Territoriality among Icelandic Fishermen¹

Gísli Pálsson University of Iceland

The article discusses the nature and significance of strategies of managing access to fishing territories. The data relate to the indigenous and private strategies used by Icelandic fishermen. Such strategies vary with time and with fishing technology. The article discusses changes in the control of access and their implications for the management of information among skippers. Several scholars have reported claims of territoriality among fishermen and have referred to them as manifestations of property rights and ownership. It is argued here that territorial claims should be seen as pragmatic attempts to manage the conduct of fishing.

The question as to whether fishing grounds constitute a form of property or not is a matter of some controversy. Most observers have assumed that since fishermen are unable to control the resource-base they exploit, they do not develop claims of ownership of water space. Thus, in a recent article which attempts to yield 'empirical generalizations' about preindustrial and modern fishing, it is argued that 'fishermen . . . generally do not have exclusive rights to particular fishing grounds' and that 'there are no reports of fishermen asserting rights to specific fishing areas' (Norr & Norr 1978:166). Similarly, Pastner claims (1980:17) that 'among fishermen cross-culturally there is . . . a characteristic policy of viewing the sea as a collective resource'.

Recently a number of scholars have raised doubts about the validity of statements of this kind. Cordell has challenged 'the common property myth' by showing that various forms of 'proprietary rights' have developed in small-scale coastal fisheries in Brazil (1978:2). Forman shows how 'temporary property rights' (1967:417) are accorded to individual fishermen in another Brazilian community. Acheson argues that amongst the 'harbour gangs' in Maine 'informal norms about territoriality and hence ownership . . . exist' (1975:184), while noting that theirs is an 'unusual fishery'. The list could be much longer.

There are reports about the allocation of property rights to specific fishing grounds, so perhaps the 'ownership' of water space is not so 'unusual' after all. How is one to make sense of this? Is the prevailing disagreement, one may ask, due simply to lack of information, or is it the dubious quality of ethnographic reports?

During the 1981 winter season, 46 'local' boats were stationed at Sandgerði, near

Keflavík, Iceland. Approximately 20 'guest' boats landed their catches there too, although less regularly.² Of the local vessels, 40 fished with longlines and/or gill nets. These boats start with longlines at the beginning of the winter season up until February–March. Gill nets are then taken aboard, because by that time 'fish' (cod) are expected to turn their attention to natural bait. These nets are used for the rest of the winter season, which ends at the beginning of May. The boats that follow this pattern, referred to as 'seasonal boats', vary in size from approx. 20 to 200 tons. Discussion concerning present fishery is restricted to these boats, which usually land their catch daily, unlike other vessels (two stern trawlers and four smaller trawling vessels), which in most cases spend several days away at a time, fishing mostly in different areas.

Ownership of land

From very early times the local fishing grounds have been exploited seasonally by the fishing peasants of Sandgeroi hamlet, which during the last decades of the 19th century consisted of 5-7 families. At the turn of the century the farmer at Sandgerði, the main farm in the hamlet, owned the bay used by local fishermen, as well as two rowing boats seating eight men. Members of the other households were either landless crofter fishermen (burrabúðarmenn) or tenant peasants (hjáleigubændur). Both were obliged to row the boats owned by the landowner. Within the major fishing areas there were approximately 60 publicly known locations, each of which had its own name. These places were also exploited by members of other hamlets. Some of the locations were associated with particular human names, after the person who 'discovered' the spot or frequently occupied it. Some areas were associated with a hamlet, but these were simply the nearest locations in its home range. No hamlets, or individuals for that matter, could effectively control specific fishing areas. Access was controlled by private means, in the sense that only those who possessed the necessary knowledge could exploit the 'liveliest' fishing spots. The number of boats that could operate from each bay, however, was limited by geographical factors, and access to the ocean was thus controlled by the owners of bay areas which were subject to rules of inheritance like other forms of landed property. The fishing grounds could thus only be controlled in a negative sense, by inhibiting others from gaining access.

When decked motor boats were introduced at the beginning of this century, access continued to be controlled by the owners of land. Enterprising merchants bought the land at Sandgerõi and built two wharfs in the bay. Peasants who managed to buy a boat were allowed access to the wharfs on the condition that they sold the catch to the owners, the merchants. The merchants' monopoly was abolished in 1946, when the commune bought the wharfs. Since then access to the harbour at Sandgerõi has been free. By this time the population of the commune had greatly increased (in 1910 the population was 377, in 1940 it was 551) largely due to the growing fishing village at Sandgerõi.

This expansion was mainly because of the strategic location of Sandgeroi and the access it provided to the fertile fishing grounds in Mionessjór. The first motor boat came to Sandgeroi in 1907, but in the twenties about 120 boats landed their catches there during the winter season. Most of these boats were 12-18 tons. Longlines

ì

were the main fishing gear and each boat had approx. 50 lines ($l\delta\delta ir$) which were about four miles in length.

The traditional fishing grounds soon became overcrowded with boats and lines. Effective and permanent control over the resource-base was impossible since even though fish might concentrate from time to time during their travel in the currents of the ocean they were always on the move.³ As more and more units exploited the same fishing grounds with ever longer lines (now up to 12 miles each boat), fishermen resorted to two different strategies: They explored new fishing areas and managed the conduct of fishing. The skipper during the expansive phase of the fishing industry could be characterized as a frontiersman who was always on the look out for new areas and for opportunities to 'open up' new resources for capitalist extraction.

The 'rowing time'

Regulations concerning the timing of departure (róðratími) were laid down by common agreement about 50 years ago in order to prevent chaos on the fishing grounds. The lines of each boat could stretch several miles and when different boats left the harbour at different times, competing for similar locations, lines got chopped and tangled up, especially when currents were strong. This was to nobody's advantage and the fishermen agreed to fix a certain time of departure for each month. The exact time was debated for years, even although most fishermen, it seems, were in favour of some regulations. Because the lines were taken ashore after each fishing trip in order to have the bait renewed, it was impossible to control any one path effectively. The fishermen therefore decided upon certain rules of the game, so that all wouldn't lose by the confusion that followed if no rules were applied.

There were several justifications for fixing the rowing time. It was argued that timing was necessary so that everyone would know where the lines were placed. It was also said that everyone should have an equal chance by immersing the bait into the sea at about the same time. Those who were first should get the best paths. The inevitable result was that the chances of some were more equal than others. The boats with the biggest engines were first to occupy 'likely' places while others were forced to look somewhere else. Nonetheless, the game was considered to be more fair and fewer lines were lost. 'Time wardens' were appointed by the communal authorities on a rotating basis to give the 'sign' of departure and to ensure that no one was cheating.

The timing of departure was at first in accordance with daylight. Without electric light fishermen were unable to work, so the boats would leave around midnight so they could start fishing at daybreak. These rules still apply and those who break them are liable to be harassed by other skippers or fined by the state authorities.

Usually the 'time' was respected within each fishing community, but occasionally competition from other communities would lead to violation of the rules. Thus skippers from Sandgerði often occupied the best locations on the fishing grounds in Miðnessjór despite the competition posed by boats from nearby villages. The latter sometimes tried to get a 'head start', but if they were noticed by skippers from Sandgerði the latter's boats would leave the harbour immediately even though

'time hadn't come'. The coordination of rowing times for boats from different harbours was disputed in election campaigns in the respective communities. But the competition was regarded as impractical in the long run and a general rowing time was established, as well as the line from which boats were supposed to leave. This meant that all boats got the same chance irrespective of whether they came from Sandgerői or other harbours. Such a coordination was made easier by the fact that around 1940 skippers and mates from Sandgerői and nearby villages formed the same union, within which conflicts could be settled.

Ç

1

Rowing times were similarly established in various other communities on the southwest coast. Elsewhere, such as on the fishing grounds of the eastern fjords, nature offered a partial solution to the problems posed by increased competition. In such cases lines could only be laid at particular times of the day because of strong tidal currents.

Technology and information

The management of information is one of the private means of controlling access to fishing spots. Sometimes skippers share information. This is most obvious when, because of bad weather or governmental restrictions, no boats have been fishing for some days on the vast area usually exploited. Even though the basic features of the seabed are known to most skippers, and they can tell where the best catches were caught the same time the previous year or during the last fishing trip, they know that the movements of fish are uncertain. Therefore fishermen consider the area as 'untested' (*óprufað*) when fishing resumes. As the boats go out again they tend to be highly dispersed and in some cases skippers even agree to spread out, scrutinizing the fishing grounds with their electronic equipment (fish finders and echosounders of various kinds). While they search the area they are constantly listening to the 'spy' (an automatic scanning FM radio) and occasionally commenting themselves on the search. They may even ask for 'news' or advice and frequently the listener encounters questions such as 'How is it in the south, should I go there?'.

The accuracy of the information given by the 'spy' is limited, but skippers know roughly the location of other boats. When the catch has been landed after a trip they have a crude measure of the relative profitability of various spots. What happens during the next fishing trip depends on the success of the individual skipper, the characteristics of the main fishing locations and the type of fishing gear used.

The successful skipper is likely to underestimate his catch and use various methods to escape the attention of other skippers, in case some of them have not yet laid their gear. He is also likely to give inaccurate information on his location. This is even more likely if the fish are concentrated at a particular spot (stendur glöggt).

Nets and lines have slightly different implications for the strategies employed and the management of access. The nets are tied together in groups (trossur), ten or fifteen depending on the size of the boat. Each trossa is approx. 300 fathoms in length. The number of nets that each boat may have at any one time is fixed by government regulations in accordance with the size of crew, but they can be laid at whatever part of the day the skipper wants. The nets are marked by buoys and are usually left for a day or two depending on weather. They can therefore be

spotted by other boats, but usually the individual trossur are scattered at various points. The ones who use nets are those who can most effectively control their fishing spots. Sometimes the same boat occupies the same locations for weeks and skippers may speak of 'their path' (farið mitt).

Fishing with nets is regarded as 'punctual fishing' (punktafiskiri). The nets are fairly short compared to lines. The skipper usually explores the area and only discharges the nets if the echo shows some promising soundings or 'sparks' (neistar). But even if there are no sparks shown by the fish finders he may occupy a location he expects fish to come to later on.

When one area is occupied for some time the 'owner' may prevent other boats from gaining access to the best paths by putting other nets adjacent to the main ones. This is not always necessary, however. In practice the one who is first is considered the 'owner' of that particular location.

Even though net locations can be occupied for extended periods skippers may compete for the fish that enter the area. Nets may be laid parallel to those that have already been discharged or even across them. In order to prevent potential competition, and the conflicts that could ensue, skippers often use secret codes when they report catches on the radio. In many cases they are expected to give information on their catch so that necessary arrangements can be made when they reach harbour. The codes $(k \acute{o} dar)$ usually take the form of a series of numbers which are changed every now and then to prevent others from discovering their meaning.

But conflicts do occur. If 'someone's area' is invaded by other boats the reactions depend on the skippers involved. Some skippers are known to be more cooperative than others. In several cases skippers contacted those who laid nets or lines too close to their own, or on top of their gear, and told them that they would tow the invader's gear to harbour. Sometimes this 'works', but also more severe measures are used. Skippers may deliberately tear the invader's gear apart or 'cut him in sea' (sker 'ann i sjó). Significantly, in such cases the 'owner' does not appropriate the invader's catch, if any; he only spoils the success of the invasion by removing or destroying the fishing gear. Anyone who destroys another man's gear may be prosecuted, but this is rare. Often it would be difficult to prove who was to blame.

Some of the management strategies described above apply to fishing with both nets and lines. In the latter case it is difficult to hide the fishing gear. It covers many miles and is marked by buoys where its units (tengsli) are connected, whereas individual groups of nets may be scattered at various locations. But while the location of lines depends less on information about passing fish, the line has to be taken to land each time for the bait to be renewed. Even though there is less secrecy about the location of lines (codes are rarely used by those who use lines) and they cannot occupy the same area for a number of days, they can be taken to an entirely different area at the beginning of the next trip if that is found desirable. Nets on the other hand have to be revisited and only then can they be transferred to other locations. For the longliner, time may be gained even though space may be lost.

In many ways skippers see fishing as a competitive game. They are fighting against the uncertainties of nature and at the same time playing a game against each other. Competition between skippers fosters a heroic image of their profession.

Differential success is accounted for by a skipper's character and expertise, the skipper effect. Successful skippers are said to prefer to be on their own (einskipa) while fishing, in order to be able to occupy likely spots for some time and protect their fishing gear. Since success is relative to what other skippers catch and each seeks to be among those at the 'top of the list', every skipper tends to think of fishing as a zero-sum game; his position, consequently, gets worse when others fish well. In some cases those who get nothing while others fish well will hardly dare to leave their boats to look the others in the face. As one skipper commented, 'during the game no two men are brothers'.

The management strategies discussed above clearly depend to a large extent on personal characteristics and individual preferences. To the outsider interboat communication may sound like a classic example of what Malinowski called 'phatic' communication (see Hymes 1974:31-32). Lengthy and repetitive exchanges often seem to be simply an end in themselves. Yet one should not underestimate their public nature. The statements made by skippers on the radio take place within a local frame of reference which limits their comprehensibility to outsiders. What skippers say is interpreted on the basis of prior knowledge of catch statistics and fellow fishermen. The weight of the catch is recorded locally after each fishing trip and the list is carefully studied by skippers. It provides information on where to search the next time, or rather where not to search. As one skipper put it, 'it would be stupid to follow someone at the bottom'. In exceptional cases local skippers come to land in a different harbour so as to avoid having a good catch recorded in Sandgerði. Knowledge of the statistics and the people involved is also essential for reading signs sent during the course of fishing, since skippers often claim that they got 'more than yesterday', 'same as Saturday', etc. Those who do not share a basic stock of knowledge are excluded from the game. The local system of information can, therefore, be said to demarcate a home range for local fishermen.

Discussion

Some of the management strategies discussed are similar to those of other fisheries. Such practices could be ethnographically translated as 'property rights' or 'territorial ownership'. To do so, however, would be misleading.

It is true that in some cases a group of people can monopolize fishing grounds, such as during the era of peasant production in Sandgerői, where the owner of the land controlled access to the sea. Breton's material (1977) on a group of fishermen in Venezuela offers a similar picture. There, a few individuals were granted 'exclusive rights' of exploitation of certain species and others were not allowed to use the relevant fishing techniques (Breton 1977:131). In such cases, however, territorial control is either a result of technical and ecological constraints, which limit the exploitable range, or is managed by differential access to the instruments of labour – land and/or fishing gear. Control is therefore not exercised on the basis of 'ownership' of the resource-base.

Acheson's description (1975) of territoriality among the lobstermen of Maine may seem to refute his general statement. There, fishing rights in 'perimeter-defended territories' belong to families which are legal owners of land, and 'water areas' may even be rented out. Yet, as Acheson himself points out, these informal norms

١,

Ŋ

'contain no "legal" or jural elements' (p. 187). Acheson also notes that these territorial boundaries were related to the technology in use when they were established: 'The area that one could fish was very limited, since one could learn the bottom only by hand lead line and the travel radius was small' (p. 192). These practices persist, though, despite the introduction of motor boats and echosounders, but to become a member of a 'harbour gang' one has to be a long-term resident of the locality and respect the 'local norms' of the industry (p. 195). Boundaries are thus maintained by converting local identity into political force.

Even though spots or paths can be occupied for some time, either by temporary or by relatively permanent facilities, in such cases the absence of individual ownership is often directly acknowledged by the fact that various methods are introduced to give everyone an 'equal' chance. This is exemplified by the establishment of the 'rowing time' discussed above, the 'public draw' for named berths in Newfoundland (see Andersen 1979:311) and the 'lunar-tide fishing space' amongst some groups of Brazilian fishermen (Cordell 1978:7). The resource-base remains common property. but efforts are made to organize the conduct of fishing. Significantly, when someone invades 'another's area' and conflicts occur due to the tangling-up of fishing gear (as in the case of Sandgerði), the 'owner' does not take possession of the fish the invader may have caught. He only spoils the success by removing the fishing gear. This is also evident in the case of the Maine lobstermen. A violator of boundaries may be warned, but if he persists his traps will be 'cut off' (Acheson 1975:189). Even though such incidents may escalate into 'lobster wars', territoriality is a practical arrangement for, as Acheson notes (p. 190), 'there is a strong feeling that if one is going to keep others on their side of a boundary one should stay on one's own side'.

The debate concerning the territoriality of fishermen has its counterpart in the literature on terrestrial hunters. Both exploit wild migratory animals which tend to ignore conceptual boundaries and the reproduction of which is beyond human control. But they too have been said to effectively control or 'own' specific hunting territories. If anything, hunters and gatherers have been credited with more effective claims of terrestrial ownership than fishermen.

The literature on the former group, which has a more 'established' place in the anthropological literature, has recently been reviewed by Ingold (1980). He suggests that territoriality among hunters and gatherers should be seen as a form of technical cooperation and not as an aspect of social relations and competition. The ascription of territoriality, he argues, turns out to control not the 'appropriation of resources', but the conduct of hunting.

It is argued here that divisions into fishing 'territories', where they exist, do not signify a real division of access to the resources of the sea, but rather constitute a cognitive map which aids the fisherman in the practical conduct of his activity, especially in the establishment and communication of location.

Events of recent years have shown, of course, that ownership of sea is claimed by nations, and this is especially significant for Iceland. The opportunist exploitation of fishing stocks by free competing skippers who try to get what they can from the sea whilst stocks last leads to sharply diminishing returns some time after the 'natural' limits (maximum sustainable yield) have been exceeded. This in turn leads to a redefinition of fishing stocks when fishing begins to appear 'uneconomic'. The

resource-base becomes perceived as finite and fishing zones become identified with nations or particular localities. The responsibility over exploitation becomes vested with an agent – usually the state. Such an agent often controls access to fishing space for two different reasons. One has to do with the conduct of fishing, such as when trawling is banned in certain areas simply because if allowed it would destroy lines and nets. The other reason is related to the resource-base itself. The state may directly attempt to affect fishing stocks. The ecological effect of territoriality is, however, in any case an empirical matter (McCay 1978:399). But even though access to the resource-base becomes divided and subject to control, both internationally and domestically, in other respects the sea remains a common property, albeit collectively managed by states.

e`

Notes

- 1 A more detailed discussion is available in Pálsson n.d. Most of the data on which the discussion is based were gathered during a discontinuous period of fieldwork in Sandgerði, from October 1979 to June 1981. The research has been supported by the British Council, Vísindasjóður and Fiskimálasjóður.
- 2 It should be noted that the term 'local boats' is used by fishermen in reference to those which regularly land their catch at Sandgerői. In many cases the owners of local boats are not residents in the locality. Only 14 of the skippers live there while 18 live in Keflavík and 2 as far away as Reykajvík.
- 3 Cod was then and still is the main species exploited during the winter season, the peak of the fishing year. It spawns in the warm sea off the southwest coast in March and April, and on its way to or from the spawning areas it travels vast areas looking for the right conditions, food, temperature and bottom features.
- 4 Path analysis of recent data on the winter fishery from Sandgerői has shown that the size of fishing boats and the number of fishing trips account for most of the variance in catch and that there is very little unexplained variance (about 12%) which could possibly be explained by a skipper effect (see Pálsson & Durrenberger 1982).

Correspondence to: Gíslí Pálsson, University of Iceland, Faculty of Social Science, 101 Reykjavík, Iceland.

References

Acheson, J. M. 'The Lobster Fiess: Economic and Ecological Effects of Territoriality in the Maine Lobster Industry', in *Human Ecology*, Vol. 3 (3), (1975), pp. 183-207.

Andersen, Raoul (ed.). North Atlantic Maritime Cultures, Mouton, Paris 1979.

Breton, D. 'The Influence of Modernization on the Modes of Production in Coastal Fishing: An Example from Venezuela', pp. 125-137 in M. E. Smith (ed.): *Those Who Live From The Sea*, West Publ. Co., St. Paul. 1977.

Cordell, John. 'Carrying Capacity Analysis of Fixed-Territorial Fishing', pp. 1-24 in Ethnology, Vol. XVII (1978), No. 1.

Forman, Shepard. 'Cognition and the Catch: The Location of Fishing Spots in a Coastal Brazilian Village', in *Ethnology*, Vol. 6 (4), (1967), pp. 417–426.

Hymes, Dell. Foundations in Sociolinguistics: An Ethnographic Approach, Tavistock Publ. Ltd., London 1974.

Ingold, Tim. Hunters, Pastoralists and Ranchers, Cambridge Univ. Press, Cambridge 1980.
McCay, B. J. 'Systems Ecology, People Ecology, and the Anthropology of Fishing Communities', pp. 397-422 in Human Ecology, Vol. 6 (1978), No. 4.

Norr, J. L. & Norr, K. L. 'Work organization in modern fishing', in *Human Organization*, Vol. 37 (2), (1978), pp. 163-171.

Pálsson, Gísli n.d. 'Indigenous Management and Public Regulations in Icelandic Fishing'. (Manuscript).

Pálsson, Gísli & Durrenberger, Paul. 'To Dream of Fish: The Causes of Icelandic Skippers'

Fishing Success', in *Journal of Anthropological Research*, (forthcoming).

Pastner, Stephan. 'Desert and Coast: Population Flux between Pastoral and Maritime Adaptations in the Old World Arid Zone', pp. 13-22 in Nomadic Peoples, No. 6 (June 1980), Bulletin of the Commission on Nomadic Peoples, International Union of Anthropological and Ethnological Sciences.