makushin, while done to provide entertainment also conveys cultural information at the occupational and organizational level. Stories about fishing heroes and villains communicate an idea of occupational standards and ethics. Heroes are not just tough and hard-working but also quick-thinking, clever, optimistic, and calm in the face of danger. Some aspects of the occupational cultural are relevant to cooperation. The most obvious trait, a sense of personal invulnerability, is not. It is included because, just like uncertainty avoidance, it is an important part of the work context. It is so important as to be virtually a selection criterion for these fishermen.

A sense of personal invulnerability can be seen among the members of this occupation both at work and at play. "Work hard. Play hard!" is a common expression. The hard playing often includes high risk encounters with motorcycles, women, and illegal substances. At work a sense of invulnerability can be seen as deck hands refuse various safety devices, like hard hats and life jackets, unless absolutely required to use them. Falling into the Bering Sea in winter is only slightly less dangerous than falling out of a rocket on your way to the moon. On a rational level crewmen understand that life jackets could make them safer. On a symbolic level these safety devices attack the feeling of personal invulnerability which is a part of the occupational culture which helps them cope. Deck hands often work in rain, wind, and snow without their protective rain gear. They commonly handle frozen tie-up lines with their bare hands and wearing t-shirts. Perhaps, if they make one concession to their vulnerability to the elements, they might not know where to stop.

This attitude of personal invulnerability, while certainly not limited to fisherman, has roots in history. (For doctors and airline pilots see Helmreich and Merritt 1998.) Sea-faring and high-seas fishing have long been extremely dangerous activities. Those men given to excessive reflection on their own mortality and vulnerability would likely choose another profession. Weibust's historical work on Scandinavian merchant mariners suggests that surviving dangerous experiences and acquiring a sense of invulnerability was an important marker of professional socialization. Those who were still afraid had not yet fully become sailors (Weibust 1969:189,229). Even in the present, the Bering Sea in winter is known as a dangerous place. As in the case of low uncertainty avoidance mentioned above, Bering Sea fishing selects and encourages workers with a sense of personal invulnerability. This sense of invulnerability is related to other aspects of the occupational culture which do influence cooperation.

Personal invulnerability is related to an exceptionally demanding **work ethic** which ignores illness, injury, fatigue, and stress. Injuries generally have to be a major bone break or something of that magnitude for a man to leave his work station or leave the boat. (Compare to Binkley 2002:46.) While fatigue is as obvious as the redness of one's eyes, "Do you want some band aids for those eyes?

[because they are so red from lack of sleep]" it is never used to excuse poor performance. Though complaint is an important form of association and a way of coping with stress, nobody complains about how tired they are (Hanna 1981:308). "I'll have time to sleep when I'm dead," say these fishermen. This work ethic is alive and well in other Alaskan fisheries which continue to be open access. It continues through its own inertia in fisheries with individual quotas.

The work ethic says that these crewmen work at a task together until it is completed. This promotes cooperation because it helps equalize contributions among teammates. It is important that teammates feel like others are contributing their share to the team. This work ethic does not allow a deck hand to believe they have already done their share and to stop working. Everyone works together until the task is completed.

This sense of personal invulnerability is also related to the occupational cultural ideal of **risk-taking**. While at first glance this would not seem to support cooperation, not all risk-taking is glorified. Heroes are those who take risks for the team. Optional risk-taking is frowned upon. Required risk-taking (there is a lot of it in pollock fishing) is respected. In this way risk-taking is controlled and transformed into sacrifice for the team. When seen in this light it is an ethic which promotes cooperation. Accepted aims include increasing the team's earnings and increasing their safety.

A sense of invulnerability is also related to the norm of **low emotional expressiveness**. This occupational culture is strongly to one end of Trompenaars' neutrality v. affectivity dimension. Emotions are to be concealed rather than revealed (Trompenaars and Turner 1998:227-8). The occupation has certain "feeling rules" (Hochschild 1979:563-569, 1983:56-75). The crabber expression "maintain cowboy" means maintain calm. Exceptional situations and life-threatening dangers are to be met with at least outward calm and self-assurance. It is the positive equivalent of the command: "Don't panic." It originates in, and makes sense in, a culture of invulnerability. Why should I worry if I am invulnerable? It is very possible that a panicking teammate is a greater impediment than an unresponsive teammate.

This is not an ethic of non-communication but rather a suppression of emotion within communication. Research shows a correlation between expressions of emotion and low performance among work teams under high task load conditions (Krifka et al. 2003:88). James Faris, in his study of a Newfoundland fishing community, says, "There is a premium on the repression of emotion and random behaviour; should these be expressed, the reaction is one of considerable discomfort and repugnance" (Faris 1972:152). Discomfort and repugnance are good adjectives for how crewmen on the Makushin react to the expression of emotion and random behavior on board. (Compare this to feeling rules and emotion management generally in Hochschild 1979:561-563, and among airline flight attendants in Hochschild 1983.) Teammates whose responses are predictable and reliable, especially in situations of potential threat, are highly valued.

Shared support is another component of occupational culture which is related to cooperation. It has some clear historical roots. In the past, as in the present, the ship's crew is in an isolated and dangerous environment. The idea of reciprocity and shared support is enormously important for safety and success. It is a sort of an insurance cooperative. *I will help you so that I can rely on your help when I need it.* It is a form of reciprocity common in many cultures. (See Wiessner 1982 who observed the same phenomenon in an African desert.) This occurs among the pollock fleet and among other types of vessels in the area. To come to the aid of another boat in distress is an old law, and maybe the highest law, of the sea. (See Byron (1988:9) for an ethic of shared support in a Shetland Island fishery and McGoodwin (1979:33) for the same ethic in a Mexican fishery.)

Quite clearly an ethic which sanctions risk-taking, even when done for the collective good, and which denies the effects of illness, injury, stress, and fatigue, does not only positively influence cooperation and team performance. A variety of research shows that performance declines as stress and fatigue increase (e.g. Driskell et al. 1999; Foushee et al. 1986; Sexton et al. 2000; and on a Polish factory trawler see Horbulewicz 1973:69.) It is not that fishermen need academic research to tell them that cooperation and safety decline as they tire. They perceive it themselves. But people may hold on to images of themselves even in the face of

disconfirming evidence. This is true when such denial helps avoid anxiety about performance under such difficult conditions. It is especially true when one's self-concept is so strongly reinforced by one's occupational culture.

Within West Coast fishing, **professional subcultures** develop based on gear type and to a lesser extent on species and area fished (Sepez et al. 2006:285). This is natural as we tend to identify with those who have had similar experiences and work in similar organizations. Within this group of Bering Sea pollock fishermen it is hard to discern differentiation into smaller sub-cultures. If it occurs, it likely develops around specialties and exists in a weak form. That would mean that skippers, web men, engineers, and "night guys" would each have their own little sub-culture. They do tend to associate with each other to the extent that they group up in bars or at end of the season parties. But the relative interchangeability of the crewmen, especially among an experienced crew where they can all do large portions of each others' jobs, is probably reflected in this lack of sub-cultures within these teams. This logic is consistent with the contention that skippers may have their own sub-culture. I think that is possible. Certain aspects of their work, such as total legal responsibility for all aspects of the boat's operations, are not shared with others on the boat. They are specialists in ways the other crewmen are not.

c. Organizational culture

National and occupational cultural elements which support cooperation are also encouraged at the level of the organization. Definitions of organizational culture differ according to academic discipline. Management literature defines organizational culture as a phenomenon that can be managed and manipulated. Sociologists and anthropologists stress that each organization is a unique, historically derived phenomenon which is beyond simple manipulation. Organizational psychologists try to reduce it to its subcomponents (Helmreich and Merritt 1998:109).

Organizational culture in this context refers to the culture of the Makushin. It includes the values, beliefs, rituals, symbols, traditions, and standard behaviors which define the boat especially in relation to other boats. Like other levels of

culture it is transmitted from old members to new. The more stable a group of workers on a boat the stronger and clearer an organizational culture can develop.

Organizational culture does not occur in a vacuum. The culture of the Makushin contains no elements which are completely unique when compared to the occupational and national levels. It builds on, or reacts against, and shapes elements of the national or occupational culture. The catcher boats in the trawl fleet, in most cases, share the basic values of the greater occupational culture but give them different priorities. Less frequently they define themselves in reaction against elements in the occupational culture. Individual boat cultures channel the effects of national and occupational cultures toward standard practices and attitudes. They vary in the extent to which they value and promote exceptional cooperation. Exceptional cooperation is highly valued among the deck hands on the Makushin.

Let us return to the example of power distance. At the level of national culture power distance is fairly low. I did not address power distance at the occupational level. It varies dramatically within Europe, and Alaskan fishermen have roots in some of these European cultures. In many cultures, the distance between an ordinary sailor and a ship's captain has been great. The captain's authority has been absolute. This seems to have been true of British trawlers in the middle of the 20th century (Tunstall 1962:25, 28). This tendency is supported by Richardson's comparative work with British and American merchant mariners (Richardson 1956). Lourido's research with Spanish fishermen reveals the skipper to be "the absolute master of the ship" (Lourido 1984:267). The captain's authority has been absolute in some Norwegian fisheries, though there seems to have been variation within Norway. In the West skippers were dictators. In the south and east they were more democratic (Weibust 1958:34; also Barth 1966; Byron 1980; Goodlad 1972). Palsson gives evidence of an authoritarian style of leadership among Icelandic skippers (Palsson and Durrenberger 1983:514). In contrast to Norway and Iceland, the authority structure on Swedish trawlers was collaborative and egalitarian (Löfgren 1972). This was also true of fishermen from the Shetland Islands (Byron 1980; Cohen 1977; Goodlad 1972). In North America there is also considerable variation. Power distance is low among Pacific tuna

fishermen of Italian and Portugese descent (Orbach 1977). In Newfoundland, it is low among gill net crews (Nemec 1972:16; Stiles 1972:41) and higher among trap fishermen (Faris 1972).

I mention Norway specifically, because of the strong Norwegian influence which is felt in this fishery. Many of the skippers and crewmen in this fishery are second and third generation Norwegian-Americans. Norwegian fishermen played an important role in developing the Alaskan crab fisheries and then the offshore pollock fishery. Norwegian can still be heard in radio communication between boats. In this fishery, as in other Alaskan fisheries heavily influenced by Norwegians (e.g. Walker 1991 on crab fishing), the occupational cultural element of power distance is relatively high. The organizational culture of the Makushin, however, values low power distance. Neither the original owner nor the new owner nor the skippers are Norwegian. On the Makushin, the element of power distance is an example of organizational culture agreeing with national culture and at the same time reacting against occupational culture. The organizational culture of the Makushin is generally in agreement with other important elements of the occupational culture. The importance given to the work ethic, risk-taking, low emotional expressiveness, and shared support, along with low power distance, facilitates and encourages exceptional cooperation.

The influence of the owner and skipper on the boat's culture is powerful and wide-ranging. (Compare to aviation in Foushee 1984:888.) The combination of formal political and economic power with typically long membership in the organization makes their behavior powerful in setting social and cultural examples. The patterns of authority and responsibility they employ, for example, are re-employed, or improvised upon, at the deck crew level. Important areas of organizational culture where the skipper and/or owner have special influence include the social climate of the boat, attitudes towards safety (including its importance relative to task performance, level of commitment to safety, proactive or reactive posture, and structure of rewards for safe work), attitudes towards handling mistakes and critiquing each others' work, and attitudes toward periods of high task load and emergencies. A more detailed discussion must be reserved for a future treatment of the skipper. Everyone has a voice in an organization's culture,

but the skipper and owner hold privileged positions. Their examples must not always be followed, but they cannot simply be ignored.

If we describe these levels of culture like human personalities, Bering Sea pollock fishing as an occupation is a person who is a risk-taker, outcome-oriented, has low emotional expression, values task success above relationship success, values shared support within a fairly rigid hierarchy, and has a strongly developed sense of personal invulnerability. The Makushin is an outcome-oriented risk-taker with low emotional expression who values task success above relationship success, *values shared support and cooperation within a relatively egalitarian social structure*, and has a strongly developed sense of personal invulnerability.

On the Makushin where so much training is informal, so many rules are unwritten, specific procedures are rare, and reliable performance is so important, organizational culture is a powerful tool for coordination. It imposes order yet allows latitude for "interpretation, improvisation, and unique action" (Weick 1987:124-125). Organizational culture coordinates the actions of teammates by several symbolic means. One of the most important is through the telling of stories. The use of stories in coordinating the actions of a new hire and of insiders is among the themes to be addressed in the following sections.

But before we go any further the concept of exceptional cooperation must be defined. The skipper and owner are influential at the level of organizational culture. However, virtually all of the deck crew's work is done in the absence of the skipper (and owner who remains on shore). It should be no surprise then that there are cultural elements pertaining to the deck crew which are virtually free of outside influence. Among these elements of deck culture on the Makushin is the special value given to **exceptional cooperation.**

Task related cooperation, when combined with experiences of emotional binding, becomes a strong interpersonal commitment going beyond civility, teamwork, and an obligation to uphold group rules (Lawler and Yoon 1993:465 on types of commitment). This commitment includes mutual concern for each others' well-being and success, mutual aid in achieving personal and professional goals, and extends beyond company activities and even beyond the life of the team itself. This is what I refer to as exceptional cooperation. It is broader and deeper than the

task related cooperation required by characteristics of the work environment. It cannot be created on purpose. Once it is experienced it cannot be forgotten. It is rare because the personal commitments involved are difficult to achieve and sustain. It is similar to what Katzenbach and Smith call high performance teamwork and has many instrumental benefits. Strong interpersonal commitments and an "if one of us fails, we all fail" approach lead to a deeper sense of purpose, fuller mutual accountability, and the development of interchangeable and complementary skills leading to greater flexibility. Performance goals become more urgent and ambitious, there is more leadership sharing, teams become self-sufficient, and they have more fun (Katzenbach and Smith 2003:65-81). Exceptional cooperation has intrinsic benefits too. These teams have more fun and are fun to be a part of. There is a feeling of being part of something greater than oneself. It feels good to be a member. I have never been among a more generous group of work colleagues than on the Makushin. Multiple members of the team were generous to me at work and in spheres far removed from the work environment. These are experiences I will never forget.

I would not have predicted that this type of cooperation could be built on the Makushin. It was not intentionally pursued. Looking backwards in time I can now see the conditions that facilitated and made it possible. That is the basis of this discussion. It is an examination of the conditions that made possible and brought about this exceptional cooperation. The actors were not aware of the cumulative influence of task characteristics, cultural elements, socialization practices and processes, and story-telling. They were aware of how good this cooperation felt. They miss it when it is absent and wonder how to get it back.

D. Conclusion

At this point the raw materials for building cooperation have been described. Aspects of the task context, relating to common goals, proximity, and the nature of interdependency, demand a minimum level of task related cooperation. Aspects of the social and cultural contexts guide and encourage cooperation at higher levels as in the production of intrinsically valuable goods such as trust, agreement, and intimacy. Important social aspects include an absent family, familiarity, a positive attitude towards the team, and a relatively egalitarian

social structure. Relevant cultural aspects include low power distance, a strong work ethic, risk-taking, and shared support, and valuing exceptional cooperation. The next step in building exceptional cooperation is in the socialization of a new hire. This is when a member of the team is first exposed to those raw materials of exceptional cooperation in the specific Makushin context. Here a foundation of competence and agreement is laid that can be built upon later by the practice of telling deck stories. Building a foundation of cooperation is not the only thing that occurs during socialization. This is the site of various competitions for status and prestige. One goal of the next chapter is to look at practices of socialization and their contribution to the creation of a cooperative deck hand. The competitive processes which are set in motion and the results of these practices and processes will also be described.

III. Socializing a new hire: practices and processes

A. First impressions

My first time in a Bering Sea gale I walked out on deck and said, "What a storm! Those waves are huge!" "It's a bit swelly" replied another deck hand helpfully with a corrective yet nonchalant tone of voice. He, and the rest of the team, had a different interpretation of the situation. When I walked off deck some hours later I thought to myself "It's a miracle I didn't die just now," but I kept my interpretation to myself. I knew by then that the team did not view the experience in that way. Expressing that thought would have just reinforced my status as new or "green." That was the last thing I wanted. I wanted to fit in. I wanted to increase the level at which I was regarded. In this instance my face-maintaining strategy was to keep quiet and try not to let on how shocked I was by it all. So I kept my interpretation to myself. Over coffee and cigarettes in the galley the team's behavior and comments to each other told me that nothing out of the ordinary had happened out on deck. The experience had been routine.

A simple comment on my part, "those waves are huge," provided the opportunity for a definition-correcting-event. This event is stamped into my memory because what I was experiencing was so incompatible with the team's description of it. But there were many other subtle and slight corrections of my

interpretations. Some were verbal and some I perceived by observing body position, posture, and tension. In these cases I no more realized that I was being instructed than my instructors realized that they were giving instruction. As I lived and worked with the team for some weeks I began to re-live and retell the stories of these experiences to myself according to the team's interpretations. And after I told them to myself for a while I started telling them in this new way to others and to correct their interpretations just as mine had been corrected. A Bering Sea gale was no longer shocking. It was routine. I had learned to make sense of the situation in a way that the team agreed with. This agreement on sense-making was the foundation for joining the team functionally and socially. Even though I still had a ways to go functionally and socially, I was a group member in the way they interpreted, and therefore experienced, the situations we faced together fishing.

My definitions and metaphors had changed. Early on in the process fishing was a life or death situation. Going out on deck was a time in which anxiety built up to a period of intense concentration and effort with large doses of fear and then followed by great relief. Now, fishing was "going to the bank." Deck work was "just another day at the office." "My cubicle" had a wide horizon. The situation was presented to me in a new way, under a new definition, and I chose to accept it. I had accepted a new "art of assessing likelihoods" (Bourdieu 1990:60).

Learning the organizational culture happens in many ways and through various media. The everyday social contact which is a part of living and working together provides many opportunities for the team to influence how the new teammate's experiences are interpreted and what lessons are learned from them. Reflection is not always possible at the time an event is experienced. The demands of the task, fatigue, and the circumstances of the weather may not free up any mental capacity to figure out what it all means. In a new situation it is difficult to do this sort of reflection alone. There is always what amounts to an informal de-briefing after a period of work out on deck or an emergency in the engine room, for example. The team is together under the shelter deck stripping off rain gear and then immediately afterwards in the galley having coffee and a sandwich. Teammates have a voice inside their own heads. From the first moment available for reflection onwards, the team is talking in our ear and shaping our experience of

the event after it has been lived. To extend Goffman, the work group is a performance team acting out its drama. Each member of the team is an individual audience of one attending this group performance (Goffman 1959:86). New perspectives for "interpreting one's experiences in a given sphere of the work world" often accompany socialization into a new organization (Van Maanen and Schein 1979:212).

B. Occupational Socialization: definition and literature

Occupational socialization is the process by which a new hire learns the values, expected behaviors, and social, cultural, and technical knowledge essential for assuming a role in the organization. It has been analyzed from a number of different perspectives such as those which focus on its **stages**, **content**, and **practices** (Louis 1980:277-234).

Merton has suggested that socialization begins as the new hire anticipates and develops expectations of how the new organization will be experienced (Merton 1957:265). Once the new hire enters the organization there is a period of encounter. A new hire's anticipations are tested against the reality of the new work experiences. It is at this point that the new hire is especially susceptible to influence because of the uncertainty regarding role requirements (Ashforth and Saks 1996:149). The new hire has 'little, if any, organizationally based support for his "vulnerable selves" which may be the object of influence' (Van Maanen 1973:408). Entering a new organization and role also requires leaving the old (Becker and Strauss 1956:259). This was also recognized by Van Gennep in his work on rites of passage which occupational socialization often involves (Van Gennep 1960).

Socialization includes technical and cultural **content**. As Merton points out, a new hire in the encounter stage is rarely starting from zero in either category. On the Makushin all of these crewmen have trawling experience prior to being hired. They are familiar with the greater occupational culture and more specifically the occupational sub-culture of pollock trawling and have acquired a level of technical expertise. They are hired as engineer, web man, or deck hand/cook. Regardless of how much experience and technical expertise a new hire has, every deck is laid out slightly differently and every boat has its idiosyncrasies

which must be learned. Nobody can step onto the deck of the Makushin and know just what to do. There is a period of technical-role related learning that is required of even the most experienced deck hands.

In addition to the technical aspects of the job there is cultural and social content to be learned. This cultural and social content includes such things as the structure, rhythms, rules, and etiquette of the team. For example, who is the highest status crewman, whose expertise lies in which area, who gets asked questions concerning what, which activities require permission and which do not, how are complaints handled, which questions get taken outside of the deck team to the skipper or owner and what is the procedure/etiquette, does the crew like to finish a task completely before breaking for coffee or do they break in the middle, do they like to start early or work late, do they repair the net on the way in, at the dock, or leave it for as late as possible? (Compare to Richardson 1956:199-200 on British and American cargo ships.) These standard assumptions and practices about work and life are collectively shared and are enacted rather than spoken. Although the new hire knows the occupational culture some of its elements will have been modified by the organization, the personalities and history of this group, in ways that are different from other boats he has previously worked on. There is cultural and social learning to be done no matter how great his previous experience. Some learning of this type is required in any new job situation which involves working with others. It is a very significant aspect of life in a total institution where work, rest, and play are pursued together.

Total institutions

With the publishing of "On the characteristics of total institutions" in 1957 and then more prominently with *Asylums* in 1961 Erving Goffman offered a new way of looking at the social structure of institutions of various types. His research in a mental institution led him to suggest several ways in which that setting was special. He organized a group of characteristics under the terms "encompassing tendencies" or "total character." "A basic social arrangement in modern society is that the individual tends to sleep, play, and work in different places, with different co-participants, under different authorities, and without an overall rational plan. The central feature of total institutions can be described as a breakdown of the barriers ordinarily separating these three spheres of life" (Goffman 1961:17). Goffman also provided five broad categories into which society's total institutions would fit. This concept, or aspects of it, has been applied by him and others to a variety of institutions, such as prisons, monasteries, boarding schools, and military institutions. His fourth category includes "institutions purportedly established the better to pursue some work like task and justifying themselves only on these instrumental grounds." This perspective has been taken up in the study of both military and civilian ships, some fishing boats, and oil platforms (Aubert 1965; Aubert and Arner 1958; Encandela 1991; Nolan 1973; Zurcher 1965; oil: Collinson 1998:303; Solheim 1988:145-147).

Van Maanen and Schein looked at generic aspects of socialization practices. They built on Wheeler's (1966) work with individual versus collective and serial versus disjunctive socialization to produce a typology of six tactics or practices (Van Maanen and Schein 1979:232). Each one consists of a continuum. They are collective v. individual, formal v. informal, sequential v. random, fixed v. variable, serial v. disjunctive, and investiture v. divestiture. Their work has been since built upon by a variety of researchers (e.g. Jones 1986). Socialization on the Makushin is mainly individual, informal, random, variable, serial, and investiture.

Collective v. Individual	Formal v. Informal	Sequential v. Random	Fixed v. Variable	Serial v. Disjunctive	Investiture v. Divestiture

Each new hire moves alone through a unique set of learning experiences which are the outcome of interaction among the crewmen. The new hire is not segregated from more experienced members during a defined socialization period. A new hire is expected to immediately begin working alongside experienced crewmen in whatever capacity they together feel is best. There is no fixed sequence of steps or timetable according to which the new hire fully assumes his new role.

Socialization on the Makushin is serial in that experienced members provide role models for the new hire. And socialization involves investiture. The incoming identity of the new hire is affirmed rather than being denied and stripped away. The lack of segregation, the randomness, and the variability of the process mean that there is not a well-marked liminal period. The special characteristics of transitional beings (invisibility, polluting, having nothing) are not part of the experience on the Makushin (Turner 1967 [1964]:95-99). An individual in the liminal period is not yet a member or contributor to the future group. The goal of socialization on the Makushin is to "create" a cooperating teammate as quickly as possible.

Socialization has also been looked at through the perspective of the newcomer. Louis focused on the importance of a sequence of surprise-provoking cognition and the process of sense-making in the newcomer's experience of socialization (Louis 1980). Ibarra suggests that the construction of a professional identity is a process of observing role models for potential identities, experimenting with provisional selves through wholesale and selective imitation, and then assessing and modifying these experimental selves against external feedback and one's internal standards (Ibarra 1999). These newcomer perspectives are helpful.

Socialization on the Makushin is not a smooth, super-efficient process of building cooperation. Building cooperation is not the only thing that occurs during socialization. There are also processes of status competition and possibly social exclusion. The drive to turn the new hire into a cooperating teammate as quickly as possible necessitates extending provisional status. When the new hire's behavior does not live up to this status credit, the very un-cooperative process of exclusion occurs. The new hire's presence on board also sets in motion status competition between insiders themselves and between the lowest ranking insider and the new hire. While the deck hands are *relatively* egalitarian, there is a hierarchy among them. Each insider wants to introduce the new hire to, and situate him within, the hierarchy in the most advantageous way. This creates competition between insiders for the right to their definition of the social structure. This can also lead to competition between the new hire and one or more insiders when the

new hire does not accept where he has been placed or when he shows the potential for making a leap in status over an insider. After examining practices and processes we will look briefly at the results of socialization including the reproduction of an informal social organization and the new hire's effect on the team.

C. Practices

There is very little formal training on the Makushin. A great deal of teaching happens in the everyday life on board the Makushin including all social and cultural content which is informally taught. Just as teams develop simultaneously, but not always equally, along the two tracks of task and team (Sexton et al. 2004:169), our discussion of them will also be somewhat simultaneous. We will look at three practices of task related training as vehicles not just for technical but also social and cultural teaching and learning. These are **role modeling and imitation**, **instructional story-telling**, and **direct technical instruction**. The primary goal is building cooperation. Task level cooperation is increased through transmitting technical information while working together. Higher level cooperation is built through social and cultural information. On the surface this communication is about work procedures and technical skills. On another level this verbal and non-verbal communication carries cultural and social content. The new hire must learn the organizational culture of this particular boat and find his place within the social hierarchy of its crew. The crewmen take the raw materials of minimal cooperation required by the task and build a foundation for exceptional cooperation.

	Types of Information:	Explicit task	Implicit task e.g. posture, gaze	Implicit non-task e.g. social/cultural norms
Forms of Communication:				
Modeling and Imitation		X	X	X
Story-telling		X		X
Direct Instruction		X		

1. Role modeling and imitation

Experienced crewmen have a certain amount of consciously held knowledge which they may explicitly decide to teach a new hire. They also have knowledge of which they themselves are not conscious. And there is an enormous amount of implicit knowledge contained in their attitudes, body positions, and behaviors. There are things that they know they know. And there are things that they do not know that they know. For example, if an outsider were to ask what to beware of out on deck the answer might concern the big trawl and Gilson winches. But by observing where, when, and how the more experienced crew stand, move, speak, and direct their gaze, the outsider could gain a much more complete answer. These kinds of implicit, unconsciously held knowledge are enormously important in adapting to, and safely succeeding in, the job. (See Berkhofer 1969:134-5 on a continuum of ideation.) An enormous amount of implicit and unconscious information is displayed and perceived through modeling. Though we will look at modeling, story-telling, and direct instruction in sequence, in practice these forms can be simultaneous and reinforce each other.

Modeling is a form of social learning (Bandura 1977:22-55). In simplest form it means identifying with and in some form imitating a role model. Imitation may be conscious and unconscious. Role model here does not imply the positive values which are attributed to it in popular culture. I am speaking neutrally about the source of postures, positions, behaviors, attitudes, and dispositions to be observed and imitated. Characteristics of the model, observer, and situation are all important in understanding the extent of the learning.

Norms, values, and behaviors are transferred through modeling (Weiss 1978:712). New crewmen learn what to fear and what not to fear on deck. They learn when to hurry and when to rest, when to be alert and when to relax, how much responsibility to take, when to come and help with a task and when not to, and how clean to leave the galley. When the skipper orders something to be done "right away," it is through modeling that a new hire learns whether "right away" means immediately, in the next five minutes, in the next hour, or sometime today. Through modeling new hires learn how to give and accept a critique. They imitate through their desire to fit in and to occupy the same level of status as their

teammates. (See Dawson and Chatman 2001 for a summary of reference group theory.) This is often "a practical mimesis (or mimeticism) which implies an overall relation of identification" rather than a "conscious effort to reproduce a gesture, an utterance, or an object explicitly constituted as a model" (Bourdieu 1990:73). Learning to tie knots is the only example of conscious modeling that I can recall.

On the Makushin learning through modeling is not passive observation. It is learning through observing and doing, or as Lave says, "learning-in-practice" (Lave 1990:310). New hires are proactive agents in their own socialization. (On the important role of information-seeking behavior in newcomer adjustment see Miller and Jablin 1991; Morrison 1993.) Modeling can also invoke verbal interaction. And it can be a particularly powerful form of learning when there is one new crewman among a crew of experienced teammates. (Compare to a military academy Dornbush 1955; merchant marine academies in Hopwood 1973; Rosengren and Bassis 1973; and the police in Van Maanen 1973.) Teams are a powerful vehicle for personal learning and development (Katzenbach and Smith 2003:48). At the level of attitudes and dispositions modeling is generally the only tool the crew has. At the level of acts and behaviors modeling is often accompanied by verbal instruction. How they communicate verbally is also something that role models display.

Role modeling and imitation is a particularly important form of technical learning on a fishing boat. The tasks are not just cognitive but a mixture of the cognitive and the physical. Written instruction is rare. Spoken instruction is very important. Participant-learning, actually doing a task in order to master it, is the most important of all. One learns through an immersion in the practical and social world of the fishing boat. The emphasis on learning through participation and imitation is important in fisheries generally (e.g. Christensen 1972; Löfgren 1984:284). Hasslöf refers to a category of knowledge he calls "manual tradition." It is passed on "by means of observation and imitation of hand movements, gestures and behaviour. It plays a "fundamental role in the transfer of culture tradition" (Hasslöf 1972:23-24).

On the Makushin, there is no stock of knowledge, written or oral, to be mastered and internalized independent of context. Ideas are not separated from the real world, learning is not separated from doing, and knowledge is not separated from practice. Marglin calls this *episteme* and contrasts it with another knowledge system, *techne*, which is implicit, contextual, tactile, and practical (Marglin 1990: 231-278).

On the Makushin, from the moment a new hire feels the movement of the boat as it reaches open sea, he knows that learning will not just be an exercise of the mind divorced from the experience of the body. Bering Sea fishing is an intensely physical experience. Just as in music and dance the body resonates with the world (Ingold 1993:455). Both sea sickness and recovery involve "bodily manifestations of a particular stage of learning" (Palsson 1994:905). Your mind does not tell you that you are recovering from sea sickness. You feel it with your body. Learning and competence occur in the same way.

The pain, stiffness, and fatigue in your hands and shoulders signal a particular stage of learning the job. The growth of calluses and the fading away of the pain signal arrival at another stage of knowing. In a related way technical learning, such as in the realm of splicing lines and tying knots, comes initially through a set of explicit rules and procedures. But mastery of complicated sequences of physical tasks is something different. As Ingold says, "The novice becomes skilled not through the acquisition of rules and representations, but at the point where he or she is able to dispense with them." Rules are like a map. "The map can be a help in beginning to know the country, but the aim is to learn the country, not the map" (Ingold 1993:462).

Teaching and learning through modeling is a collective enterprise. It is an almost constant social activity among a fishing crew. It does not have the tight boundaries, formal method of teaching, and one way direction of a classroom setting. It is collaborative instruction. It is an apprenticeship involving joint intentions and practical skills in very specific applications and contexts. One does not learn to tie an assortment of knots as a general skill. One learns to tie a clove hitch, for example, for a specific application. We use a clove hitch here, a carrick bend there, a lover's knot here, and a bowline there. Though Palsson's focus was

on how Icelandic skippers achieve competence his perspective on intuitive knowledge and situated practice is applicable to Alaskan deck hands as well (Palsson 1994; Palsson and Helgason 1999).

Role modeling and imitation, then, is a term applied to this form of learning which includes forms of knowledge which we do not consciously know that we know. It includes muscle memory and body positions and the mastering of skills which we cannot explain how they are done. (Compare to Bourdieu 1990:73-75.) It acknowledges that we do not only think in this world but we live in it with our bodies. Modeling is a vehicle for transmitting social and cultural knowledge relevant to living and working in a team. This includes both what is needed to build minimal and exceptional cooperation and the rules regulating competition. It is more than a method of learning and teaching on the Makushin. It is a continuous context for other more intentional forms of teaching. Two of these forms, story-telling and direct verbal instruction, lose their richness and depth when not viewed from within the lived-in world of the fishing boat. Much of their pedagogic utility would be stripped away were they to be removed from this embodied apprenticeship which is learning to fish.

2. Instructional story-telling

Story-telling generally is a common form of interaction on the Makushin. Stories are told about a variety of topics and accomplish a variety of purposes in their telling. It is a vehicle which handles multiple tasks well. Stories contain cultural messages, social messages, technical messages, and history even as the explicit point is entertainment. There is a form of story-telling that teaches the job directly. These are the stories of interest here. These may be stories of events which happened on this boat or on other boats, distant in time and place (even another fishery), and in which the audience did not participate. "I remember one time on the [insert boat name]…" these stories often begin.

Story-telling is very informal. It can happen at any time, even in the middle of the night. For example, sometimes when we are waiting to set or haul back in the middle of the night, we will find ourselves sitting in the galley hunched over a cup of coffee trying to rub the sleep out of our eyes. There may be complete silence, especially if we are exceptionally tired and the weather is good. But when

the weather is really bad it will usually get discussed. "Man it feels like it's pretty shitty out there", "I hope there's no overkill [overfull net]", or "What the hell are we doing here?" Stories will come out about big storms and big waves of the past or about how someone got hurt in the past on this or another boat or about what has gone wrong and what to do about it. They are not told in a way which heightens the drama. In keeping with the occupational culture of these fishermen they are told in an understated and often humorous way.

> **Story 1.** Karl was talking about fishing on the Alyeska, having greenies [big waves] coming over the stern. "One guy would be running for the crane, one guy could hang onto the gantry, and one guy was locked out. (laughing) There was no other place to hold on to. He had to just haul ass for the back of the house, and he'd almost always get caught by a wave. We called it surfing (laughing) …just screaming up the deck on your ass. …hoping you don't break a leg or your head. (laughing) Those waves are so fast, they catch you just like your standing still. One wave will change your life."(serious)

Fishing off the forward reel required level winding the bridles by hand. The story of Torkel and his injury routinely comes up when fishing off the forward reel in bad weather.

> **Story 2.** "He was sitting on the trawl fence when a big surge jerked the net to the side and then up. It caught him and tossed him back off the fence. He landed on the weight chains. …he couldn't sit down…had a huge black and blue area around his tail bone…that must have hurt."

This is a form of teaching and learning similar to what pilots call "hangar-flying" and what policemen call war stories or "sea stories" (Van Maanen 1973:410). Occupational ethnographers and folklorists have collected similar stories from a variety of occupations including railroad engineer, cocktail waitress, smoke jumper, and paramedic (Gamst 1980; Spradley and Mann 1975; McCarl 1976; Tangherlini 2000). These stories are told to instruct. They contain a lesson or a warning. They invoke questions or reactions on a technical level of the "why did that happen?", "what did you do then?", "how did you fix that?", and "what would have happened if you had tried to do ….?" varieties. This is practical, situation specific task instruction. It includes not just concrete actions and procedures but also problem solving strategies. These stories "organize know-

how, tacit knowledge, nuance, sequence, multiple causation, means-end relations, and consequences into a memorable plot" (Weick and Roberts 1993:368). Among the fishermen of New Bedford, Massachusetts, these "informal training sessions" serve to "reduce both perceived and real dangers of incidents discussed" (Pollnac et al. 1998:57).

The social hierarchy among the Makushin crew is subtle (flat) enough to co-exist with an egalitarian ethos including forms of address. Deck etiquette, on the Makushin, does not allow for interaction among experienced crew which is explicitly super-ordinate – sub-ordinate, unless it is solicited. If I ask Cody, for example, how to treat the bridles he can say something very direct, almost as a parent to a child, like "Don't get on top of the bridles when we're hauling back." But if I have not solicited his advice, he is breaking a rule of etiquette by speaking this way.

Instead he tells a story. It is a softer way of giving a lesson and one that does not violate the egalitarian deck etiquette. (Compare to Menzies (1991) for interaction among deck hands with an egalitarian ethos in another fishery.) And as the Weick and Roberts quote above suggests, a story can organize infinitely more information than a simple statement like, "Don't get on top of the bridles." Language articulates social relationship as it expresses information and ideas. (See Jackson 1998:12 for an even stronger position.) Most of this is unconsciously done. It is just a part of the social etiquette between two crewmen and varies from boat to boat. It is learned during the socialization phase of a new deck hand. Insiders model this etiquette to the new hire in the way they address each other. The new hire might also find himself addressed in this way. If the level of status credit he is given is high enough, the rules applying to interaction between two experienced hands (insiders) will also apply to him. Thus he learns deck etiquette not only by observing but by participating. One of the ways he learns his level of credited status, low or high, is through the way the insiders address him. The code of etiquette is stable in a social setting where status is continually in play.

Gaining technical knowledge through stories of others' experiences can be extremely valuable. This is especially true on the Makushin where tiny errors can be very costly in terms of physical well-being. In his study among air traffic

controllers and in nuclear power plants Karl Weick suggests that story-telling may be especially important in organizations where reliability is a more pressing issue than efficiency. Because of the difficulty in containing errors, certain forms of learning, such as trial and error, are not available. In these cases reliable performance depends on developing substitutes for trial and error learning. Story-telling is one of these substitute forms. Stories record, summarize, and allow the reconstruction of complex and dangerous scenarios. They allow imagination to intrude upon the real and known in a way that can produce potentially important knowledge. Says Weick, "a system which values stories, storytellers, and storytelling will be more reliable than a system that derogates these substitutes for trial and error" (Weick 1987:113).

Not only does story-telling provide a new hire with important technical information but it also provides him with important information about his instructors. The new hire learns about the story-teller's experience and competence through the types of stories he tells. This is important as the new hire tries to determine whom he can trust, to what extent, and in which situations. Status, experience, and technical competence are important factors in selecting and identifying with a role model. We are most likely to model those who are successful or who have status in our eyes (Aamodt 2004:274; Bandura 1977:24; Weiss 1978:711).

Story-telling provides the teller, and other listeners, with similar information about the new hire. Through his responses the new hire gives information about his experience prior to coming to the boat and about his current level of assimilation. Does he laugh and if so at the right moments and for the right reasons? Does he get the jokes embedded in the story? Does he pretend to get them? Is what is supposed to be predictable in the story a surprise for him? Does he respond with a story of his own? It would be a thin description to call this simply technical instruction in story form. Even the purest, most explicit technical instruction communicates on many levels.

Instructional story-telling is an aid to cooperation. These are stories which are told among insiders. They are full of slang and technical jargon. The only appropriate instructional stories describe situations in which the hearer might one

day find himself. They are told in a way that invites the hearers to identify with the teller. The new hire is encouraged to identify with the teller, imagine himself in the team, and cooperate.

3. Direct Technical Instruction

Direct technical instruction is embedded in role modeling and imitation. The Makushin is no sterile classroom environment. There is no designated active teacher and passive student. Both are active. Both interact. This learning takes place in the interplay between individuals with their own personalities, motivations, ambitions, and statuses. There is interplay between the new hire and the crewman who is in that moment instructing him. The role of instructor will be passed around depending on the situation. And there is interplay, sometimes competition, between the momentary "instructor" and the other experienced crewmen. The skipper involves himself from time to time as well.

Virtually all of the technical instruction is triggered by the new hire's behavior. He asks a question and he gets instruction. He makes a mistake and he gets instruction. He does something right and he still gets instruction. The way in which he is instructed communicates how the team and its members are *appraising his status* and what they are expecting from him. His instruction also allows them to check on each other's status. His "newness" reminds them of what they have in common and often leads to increased feelings of solidarity among the crew. Signs that he is learning his roles can threaten the status of other crewmen.

Let us take an example. When the boat leaves the dock the crew spends fifteen minutes or so securing the deck. This includes securing the cranes and other hydraulic winches, stowing tie-up lines and buoys, locking fish hatch covers, and putting away or tying down any objects that could move around when the boat feels the motion of the open sea. This is a good situation for a new hire to ask questions such as where the tie-up lines are stored, where the buoys are tied, and how the crane should be secured. Direct technical instruction in a response can take several forms.

Response #1: "Tie the buoys on the port rail aft of the crane." The new hire gets a short answer pertaining only to the specific case at hand. This is the bare minimum of technical instruction. From the instructor's perspective this

response means: *My expectations of you are low enough that you do not need any extra information. If the situation were complicated enough that you would need more instruction it would be the kind of situation that I would not trust you with. Instead I would take the task away from you and give it to someone else to do or do it myself. The next time you do not know what to do, ask me. I do not expect you to figure it out on your own.* The new hire's status is low. Satisfactory performance will not raise his status but it may gain him such an opportunity in the future.

Response #2: "Tie the buoys on the port rail aft of the crane. We tie them up behind the house in winter because of ice, unless we're sure of a good forecast." The new hire gets an answer which pertains to this case but then goes on to include other cases, exceptions, and a broader context. From the instructor's perspective this makes several points: *I expect you to stick around long enough to see some of these other cases occur. I expect you to learn these things. These other types of cases are going to occur and when they do, I expect you to know what to do. I expect you to grasp a bigger picture and to learn to place tasks within this picture. I provisionally offer you a status which pertains to someone who has mastered this task. In this case, I give you status at the level of someone who is trusted with knowing how to secure the buoys.* The new hire's status is in play. By satisfactory task performance he can begin to turn this provisional status into real status.

Response #3: "Get out of the way. I'll do it." The new hire receives no technical instruction. The new hire can only learn by watching. The words chosen have communicated no technical job information. The way they are said and the body language used communicates social information. *I extend you low provisional status. You do not know how to do the job and you get the status commensurate with someone who is unable to do that job.* In the absence of other circumstances such as time pressure or a task which is difficult to put into words like tying a knot, it communicates, *You don't have a future with the team unless you make a change in your behavior or attitude.*

When the matter at hand is clearly a task that cannot be easily taught in words, there are variations of this third response which are important. Lack of technical instruction may, but does not have to, communicate a low team status. In

the following examples there is no technical instruction offered, but low status is not always communicated. The responses given may be (1) “Hey!” with a quick motion of the thumb that the guy should move out of the way, or (2) “Get out of the way. I’ll do it.” with a sideways movement of the head, or (3) “Let me in there. I’ll do it.” with a bob of the head, or (4) “Let me give it a try.”, or (5) “Do you want me to give it a try? Maybe I can get it.”? These all grade from low to higher levels of status. The highest and most polite way of addressing a teammate is to phrase a command as a question. Suggesting that you might not be successful either is another way of minimizing the distance between you, the teacher, and your student. It does not require a long verbal exchange to communicate complex status information.

While direct instruction can be a vehicle for social communication, it is rather limited in the types of knowledge which it can carry. Direct instruction is useful only for transmitting explicit task related knowledge such as technical procedures and problem solving strategies. In addition to explicit task related knowledge, story-telling can transmit implicit non-task related knowledge such as social etiquette and cultural norms. Role modeling and imitation carries the broadest array of knowledge. It can also transmit implicit task related knowledge such as where to direct your gaze, when to be alert, and how to position yourself on the deck.

These are the important practices of socialization on the Makushin. They are the media through which the new hire gains relevant technical, social, and cultural knowledge. Without this knowledge, exceptional cooperation cannot be built. There is more to socialization than just practices. These practices demand, or set in motion, three important processes. The first, extending status credit, is the mechanism through which the team seeks to build a cooperative new teammate as quickly as possible. The other two processes are not aids to cooperation at all. They are processes of competition. Their influence works against the forces for cooperation. The outcome is unpredictable. Exceptional cooperation can be built only when a crew can survive these competitive processes.

D. Processes

In the early 1950s Robert Bales's research led him to create informal problem solving groups made up of strangers who were equal in status characteristics significant in the greater society. He found that through face-to-face interaction there evolved inequalities in opportunities to participate, in participation, in evaluations of performance outputs, and in influence over the group's decisions. Essentially an intra-group power-prestige order emerged and became stable. These groups had a tendency towards hierarchy (Bales 1950, 1951, Bales et al. 1951).

Expectation States Theory, the perspective which dominates the field of small group research today, arose out of attempts to explain this occurrence (Gibson 2000:733). Expectations about future performance arise out of the task-related interaction of members of the group. Once these expectations have emerged, they determine subsequent task-related interaction in such a way that "expectation states are confirmed and hence maintained by the very interaction that depends on them (Berger et al. 1980:480-481). So, interaction among status equal strangers produces expectations, resulting in a power and prestige hierarchy, which further shape interaction.

Informal problem solving groups of status-*unequal* strangers were also observed. Rather than a new intra-group order emerging, inequalities which were significant outside the group were maintained inside the group. The power-prestige order of the group correlated with external status differences. This order appeared instantaneously instead of evolving through interaction. The particular status characteristic (e.g. age, sex, race, occupation, ethnicity, education, organizational office) made no difference. Nor did it matter whether or not the status characteristic had any prior established association with the group goal or task. (See Berger et al. 1980:480 for relevant studies.)

The Makushin is somewhere in between. I was unable to observe the possible effects of greater societal status characteristics on group hierarchy because the deck hands were roughly equal in these characteristics. However, this was not an informal problem-solving group of strangers. There were some performance

expectations for the new hires which were based on those portions of their work history that were known by the crew.

So, we are not interested in the process of creating hierarchy from expectation-free status equality (Bales). Nor are we interested in the instantaneous process of appropriating greater societal status characteristics (even task irrelevant ones) into performance expectations (Berger). We are interested in a mixture of the two. We are interested in the face-to-face interactions (processes, strategies, tactics) by which tentative performance expectations based on occupational history (with strangers) are associated with a provisional status position (given by the team) which is then appraised and assessed through further face-to-face, task-related interaction. These interactions lead to a recalibration of expectations and a re-apportioning of real and provisional status. This process continues long after a status ordering within the deck crew has stabilized. It is part of the **daily social hygiene of the team** and does not seem to stop. When a new hire joins the Makushin, status is extended to him provisionally based on technical and social performance expectations: *How good he will be to work with and live with.* Then real face-to-face interaction begins. Our present interest, like Berger's, is in these "status organizing processes" (Berger et al. 1980).

1. Extending Status Credit – learning the job and the team.

A new deck hand presents the crew with a host of questions. Is he competent, reliable, trustworthy, and easy to live with, for example? Where will he eventually end up in the status hierarchy? At the beginning he is unknown. The team has a choice. They can treat him as a low-status outsider until he demonstrates he can be trusted to perform his roles in team, or they can extend him some provisional status based on a certain expectation of what he will attain. For the crew of the Makushin this is a choice only in theory. In reality, they have only one option. Treating him as an outsider slows down the process of learning his technical and social roles. This is a luxury that these fishermen cannot afford. The goal of familiarizing the new hire with his technical and social roles is to get him making as large a contribution, as soon as possible, to the success of the boat. They need a cooperating teammate. So they extend him provisional status.

A new deck hand, Walter, was hired during the period of my research. Only the skipper knew Walter before he was hired. We had formed an expectation of him only through what we had heard from the skipper. MacPhail, like each one of us, made a guess as to what level of status Walter would eventually achieve and extended him something close to that provisionally. He was hired as a "web man" so we expected a certain collection of skills and a level of expertise regarding deck work and nets. Attaining technical skills requires fishing experience. Fishing experience usually correlates with attaining social skills as well. We assumed that he knew how to live with others on a fishing boat without causing problems. This provisional status was extended with the expectation that Walter would learn the job and learn the team to a reasonable degree.

Status on the Makushin means the right to participate in discussions, make evaluations, and influence decisions. It is created in social interaction and is based on one's responsibilities and performance in, or contribution to, the success of the operation. Actions and status are justified in terms of their contribution to the success of the boat. (See Knutson 1991:78 who made the same observation in another Alaskan fishery.) Technical competence is directly linked with status in the team. The crewman with the best skills and most experience has the most responsibility and the highest status and the authority that comes with it. If an initial line of status credit was extended based on a level of technical competence which turns out to be incorrect, then that status level will be adjusted downward to match the declining perception of technical competence. Working and living, the technical and the social, cannot be totally separated on the Makushin. I have seen this confirmed in the opposite direction as well. One of the experienced hands had a very important social role on the boat. This influenced the crew to overlook some of his technical short-comings and grant him a higher level of status than he strictly deserved.

After one fishing trip we agreed that Walter was not meeting our technical skill expectations. This was reducing MacPhail's confidence in him as a teammate and he became less willing to extend him higher provisional status. He began to treat Walter as someone of his achieved status. This was much lower than the level we had provisionally credited him with. MacPhail had made this switch

before the rest of us and so there was some temporary unevenness in the team's approach to Walter. An example of this showed up in the social realm. Inclusion in recreational activities is a signal of team membership. We were getting ready to go to the Elbow Room bar and I asked if I should tell Walter that we were going. "I don't think he's earned a seat at the bar yet," said MacPhail. And in terms of learning the job he had not. He was not doing a bad job of fitting in socially. He was easy to live with. But his failure to live up to expectations in the technical realm resulted in social exclusion. Social exclusion does not build cooperation.

The case of Ryan was completely different. He was known casually by some of the crew who had a high regard for his skills. Upon entering the team he was granted a very high level of provisional status. This ended up corresponding to his technical skill level. Treating him as a provisional insider from the beginning allowed him to start making contributions to the team immediately. It also became the basis for exceptional cooperation in the future.

Extending provisional status is part of a system of social accounting which is considerably more relaxed than strict reciprocity. Relationships governed by strict reciprocity "must be continually balanced, debts are repaid quickly (often in kind), and careful track is kept of each person's contributions." In relationships with a looser accounting system, among family members and friends, for example, "the books are allowed to remain unbalanced for long periods of time and exact tabs are not kept on each party's contributions" (Kollock 1993:769-70). While strict accounting systems minimize potential exploitation, this often comes at the expense of total outcomes for all parties. This is especially true in conditions, such as those found on the Makushin, where "noise" (distortions in the perception of actors' moves) is present (Kollock 1993:783). Were deck hands to employ a restrictive accounting system during socialization, cooperation would be much slower to emerge. By employing a relaxed accounting system, including extending status credit to the new hire, the crew increases the speed and overall level of cooperation which can be built.

When a new hire meets or exceeds expectations, it can help to build minimal cooperation quickly, as in the case of Ryan, while it lays the groundwork for possible exceptional cooperation in the future. When a new hire fails to meet

initial expectations, as in Walter's case, social exclusion and a reduction in expectations is the rule. This damages present cooperation as well as prospects for future cooperation. While extending provisional status almost always aids cooperation, the following processes are strictly competitive.

2. Checking definitions

Socializing or "breaking in" the new hire is left largely up to the other experienced deck hands. When the new deck hand gets on the boat there will be a formal safety orientation and an informal orientation to watch standing. The rest of the technical job teaching is left up to the crew.

Ideally the senior deck hand helps the new hire settle in. The new hire wants to identify with the most skilled, experienced, and highest status deck hands. The skipper wants the new hire to imitate and learn from his most experienced crewmen rather than his least. This does not always happen. I have seen the senior hand ignore the new hire. Perhaps he believed himself to be above such mundane work. Perhaps he was angry with the skipper for not hiring his recommendation. (An experienced deck hand will often make hiring recommendations.)

Whatever the reason, when the new hire can not go to the senior crew with his questions, he must go to a less experienced crewman, someone he can access. He receives less authoritative answers and explanations from this junior hand than he would have from the senior crewman. As a result, the new hand will want to check his definitions with the other team members whenever possible. While on the surface about technical aspects of the job, this interaction is more deeply about the social structure of the group and the relative status of its members. This desire to check definitions reinforces the forces of competition already in play between the insiders as a result of the new hire's presence in the first place.

Let us return to the example of securing the deck after leaving the dock. When the deck is secured the new hire may seek out other crew and say something like, "Karl said to tie the bags [buoys] up on the shelter deck. Is that where we always keep them?" This really asks the question: *Is Karl correct?*

Response A. "Yeah, that's right" is a response which, in addition to technical information, says (a) to continue giving Karl the same status you have

been, (b) I rate you at the same status as Karl did, so (c) you can rate Karl and me as having equal status in this area of expertise.

Response B. "You can do that, or you can put them on the back rail, or on the port side" is a response which says that (a) I am giving you more status credit than Karl gave you and that (b) you should rate me a higher status than you rate Karl. (I have higher status because I correct him.)

Response C. "You don't have to do that. Just put them anywhere" is a response which says (a) Karl does not know what he is talking about, I do, and therefore my status is higher than Karl's, (b) you are giving him a higher status than he deserves and should adjust downwards, and (c) I do not rate you highly enough to give you a proper answer. (See response #3 on page 168.)

Response D. "Put them wherever you think is best" is a response with a test. Here the new hire is being given an opportunity to use his judgment. He can be tested on this. It is an opportunity to make a greater move up in status or down than simply following a specific command would be, as in "Put them on the shelter deck." It communicates that (a) Karl does not know what he is talking about (he is giving you unnecessary instructions rather than trusting your judgment), (b) Karl is rating you lower than you deserve, (c) I am extending you provisional status by offering you a chance to use your judgment (e.g. I am crediting you with the status that pertains to someone who can be trusted to use his judgment regarding where to tie the buoys), and (d) I know what I am talking about and therefore my status is higher than Karl's.

This example of status credit is very narrow. It extends to this job alone. I am not offering a level of status credit equal to that of one who can be trusted to use his judgment to determine if and how much maintenance work the cod end[7] needs, how long it will take to fix the net, if the fuel centrifuge needs an overhaul, or if we should leave port in this weather and go fishing. Though status credit is narrow it does not exist in a vacuum. A status gain achieved in one technical area influences how much provisional status teammates are willing to extend to you in other areas. The same is true of a status loss. The damage is not easy to limit. The

[7] The cod end is a heavily reinforced bag attached to the back of the net.

thinking among the team is something like: *If he can't master [task A] what else is he going to screw up?*

By checking definitions, the new hire stimulates competition among insiders through both positive and negative means. Response C contains a clearly negative attack on Karl's status. The responder is trying to lower Karl's status, in the eyes of the new hire, through this negative statement. In responses B and D there are positive statements which contain status gains for the new hire. The responder competes with Karl, through the new hire, by trying to increase his own status rather than to decrease Karl's.

Response D takes the form of an exchange. In giving this response I exchange an increase in provisional status with the new hire in return for something like **loyalty**. My offer of higher status makes me attractive to the new hand. If I extend him the equivalent of "one-year-experience deck hand credit" and Karl extends him "one week experience" status credit, he will prefer to exchange with me. He seeks the greatest benefit possible. This experience will be especially strong if he believes that he does not deserve the provisional status I have credited him with or if he believes that he does deserve it but that I cannot really know that. In either case he sees me as being generous. My use of loyalty is similar in meaning to Lawyer and Yoon's use of affective commitment. "Positive emotion increases the propensity to form an affective commitment to the relationship" (Lawyer and Yoon 1993:465).

Generosity is a status booster. Generosity is an extension of provisional status. The media could be such things as information, time, and money. It all says the same thing. You have status level A. Status level B is higher. If I show you how to tie a knot twice, for example, then I am being fair for status A. If I show you how to tie a knot in several different ways and explain its various applications, and this behavior pertains to status B, then I am being generous to you. I am extending you provisional status and then being fair on the basis of this provisional status that I have extended to you. I am treating you in a 'fair' way as if you held status level B. I have taken a step towards legitimating your possession of status level B. I have tried to stabilize and "render uncritical" our social relations (Cohen 1977:194). I have been generous and in exchange the new hire

will be loyal. Loyalty is defined here as being slow to decrease a status rating. My status will decline in the eyes of everyone else on the boat before it does in his eyes. It is the opposite of Generosity. Generosity is the premature increase of provisional status. Loyalty is when you wait longer than you should before lowering my status. Loyalty is status insurance. Building loyalty through generosity is one of the positive strategies employed in this status game. A statement like, "You don't have to do that [what Karl said]" is an example of a negative strategy.

Checking definitions is one way in which the new hire learns the technical aspects of the job, his changing position within the team, the relative positions of all the other team members, and even increases his own status as a result of their internal competition. As was mentioned above, socializing a new hire is also an important experience for the old teammates. They are checking their statuses relative to each other. The new hire is a catalyst for this status competition. This competition is not an aid to cooperation. If the new hire has strong technical and social skills, he can be drawn into competition with the very deck hands who are trying to build cooperation through socializing him. He starts in the lowest status position but may quickly threaten to overtake one of the older hands. This also harms cooperation.

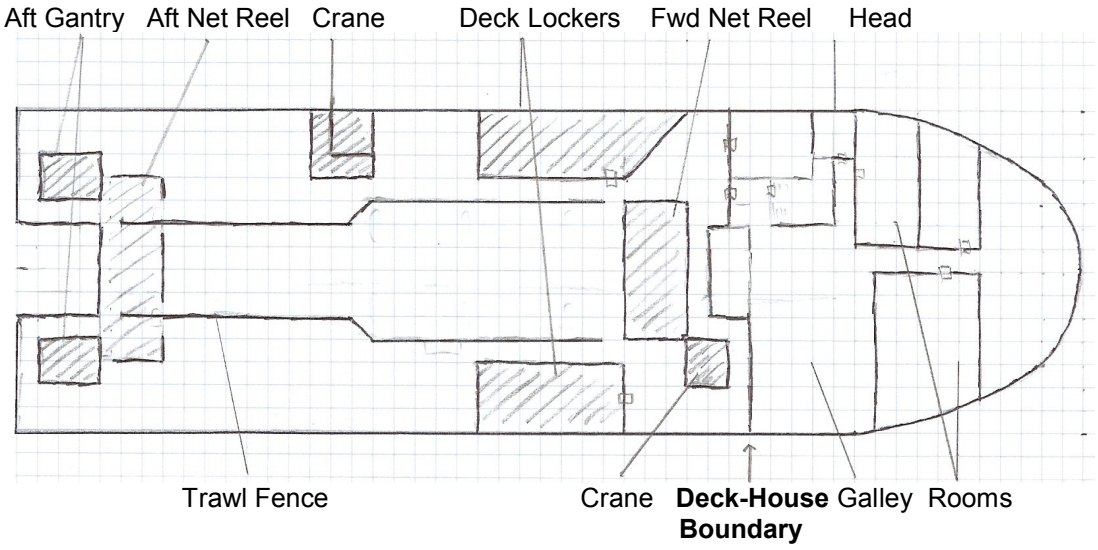
3. Response of the 2nd lowest hand

When the new hire shows the potential for rapid gains in real status, the threat to the status of the lowest ranking older crew, Karl for example, will be most acute. He may become particularly active in defending his position. One of the ways Karl will do this is by trying to negate the new hire's ability to make status gains through checking definitions. Karl will check his own definitions with the other senior crew. In short, it shows a preference for self-correction over other-correction. If he is wrong he wants to appear, vis-à-vis the new hire (his main threat), to be correcting himself rather than having the new hire do that.

For example, after giving the new hire a command that he has any uncertainty about such as "tie the bags up behind the house" Karl will go to the other crew and say, "I told Walter to tie the bags up behind the house." He wants to check his definition of the situation with the rest of the team before the new hire

has a chance to. If his definition is accepted by his teammates then he need not fear a loss of status if the new hire comes and checks. If it is not accepted, he can get his understanding re-defined and then go out and give this new, pre-checked definition, to the new hand. "Actually, the forecast isn't that bad. It's probably better to put them on the port rail." This revision is presented to Walter as if it has come to Karl after reflection and not as it really has come to him in a conversation with the rest of the group. Later if Walter checks with the other teammates, Karl will be subject to the social implications of response A (page 174): (a) Continue giving Karl the same status you have been, (b) I rate you at the same status as Karl did, so (c) you can rate Karl and me as having equal status in this area. This is the response which will do the most to protect Karl's status. It is worth his effort to increase the chances of getting this response.

This checking of definitions must be done in the absence of the new hire in order to achieve its purposes. This is facilitated by the layout of the boat. There are numerous divisions and boundaries in the physical space of the boat. The most important boundary to social interaction is loud noise. The noise of the machinery is such that private conversations can take place when separated from potential listeners by as little as three or four feet. There are also boundaries to sight. The primary work space is outside on deck. The deck is not a single open space. It contains net reels, trawl fences, and aft gantry (gallows) which break up the lines of sight. There is also an enclosed deck locker which is a work area. The primary common living space is the galley which is inside the house and cannot be observed from the deck. It is quite easy for a deck hand to leave the new hire out on deck, encounter another hand in the deck locker, the galley, or elsewhere on deck, check his definitions in complete privacy, and then return to the new hire.



This view gives a feel for the dimensions of the deck. The forward net reel is in the upper left corner of the photo. There is a gray tarp on the aft reel.

A lot of this interaction will be avoided if the senior crew will help manage the transition of the new hire. This reduces status competition and aids cooperation. The skipper, if he is socially alert, will want this to happen. It is one of the benefits of consulting with the crew prior to a new hire. If the senior crew has recommended the new hand he has a personal stake in his success. He will lose face if the new hand fails to live up to expectations. Therefore, he will help manage the new hire's transition to the boat. The new hire will accept technical instruction and social situational definitions from the senior crew without feeling like he needs to check them with the other teammates. When the senior hand extends the new hire progressively higher levels of status and acceptance the other hands will be hard pressed not to go along. This makes for a smooth process. It avoids the very un-team-like situation of teammates having differing appraisals of a particular member's status. (e.g. I think Ryan is great, MacPhail thinks he is just alright, and Karl thinks he is terrible.) Large differences in status appraisal are destructive to building cooperation. Karl attacks Ryan and tries to form a coalition which will isolate him (as if he belonged to a competing team). MacPhail is passive. I defend Ryan and try to maintain him as a fully integrated teammate. Attack. Be passive. Defend. Status competition poses small and great challenges to cooperation in the team.

Socialization practices are aids to building cooperation. Accompanying social processes can be positive, negative, and neutral. There are at least two significant outcomes.

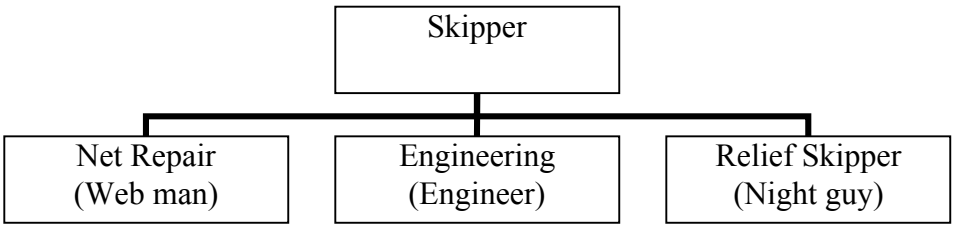
E. Results

1. Informal social organization

The management of status and expectations is central to the creation and maintenance of an informal social organization among the crew. In many ways the informal organization serves the goals and purposes of the boat in general. (Zurcher 1965 made a similar observation on a military vessel.)

Formally the boat has a two-tiered hierarchy. By law and custom the skipper has authority over everything that takes place on the boat. For example, a crewman's bunk can be searched by the skipper at any time. (While this rarely

happens, is there any work situation on shore where that would that be tolerated?) Below the skipper everyone is formally equal. Although there is much overlapping[8] in expertise, crewmen do have their own areas of responsibility. Each hand is in a sense vice-president of his own area. All are one step below the skipper and formally equal.



Cooking is also an area of expertise but of lower status than the others. During the Olympic system[9] there were additional crew and this led to a second tier of status. One man might be only the cook or only a non-web man deck hand and therefore on a level lower than these other specialties.

Informally there is a multi-tiered hierarchy of status. These deck hands, though formally equal in power, show Bales' same tendency towards hierarchy (Bales 1950, 1951, Bales et al. 1951). This is achieved status not ascribed status. It emerges in social interaction, as has been described, and in accord with categories directly related to the group task. Status is tied to expectations of performance and is based on experience, demonstrated competence, and responsibilities. As in other settings status is associated with the technical sophistication, complexity, and importance of one's job responsibilities (Encandela 1991:145). When one crewman becomes responsible for, or competent in, more than one of these positions, his status increases. This occurs quite commonly when a new hire comes on board. An experienced hand will take on additional responsibilities temporarily with the expectation that they will be handed off to the new hire at some point in the future.

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[8] Hutchins work on distributed cognitions within navigation teams of large vessels suggests that overlapping expertise is superior to mutually exclusive task knowledge. "Not only are members of the team responsible for their own jobs, they seem also to take responsibility for all parts of the process to which they can contribute." If this kind of helping out did not occur, "if each individual was required to produce flawless performance entirely alone, the system would grind to a halt everytime any member of the team was unable to do his or her part of the job" (Hutchins 1990:210).

[9] See footnote #1 on page 43.

An informal social organization serves the goal of efficiency on board. While there is considerable overlap there is not perfect crew inter-changeability. Every crewman cannot do every job. The boat functions inefficiently when the engineer, for example, is taking out the garbage, buying groceries, and changing light bulbs. These are better done by a crewman who cannot do what the engineer can. Or when the night guy, rather than sleeping during the morning, is awakened to do a job that the cook or engineer can do. The deck hands know where they all sit within the social order. When there is basic agreement on social ordering, task allocation takes place rather smoothly. Maintaining an efficient division of labor, in a sense rationalizing task allocation, is one of the functions of this informal organization. In this way it serves to support and promote the organization's overall goal of efficient production. (See Richardson 1956:206 for comparison with merchant ships.)

2. New hire's effect on the team

The socialization of the new hire also has a cultural effect on the team. Insiders are re-socialized when they answer the questions of newcomers. The new hire often helps experienced crew to remember and reconstruct knowledge in a conscious way that they had forgotten they possessed. The collective mind can be renewed, and organizational memory refreshed, during this re-socialization (Weick and Roberts 1993:367-368). This renewal can also improve the performance of marginal insiders (Sutton and Louis 1987:357).

Socially, as has been mentioned, the new hire's presence stimulates status competition. This competition, and the way in which the new hire is incorporated into coalitions, can influence the distribution of power within the team. The team also sees how the new hire is different and how uncoordinated he is in relation to the rest of the team. Team members are reminded of their similarities and degree of trust and cooperation. In the midst of the status competition, the new hire is a reminder of the basis on which the team's borders are drawn. This can result in an increase in group solidarity.

F. Conclusion

The importance of coordinated work behaviors, the motivational power of common goals, social familiarity, and cultural agreement should not imply a peaceful, non-competitive, and purely cooperative co-existence on board. As has been described above, there is a constant process of assessing and actively trying to protect or elevate one's own status level within the crew. Even with all the demands for, and aids to cooperation, status competition is alive and well. The existence of social harmony is not a given. On the Makushin the relative stability of status positions within the team is a dynamic equilibrium. It is the result of a tremendous amount of pushing and pulling.

It is in part because of the forces promoting competition, which the newcomer's presence stimulates, that socialization can at best only lay the foundation for exceptional cooperation in the future. At worst it can lead to social exclusion which is contrary to cooperation. Socialization practices and processes are not sufficient to produce this exceptional cooperation. They are a necessary, preparatory step *if* this cooperation is to develop. Fully developing that foundation into exceptional cooperation requires the repetition of a more powerful, and less divisive, exercise in team building. This includes the creation of a common focus and the experience of a common mood or shared emotion. On the Makushin, this exercise in team building is located in the practice of collaborative story-telling. These are not the instructional stories described above. These are stories which retell the shared experience of collective deck work. Through the retelling and re-mastering of shared experience, combined with the raw materials of work environment and the foundation of socialization, exceptional cooperation fully develops.

IV. Building exceptional cooperation through story-telling

Storms and bad weather are a constant possibility and often the reality of Bering Sea fishing. They set in motion a type of story-telling which has important consequences for the team as a whole and for its members individually. These are stories of work done together on deck. The practice accomplishes two things that

are important to building exceptional cooperation. First, this is a collective exercise in risk management. Individual psychological benefits of successfully coping with danger are gained through a collective endeavor. In the absence of a way of coping with the dangers of fishing, these fishermen will not remain a part of the team. The benefit is felt individually and success is attributed to the team. This attribution positively influences cooperation. Story-telling is also a means by which trust, agreement, and an ethic of sacrifice for the team are encouraged. The stories make sense of the benefits of team membership, both instrumental (e.g. task success, safety) and intrinsic (e.g. global feelings of pleasure/satisfaction and interest/excitement), and attribute them to the group itself. The cultural valuing of shared support, risk-taking in pursuit of group goals, collaboration, and equality are picked up in these stories and help to direct this attribution. The team can leap from minimal, required, task-related cooperation to exceptional, voluntary cooperation in working and living. The instrumental benefits of this cooperation increase task performance and profitability. The intrinsic benefits include the emotional attachments of friendship and camaraderie. Earnings is the prime stated motive for fishing and camaraderie plays an influential role in the quality of working life, and in the overall quality of life, of these deck hands.

A. Telling deck work stories

The main interaction, as it relates to risk management and team building, takes place after work is done on deck. At this time there are two normal sites for crew interaction: near the entrance to the house under the shelter deck and in the galley.

The light on the left marks the outdoor site for story telling. The galley window is visible above the fire axe.

If the net has been re-set the skipper will be in the wheelhouse and both locations will belong solely to the crew. The engineer stands near the doorway as he fills the remaining space in the fish holds with water. Deck hands who have removed their gear in the deck locker sometimes pause here to smoke and talk. Once the tanks are pressed the engineer goes inside. Crew interaction then takes place in the galley. The skipper's absence is important because these stories are about coordinating the experiences of the crew. The skipper has a vastly different experience of deck work. It is so different as to be largely irrelevant to this exercise. Especially when the weather is bad, working on deck can be pretty intense. On a physical level, it can provide an adrenaline rush which takes some time to subside. After an intense time out on deck, it takes time to wind down before you can think about trying to sleep. During this physical winding down some important social work takes place.

The conversation has a slightly different tone than it did before stepping out on deck. Expectancy and anxiety are replaced by the after effects of exhilaration like satisfaction and excitement. In telling stories about the work which just took

place out on deck the crew relives the experiences together. These stories often affirm what was good or introduce discussion of a close call that might have been very bad. They generally deal with the very specific instances or work events that were just experienced. Stories that are less immediate in time and space, about seasons, skippers, owners, plant workers, and family, are told in other forums. This is a time for telling the stories of the team in the immediate past.

These deck stories exhibit two of the four features present in Schwartzman's analysis of stories at work. A third one of those features is inverted from what she observed. First, the storytellers are almost always the stories' heroes or victims (Schwartzman 1984:83). Sometimes they can be both. The human subject is both hero and sufferer (Arendt 1958:184). These stories are about the bad things that happened, or almost happened, to me or to us. And they are about how I prevented something bad from happening to someone else in the group.

> **Story 3.** November 1, 2004. The three of us were talking about the haul back. There was a lot of water coming over the stern. It was the worst haul back of the season by far. We were recalling big waves. When we saw them, when we yelled a warning, what our reaction was, and what everyone else's reaction was. For example, "I saw a big one out of the corner of my eye and just yelled 'big one!' and I ducked down and the thing hit me right full in the back, just covered me." (*I was a victim*.) Then Karl says, "Yeah, I didn't have time to look. I heard you yell and I just grabbed on to the ladder as fast as I could." (*You were a hero*.) We were reliving what we had experienced out on deck. We were reliving the parts where we were relying on each other, looking out for one another, and warning each other. It makes you feel close. It's sort of reliving that cohesive experience. It's kind of nice. We sit in here, safe and sound, reliving that experience after the fact. We relive the experience of calling out waves [warnings] for each other.

Second, the stories describe the unexpected or improper.

> **Story 4.** "Remember that blow? Bart and I went out on deck to take a leak. We look up and there's a 45 -50 footer coming over the stern. There was water up above the lights on the top of the gantry. Nobody went out on deck alone."

They had gone out on deck expecting a sea state which would allow urinating and were surprised by what they saw. In terms of entertainment, the

unexpected can be a hook which draws an audience's attention more thoroughly to the story. Louis has suggested that surprise is an event which provokes cognition and initiates a process of sense making (Louis 1980:240-241).

Finally, Schwartzman observed that the stories she heard in a community health center treated everyday events as "momentous and sometimes life-or-death issues" (Schwartzman 1984:83). What I observed among deck hands was the inverse. What in my eyes were life-or-death issues were treated in a light and non-dramatic manner. In the instructional story #1 on page 164, for example, the term surfing, a form of play, was used to describe the very serious event of "just screaming up the deck on your ass. …hoping you don't break a leg or your head". The audience expects these life-and-death stories to be told with humor and matter-of-factness rather than in a way which dramatizes or, heaven forbid, over-dramatizes the experience. This is related to the occupational culture as has been previously discussed.

B. Outcomes: intrinsic and instrumental benefits

1. A method of coping with danger

Michael Jackson argues that self-determination or self-definition and control or mastery of one's fate are the central human preoccupations (Jackson 1998:17-22; compare Karasek and Theorell 1990:31-40; Morrison and Clements 1997:322 who emphasize the influence of a sense of control on perceptions of stress). For these pollock fishermen the sea can stand in for fate. It is practically and symbolically a "force of otherness that one cannot fully fathom and over which one can expect to exercise little or no ultimate control" (Jackson 1998:19). But pollock fishermen, like everyone else, according to Jackson, through will and imagination carve out a space in which they can act and be their own master. Telling both deck and instructional stories is a way of carving out a space of free will and control within the world of the sea. From the actors' perspective these stories are told to entertain, pass the time, and maybe instruct. From an observer's view, by telling these stories the actors come to experience the world as a subject and not purely as an object tossed on the stormy seas (of fate).

"In all societies, recounting one's experiences in the presence of others is a way of re-imagining one's situation and regaining mastery over it." Stories enable people to "recover a sense of self and of voice that was momentarily taken from them. …we come to feel that the true meaning of an event that befell and overpowered us lies within our grasp – partly, if not entirely, a matter of our won insight and agency." Stories are instinctual ways "to bring an overwhelming and incomprehensible experience 'under control'" (Jackson 1998:23,24). These stories "simultaneously create, transform, and comment on the realities of [occupational] life" (Schwartzman 1984:84).

What Jackson says about the truth of these stories applies on the Makushin. "Objectively, stories and ritual scenarios seldom tell the truth about what actually happened." He calls them "expedient lies" which prioritize **re-mastering experience** over recording it (Jackson 1998:24). This is true but not on all levels. The rules of the "deck stories" genre are flexible. One can tell oneself into the story as hero, victim, or even villain. I have not observed that this choice of role influences a story teller's success in both accurately recording and at the same time reshaping the experience.

Especially in the realm of internal reactions (e.g. what I was thinking and what it meant to me) it is very hard to verify how much these change from the event to its re-telling. They are not usually verifiable to others. In this internal realm there is clear priority given to re-mastering the experience. The sequence of external events, however, generally gets accurately recorded. This is largely because the events happened in the presence of the story's audience. The teller will want to avoid having his account corrected by the audience. For example, when the story of a haul back gets told in the galley afterwards, discrepancies between the living of it and the telling of it will be noticed and commented upon. Telling a story poorly (e.g. events out of sequence) and/or incorrectly (get the events wrong) results in a loss of face.

Deck stories are always commented upon by audience members. In fact it is difficult to differentiate teller from hearer, as in story 3, for example. Everyone was there and everyone has a reaction to some intense experience. Everyone participates in retelling and reliving the experience. The result is a **collaborative**

form of story-telling in which all perspectives are included. There does not seem to be any systematic form of turn-taking. When a particular hand is mentioned in the story, he probably has the privilege of first response so that his own experience of the event can be told into the story without upsetting the chronology. Consistent with the cultural value of low emotional expressiveness, there is mutual encouragement to under-tell the intensity of the experience and one's emotional reaction to it. The same form of correction I experienced as a new comer (page 153) could be invoked here by similar kinds of overstatements. In this forum, the corrections would tend to be more subtle because competing definitions (i.e. overstatements) would not be so divergent. Nobody on the Makushin is as green as I was when I had my first experiences. All these deck hands have had their first experiences elsewhere.

This story-telling is a form of "mastery play" which helps people "regain a sense of control in situations that overwhelm, confuse, and diminish them." It is a way of acting that transforms our experience of the situation while leaving it unchanged as seen from the outside (Jackson 1998:30). One of the ways control and self-determination gains are made is in this revision of one's own internal reactions. If I experienced fear and retell it as excitement, it may help to make that fear more bearable. To modify Blixen, "All fears can be borne if you can put them into a story or tell a story about them."[10]

We re-lived the experience and retold the story of working out on deck together. We were warm, dry, and safe. We knew we had come through the experience safe and unhurt. This knowledge gave the re-telling, the re-experiencing, a different mood. In the midst of the experiences out on deck we could not know what the outcome would be. We could not know that we would avoid injury, for example. Anxiety, stress, and possibly fear were part of the experience. Maybe there was also social uncertainty as to how much confidence could be placed in each other. Having come through that intense common experience, that confidence level has risen. Instead of re-telling the *uncertainty* of trusting each other, we re-tell an *expectation* of trust. Now that it has been demonstrated that we can trust each other in such a situation, we suddenly "knew

[10] Blixen used sorrows in place of fears (Arendt 1958:175).

all along" that we could trust each other. The result includes a change in how we recall our previous state as a team. By reliving and re-mastering the dangerous parts of that experience together again we see them with confidence and perhaps humor rather than anxiety and fear. (For a different explanation of the "therapeutic function" of story-telling among North Atlantic fishermen see Pollnac et al. 1998:57.)

This re-mastering of experiences on deck creates new **metaphors** for understanding the experience. The raw exhilaration, fear, excitement, and other various emotions need a frame for understanding them. If we just sit around and say, "Boy, we really cheated death that time" few of us will be able to keep doing it. But by using the picture of surfing, from the previous story, for example, it sets up a new metaphor relating fishing to sport. New metaphors give us a new understanding of our experience. They give new meaning to our pasts, our daily activity, and to what we know and believe.

> "New metaphors have the power to create a new reality." "If a new metaphor enters the conceptual system that we base our actions on it will alter that conceptual system and the perceptions and actions that the system gives rise to." "It is reasonable to assume that words alone don't change reality. But changes in our conceptual system do change what is real for us and affect how we perceive the world and act upon those perceptions" (Lakoff and Johnson 1980:145-146).

Working out on deck becomes like doing a sport. The excitement, fear, exhilaration, and uncertainty are not of the life and death variety but rather become understood as the sports variety. The worst thing that can happen is that you lose the game. Rather than sit around shaking with fear after a close call we should be telling "locker room" stories and enjoying our team's latest "victory." So many important parts of the fishing experience such as emotions, ideas, and time frames are either abstract or not clearly and easily understood. Metaphors come to our aid by linking concepts that we understand in clearer terms, and have more experience with, to these difficult to grasp aspects of our experience. How can a deck hand understand his relationship with the sea which is both provider and destroyer, sublimely beautiful and deadly? Melville captured this predicament.

> At such times, under an abated sun; afloat all day upon smooth, slow heaving swells; seated in his boat, light as a birch canoe; and so sociably mixing with the soft waves themselves, that like hearth-stone cats they purr against the gunwale; these are the times of dreamy quietude, when beholding the tranquil beauty and brilliancy of the ocean's skin, one forgets the tiger heart that pants beneath it; and would not willingly remember, that this velvet paw conceals a remorseless fang (Melville 1967[1851]: CXIV:449).

The deck hand needs some new metaphors. He needs something to structure the overwhelmingness of the experience and to put it in terms which are familiar and understandable. Metaphors link something clear with something mysterious and thereby make the mystery more understandable. In mundane and well-understood occupational settings, exotic metaphors may be used to make these aspects of life more exciting.[11] This would be consistent with the feature of stories that Schwartzman observed in a community health center. On the deck of a Bering Sea pollock trawler, where so much is uncertain, routine is comforting rather than boring. Familiar, clearly-understood metaphors, like sports, are used in this context to tame the danger and mystery of the sea. (See Binkley 1995:139 on how north Atlantic fishermen try to make the extraordinary ordinary.)

As an aside, once a fisherman spends enough time at sea, the sea and boat become what is most familiar. The symbols get reversed. I have heard fishermen on the Makushin use the familiar stuff of their lives at sea to understand the mysteries of life on land. A wife's anger is understood in terms of a storm at sea. A failing marriage is a sinking ship.

The idea of a sport is an example of the broad games and play metaphor which is repeated in these stories. Bering Sea pollock fishing is a game to be played. During open access fishing one started with zero and whoever had caught the most fish when the season ended was the winner. The arrival of an individual catch quota has not changed this powerful metaphor. It has weakened the competitive aspect of the game but strengthened the aspect of rules. This is not an unstructured competition. This is a game. A game has rules to follow and consequences that come with breaking these rules. This brings to mind Mary Douglas' work on risk. In her typology of misfortunes and causes she makes the

[11] Neil Thin made this helpful point.

distinction between **normal accidents** and abnormal accidents. Normal accidents come about through breaking a rule. Abnormal accidents come about through the radical intervention of some higher authority (Douglas 1992:60-62). (Riemer's (1976) typology of mistakes in a different industrial setting is also relevant here.) On the Makushin this higher authority is usually nature in the form of weather, such as heavy icing conditions, or the sea, as in the form of a rogue wave. This higher authority could also be the skipper making a mistake. The deckhand's set of work rules are based in part on being able to predict the skipper's behavior. When the skipper makes a mistake or does something unpredictable it is similar to a rogue wave. It cannot be prepared for. (See Murray and Rogers 2005:117-118 on Newfoundland fishermen attributing their injuries to their skippers' behavior. See Menzies (1990) for how skippers and crewmen use competing versions of a story to locate an accident in one category or the other.)

For the deck hands on the Makushin a rule in the game of fishing might be "Don't go down the ramp to put a hook in the bag," or "Don't get underneath a door." Now, they know that they may break these rules for expediency's sake and sometimes get away with it and even gain an advantage (e.g. a savings of time and effort). But, if an accident happens, it is a *normal accident* and the blame will fall upon the deck hand that broke the rules. Enquiry will stop there. There is no mystery. (See Smith (1988:33) for a similar outlook among New England fishermen.) When *abnormal* accidents occur, the victim is not blamed and an enquiry ensues. If, through investigation, what was at first thought to be an abnormal accident can be understood in a way which subjects it to the power of the rules of the game, it moves into the normal category. Normal accidents come about only by breaking the rules. It is worth the effort to investigate because the payoff is big. The payoff is control. This is the opposite of the fatalism of the Spanish trawlermen in Zulaika's study which "… prevents the search for, and eradication of, possible causes of danger" (Zulaika 1981:89). Among the Swedish fishermen of their study, similar to the Makushin, Eklöf and Törner found an active engagement with danger expressed in a low degree of fatalism and high "perceived manageability of risks" (Eklöf and Törner 2002).

For the discussion here it is important what this game metaphor accomplishes for a deck hand. It creates understanding and control over the majority of bad things that can happen out on deck. Choosing our lives, or imagining that we choose what happens to us, is enormously important to fisherman and land-lubbers alike. This game metaphor brings a world of possible accidents under the control, or imagined control, of a deck hand. It transforms the pitching iced-up deck of a Bering Sea trawler into a backgammon board or a basketball court. The terrifying mystery of the wind and the waves is transformed into the implacable umpire or referee. It transforms the unknowable into the familiar, the chosen, and the controllable. (Compare to Newfoundland fishermen referring to a fishing trip as a "supermarket run." in Binkley 1995:91.)

A fisherman who has successive accidents can continue to go back fishing, all things being equal, as long as he can see himself as having been in control of these accidents, of having chosen them, in a sense, through breaking a rule. He can go back fishing again because he carries the knowledge that the future is under his control. If he breaks no more rules, no more normal accidents will befall him. This is active control not the passive fatalism of "what must happen will happen." A sense of personal invulnerability has not been damaged.

These fishermen are more likely to quit fishing if an abnormal accident happens. Abnormal accidents are not controllable. One of these may be enough to shatter the sense of personal invulnerability. Sometimes one abnormal accident is not enough. I know of a fisherman who survived two abnormal accidents before he gave up fishing. After the first accident he justified continuing by saying to himself that the odds of that happening a second time were just too small to be possible. Personal invulnerability was still intact. When the same kind of abnormal accident occurred again he quit. His outlook had changed. "If it happened twice it could happen a third time."

These metaphors and behaviors are powerful responses to what Devereux calls the "trauma of the unresponsiveness of matter" (Devereux 1967:32-34 in Jackson 1998:30). They are also preemptive actions as they create frameworks for understanding future experiences. The game metaphor is one of the ways deck hands deal with it. As long as you follow the rules of the game your only chance

of getting hurt is by some radical intervention from a higher authority. And the chances of that sort of intervention occurring on a pollock trawler are no great than that happening at home (e.g. get hit by a car crossing the street), so they argue. In this way, through will and imagination, they tell themselves that they are in control and not at any special risk.

Fatalism is a term associated with fishermen of various types (e.g. Binkley 1995:139; Tunstall 1962:75, 172-5). The belief that these fishermen are fatalistic is only possible by not differentiating between normal and abnormal risks. They passively accept the possibility only of abnormal accidents. According to their understanding, this possibility exists on shore just as at sea. The majority of the dangers on board, the threat of normal accidents, are engaged in an active way, culturally and socially, through story-telling. They are not ignored. They are engaged and controlled. In keeping with the occupational culture, risk as an emotion is played down. Safety precautions have a matter-of-factness about them.

This analysis from an observer's perspective highlights some pretty abstract tasks that these very pragmatic and immediate stories accomplish. As a coping strategy, re-mastering experience through story-telling allows these fishermen to carve out a space of control within the uncontrollable forces of nature which dominate their work environment. It increases their sense of control over their work lives which has value for a quality of working life.

Coping with danger is a collective work with social as well as psychological consequences. The rules of the game are not individually discovered and learned. They are part of the body of unwritten, practical knowledge that the new hire is introduced to during socialization. They were collectively discovered at some point in the past and are repeatedly told and re-discovered in the process. They exist in the social interaction of the team out on deck. Their truth is constantly confirmed by the presence of one's teammates and occupational histories contained in their stories. Each collective task success, when carried out without injury, reconfirms the truth and value of the coping strategy.

Collaboratively telling deck stories is more than a way of coping with danger. There are other valuable outcomes. This is where exceptional cooperation

is built. This cooperation is made up of many elements. We will examine three; trust, agreement, and an ethic of sacrifice for the team. This cooperation has instrumental value to these deck hands. Better cooperation leads to increased task performance. A better team means greater safety and profitability. Elements of cooperation such as trust and agreement also have obvious intrinsic benefits for these teammates. Right now our focus is on instrumental value. In our assessment of the quality of working life we will mention the intrinsic value of this cooperation.

2. Trust

There is widespread agreement that trust is valuable in teams in a variety of contexts (e.g. Hechter 1987:141; Simons and Peterson 2000; Tidd et al. 2004). Trustworthy reporters of their own observations (e.g. sounders of warnings) enlarge the team's pool of information inputs (Weick 1987:117). The value of the information varies with the trustworthiness of the source. Three pairs of eyes looking for threats are better than one *if there is trust*. Trust is positively related to perceived task performance, team satisfaction, and relationship commitment and negatively related to stress (Costa et al. 2001). Agreement on a definition of trust has not been so widespread. Most definitions contain the elements of willingness to rely on another and confident, positive expectations of others. (For a review of definitions see Costa et al. 2001:227-229; Rousseau et al. 1998:394-395.) Trust has been studied as cause, outcome, and moderator. (As cause see Heath 1976; Kapferer 1976; as moderator see Robinson and Rousseau 1994:255-257; as outcome see Hechter 1987; as outcome and cause see e.g. Fukuyama 1995.)

There is agreement that both risk and interdependence must exist in order for trust to arise. Risk is "the subjective possibility of loss as perceived by the decision maker" (Chiles and McMackin 1996:80). Trust would not be required if one could act with complete certainty and no risk. And of course trust is not required if one acts independently of others. "Trust is not a behavior (e.g. cooperation), or a choice (e.g. taking a risk), but an underlying psychological condition that can cause or result from such actions" (Rousseau et al. 1998:395).

The deck of the Makushin is a context which has both interdependence and risk. Risk creates the opportunity for trust. Trust leads to risk-taking. Risk-taking

further encourages a sense of trust when the expected behavior materializes (Das and Teng 1998:503). The combination of high risk and intensive interdependence on the Makushin create the conditions for the development of trust. This post-experience de-briefing in the collaborative telling of deck stories is a way of wringing the last drop of trust-building power out of the common experience.

On the Makushin we were re-living the experience of calling out waves for each other and how the others reacted to that warning. The response to another's warning gets retold and emphasized. This verifies and reinforces that it was the correct response. This reinforces the connection and collaboration among the group members. It takes the form of a command but it is really a warning. It is the rehearsal of a drama of reliance and commands; of trust and obedience.

> **Story 5.** Ryan told a deck story about warning Fred and about Fred's reaction. Ryan shouted a warning. It was in the form of a command. Fred did not turn around to question it or evaluate it. He did not hesitate. He just reacted and jumped away from the rail. In all, Ryan re-told this sequence three different times in an approving way. He mixed in humor and the story was told according to Schwartzman's second model as something unexpected. Fred's level of trust in him surprised Ryan.

Not only are there patterns in narration as Schwartzman has suggested, but patterns in content are also visible. Deck hands emphasized three types of events in the stories they retold. They emphasized examples of reading a threat (to health, equipment, or task performance), responding to a threat (hold on, take action, sound a warning) and responding to a warning. The meta-story being told is one of cooperation: *we must look out for each other, trust each other and there will be good consequences*. There are two main variations. (1) He trusted me and it was good. (2) He did not trust me and it was bad or only by chance (radical outside intervention like an exception in the laws of probability) did he escape something bad happening.

Ryan's story above emphasized both a warning and a proper response to that warning. Ryan recounted Fred's demonstration of trust and the good consequences that followed. The message was something like: *When I warn you, don't hesitate; just blindly obey. You can trust me to not say anything misleading*

or out of proportion to the danger. These deck stories carry a moral of cooperation: this is how a team should function. They affirm a level of normative commitment to the team, an obligation to uphold its rules.

A response by the other actors in the story usually followed. In this case it was Fred. Fred's response was, "I heard you call greenie. I didn't have time to look. I just dove for the trawl fence and hung on." Fred's contribution to the story confirmed agreement with Ryan's reading of the situation (trust in his judgment) and instant response. If Ryan's story had been corrective of Fred rather than approving, Fred's response might have been different. But in this case Fred's response reinforced this ideal of trust and coordination at the level of virtually instant reaction. Fred's response also contained the idea that in the future, just as in this past situation, he expects to be warned by Ryan. And when he hears a warning ("greenie" is standard phraseology; a clear warning with an agreed upon meaning)[12] he trusts that message, and Ryan's interpretation of the situation, without evaluating it for himself.

In repeated re-telling of deck stories, certain types of behaviors are set up as exemplars of what it means to cooperate as a team. This case highlights the trust-building process. Fred was at risk. He had an expectation of a certain behavior from Ryan. Ryan produced that behavior and Fred reacted in an appropriate way. As a result, Fred's trust in Ryan is maintained and possibly broadened or deepened. On the Makushin trust is both an outcome and cause of cooperation. It is not static and not an either/or decision as in the Prisoner's Dilemma (e.g. Axelrod 1984, 1997). Trust grows out of successful cooperation (outcome) and, as an expectation of future behavior (cause), encourages the continuance and further development of that cooperation. "Repeated cycles of exchange, risk-taking, and successful fulfillment of expectations strengthen the willingness of trusting parties to rely upon each other and expand the resources brought into the exchange" (Rousseau et al. 1998:399). Emotions, such as those contained in an approving demeanor and tone of voice, are among the resources exchanged and further promote mutual trust (Lawler and Thye 1999:240).

[12] For an introduction to the requirements and problems of standardized terminology see Krifka (2004:147-150); Sexton (2004:48); and in aviation see Cushing (1994).

3. Agreement

Re-telling deck stories that emphasize coordinated and successful threat assessment, response (e.g. warning), and response to warning encourages not only trust but also clarifies common definitions and agreement on behaviors. Together trust and agreement make possible predictable, coordinated behavior under conditions of high risk and high time pressure. In discussing trust we focused on the expectation of a warning. In discussing agreement we will focus on the response to a warning. In their stories the deck hands congratulate each other when a stimulus was followed by a predictable response and they criticize each other when it was not.

> **Story 6.**
> MacPhail-"I just felt the deck rise and I yelled 'greenie'. I didn't even look I just knew."
> Fred-"Well I'm sure glad you did. I just barely had time to grab onto the gantry."
> Karl-"Yeah, that was smart. I didn't get out of the way in time and I got water all the way down my gear into my pants and almost went down."

A threat is assessed (felt the deck rise - stimulus) and gives way to a predictable response (give a warning – "greenie"). A warning is heard (stimulus) and a predictable response follows (grab something solid and hold on).

As far as content this story has each of the three main types of events (threat assessment, response to threat, and response to warning). In terms of format the teller is the hero and the narrative is a surprising or unexpected event. Threats are normally noticed and assessed visually. In this case, the danger of a wave was assessed by feeling the movement of the boat with the feet which is mildly surprising or unexpected. Fred's response agrees that MacPhail is the hero and that because of that heroism, and Fred's quick response, Fred avoided becoming the victim. Karl's response to Fred agrees that Fred avoided becoming a victim and that he himself was a victim of one sort (getting wet to his skivvies) and escaped being a victim of something worse (falling down).

Another way of describing this framework of agreement among teammates is through what has been variously referred to as a collective mind, shared mental models, team mental models, and shared knowledge (Weick and Roberts 1993,

Mathieu et al. 2000, Mathieu et al. 2005, Orasanu 1993: 158-160, Salas and Canon-Bowers 2001).

Shared mental models are organized knowledge structures consisting of knowledge, behavior, and attitudes (Kraiger and Wenzel 1997:67-72). A variety of shared mental models relating both to task and to team have been described (Mathieu et al. 2000:275). They allow crewmen to anticipate what their teammates are going to do and what they will need in order to do it. Shared mental models include the ability to imagine the experience of another, his focus, needs, and intentions. This is empathy as opposed to the trust that was just discussed. That virtually blind trust implied the possibility of trusting someone without understanding what they are doing. Empathy implies being able to understand the common task from another teammate's perspective. Trust is personal. Empathy is positional.

In working conditions where the team can freely communicate, strategize, and discuss its next moves, high levels of agreement and empathy will not be very important. However, under conditions where communication is difficult because of excessive workload, time pressure or other environmental features (e.g. a Bering Sea gale), shared mental models become crucial to team functioning (Mathieu et al. 2000:274). Their existence and quality can be of life-and-death importance on the Makushin in an activity like recovering a man fallen overboard.

"Be careful" and "Be safe" are send-offs common to fishermen. On the deck of the Makushin deck hands cannot be safe by themselves. They can only be safe when they are able to envision their contributions in the context of the team's joint action. On the Makushin, like on an aircraft carrier, "being careful is a social rather than a solitary act" (Weick and Roberts 1993:373).

Telling deck stories is a form of de-briefing. Ambiguities are raised and clarified, exemplars are highlighted, and agreement, empathy, and shared mental models are built.

4. Ethic of sacrifice for the team

There is a special case of deck story. The teller becomes a hero by being a victim. What makes his victimization heroic is that it could have been avoided or lessened by elevating self-interest above the interests of the team. Instead,

selflessness was chosen by the victim/hero in his story of sacrifice for the team. I call these *I took one for the team* stories. The teller recounts himself as the victim and expects a team member to respond and label him a hero.

> **Story 7**. Karl- "Remember that big one? [a wave] I got soaked. Water went down my neck all the way to my boots. There was nothing I could do. I couldn't just drop the ducer."[13]

This example is retold to emphasize how Karl put the needs of the team ahead of his own. He was, as comedian Curly Fine used to say, "a victim of circumstances." The response Karl wanted from a teammate was one that says "you're a hero." If the story is told without the last sentence, "I couldn't just drop the ducer," the audience might understand that the teller is simply an ordinary victim of the circumstance of working on the deck of a pollock trawler. This last sentence tells the audience that his victimization was not normal but had to do with his sacrifice for the team. If that type of *hero* response is not forthcoming, the victim might tell another story, perhaps one farther away in time and more general. This might be the fable about the deck hand that did drop the transducer and how badly that turned out for the crew. This would be employed to remind and prompt the team into a response that placed Karl into the hero status he was seeking.

In story 7, Karl could have avoided getting soaked but only at cost to the team. If he had put himself first he could have stayed dry. But instead, he sacrificed himself for the team. This story is simultaneously an instructional story, a deck story, and an attempt, possibly unconscious, to raise or check on his status by drawing attention to his trustworthiness as a team member. The greater the cost Karl incurred in his sacrifice, the greater his imputed trustworthiness and commitment to the team.

Putting the team's needs ahead of personal needs is a value of this occupational culture. (Compare with a baseball team in Gmelch 2000:28-29) It is also good teamwork. (See Weick and Roberts 1993:363 on the important role of subordination in heedful interrelating.) The exact extent of the sacrifices deemed

[13] The "ducer" is a transducer. It is a very expensive and very important piece of electronic equipment. It is attached to the net and transmits a sonar picture of the net's mouth to an instrument in the wheel house.

appropriate varies from boat to boat. This behavior does not make Karl eligible for super-teammate status. It is not that exceptional. Telling the story gives him a chance to check on his status and at best reinforce his position as a normal trustworthy teammate.

However, if Karl had dropped the transducer he would have been the villain of the story, at least as told by other members. He would have jeopardized his status. He is probably not going to tell the story, unprompted, if he feels happy with his status within the team. There is a very low ceiling to the gains this type of story can bring him. But he will probably be prompted to tell it with a line like, "Man, you got soaked out there. I thought you saw that wave. What happened?" Whether prompted or not, if he tells this story, he will pay close attention to the team's response. Their response will tell him about his current level of status within the team.

Typical responses might be:

(1) "Yeah. I saw that. There was nothing you could do." This means: Karl, your interpretation of the situation and team rules was correct. You acted correctly. You are a good teammate.

(2) "The same thing happened to me…[tell a story]" This means: Karl, your interpretation of the situation and team rules was correct. You acted correctly. You are a good teammate. And I, the responder, was in the same situation once and I also acted correctly. So I can be trusted to act correctly in the future. (Maybe the responder is feeling like his status is under threat.)

(3) "I would have just let go, man. That wave was steep!" This means that the teller and the responder have different definitions of expected commitment to the team.

The resolution of this difference depends on the relative status of teller, responder, and any other audience member involved. If the responder is more senior and experienced than Karl, Karl may modify his own understanding of what he needs to do as a member of this team. Perhaps Karl has over-estimated the level of commitment that the team is asking of him. In the future, if a similar situation occurs, Karl can sacrifice a little less for the team. If the responder is junior and of lower team status, Fred for example, Karl will be less likely to change his mind.

Instead he may say to himself, "Fred's got a lot to learn" or repeat out loud, "I couldn't just drop the ducer." If there is anyone else in the audience, the impact of their response will vary with their relative status in the same way.

This calculation and adjustment on Karl's part does not happen in silence. As I hope this example shows, the process of collaborative story-telling is well suited to working out agreement on what level of task related commitment is demanded by this particular team.

5. Exceptional Cooperation

The joint creation of a successful coping strategy, trust, agreement, and an ethic of sacrifice for the team are instrumentally important as they relate to task performance. They also have intrinsic value to the members of this team. The value of these, and other social outcomes, is enhanced in the presence of the strong interpersonal commitments I have termed exceptional cooperation. Exceptional cooperation comes into existence through the repeated practice of collaborative story-telling. Several elements are involved. These are a common focus, a common emotion, and common attribution. Attributions of experience are guided in many ways. There is, for example, the high level of interdependency required by task characteristics. The greater and more intense the interdependency within a group, the more difficult it is to attribute common products (e.g. successes, failures) to individual causes. Attributions are also guided by elements of the social and cultural frames of the work setting and in serial practices of socialization such as the collaborative form of knowledge sharing which is role modeling and imitation. The content of deck stories, with their affirmation of exemplars, norms, and rules, further guides the attribution of experiences. This story-telling also incorporates an emotional binding experience which empowers the creation of cohesion and commitment.

Working out on deck in dangerous conditions generates a range of very powerful and basic emotional reactions. Some of these such as excitement, fear, and satisfaction can be quite diffuse and unfocused. The process of attribution shapes these reactions and gives them specific meaning (Weiner 1985:559-561, 1992:277-286). The same negative reaction, for example, could be known as shame or anger depending on to whom it is attributed. According to Lawler and

Yoon's theory of relational cohesion, successful social interaction, like that required in the pursuit of common goals, also creates diffuse feelings of satisfaction and interest. Actors are motivated to interpret and understand the causes of these feelings. In the process, actors come to view the group as a cohesive object and are willing to take risks and make sacrifices on its behalf (Lawler and Yoon 1993, 1996:95, Lawler and Thye 1999:237).

Randall Collins explains the details of this process according to something he calls interactional ritual chains (Collins 1981:998-1002). The crucial components of these interactions are present in the collaborative telling of deck stories. These are a type of conversation in which the group focuses on a particular object, behavior, or action. Telling these stories is in Collins' words the common activity of focusing on content. A shared reality is created and focused on by the group. A common mood or emotional tone is also created, shared, and sustained. It usually is includes feelings of satisfaction, safety, confidence, and trust which have been re-mastered out of the rawer emotions of excitement, anxiety, and fear and attributed to the group. These feelings tend to strengthen with repeated experiences and re-tellings. "Participants feel like members of a little group with moral obligations to one another" (Collins 1989:18 in Lawler and Thye 1999:237). Deck hands comply with the team's rules out of obligation rather than just compensation. This means of compliance is more typical of a family than of a work team. Understanding (attributing) these raw emotional reactions motivates the deck hands to repeat the practice of collaborative story-telling as they try to reproduce positive feelings and avoid negative ones (Lawler and Thye 1999:235). Success in this interaction also motivates them to widen their social exchange with each other, into non-work areas, for example. The result is strong interpersonal commitments including mutual concern for each others' well-being and success and mutual aid in achieving personal and professional goals, which extend well beyond work activities. The intrinsic benefits of this exceptional cooperation come to be felt not just in working together but also in living together.

C. Conclusion

The collaborative telling of deck stories has important outcomes for the team as a whole and for its members individually. They are not only a

collaborative effort in and of themselves, but they summarize and make meaningful a variety of other collaborative efforts. First, there is the collective exercise in risk management. The benefit is felt by each individual member and is attributed in large part to the team. Second, telling these stories is a form of de-briefing. The work done together out on deck is reviewed. Ambiguous situations and behaviors are clarified. Incorrect behaviors are criticized and exemplars are held up to demonstrate how teammates should cooperate. In this way the development of trust, agreement, and an ethic of sacrifice for the team are encouraged. These are valuable instrumentally and intrinsically. Collaborative story-telling is the final step in building exceptional cooperation. The raw emotions associated with dangerous work and joint success are transformed and attributed to the group. Strong interpersonal commitments are formed which affect the relationships of these workers in non-work areas of life. This exceptional cooperation has instrumental benefits related to task performance and intrinsic benefits which influence the quality of working life and the quality of life overall.

To this point we have looked at the raw materials, foundation, and final development of exceptional cooperation. Now is the time to make a quality of working life assessment. I will try to answer the following questions. How can we make a successful assessment of the quality of working life on the Makushin? How important a role does exceptional cooperation play? What other factors are influential? What strategies are employed to pursue a better quality of working life? These are the subjects of the following section.

V. Quality of working life

> "Take 100 people out of any occupation bring them up here for one typical A season trip and they'll all say 'I'm not doing this and I don't care how much fucking money you make'."
> (MacPhail, Jan. 28, 2005 under the shelter deck starboard side.)

This discussion tries to offer a balanced assessment of the quality of working life (QWL) of these Bering Sea fishermen. It includes positive and negative aspects, influences originating in both the work and family contexts, and static and changing variables. In addition to the effects on these workers, there is a description of strategies they use to actively improve the quality of their working

lives. We begin with informal methods and then proceed to formal attempts to measure QWL both specific to fisheries and generally. Discussing the usefulness of formal attempts allows me to describe aspects of the work context I consider to be stable and in the background. The limitations of these formal attempts, when applied to the Makushin, are also considered. Then I try to support and develop an actor perspective on the importance of extremes in an assessment of the quality of their working life. At this point, I offer an ethnographically based attempt at a QWL assessment with special focus on dynamic and peak factors. Included in this assessment are strategies employed by these fishermen in the pursuit of a higher QWL. The concluding section is a look at the decision to quit and the role that the intrinsic benefits of team membership and exceptional cooperation play in these workers' own QWL assessments.

A. Informal attempts

> I hate the job and I love it. It's dull and repetitive and, at times, exhilarating. You feel dead tired and intensely alive. It's so uncertain. You go without for weeks on end and then you live in the bars, restaurants, and at home on vacation. Sometimes you're helpless and can't do a thing and you're also so non-stop busy that you can't get a break. It's so uncomfortable, but at times you sleep like a log. Sometimes you feel so trapped and like you're getting fucked over and other times you feel satisfied doing a job under crazy conditions. If I were to give an average [evaluation of work satisfaction] it would be so far from true you should just wipe your ass with it. It's not an average. A better way might be: what is the best it feels and the worst it feels and how often does it feel these ways. (October 18, 2004)

As the quote above shows deck hands are very ambivalent about the quality of their working life. I have heard steady complaint from deck hands who clearly enjoy periods of great exhilaration and social camaraderie. The complaining often comes during the boring and easy times. The exhilaration comes in the dangerous ones. During intense periods of danger and exertion there just is not time or capacity to do anything but try to survive.

Everybody complains about his or her job. **Complaining** is not a good indicator of quality of working life. Like story-telling it is a way of passing the time. It is a way of having something in common to talk about. Complaining on

the Makushin is a form of association. It is a "pure form of objective culture" where participation in the form is an end in itself (Simmel 1964 in Hanna 1981:303). It is a way of life. Additionally, complaining has the positive social consequences of increasing group solidarity, coping with stress, and transmitting cultural material (Hanna 1981). It plays a role not just in the socialization of a new hire but in the regular remembering and reconstruction of cultural knowledge among insiders. So, while complaining may reveal interesting cultural information, it is not a good indicator of quality of working life. It is not even a good way of identifying negative aspects of a work situation. Fishing is dirty work. It is long, hard, dirty work in sometimes appalling conditions. This has negative consequences. Yet, doing dirty work together, and complaining about it (Hanna 1981:305), builds positive sentiment among a group of workers (e.g. Encandela's 1991:142-145 study of a dredge boat). This facilitates identification with the group and trust building. The job aspect which triggers complaints is also the source of positive benefits.

Perhaps **motives** will reveal something of the quality of working life. When we talk about what motivates these men to fish we could mention that it gives them a chance to create a heroic self. (See Wacquant 1995:514; among Brazilian fishermen see Robben 1989:127.) We could talk about American ideas of manhood and cultural images of masculinity and heroism (Broude 1990; Gutmann 1997; Wendland 2003). These fishermen are recreating the archetypal cowboy/trapper figure of the frontier. This figure goes into the wilderness, labors in complete or relative isolation, and returns home after a "season" with a "catch" to support himself and his family. Like coal miners in England and Bolivia they can be both victims and heroes in the struggle against nature (Finn 2001:207). "Life itself is endangered, their enemy is the elements, their tragedy derives from forces greater than they, forces of nature and vengeful acts of God" (Campbell 1984:97). They are heroes for men and attractive to women (Bassett and Moss 2004). This is why these lower class working men go fishing and continue in the job, goes the argument. The negative aspects of their working life are not as important as the chance to remake themselves as archetypal American men, like something straight out of a Marlboro cigarettes advertisement.

These are observer arguments and categories. They are speculations which may or may not exist alongside the actors' stated motivations. They may be interesting but they are not a starting point. These actors have explicit reasons for what they do, what motivates them to stay in this job, and what aspects they like and dislike. In the absence of evidence which challenges their own wisdom one must accord them the same status of understanding themselves as we accord to ourselves. One must accept that they know why they do what they do at least as well as an outsider might. So, what motivates the fishermen of the Makushin? They offer only instrumental reasons for remaining in this occupation. (This is similar to offshore oil workers in Collinson 1998:307, Solheim 1988:143-145.) Said one Makushin deck hand, **"I fish for the money and for the quality of my free time when I'm not on the boat."** Yet when they speak about quitting the job, and what they will miss, they do not mention money. Apparently motives are not the key. How then do we evaluate the quality of their working life? What aspects make a real difference?

B. Formal attempts

The most popular method for measuring job satisfaction among North American fisherman has been the questionnaire. (In Atlantic Canada see Apostle et al. 1985; Binkley 1995:66-88; Binkley and Thiessen 1990; Thiessen and Davis 1988; in New England see Pollnac and Poggie 1988; in New Jersey see Gatewood and McCay 1988; in Alabama see Johnson et al. 1994; in southeast Alaska see Pollnac and Poggie 2006; in Oregon see Smith 1981.) These questionnaires are given to a fisherman once and he or she is asked to rate their satisfaction with various individual aspects of the job such as time away from home, crowding, and physical fatigue. They generally agree on the importance of non-financial factors in the quality of fishermen's working life. The number of aspects is often considerable. Gatewood and McCay used 41 in their study. Because of the often high number of aspects, researchers have looked to reduce the complexity of the findings by looking for a few stable underlying factors such as time, control, earnings, stress, and adventure (e.g. Binkley 1995:73). Some of these broad underlying factors are found in job satisfaction studies designed for wider application than just fisheries.

Oswald has suggested that job security, control of the pace of work, relative income, size of workplace, and commuting time all rate as highly important indicators of job satisfaction (Oswald 2002:4). Hackman and Oldham suggest that skill variety, task identity, task significance, autonomy, and feedback are the essential job dimensions (Hackman and Oldham 1976). Some research has focused on as few as one or two factors deemed to have the greatest influence on QWL. Karasek and Theorell suggest that stress (strain) and control are the most important factors in QWL (Karasek and Theorell 1990:31-40). Benz and Frey focus on independence and hierarchy (Benz and Frey 2004). Peter Warr examined non-financial employment commitment by asking workers whether or not they would continue to work even if they had enough money to live out their lives comfortably (Warr 1982:300). The International Work-Life Balance League Table measures job satisfaction according to how many respondents agree with the statement, "I would like to be able to spend much more time with my family" (Oswald 2002:5).

These can be useful tools even when applied to fishing on the Makushin. It is true, for example, that stress is an aspect of this work environment that has a negative influence on quality of working life. Although often routine, fishing work is strenuous, uncomfortable, and at times **stressful** and dangerous. The work is stressful because of the danger involved (Jermier et al. 1989) and because of the time pressure under which most fishing takes place. "The boat never waits," or in other words, *the boat should never have to be kept waiting because you have not finished your task,* is as short and accurate a description of this element of the work environment as I have heard. Stress "narrows the scope of attentional focus," weakens the team perspective, and performance suffers (Driskell et al. 1999:299-300; also Dietrich and Childress 2004:1). Even well rehearsed actions may become difficult to perform under stress (Sexton et al. 2000:747).

The work is **fatiguing** on several levels. Long, strenuous days are physically fatiguing. Tired muscles and sleep deprivation are ordinary parts of this fishing. It is mentally and emotionally fatiguing due to the constant need to pay careful attention to one's surroundings and the awareness of the steep price to be paid for a lapse of concentration. (Compare with exhaustion among police officers

in Gaines and Jermier 1983.) Long seasons also contribute to fatigue. Chronic fatigue, related to burnout, is a part of every crewman's experience at one point or another. It is dangerous individually and an impediment to successful teamwork. It continues to be a normal part of the job here and in other fisheries (e.g. Binkley 2002:46). Various forms of fatigue probably contributed to what Schilling saw on British trawlers. Schilling described fatigue in the following way: "It reminded me of what I saw among soldiers during the retreat to Dunkirk in 1940" (Schilling 1966:409). While primarily a strategy to improve the quality of family life, boats which rotate crew members (crewmen work less than a full season) also experience less burnout. Burnout can be dangerous especially as it degrades what is known as latent heedful interrelating. This is a "readiness to interact and attention to helping notice if something unexpected happens but less in an observable overt behavioral form" (Sexton et al. 2004:172; compare to Weick and Roberts 1993 on heedful interrelating which is active). A chronically fatigued deck hand may be able to muster his resources once an emergency is underway but he is less useful in recognizing an emergency or the signs of an impending one. Burnout degrades crucial performance and safety elements such as readiness, awareness, and responsiveness.

Highlighted by formal approaches to QWL, **control** over the work environment is another important aspect of the working life on the Makushin. Though not consistently defined in the literature, deck hands on the Makushin have a negative experience of low control in several contexts. As I mentioned above (page 109) many fishermen with families have the negative experience of feeling trapped in the occupation. The principal, physical, working environment is dominated by the sea. The sea can be the cause of a problem or emergency at virtually any time the boat is in the water. As a fisherman on the Makushin, you are never off duty. Your shift is never over. You always have to respond when a problem arises. This is clearly a low level of control over the work environment. This is also reflected in risk management strategies as we have seen. We have discussed story-telling and the fact that there are certain dangers which are simply out of the fishermen's control to avoid.

Low levels of control are also experienced over the social environment. Their social working environment extends beyond the back deck to include the levels of skipper, owner, coop manager, processing plant manager, the fishery management council, and somewhere hovering above is the world market for pollock. Each level is progressively more distant, less personal, and less responsive to those methods of control which the deck hands do possess. The deck hands sit in at the bottom of a great social web or inverted pyramid. Quite often decisions with important consequences for their lives are made at great social (and geographic) distances from them, without any of their (the deck hands') input, and by individuals who often have no experience of pollock fishing or the sea. When this happens the result is frustration and dissatisfaction. I recall one deck hand's argument with the skipper regarding the decision to begin a trip during a terrific storm. The deck hand did not seem to have a problem with going out into the storm as much as with the feeling that the decision to go had been made by the owner in Seattle. The tendency to direct frustration and anger at outside individuals with control authority has been shown among small groups in other isolated environments. (On an arctic trek see Leon et al. 2004:399; in a space station see Kanas et al. 2001.) In addition to the owner, the performance of fisheries biologists is a frequently cited source of dissatisfaction on the Makushin and in other fisheries (e.g. in New Jersey, Gatewood and McCay 1988:123).

Limitations of formal attempts when applied to the Makushin

The usefulness of both general and fishery specific measures of job satisfaction, when applied to this context, is limited in at least four ways. Aspects may be inappropriate or ill-fitted to this work context. Aspects which are inherently biased positively or negatively fail to capture the simultaneity of both aspects. Averaging (overview) relies on memory and is unnatural. Sampling is impossible at the highs and lows which really matter. One-time questionnaires do not allow for wide variation between points in a career, season, or trip.

a. No matter how long the list, questionnaires can leave out important aspects of work life. Instruments emphasizing fewer, yet broader, factors, designed to be of greater comparative value, minimize the risk of leaving out

something altogether, but they increase the risk of improperly emphasizing the value of a factor to a worker's QWL. Pollock fishing can be measured according to Oswald's list of factors: job security, who controls the pace of work, relative income, size of workplace, and commuting time (Oswald 2002:4). But the measurement is not very meaningful. Both low job security (casual workers) and a supervisor controlling the pace of work are negatives. Relative income is high, the workplace is small, and commuting time, if calculated as zero (it is either zero or at least 10 hours but must only be made twice a year), are all positives. Measuring job satisfaction according to how many respondents agree with the statement, "I would like to be able to spend much more time with my family" is also relatively meaningless. Peter Warr's measurement of non-financial employment commitment does not fit pollock fishing either. While some crewmen would continue to work in some capacity, nobody on the Makushin would continue in this job if not for financial necessity. This would yield a low score on non-financial employment commitment. But non-financial factors related to this work, like the social benefits of team membership, are very important to these fishermen. The importance of non-financial benefits has been reported widely in North American fisheries. (In New England see Pollnac and Poggie 1988; in New Jersey see Gatewood and McCay 1988; in Alaska see Karpoff 1985; Pollnac and Poggie 2006; in Atlantic Canada see Binkley 1995:66-105; Binkley and Thiessen 1990; Thiessen and Davis 1988; in Oregon see Smith 1981; and in St. Kitts see Aronoff 1967:50.)

Benz and Frey's approach does not fit much better. They suggested that workers value independence and dislike hierarchy, and that these play an important role in job satisfaction. To their credit they make the important point that people do not only value outcomes. The conditions and processes which lead to these outcomes are intrinsically important. A more appropriate statement for work on the Makushin could hardly be made. Unfortunately, their measuring instrument is so coarse, and the interplay between these two values is so complex and dynamic on the Makushin, that their approach loses its value (Benz and Frey 2004). (On the lack of agreement among researchers on a definition of "degree of job control" see Gallie 1996:181-182.)

b. Furthermore, questionnaires use aspects which are explicitly biased positively and negatively. As in other studies where the bias is implicit, these fail to capture the complex interplay between, and at times simultaneous existence of, both positive and negative aspects. Benz and Frey depict increased independence as only good and so fail to account for the negative consequences of increased independence and autonomy on the part of the worker such as stress (Gallie 1996:184-185). As Argyle points out, not only joy and satisfaction are important to subjective well-being but also the absence of unhappiness, depression, and anxiety (Argyle 1996:18).

Skill variety, as opposed to routine and repetitive tasks, is another important characteristic of the work situation on the Makushin and is felt everyday in the rhythms of the working life. Yet how does one measure this aspect when it has both the positive effect of synchronizing workers' movements and promoting an atmosphere of cooperation (Encandela 1991:141) and the negative effects to self-esteem, for example, associated with studies of assembly-line work (Chinoy 1955, Roy 1959, Walker and Guest 1952). Not only is there an interplay between positive and negative, but the values of the biases inherent in conceptions of routine and variety get inverted on the Makushin and perhaps in other high risk environments. When the level of risk is low variety is valued as something new or original to break the monotony. When risks and uncertainties are great, routine is valued. After another trip which we spent battling the elements and mechanical problems, Cody said, "I wish we could just have a couple of routine trips." Variety was related to dissatisfaction and routine to a higher quality of working life. These two examples, independence and skill variety, are in no way a comprehensive list of job aspects with both positive and negative consequences for quality of working life. Danger is another example. Thus, even when these studies identify job aspects which are appropriate and meaningful on the Makushin, they can still be limited by explicit and inherent positive and negative bias.

c. The problem of incorporating the positives and negatives of a job aspect would seem to be solved by asking the fisherman to give an average value. He or she is asked for a number which represents a summary or an overview of satisfaction with a particular job aspect. The burden of calculating a number

according to his or her understanding of how the positives and negatives interact is placed on the fisherman. The fact that these schemes for reckoning might vary among respondents has implications for the usefulness of the data. If two workers rate the same experience differently, which value should a researcher accept? There is also the fundamental problem of calculating an average of one's experience. The greater the variation in the value of a variable, the more difficult this process becomes. Warr's scheme for measuring well-being along the axes of displeasure-pleasure, anxiety-comfort, and depression-enthusiasm highlights this problem. Where along the axes does a deck hand, whose experience vacillates between poles on a regular basis, locate him or herself (Warr 1994:84-85)? In many of the formal attempts, crewmen were asked to calculate an average value of their experience rather than giving a one-time snapshot. The deck hand quoted above painted a vivid picture of what he thinks that exercise is worth. Put into less colorful language, the problem with this technique is that it asks a respondent to remember and evaluate their work in a way that is quite different from how they actually experience it. There are additional problems related to a reliance on the respondent's memory. Evidence suggests that retrospective studies of inner experience (asking people to look back and recall) are often misleading or inaccurate (Mitchell et al. 1997; Myers 2005:103-105**).** The final question to ask of averages is whether or not they are meaningful. The greater the variation in a value, the more time spent at the extremes, and the greater the value of these extreme experience, the less an average can offer up a meaningful representation of that experience. This last point is part of a later discussion. First, I want to consider one more limit to the application of these QWL measurements to the situation on the Makushin.

d. The problems of averaging disappear when a respondent is asked to give a present value to a variable. I call this a snapshot approach. But this approach has other problems. Especially with these one-shot questionnaires, choosing the point in time to ask about QWL is crucial. Levels of satisfaction or dissatisfaction with one's working life tend to vary. Snapshot surveys which are given on the dock, at home, or in other non-work-related locations can be expected to yield different values than those given on board during a fishing trip. On the Makushin, values

change even within the time span of a trip or a day. A snapshot approach to researching job satisfaction would get wildly varying indications depending on when such a questionnaire was given.

Regardless of when the questionnaire is given, a one-shot approach does not capture the wide fluctuations in job satisfaction which are an important part of fishing on the Makushin. A one-shot approach is also vulnerable to a change in relevant aspects over time. Aspects which are relevant to a QWL in an organization or industry are not static. They change with circumstances. Individuals adapt to stable factors (or quit) and are sensitive to dynamic ones. Novel circumstances become part of the background. (On lottery winners and accident victims see Brickman et al. 1978; Schulz and Decker 1985.) Six years ago wages on the Makushin were a dynamic factor: they were very unstable, and played a big role in QWL. They have been steady for the last few years and are less of a factor. Other aspects are relevant now. The change in ownership on the Makushin has pushed aspects to the forefront which might not have been so prominent five years ago, or will be in the future, and which are not as important to other boats in the fishery.

The method of **experience sampling** has the potential to overcome both the problems of retrospective averaging and the problems of choosing a point in time for a one-shot questionnaire. Respondents are asked to record their answer to a research question at random intervals as they move through their own natural environments (e.g. Csikszentmihalyi et al. 1977; Csikszentmihalyi and Hunter 2003; Csikszentmihalyi and Schneider 2001). Many records, rather than one, combined with the randomness of the timing, eliminates the problems of choice and averaging. Unfortunately, this method is limited to environments where a respondent can stop their activity and record an answer when prompted by a randomizing device. Bering Sea fishing is often not that sort of environment.

Anthropological methods can overcome these limitations and are appropriate for studying QWL. Participant observation and relatively long and intense research periods are well suited to studying aspects of work which are important to the QWL of actors, to handling the complex and simultaneous interactions between positive and negative aspects of experience, and do not rely

on averaging or a one-shot approach. My two years of research have not led me to create a new instrument for measuring the quality of working life on the Makushin. They have given me a certain insight into which aspects are important, and how they are influential, to the QWL on the Makushin. The next section begins with the actor's perspective. It is an attempt to assess QWL "from the behaviour we observe, instead of by trying to interpret and classify behaviour through the use of 'imported' categorical devices (Cohen 1977:181). We shall see how far it takes us.

C. The importance of extremes

Measuring the quality of work life on the Makushin requires taking into account the highs and lows of the job. (See Poggie and Gersuny 1974:59-62 for agreement in another fishing context.) At times, fishing on the Makushin approaches a level of "infinitesimal cerebral excitation" like that which Roy experienced in an industrial setting (Roy 1959:160). This can be quickly followed by times of extreme exhilaration where every cell is alive and every sense alert. Snapshot measurements fail to capture the variation in QWL in this context. More important than the problems of using averages is their significance. What counts most, in terms of QWL, is how extreme the highs and lows are, and how much time one spends at them. These averages depict the QWL mid-range. **When work is not good enough or bad enough to really notice, we don't.** This unnoticed chunk of working life is what these average-approach questionnaires seek. They are seeking background information on QWL rather than what is really meaningful.

Any successful study must include questions such as "How good can the job get?", "How bad can the job get?", and "How often does it get to these peaks?", or in other words, "How often does it get far enough to an extreme that it gets noticed?" After a while, this mid-range of experience (even though for fisherman it can be pretty extreme including regular sleep deprivation and periodic burnout) feels normal and is forgotten. It is not the QWL mid-range that matters but the extremes. Opposite extremes do not cancel each other out. Kahneman's work on remembering supports this. What is remembered about this work is not how much time was spent in this mid-range. The peaks (high and low) and the ending are remembered (Kahneman 2003[1999]:19-21; Kahneman 2000:676;

Kahneman et al. 1993; Redelmeier et al. 2003). This is overwhelmingly supported by the stories that fishermen tell. They feature the peaks both high and low.

Both the peak experiences, and the attribution of causes, are of importance in QWL. A deck hand with a high QWL has a certain pattern of attributing causes to peaks. Negative peaks such as experiences of fear are attributed to outside, impersonal factors. Positive peaks, like experiences of camaraderie and belonging, are attributed to inside, personal factors like self and the team. So long as this pattern holds, the negative peaks can be fairly extreme without significantly diminishing QWL. When negative peaks begin to be attributed to people, especially insiders, QWL diminishes rapidly. As long as low earnings are attributed to Japanese markets for fish and international markets for diesel, they are not a big negative factor. As soon as they are attributed to a greedy owner, or incompetent skipper, they become strongly negative.

I observed the following trends in my research: Schedule uncertainty was no longer simply the fault of unpredictable fish but also due to an unpredictable skipper. The lack of advancement opportunities was no longer explained by inadequate performance of one's duties or lack of experience but by the fact that the owner's brother just got out of drug rehab and needs a job. In this climate, whenever something unexpectedly positive does occur, there is a tendency to look outwards for a cause and attribute it to something impersonal like luck, rather than to make an inward attribution. When a negative event occurs, an inward, personal attribution is likely to be made. In this way the climate reinforces itself. The social benefits of team membership, and with them the quality of working life, are diminished. This is consistent with my contention that on the Makushin, the most meaningful aspects of the work experience, positively and negatively, are the jointly-produced immanent goods which result from membership in the work team.

D. An ethnographically based attempt

The following is an attempt at a balanced assessment of the QWL on the Makushin. It includes positive and negative aspects, the influence of work characteristics and family, stable and dynamic contributors, and the strategies these fishermen employ to pursue a better QWL.

Factors in the work context influencing QWL

	Positives	Negatives	Changing
Stable, background factors	-Money, -Quality of free time	-Stress -Fatiguing -Dirty, miserable conditions -Low level of control -Food, drink, and entertainment options are limited -Long absences from home	
Dynamic, peak factors			-Advancement -Attitude of Owner -Schedule Uncertainty -Social Interaction

During the period of research on the Makushin four aspects were very important to the quality of working life. These were advancement, the attitude of ownership, schedule, and social interaction on board. As I have mentioned, three years of fairly steady earnings since the beginning of the quota system made the aspect of wage uncertainty not as important as it had been in the 1990s and as it is in fisheries more generally. The Makushin was sold one year before the start of my research. The adjustment to new ownership made the aspect of ownership's attitudes, especially as impacting advancement and scheduling, more important. Although they may have been highlighted during this period, the importance of these four aspects is not unique to the Makushin. It is typical of the fishery in general. The aspects that go into an evaluation of a boat as good or bad are the processing plant, owner, quota, crew share, skipper, and crew. They are talked about constantly. The processing plant is important to the crew mainly as a geographical point of delivery. Quota and crew share are now stable economic aspects and were not in the foreground in this period. That leaves owner, skipper, and crew. The first three aspects we will discuss are related to the ownership. The fourth aspect, social interaction, relates to the skipper and crew. These were the aspects, during my research, which were creating QWL peak experiences. These were the aspects in the work context whose impact on QWL was most frequently discussed.

(1) Among career pollock fishermen, possibilities for **advancement** are an important part of a work setting. The skipper on the Makushin earns twice as much as a deck hand. Many of these deck hands want the challenge and prestige of running a boat in addition to the increased earnings. They also realize that they will reach a time when they can no longer fulfill the physical demands of the job on deck. On the Makushin, and other boats like it, there is a system of advancement that is unwritten and sometimes unspoken. It is contingent on acquiring skills and experience. A crew man "learns the deck," learns to tow at night, and then "learns the engine room." When a hand has acquired expertise in these areas he will be promoted when a skipper position becomes available.

Economists refer to this as an *internal labor market*. "Its distinctive feature is that most of the jobs are filled by the promotion or transfer of workers who have already gained entry to the firm. Consequently, these jobs are shielded from the direct influences of competitive forces in the external market" (Hechter 1987:142). Holding out the promise of promotion within the firm's hierarchy "ties the interests of the workers to the firm in a continuing way" (Williamson 1975:77). The system works best if the alternatives, where the worker might otherwise turn for a promotion, in this case other pollock trawlers, are also internal labor markets. For these crewmen there are both high rewards for complying with the owner and little prospect of upgrading one's job outside the firm. This makes for very high exit costs. It makes sense as a management strategy in an industry where so much of the training is done on the job. This type of training is an investment which the boat makes in the worker and is lost if the worker quits and goes elsewhere. It also has benefits for the crewmen who would like to increase their earnings power and make a career out of pollock fishing.

MacPhail, the engineer, was first in line to be the next skipper. Ryan was deck hand and relief engineer. That put him two steps away from a skipper job on the Makushin. When Ryan quit and went to another boat he lost his place on the Makushin and moved to the end of the line on his new boat. For career fishermen interested in advancement, this exit cost is part of what makes switching boats a major decision. It would have cost MacPhail even more to jump to another boat. He could have easily gotten hired as deck hand and relief engineer. But he would

not likely have been hired onto another boat as engineer-next-in-line-to-replace-the-skipper. In the process of changing jobs he would have taken one step downwards on the career ladder. This is what Allen and Meyer refer to as continuance commitment (Allen and Meyer 1990).

This unwritten and often unspoken understanding between owner and workers amounts to a delayed payment contract. If they acquire skills and take on additional responsibilities now, at no increase in pay, they will be "paid off" in the future through promotion to skipper. It must not be unspoken, but it can exist in that form, because workers know the history of the organization. They know the work history of the current skipper who went from deck to engine room to wheel house. They believe that this option will be open for them at some future point as well, perhaps just a few years away.

(2) Because it is an unwritten contract, advancement depends on the **attitude of the owner** in the present and future. That is why the prospect of a change in ownership can be so unsettling to the crew and damaging to morale. The crew will lose out if ownership or the ownership's attitude changes, such as deciding to hire a skipper from outside the boat. The investment they have made will go unrewarded. The Makushin was under the same ownership from 1979 until 2003. Promotion was done according to this system. When the new ownership took over they showed great insensitivity to the importance of this traditional scheme of advancement.

This ownership had bought another pollock trawler, the Arctic Wind, a year before they bought the Makushin. The Arctic Wind fished two crab seasons and two pollock seasons each year. Kevin, the skipper of the Arctic Wind, had been with the boat for more than a decade slowly working his way into the wheel house. Immediately after the purchase, one of the new owners decided that his brother would take over as skipper for the two crab seasons. Then with five trips left in the fall pollock season the owner called Kevin at sea and said, "Your replacement is at the dock. You can go home immediately, train your replacement and then go home, or work on deck and send one of the other deck hands home." The replacement skipper was an old friend of the new owner who, like the brother, was considered by many unqualified to run the boat.

These actions strongly affected the crew of the Makushin. It was a negative peak experience. A new owner with a new attitude had cancelled the unwritten system of advancement. Hopes and investments in a future career on the Makushin were jeopardized.

(3) Schedule certainty, relatively speaking, is another key component of job satisfaction in flux on the Makushin. All of the Makushin hands started out in other fisheries. They have accepted and become accustomed to the reality of uncertain catch rates. Numerous other variables make it difficult to predict how long a pollock season will last. But they are used to being certain of which fisheries they will participate in and how much unpaid shipyard work will be involved. In fact, most maintain complete control over their activities while growing up in the industry. They are independent workers who essentially contract their services out to various boat owners over the course of a year. Now, most of the fishermen only work on the Makushin. They do not work on other boats in other fisheries.

In contrast to other pollock trawlers, schedule certainty on the Makushin has changed in the last few years. The first step was taken by the former owner. In 1998 he started leasing the boat (and crew) to groups of government research biologists. These charters lasted up to 70 days. They were bid on (lowest bidder is awarded the contract) and the final decision would come only a couple of weeks before the charter would begin. The crew would put the boat away in early April after a winter season not knowing if they would be back in July to fish pollock or in May for a charter. The new ownership has made the schedule even less certain by deciding, or communicating, at the last minute, which fisheries the boat will participate in. During the period of research we heard rumors about cod fishing and sole fishing. And in the winter of 2005 it was decided to try an experimental fishery. Both of these activities, charters and experimental fisheries, involve fairly short-term decisions, reduce time on shore, and have poor to negative economic results. These were negative peak QWL experiences for the Makushin crewmen.

To an outsider, a little more schedule uncertainty may seem like a trivial thing. But when asked, the crew generally agreed that their main motivation for fishing was the quality and quantity of free time it allowed. This meant they had

blocks of time at their own discretion and sufficient money to enjoy that time. (This is similar to Hull trawlermen in Tunstall 1962:117.) Uncertainty about their future work activities (fisheries, charters, shipyard work) threatens the stability of one of their primary sources of motivation. It is by no means trivial. A sudden and significant reduction in one's non-working time plays a significant role in the QWL.

(4) Social interaction on board plays the most important role in the quality of working life. Being part of this work group was an unforgettable experience. The shared experiences were intense and the sheer number of hours spent in one another's presence was staggering. In my experiences on other fishing boats I have learned that jointly-produced immanent goods can be just as powerfully experienced when they are negative as when they are positive. The experience of distrust is as strongly negative as the experience of trust is positive. On the Makushin, the social experiences were largely positive.

For much of their working lives these deck hands only have contact with each other. They are isolated far from their social relationships at home and the feelings of trust, agreement, belonging, and camaraderie that are produced in them. Long periods at sea leave them feeling isolated from their communities (page 67 above). They are surrounded by an unresponsive natural environment. And they are at the bottom of a social network which is almost as unresponsive as the sea. It controls them from the wheelhouse to the plant to the owner in Seattle to management in Washington D.C. in ever decreasing levels of responsiveness and increasing control. Deck hands are quite dependent on each other for many of their social and psychological needs. All they have is each other.

> It's kind of a nice feeling when you're out on deck and guys are calling out big waves for you. It's kind of a nice feeling. You know when the weather is lousy. Guys are calling out big waves to warn you, it's nice. It's the kind of feeling you get when you're calling waves for each other, I mean literally watching each others' backs. It's a really good feeling. And the loyalties and feelings last. It's so cool dumping these bags, doing these jobs where everyone's working as a team, just picking up the slack for each other. (October 31, 2004)

As the quote above suggests, being part of this team felt good. The trust and agreement which were aided by story telling are not valuable just as instruments. The intrinsic social benefits of membership in the group including trust, agreement, camaraderie, friendship, and sometimes exceptional cooperation were positive peak QWL experiences.

Many studies have shown that social relationships are the greatest single source of happiness (Argyle 1996:26) and work is a setting for some of the most important ones. Similar to the family, the work team is a group which, in addition to pursuing task goals, produces a variety of "intrinsic benefits of social and personal interaction" such as regard (Offer 1997:450), non-romantic intimacy (Moss & Schwebel 1993: 34), and companionship (Hechter 1987:47). During the time they are together the fishing crew meets, in part or in whole, many of the basic needs important to mental health such as affective well-being, competence, and integrated functioning (Warr 1994:84), inclusion, control, and affection (Schutz 1966), and belonging, acceptance, and love (Maslow 1954). As Rob Hughes says in the context of English football, "that intrinsic craving to be vital to the team effort is in most of us" (Hughes 2006). For the crewmen of the Makushin, the significance of team membership lies in much more than simply instrumental task "victory." The experience of exceptional cooperation, which includes many of these social benefits, becomes the most significant component of the entire work experience. During his last season on the boat I spoke with Karl about his future. He expressed an opinion that was shared by the three other crewmen on board. "The only thing I'll miss about fishing is the camaraderie."

In addition to these four dynamic factors, as I mentioned above, there are aspects of the work context which have a stable, background impact on the QWL. These fishermen do not respond passively to either background or peak experiences. They form strategies to actively pursue a higher QWL.

The two most important positive stable factors are earnings and non-work time. I have explained why they are experienced as positive and stable at this time. Yet, there are many aspects of the job that these deck hands do not like. They do not like the long absences from home. They do not like the limitations on what

they can eat and drink. They also dislike that the work is stressful, fatiguing, dirty, and that they have a low level of control over the work environment.

Makushin fishermen have **strategies** for improving their QWL. They can do little to change the characteristics of their work environment. What the deck hands on the Makushin do is to shorten their absences from home by choosing to work less. I have described this as primarily a strategy to improve the quality of their home life, but it improves their QWL as well. Most of their strategies for pursuing a higher QWL revolve around the limitations to their food, drinking, and entertainment options. Stereo systems are bought and installed out on deck. Stereo systems, televisions, DVD players, and video games like Sony Play Station are bought and installed in the galley and in individual staterooms. Special foods are brought on board whenever possible. Drinking alcohol is not permitted on the Makushin. Whenever possible, crewmen will go out for meals and to drink in bars when the boat is in port.

Occupational stressors and their effects on the quality of family life have already been addressed. The resultant conflict within the family exerts an influence back upon the work setting. We will briefly examine some of the ways in which work-family conflict is felt in the work environment thousands of miles away.

Effects of work-family conflict on quality of working life

Positives	Negatives
	Depression, withdrawal, frustration, alcohol and tobacco use, Burnout, work alienation, job tension, affective professional stress, Anxiety, irritability, hostility, fatigue, nervous tension, Decreased job satisfaction, organizational commitment and citizenship, Decline in work performance
Positive boost to morale	

In the family section above (page 86) I described how the crew attributed a stretch of bad behavior on the part of the skipper to the fact that he was getting divorced. The family seems to have a negative effect on the work situation whether there is conflict at home or not. When there is conflict at home, the deck

hand is depressed because things are going badly. When things are good at home, the deck hand is depressed because he misses being a part of that. The family's effect on the work setting is almost always negative. The only exception I can think of is when a package arrives from home. These might contain letters, music, movies, or favorite foods and can be a positive morale boost to the deck hand. Otherwise, there is very little the family can do to improve a deck hand's QWL. Family conflict can have negative effects on various areas of members' lives. Our discussion here is limited to the effects of family conflict on QWL.

Every fisherman knows when a crewmate has had a bad call home. That means there is trouble in his family relationships. This manifests itself in a variety of ways. Depression is a term which catches many of these. Everything seems less important to a deck hand experiencing conflict in the family. This includes the organization, the work group, and the individual himself. Literature on work-family conflict describes effects such as decreased organizational commitment and organizational citizenship, work alienation, a decline in work performance, and increased alcohol and cigarette use (Frone et al. 1994; Frone et al. 1997; Greenhaus and Beutell 1985; Netermeyer et al. 1996). The literature also describes symptoms such as depression, withdrawal, burnout, anxiety, irritability, and hostility. (See Allen et al. 2000 for a review.) Family conflict has symptoms like burnout. These are particularly difficult for one's co-workers in a setting like the Makushin. The effected deck hand acts lazy, disinterested, unmotivated, irritable, and hostile. He seems to stop caring about the job or anyone else. It requires enormous energy for the team to function when one of its members is in this type of disabled state. A period of sympathizing and compensating on the part of the other deck hands does not last indefinitely. At some point, anger and resentment start building. This is detrimental to the co-production of immanent goods, like trust and camaraderie, which are important to everyone's QWL. It happens quite often that one deck hand's family conflict can negatively impact the QWL for everyone else on the boat. These can be negative peak experiences for the entire crew.

Few strategies are pursued to try to ameliorate the effects of family conflict on QWL. The only one I have observed is not very radical. When the boat is at the dock, the other deck hands will do the chores of the one having family

problems so that he can spend whatever time is available on the phone with his family. I have never heard of anyone going home in the middle of a season to deal with family conflict. That seems to be reserved only for physical injury. Strategies like reducing the amount of time worked and flying one's wife or partner up for a mid-season visit were addressed in the family section. I suppose these can be viewed as pre-emptive attempts at reducing family conflict in the first place.

E. Conclusion

There is no stronger response to a poor quality of working life than to quit. I have discussed quitting the boat and the industry with every man on the Makushin. During the period of my research I observed two deck hands quit the Makushin. One left the industry and took a job on shore. The other quit the Makushin and took a job on another pollock trawler. A third hand told me he was considering quitting but did not. This gave me a chance to consider their decisions and deliberations in light of the factors that these actors considered most influential.

When I analyzed MacPhail's decision to stay and Ryan's decision to leave the boat, but not the industry, I concluded that their experiences of changes in advancement, attitudes of ownership, and schedule uncertainty were roughly equal. Both were equally dissatisfied with the job in these aspects. However, their experiences of the intrinsic benefits of team membership, and its importance personally, were not equal. MacPhail had a greater experience of, and personal appreciation for, the intrinsic social benefits of being in the team. Were he to leave the boat, he would no longer enjoy the high levels of immanent goods such as trust, agreement, camaraderie, and friendship he was used to within the team. Exit costs were higher for MacPhail than for Ryan. All other things being roughly equal, Ryan quit and MacPhail stayed. This is an oversimplification.

There were certainly very complex and personal differences which lead to different experiences of the intrinsic benefits of the team. The full complexity is impossible to explore here. In simple terms, Ryan valued the team less than MacPhail. For MacPhail it was sort of like a family. For Ryan it was something quite different. He expressed this in the following quote.

> Work is a special sphere where I can treat another guy like an asshole but it's nothing personal it's just work. Whereas if I do that to you at home then you should be mad, but if I do that to you on the boat you shouldn't take it personally.

The different roles MacPhail and Ryan played in the team (pages 140-142) were consistent with these individual differences in values and integration. Ryan's only position was as technical consultant, a role which *could* be played independently. He chose to play it that way. MacPhail was a task leader in two of his three configurations. This is a role which required a high level of social engagement to successfully play. And this probably led to yet further social engagement (Lawler and Yoon 1996). The team roles these two men played are consistent with the conclusion that MacPhail experienced team membership benefits to a greater extent than Ryan and that these benefits meant more to him than they did to Ryan. For most of these deck hands, the social benefits of team membership mean more than any other component of the work experience.

The central conclusion of Elton Mayo's work on industrial society was that "people, even in their work behavior, were ultimately 'social' and not 'economic' actors. Their most fundamental need was to belong to a relatively cohesive micro-community, and their status within this community was more important in determining their behavior than any type of economic incentive. In particular, the critical factor for worker satisfaction was the degree of social integration into a workplace community" (Gallie 1996:172).

Many QWL assessments have been attempted among commercial fishermen. When applied to the Makushin, both informal and formal methods are limited in important ways. Bering Sea pollock fishing is an occupation of both background and peak experiences, highs and lows. Some of the most intense lows are related to interpersonal conflict, especially within families. The social benefits of membership in this extraordinary work team, summarized in the experience of exceptional cooperation, provide some of the most intense highs. These workers measure QWL in terms of how extreme the highs and lows are and how much time they spend at them. This is consistent with the ambivalence towards many aspects of their work life which is so typical of these fishermen.

VI. Summary

High wages and the social benefits of teamwork are the two most critical contributors to the quality of working life in this setting. Understanding the role of earnings is relatively unproblematic and I have not said a lot about them. I have chosen instead to focus on social interaction on board the Makushin. Membership in the work team, with the benefits it can bring, is the most important part of the work experience on the Makushin. I have used *exceptional cooperation* to summarize and represent a variety of these intrinsically valuable benefits such as trust, agreement, camaraderie, and non-romantic intimacy. The building of exceptional cooperation, the production of immanent goods, is not intentional or easy among these fishermen.

Task cooperation is essential to fishing success and is strongly reinforced. While various sorts of social and relational competitions can be ignored or tolerated, there must be a minimal level of cooperation regarding task. This cooperation is demanded by common goals, proximity, and the nature of task interdependency. Teamwork may exceed the minimal level of task cooperation. Whether this occurs or not depends on the development of agreement, trust, and the attribution of shared successes to the group. There are social and cultural elements of the work context which facilitate this. These include familiarity, a relatively flat status hierarchy, low power distance, and ethics of shared support and sacrifice for the team. These are necessary but insufficient to build exceptional cooperation. Special social investments are also required. One of these takes place in the practices of socializing a new hire. These practices also set in motion a variety of processes of competition which can bring an end to almost all forms of cooperation. A second investment may be made through the collaborative telling of deck stories. This practice binds powerful emotions with an attribution experience which can create an exceptional form of cooperation whose intrinsic benefits exceed even its instrumental ones. This was the story of the building of exceptional cooperation and its importance in the working lives of these fishermen.

Conclusion

I. Summary

Family

Bering Sea pollock fishing competes with the family's goals of producing immanent goods. There is no balance to be found today, given the poor fit between family expectations and the occupation. There is no complementary relationship, only inevitable conflict.

Money is a different case. Trawling for pollock provides an income which can sustain a family and support its instrumental goals (e.g. own a house, help finance children's education). In this way the fisherman and family cooperate as they had imagined. This is where wage uncertainty plays a negative role as stressor. But at the level of immanent goods, which is why these families were formed, there is both direct and indirect competition. Long absences compete directly with family goals by necessitating transitions, and making them extremely difficult. Differing rhythms and schedule uncertainty are stressors which add significantly to the difficulty of transitioning. Difficult transitioning is by far the most important effect of occupational stressors. Guilt, compensating behaviors, and finally quitting the occupation indicate that the man has not accepted new role expectations.

There are few successful balances to be found between work and family. The two are competing and, unless the man quits in time, work almost always wins. A Bering Sea pollock fisherman today cannot successfully produce the immanent goods that he and his family expect from each other. Theoretically there are two options. The family simply goes without or the family finds substitutes. The family cannot go without indefinitely so there is only one real option which is to find substitutes and adapt to life with them. This is no small job.

There are two options for these substitutes. These substitutes allow the fisherman to play a reduced role in the family (e.g. guest) or they exclude him altogether (e.g. the wife moves a new lover into the home while he is away). If the fisherman is excluded altogether by the substitutes, the family will split. If they allow him a reduced role, there are again two options. The fisherman adjusts his expectations and adapts, and the family survives according to modified expectations. Or the fisherman may not adjust his expectations. This is expressed either by repeatedly attempting to have the family adapt to his presence as a fully present father, rather than the guest father that he is, or by quitting altogether in an attempt to "save" his family. As we have seen, this offer is viewed as a threat to the family's financial support and usually leads to the immediate split of the family. Even if it is the woman who initiates the actual divorce it is the man's inability or unwillingness to adapt his expectations which triggers the split. The woman has her chance to split the family earlier when she seeks substitutes and adapts to them. But if she is able to adapt to substitutes which allow the man to continue to play roles in the family, albeit reduced ones, then it is really up to him whether the family remains together or splits. Of course, her choice of substitutes is not made once and for all just as his decision to adapt to new expectations is not made once and for all. She can at any time seek and adapt to new substitutes which exclude the man. In the same way, he can adapt his expectations, for a while, and then later change his mind. There are a thousand points at which any relationship can break. But for the families of these pollock fishermen, in regards to the influence of the occupation, these are the two most important ones.

Work

Cooperation and competition are both present in the work setting. Many of the parameters or contexts of the work setting encourage or demand cooperation. Important factors at the physical level are the lack of substitutes and task characteristics which demand intensive cooperation. Important frames at the social level are proximity, familiarity, shared rewards, an egalitarian social order, and complementary team roles. Important cultural frames include low power distance, a value attached to risk-taking that promotes group goals, and an ethic of shared reliance and support. There is also much in the socialization of a new hire which

encourages cooperation. The goal, from the crew's perspective, is to get a new deck hand contributing as soon as possible. In order to speed up this process, the new hire is extended provisional status. The new hire is taught and socialized by the very teammates he will work with in the future. With all this emphasis on cooperation, even within the socialization of a new hire there is room and incentive for competition. There is renewed competition among insiders for prestige now that a new member has joined the audience. There is competition for status between the new hire and the 2nd lowest status hand who may feel threatened. And the emergence of an informal social hierarchy, where equality is formalized in pay, is proof of an ongoing competition for status and influence.

The collaborative telling of deck stories is another practice promoting cooperation. The meaning of past shared experience is synchronized. Positive aspects are highlighted and attributed to the team or to adherence to the team's rules. Trust, agreement, and an ethic of sacrifice for the team are built. This process culminates with the emergence of exceptional cooperation characterized by strong interpersonal commitments. Aspects of this cooperation such as trust, agreement, and camaraderie are intrinsically valuable and figure prominently in quality of working life assessments.

II. Lessons learned

It is challenging to write ethnography about your peers and in some cases friends. The research is very enjoyable, especially formulating and testing ideas against other past experiences. The writing was more difficult. The actors are not anonymous to each other regardless of the names I have given them. I would like to do further research among them and do not want to jeopardize that by what I write. At the same time, I want to give the most accurate picture that I can. It is difficult. I have hesitations about giving them the manuscript as I have promised. I know that some of them will not be happy to read everything I have written about them.

As I mentioned previously, anthropology is well suited to studying occupational life. Typical anthropology is a study of the exotic. I have done the opposite by studying the mundane experiences of the main part of my working life.

But anthropology can incorporate my research because anthropology is above all the study of humans in their natural settings. Those settings are comprised of a variety of influences of varying strengths. It is natural for an anthropologist to be interested in those influences which are particularly strong. I have done research in a setting where the influence of occupation is very strong. In this sense, my research has something in common with typical anthropology.

III. Implications for other researchers

This discussion could be greatly improved by future research on children's perspectives. The experience of being in a pollock fishing family for children of various ages must be studied including topics such as strategies for adjusting to father presence and absence and alternate sources of support. These families also should be studied by a woman. A woman must live in the community and directly study topics related to how these women and their families cope, such as how substitutes are selected and evaluated. My access was limited by my being away during fishing seasons and by my being a man and a work colleague when I was in the community. The men I worked with have much more to say about returning home than about leaving home. They are not around to directly observe what happens after they leave. Better understanding of the perspectives of women and children, together with what we know from the fishermen themselves, would form a better knowledge base for making policy suggestions than is now available.

The role of family expectations is important in this context. A study which includes both families new to fishing and families with partners who were raised in the occupation would also be an important contribution. I noticed very little difference. However, the number of families that I studied was very small. And none of the women in these families have parents who fished. (One comes from a family where her grandfather fished but her father does not.) Half of the men on the boat come from fishing families. I believe the expectations of the wife/partner are if anything even more important to predicting marital satisfaction and family survival than those of the man. Do more of these families succeed when the wife is raised with family expectations which fit this occupation than when it is the husband who comes from a fishing background? The influence of gender on the

role played by family expectations would be an important advance in research in this area.

This discussion could be improved by more comparison with other Bering Sea fisheries. To researchers interested in studying these fisheries I would give some words of caution regarding access. Entry-level fisheries will be available. This will mean starting in the factory of a long-liner or trawler. That might be an interesting study in itself and perhaps quite similar to other research in industrial settings. But the interaction among factory workers is probably going to be quite different from that among the fishermen working on deck. Access could require a large investment of time. Technical competence is the only thing we can offer to a skipper that will get us on board (unless you are related to one). If you do not already have it, it requires quite some time to get it. Now that crab quotas are so reduced, many of them fish for cod after their season. No crabber likes fishing for cod. They consider cod to be bait fish rather than a target species. Access to a crabber during cod season should be relatively unproblematic.

IV. Implications for policy and practical relevance

A. Family

Managing the return home: The fisherman comes home after three or four months away and needs a break. He needs to get involved with his family, friends, hobbies, and various other projects and responsibilities. His wife/partner has been a single parent for three or four months and needs a break. She needs to spend time with her husband/partner and maintain the family's support network. They need a multi-stage transition period to home. I suggest something like the following: I am king for a week and have no household responsibilities. Then you are queen for a week and have no household responsibilities. Then we go away for a weekend alone. Some portion of the week (1 night, 2 days) should be reserved for the fisherman's non-family activities so he can catch-up on them without guilt. And some portion must also be reserved for the wife to maintain the family's support network. The man needs to understand that it is not just her support network but the family's. He has a responsibility to help her maintain it.

Creating a shared vision: The family needs regular and conscious "family building" time every day or every week. Maybe the family shows the fisherman their scrapbook or a video scrapbook. Maybe he shows his video scrapbook or tells stories of what happened on the boat. They need regular time to talk about what happened during the man's absence from home. The goal is to create a shared vision of the separation for parents and children. This process may take weeks and can result in increased emotional intimacy. (Blaisure and Arnold-Mann 1992:181 made this recommendation to military families.) This also creates a shared vision of the time together. Creating a shared vision accelerates accepting and adjusting to that vision of time together. Wives and teenage children should make a fishing trip with their father one time in order to better understand his experience away.

The family needs to try to keep "at-home" time ordinary and "away" time special. Maybe the family eats in the living room every weekend when he is gone. Perhaps meals are eaten backwards to forwards (dessert then main course and finally appetizer) once a week. The idea is that the family practices some inversions while the man is away to help reinforce that this is exceptional time and that normal, ordinary time is when he is at home. Normal time when the father/husband is home is reinforced by such mundane events as eating at the dining room table instead of off the living room floor. Do not take the kids out of school. Planning special trips during school holidays, with or without the fisherman, helps resist the inversion of the ordinary and the extra-ordinary.

Managing the departure: Planning the leaving transition and saying goodbye is always going to be difficult. Maintaining the father's modified roles in the family unit during the separation is important for the time apart and also in the reintegration process (McCubbin and Dahl 1976:143). Zvonkovic has suggested that young children might enjoy keeping a scrapbook and sending the fisherman tapes of their voice or videos. Older kids might play a long-distance game like chess. The idea is to maintain connected and keep fisherman present in some form while he is physically absent (Zvonkovic et al. 1996). When satellite communication becomes cheap enough to use there could be daily calls. But nothing replaces snuggling.

Re-creating a community: These fishing families are striving to meet expectations which have been given them by their families, communities, and larger society. Many of these family partners, especially women, were not raised with fishing. The fishing community no longer lives near each other as it has in the past. This means that expectations of what a family should be and how it should function, which come from all three levels, correspond more closely to greater societal norms than to norms which might fit fishing specifically.

These expectations, which fit with patterns of high geographic mobility, include extensive reliance of the partners on each other, significant father involvement in childcare, and minimal reliance on wider family networks (pages 98-99 above). Pollock fishing families cannot survive under this set of expectations. They need support from non-nuclear family members. Just as importantly, they need to view this as normal. Implicit or explicit comparisons with "normal" families is an important cause of strain and family conflict (Gross 1980). Only other fishing families are going to send this kind of message.

Geographical freedom is often cited as an advantage of various long-commute occupations (Gramling 1989:54-5, 1995:31). In the case of these pollock fishermen, who live all over the United States and commute to Dutch Harbor, it works against family success. These families would be helped by living in close proximity to other families engaged in a similar occupation. The goal is to create, at the community level, realistic expectations of family life which fit the occupation of pollock fishing. These might be similar to an older version in which roles in the production of immanent goods were spread more widely among neighbors and extended family. This would require that actors besides the partner be available and willing to play those roles. Wider societal family expectations do not fit Bering Sea pollock fishing. These fishing families cannot tune out various media. They cannot arrange to have themselves raised in a fishing family with occupationally appropriate expectations for family life. What they can do is to form a community. If living in close physical proximity is not possible, perhaps some other way of forming a community can be found. A ship's crew could organize a day or a weekend when the families get together to create a support

network. Thomas' informants (merchant mariners) thought this was at least as important for the children as for the partners (Thomas 2003:105).

The fishermen of the Makushin do not live in one community. Even the three who live in the same town do not live within walking distance of each other. All three live in occupationally diverse neighborhoods. Their family expectations are typical of US society. These expectations can only in the rarest of exceptions form the basis of a successful family which includes a Bering Sea pollock fisherman. One conclusion of this research is: if you want to have a successful family, change your job or change your family expectations.

Reducing the time away from home: Another area of change could be in the fishery itself. I would recommend shorter absences. Fishing could be done in ten week blocks with six weeks in between. With a week before and four or five days after that comes to about twelve weeks away and four weeks at home. Fishing starts on January 20 (crews fly up on January 13) and ends on March 20 (crews fly home on March 15). If there is still remaining quota to be caught, they can begin again on May 4. When applied to the B season, this would change what is today a five month long season into two seasons of two months each with six weeks break in between. In the absence of family-friendly changes in the fishery schedule, crews should follow the Makushin's example and work part time rotations.

B. Work

These policy recommendations are in the areas of organizational culture, safety, and briefings. This roughly correlates to the parts of the section on work pertaining to teamwork and work frames, and to the telling of deck stories. In the areas of socialization and quality of working life I have less to recommend. Socialization is done well on the Makushin. Knowledge is shared in response to new hires' needs rather than in advance according to some more organizationally efficient scheme. These types of "in-response" socialization practices aid learning and adaptation more effectively than "in-advance" practices (Louis 1980:245). Modest improvement in QWL would be instantly realized if the ownership would begin to regularly reveal its intentions regarding advancement and scheduling. Uncertainty in these areas makes both longer range career planning and shorter term scheduling difficult and negatively influences QWL.

Building a collaborative culture: At the level of organizational culture, fishing boats and other similar work groups would do well to follow the Makushin's example of a culture of collaboration. A collaborative culture, rather than a steeply hierarchical one, leads to the improved flow of information and thus to increased team performance and safety. In national and occupational cultures where power distance is high, this means empowering workers to speak up and encouraging skippers to listen. Skippers must discontinue their (unsuccessful) attempts to convince their crews that they are infallible. Safety is improved when crews report good guesses as to what is happening as well as certain information (Krifka 2004:85). Admitting mistakes and close calls can be a training experience for everyone.

Building a safety culture: A boat's primary goal must be defined in terms of quantity, quality, and *safety* of production (Grote et al. 2004:121). Rather than responding to accidents once they occur, a proactive safety culture could be built on the Makushin through practices such as reporting close calls (Helmreich and Sexton 2004:129). I recommend a dry erase board in the galley where workers can record close calls. Just a sentence is needed to jog one's memory in the future. Close calls could be discussed in more detail by the crew during a safety review which should occur regularly either on the way to town or when at the dock. When the board is empty, skippers should ask each other about close calls or accidents which can be analyzed in the safety review. Close calls and preventative measures should be recorded in a log. Crews need to see that the organization is genuinely committed to their safety or they will quit reporting their concerns. Training drills for emergencies must be specific to the situation. Success in dealing with one emergency situation is not predictive for other situations (Häusler et al. 2004:36-37). Finally, the dangers of fatigue must be acknowledged (Helmreich 2004:11). The occupational culture's emphasis on ignoring injury, illness, and fatigue must be recognized as dangerous.

Gaining the full benefit of briefings and de-briefings: Telling deck stories is a kind of informal de-briefing. Team performance and safety would be improved by formal briefings and de-briefings before and after significant work is done on deck. There is both a technical and an interpersonal component to (de)briefings.

The technical content of (de)briefings might include identifying possible threats, reviewing options, planning contingencies, and addressing ambiguities. It is a chance to create a shared mental picture of the work task and situation or a way to update the common ground (Krifka 2004:146-148, 159). It facilitates implicit cooperation which is very efficient and cognitively inexpensive (Sexton 2004:24, 32-33). Interpersonally, a skipper or deck boss can create a climate which opens up channels of communication and empowers team members to speak up (Sexton et al. 2004:167-168). It is a powerful opportunity to influence organizational culture. This is a chance to develop a group norm of shared responsibility. The existence of such a norm increases the probability that deck hands will function more effectively in critical moments (Foushee 1984:888). Additionally, a very short formal briefing may be all that is needed to trigger a longer informal briefing, like a series of relevant deck stories, with the instrumental and intrinsic benefits which have already been described. A new hire's learning will also be accelerated by formal briefings and de-briefings.

V. Implications for theory

This research makes several contributions to social theory. There are contributions within the anthropology of work in the areas of building social cooperation, quality of working life, and adult socialization. There are contributions within the anthropology and sociology of families in the areas of family adaptation. Rather than building grand new theories I have tried to extend existing theories and to combine theories in fresh ways.

A. Within the anthropology of work

1. Building social cooperation such as trust, teamwork, and commitment

This analysis has brought together the influences of task structure, socialization practices, and social interaction on the process of building cooperation. Many anthropological studies have stressed the role that the physical and material components of the work environment play in shaping social processes (e.g. Gamst 1980). Sociological work on adult socialization has tended to rely more heavily on ideology and explore the implications of particular forms of

socialization for workers' experience and social interaction (e.g. Van Maanen and Schein 1979). This analysis has included both material (task and social frames) and ideological (social and cultural frames) contexts of social interaction in the work setting. I have also integrated theories on role of emotion into this explanatory mix (e.g. Lawler and Thye 1999). It is a balanced approach which I hope demonstrates the potential fruitfulness of building physical, cultural-ideological, and emotional factors into research on process of creating social organization. It is an approach which might be applied not just to the process of creating social cooperation but to examining the circumstances under which cooperation endures. It might also lead to a general theory on the role of emotion in the building of trust, commitment, and teamwork in both work and non-work settings.

2. Assessing quality of working life

I have suggested that the importance of extremes figures prominently in an assessment of the quality of working life of these fishermen. While this approach runs counter to much of the research done in North American fisheries, it is consistent with the work of psychologist Daniel Kahneman in the area of memory (e.g. Kahneman et al. 1993, Redelmeier et al. 2003). Kahneman believes that there are faulty mental processes which separate painful experiences from retrospective assessments of them. His interest is in the problems associated with evaluation of past experiences. He suggests that people tend to use selected moments in evaluating extended states or experiences. Peak and end moments are most important in retrospective evaluations. Duration of an experience tends to be omitted from the evaluation process. In his lab experiments, Kahneman is able to capture subjects' peak moments because he is able to record subjects' evaluations at various points during an experiment. This sort of periodic evaluation of one's own experience is problematic on the deck of a trawler. An observer is required. Kahneman's work supports my contention that ethnographic methods are well suited to studying QWL. I wonder if his subjects' retrospective evaluations of painful episodes would be different if they debriefed with an exercise in collaborative story-telling. Kahneman's interest in unpleasant experiences is also related to my observation that both positive and negative peak moments are

important in subjective QWL evaluations. They do not average or cancel each other out. Both figure prominently in the stories these fishermen tell. Endings are less prominent. Kahneman's work with endings (gradually ending a painful episode with a slightly less painful moment) could be extended by field research like mine. How is a moderately unpleasant experience punctuated with sudden moments of fear and exhilaration, a winter fishing trip for example, retrospectively evaluated? What if there were no moments of positive exhilaration and instead only negative peaks. Would a long, slow steam around a quiet harbor at the end of a trip, gradually ending a painful episode with a slightly less painful moment, lead to a more favorable evaluation?

3. Adult socialization

I have referred to the importance of generosity at two different points in the socialization of a new hire. Both instances are related to the process of extending provisional status. In one case the goal is accelerate the process of incorporating a new member into the team. In the other instance the goal is to build personal loyalty. My analysis is supported by Kollock's research on accounting rules in social interaction generally. Kollock (1993) developed the idea of an accounting system and argued that relaxed strategies often have important advantages over more strict strategies of reciprocity such as the eye-for-an-eye strategy of TIT FOR TAT (e.g. Axelrod 1984). The advantage of a strict accounting strategy is that it minimizes potential exploitation. No strategy can out score TIT FOR TAT in a one time encounter. According to this strategy, my contribution will match yours and if you defect once I will immediately defect as well. I cannot be exploited by you. In interaction situations where there are mistakes, accidents, misperceptions, and errors, a strategy which responds to any action immediately and in kind will likely amplify misunderstandings and discourage further cooperation. In the long run, restrictive accounting may result in poorer overall outcomes than more relaxed strategies which do not immediately respond to a defection with a defection. This is certainly true of socialization on the Makushin.

Much of the recent research on the emergence of cooperation has been done with computer simulations (e.g. Axelrod 1984, Kollock 1993). My research situates and verifies some of these concepts have validity in the context of

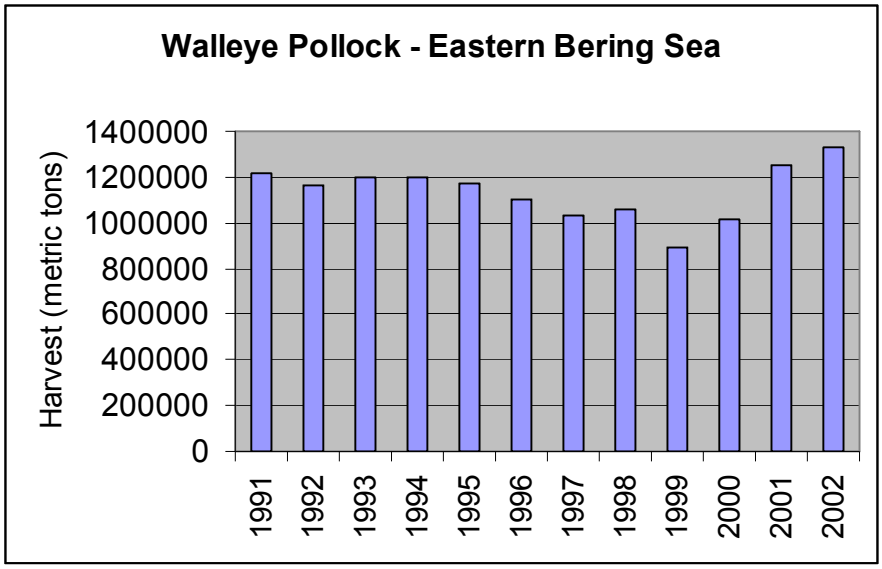
occupational socialization. This research also ties his theoretical work to motives behind the use of strategies in a specific context. Insiders on the Makushin use a relaxed strategy towards a new hire because he cannot easily leave and because they are dependent on him due to the highly interdependent nature of their work tasks. The difficulty of entering and leaving the work group restricts interaction to a subset of possible partners. This in itself minimizes the possibility of exploitation. To the extent that potential exploitation is reduced, the potential benefits of a strict strategy like TIT FOR TAT are also reduced. Additionally, the crewmen's dependence on the new hire's cooperation at some level encourages a very relaxed strategy. They cannot risk receiving a contribution of zero. They value some level of cooperation even if the new hire only contributes half as much as was expected. They must use a relaxed strategy which will result in cooperation at a lower level rather than no cooperation at all. Accordingly, variations in dependence would be related to variations in strategy. It would be interesting to extend this theory to a comparative study of socialization practices in organizations with differing levels of entry/exit costs and of task interdependence. It might also illuminate further processes in the breakdown of cooperation in the family.

B. Within social science research on work and families

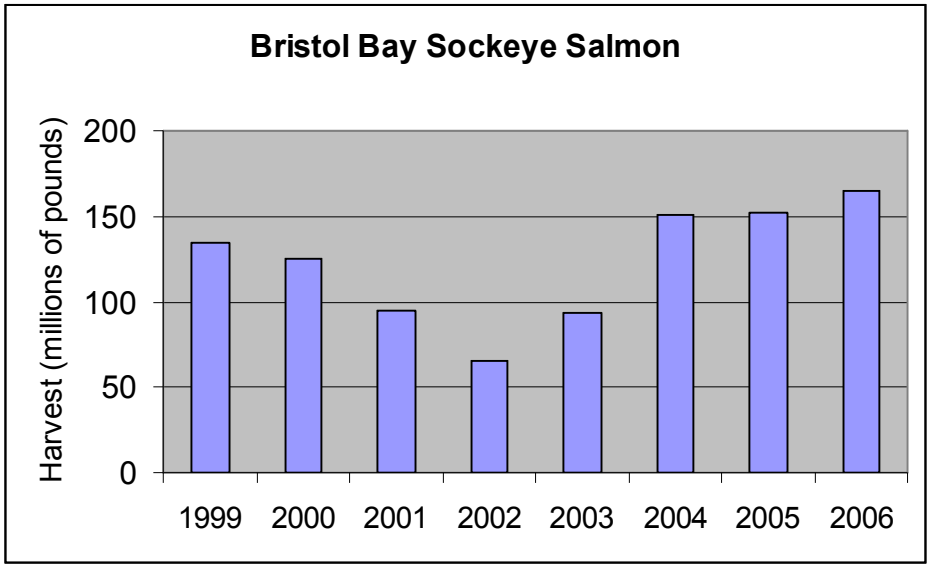
In my analysis of these fishing families I have combined sociological theories of collective action and theories of teamwork found in management literature (e.g. Hechter 1987; Katzenbach and Smith 2003). I have extended them to strongly affective relationships. The goal was to highlight occupational constraints on family adaptations and to point out the spaces and actions which can be taken. My conclusions are consistent with family research among other fishermen, military and civilian seamen, and offshore oil workers. This theoretical model might be usefully extended to the families of migrant workers, such as those who leave their families and communities to work for months or years at a time. It would be particularly interesting to study families who must adapt to patterns of father absence which are similar to those of Bering Sea pollock fishing families. Holding the absence variable constant could help to further clarify the influence of culture on patterns of family adaptation in both contexts. Assumptions about the

importance the family's immediate community to generate expectations and provide support might also be tested. This analytical frame is useful for Bering Sea fishermen and other long-commute occupations. It would be interesting to see how usefully it might be applied to non-long-commute occupations such as corporate executive, doctor, or university professor.

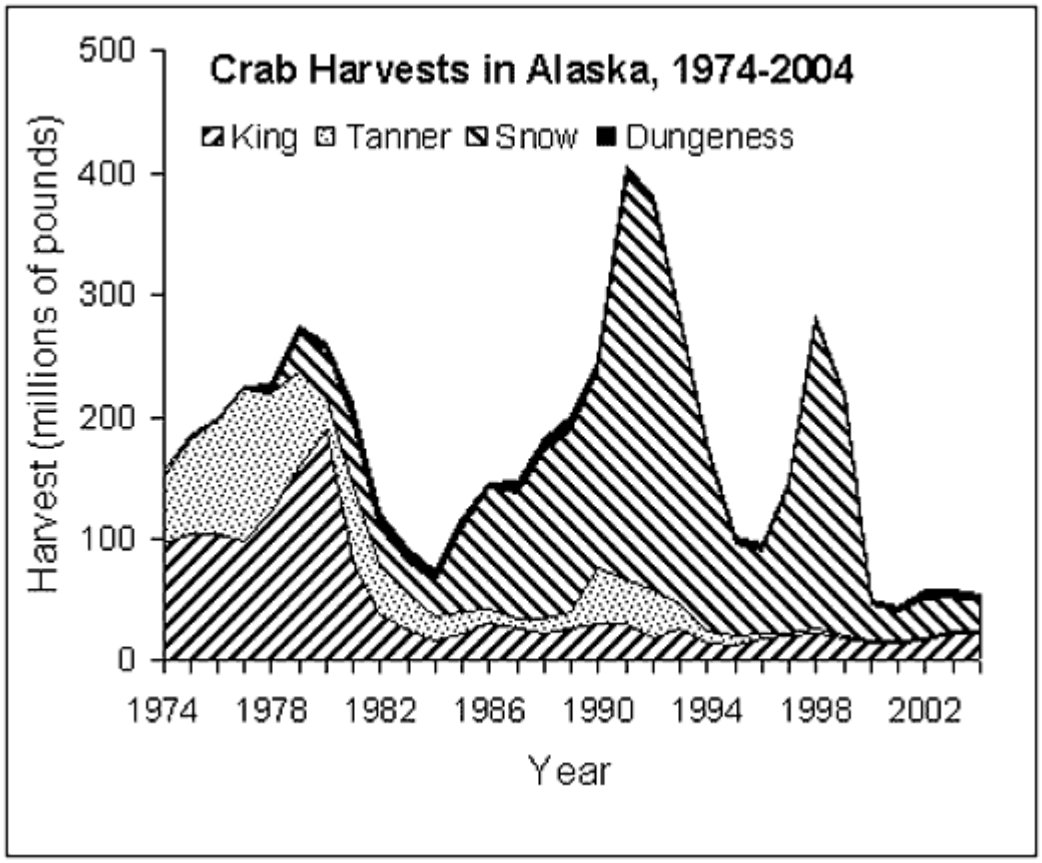
Appendix



Source of data: a National Oceanic and Atmospheric Administration report at <http://www.afsc.noaa.gov/refm/cbs/Docs/WEbsite2-donut.pdf#search=%22bogoslof%20pollock%20catch%20history%22>



Source of data: an Alaska Department of Fish and Game Division of Commercial Fisheries document. 2006. <http://www.cf.adfg.state.ak.us/region2/finfish/salmon/bbay/bbayhist.php>



Source: an Alaska Dept. of Fish and Game document at
<http://www.cf.adfg.state.ak.us/geninfo/shellfsh/crabs/catchval/crab_1974-2004.php>

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