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"THE COMMON PROPERTY THEORY AND THE SOCIAL ANTHROPOLOGY OF FISHING"

THE PITFALLS OF PROBLEM FORMULATION

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THE COMMON PROPERTY THEORY AND THE SOCIAL ANTHROPOLOGY OF FISHING: THE
PITFALLS OF PROBLEM FORMULATION

The "tragedy of the commons paradigm" has been at the center of many debates between fishing experts over the last decade, drawing attention to biological reproduction of marine species, the viability of fishing as an economic activity as well as to the political struggles between producers and state representatives. While stimulating interaction and contacts between practitioners involved in various disciplinary fields related to fisheries development and leading several of them to adopt less sectorial views of the issues at work, it also forced social scientists to engage in a re-examination of their internal paradigms and to seek ways to better adjust them to the diversity of empirical forms they progressively dealt with.

The aim of this paper is to look at this process within socio-anthropological studies of maritime communities. Without aiming at reconstructing in an exhaustive way the various phases illustrative of this situation, it will rather focus on some institutional and ideological orientations that led anthropologists to react to the above paradigm and to re-orient their methods and objectives.

Starting with some remarks on the evolution of the relations between paradigms and concrete reality, it will afterwards seek to identify how that of the tragedy of the commons affected or influenced the problem formulation related to marine property within social anthropology

and will conclude with a brief look at present-day contributions and new directions.

I - THE NATURE OF PARADIGMS

Although there still exist many interpretations on the nature of paradigms among epistemologists and sociologists of knowledge⁽¹⁾, several of them would agree on the following points: a paradigm first consists in a kind of metaphysical belief which implies that certain elements of nature, more or less circumscribed in time and space, deserve attention and must be studied. Subsequently, it gives rise to specific research efforts, analytical orientations in which are elaborated theories and methods which progressively form the trademark of a particular disciplinary field.

When a paradigm succeeds in being used by several people, it acquires an institutional basis, a scientific status, becoming more or less an ideal model for research. What frequently happens however is that with time, the paradigm is more and more used, often with effort and ingenuity, but nobody criticizes its fundamental elements until one day, someone discovers an anomaly, an absurdity which reveals itself with sufficiently regular frequency so that we begin to look at the possibility of establishing an alternative which undoubtedly will lead to the adoption of a new paradigm.

These general remarks on the evolution of paradigms bear some significance for our discussion. Without pretending to assert where

exactly lies the tragedy of the commons paradigm, there is no doubt that the fact that we are gathered here to discuss its relevance for contemporary research in maritime economies indicates that it must be somewhere between the middle of its progression and a terminal phase potentially leading to the adoption of alternative devices.

Rooted in the biological concept of "maximum sustainable yields"⁽²⁾, the common property theory in fishing rapidly acquired an economic dimension which inevitably included social and political consequences. However, the slowness with which social anthropologists became involved in its use and discussion, while revealing the unequal importance of specific disciplinary discourses in public opinion and policy, also shows that internal theoretical and methodological constraints were at work in anthropology. Let us try to define them more precisely.

II - SOCIAL ANTHROPOLOGY AND THE COMMON PROPERTY THEORY IN FISHING

The point of departure for anthropological studies of maritime communities on a more or less systematic basis (if we make exception of individual pioneer efforts of Firth, Barth and Barnes) goes back to the sixties. At that time, social anthropology went through a strong transitional phase, seeking to free itself from the rut of culturalism or functionalism and timidly looking at the potential "ouverture" brought up by more processual approaches evolving around cultural materialism and modernization studies⁽³⁾.

In such a context which indeed emphasized the need for more diachronic approaches within anthropology, the tragedy of the commons paradigm did not influence on a significant basis anthropological studies of maritime communities and this for the following reasons:

1) The embryonic status of maritime anthropology within the larger social anthropology led its practitioners to define their identity and specificity by focusing on issues strongly related to current and wider anthropological concerns. The number of studies on crews' membership, kinship relations, communities networks and technological change leading to social transformations are very illustrative of the tendency in which maritime anthropologists had to establish their legitimacy before aiming at re-structuring the links between their mother-discipline and other scientific fields⁽⁴⁾. In most of the studies, if not for the mention of the species exploited (often with their scientific names) and a few elements of information about their migration patterns, biological data were simply neglected.

2) Most of the anthropological studies focused on micro-level analysis, therefore dealing with particular and reduced ecological settings which contrasted greatly with the large geographical basis implied in the establishing of the tragedy of the commons paradigm. This "physical" distance between anthropologists and bio-economists was even enhanced by the fact that the first practical measures derived from the establishment of the paradigm consisted in limiting the external fleet fishing efforts rather than affecting immediately national, regional or, even less, local

production⁽⁵⁾. In such a context, the geographical basis of anthropological studies was not questioned since the paradigm, through its implementation in the public sector, has little or no direct effect upon the communities selected for study.

3) Unconsciously or not, several anthropologists involved in fishing hesitated to take seriously into consideration the problem of the fish depletion not only because they did not have the ability of bio-economists to deal with it but also because the latter's longer involvement in that issue conferred on them a "scientific superiority" that could not be easily challenged.

4) It can also be mentioned that the strong biological premisses of the paradigm, sharply distinguishing fish from fishermen, an orientation opposed to the holistic approach of anthropologists, could in addition lead to the adoption of a certain "durkhemian" positivism in which not only a "collective constraint" should affect individual behavior but physiological "normality" could be a basis for establishing social rules⁽⁶⁾.

5) Finally but not the least, anthropologists directly involved in empirical research were progressively faced with the following dilemma: while the common property theory could be partially verified even in restricted geographical contexts and consequently re-inforced or coincided with their "community bias", it corresponded in their analytical schemes to a traditional and idealized management form that had to be

preserved in front of capitalist growth⁽⁷⁾. At the same time however, several of them became aware that the common property theory was not always effective or entirely applicable, but given the above, this information was generally included in footnotes and to some extent marginalized. For instance, it was progressively discovered that in many fishing areas, mercantile capitalism has given rise to various forms of prebendal domains in the 19th century and several empirical cases were observed in which the use of particular technological devices generated some form of appropriation of portions of the marine zones. Even if this situation helped to better distinguish the notions of access to and property of marine zones, it only led a few anthropologists, up to recent years, to engage in systematic discussions of the issues at work⁽⁸⁾. Meanwhile, bio-economists relying more heavily on macro-statistics and more directly connected with the state apparatus kept defining access primarily in legal terms which described the right of property and were mainly concerned with the economic effect of various kinds of access rights at a societal level.

Without being exhaustive, these factors suggested that in their initial involvement in maritime studies, anthropologists were either disinterested or embarrassed by the issues derived from the common property theory and indeed contributed little to its spread or its critique.

In the middle of the seventies however, with a stronger state intervention in fishing and consequently a more visible political will for implementing an "administrative rationality" in the activity, anthro-

polologists started to enlarge their comparative basis and became more critical of their previous orientations. Without denying the relevance of the community as an analytical unit, they developped more integrative and relational views in which regional and even national issues were discussed.

It is at this point that the tragedy of the commons paradigm became an intellectual and practical concern for them. With variations according to their institutional context and interdisciplinary acquaintance, several anthropologists got involved into the debate and contributed to the discussion of the paradigm. Among their reflexions, can be outlined the following elements:

1) Bio-economic theory, more based on the reproduction of marine species than on that of the marine producers, draws attention to the future of the former and neglects the historical practices of the latter, thus creating a large gap between the bureaucrats' and fishermen's position.

2) Even if fish is a mobile resource whose migration presupposes large marine zones, most of the fishermen are concerned with more restricted areas with which they are deeply familiarized. Contrary to bureaucrats who "mentally" construct and delimit productive or economic zones, fishermen live in areas whose features are concretely interiorized.

3) Bureaucrats evaluate and regulate fish stocks through statistical compilation according to particular species while fishermens' view of production is embedded in an annual cycle of activity whose continuity is defined by natural elements rather than by human rationality, this situation not denying the presence and effectiveness of informal community control on the regulation of fish catches⁽⁹⁾.

4) Stronger capital investment in fisheries associated with a more significant state intervention results in an increased socio-economic differentiation and competition between producers, thus destabilizing their previous stronger communal attitudes towards outside economic interferences with the conduct of their activities.

All these oppositions, rooted in the progressive application and use of the bio-economic theory and the common property paradigm show that fishermen are faced with a heavily dialectical process whose aim is to destroy "previous commonalities" in order to construct a new and larger consensus better fitted to the introduction of an administrative reality addressed to the redressing of the fishermen's logic⁽¹⁰⁾.

To this process, the majority of anthropologists have reacted negatively and have sought to establish the priority of the community over the firm, of the fishermen over external economic agents and of labor over capital.

What precedes however indicates that in their efforts to solve the dilemmas associated with the growing inadequacy of the tragedy of the commons paradigm for the development of fisheries, anthropologists are characterized by both positional advantages and disadvantages. If on one hand, their disciplinary training, strongly embedded in micro-levels of analysis and oriented towards direct contacts with producers, has allowed them to document empirical facts that contradict to some extent the basis of the paradigm, on the other hand, they intervened lately into the debate and still have little audience, compared to other disciplines, within the state apparatus involved in fisheries. A better recognition of this situation should influence the way with which they will further investigate elements related to the paradigm.

3 - RESEARCH AND PROBLEM FORMULATION

What follows is not intended to praise in absolute terms the uniqueness of anthropological contributions to the solving of practical problems in fisheries management. Deeply convinced that such an aim can be achieved only through increasing interdisciplinary collaboration, my intention is rather to look at social anthropology in a prospective way and to suggest, for discussion, a few lines of development or of reorientation that could better our research hypothesis and results within the above debate.

My previous comments on the anthropological influence on the tragedy of the commons paradigm underlined the fact that, in spite of positive and sometimes provocative elements, it remained rather eclectic

and in the wake of other disciplines. Given the importance of problem formulation in policy development and the fact that it is necessary to focus not only on the problem itself but also on the problem setting, anthropologists who have a certain expertise at the level of both communities and larger forms of social organization should clarify more their position with regards to the problem setting.

The greatest difficulty with the tragedy of the commons paradigm is that it is primarily rooted in a variable (fish stocks) rather than in a problem itself. The later subsequently arose and developed but with a more consistent emphasis on biological and economic factors than on their social counterparts. When anthropologists began to be involved in the debate, they were therefore already faced with an "intellectual jargon" derived from the needs of an administrative apparatus whose formalist guidelines favoured economic over social rentability. In spite of certain efforts to rectify this situation, there is still room for looking more critically at the influence of this "official terminology" upon our problem formulation and hypothesis. By this I mean that this terminology, rooted in the management of fish resources and of their habitats, also entails the management of people. Very often, wishing to valorize ^{= quantify?} the people's reactions to the paradigm, we have limited our research to the "translation" of the core concepts of the paradigm into a concrete reality without coming up with systematic views of the producers' feelings and reactions.

The counterpart of this situation is that in addition to our restricted acquaintance with the functioning of bureaucracy (a shortcoming enhanced by the ideological distance between academic and government institutions), we have a tendency to look at it in a too "neutral" way or to consider it as "an independant variable" whose influence is primarily due to its legal and asymmetric power. Its "inevitable" character means that we take it for granted and know little either about its historical development or present-day social features and organization. Rather than conceive of the state apparatus involved in fishing as an homogeneous "external agent", we should develop research hypotheses that would take more into consideration its internal oppositions and conflicts, i.e. take it as a social entity in which are encountered social relations of classes, power struggles whose relevance for analysis lies in something else than in the official discourses of politicians or of their immediate representatives. Part of our comprehension of the problem is reduced by our limited interest in the modalities of reproduction of bureaucracy and of their effects on policy settings. There nevertheless exist social studies of state apparatus whose analytical contribution should influence us more on our problem formulation. Even if this involvement could bear some political dimension leading to greater alliances or oppositions between anthropologists and bureaucrats, it could at least serve to rectify a situation in which bureaucrats have so far learnt more from anthropologists about fishermen than fishermen have learnt about bureaucrats from anthropologists.

Thirdly, one of the major consequences of the implementation of the tragedy of the commons paradigm has been the progressive dislocation of previously more generalized and communal labor processes in fishing at the expense of specialized fishing. As a result, fishermen's demands are now often channelled through their "professional" associations rather than through their community as a whole. This also bears some contradictions for the problem setting since the term "community", largely used to describe the counterpart to government institutions or representatives, loses its operational content, a situation thus creating a terminological haziness which renders more difficult the explicating of hypotheses. It would be therefore necessary to investigate more, with regards to the paradigm, the extent to which unions, syndicates or associations succeed or not in transposing the interests of the community development in front of the state apparatus. An increasing social differentiation between producers, encouraged and supported indirectly by state intervention, creates a new context in which anthropologists, without denying the importance of the community as a social setting still influencing the fishermen's reaction, should pay more attention to emerging social classes or factions as analytical factors in the development of fishing⁽¹¹⁾.

Finally, in spite of many recent efforts in this direction, we should tend to "denationalize" more our generalizations and confront them with experiments that occurred on a large scale. This is obviously an arduous task that might seem an ideal statement. But I am convinced that at the level of problem formulation, a better acquaintance with the effects of the paradigm in other social and economic settings, even

limited to its general evolution, would be greatly helpful in developing better hypotheses⁽¹²⁾.

CONCLUSION

This paper seeks to examine in a retrospective way how the tragedy of the commons paradigm influenced the evolution of anthropological research on fisheries. Assuming that in its initial phase, it has little effect on the anthropologist's view of maritime communities, we have identified some of the reasons, of institutional and ideological nature, related to this situation. We have afterwards seen that when anthropologists became more aware of its relevance for the understanding of the states increasing influence upon the fishermen's life, they tended to criticize it and to suggest, along with scientists from neighboring disciplines, alternative devices better suited to the understanding of the fishermen's logic.

No doubt that in spite of this critical attitude towards the paradigm, the latter served as a useful landmark for an internal questioning on existing explanatory approaches of limited operational value and led to the adoption of more dynamic orientations which corresponded better to the complexity of concrete situations encountered in fishing economies. This paper nevertheless points out that this process still ^{has} have to be enriched by further efforts in which epistemological thinking should play a key role, both at the level of the new concepts that we developed or that are imposed on us and at the way we conceptualize a growing social differentiation in fishing.

NOTES

1. Cf. the works of Kuhn T. (1972) and Bachelard G. (1977) and Gursdorf (1967).
2. I refer to Gordon H.S. (1954) and Hardin (1968).
3. Cf. Acheson (1981) and Breton Y. (1981) for a summary of this evolution.
4. Several articles included in Andersen R. & Wadel C. (1972) and Spoehr A. (1980) illustrate well this situation.
5. For a more detailed view of this process, cf. Rothschild B.J. (1983) p. 152-153 and Cushing D.H. (1983) p. 264.
6. This attitude varied according to the anthropologists' academic training. Those whose background was originally influenced by French sociology and subsequently evolved around structuralism were necessarily oriented towards the promotion of "a social science" distinct from natural sciences, praising culture over nature.
7. Community has been a key-concept in most of the anthropological studies of fishing. It is a good example of a disciplinary "sociocentrism" leading to the uncritical use of a concept whose inductive and ideological content prevented anthropologists from better integrating, in analytical terms, fishermen into the larger social division of labor.
8. Articles by Guppy N. (1986), Durrenberger E.P. and Palsson G. (1985), Reveret J.P., Boude J.P. and Morrisset M. (1986), Sider G. (1986) and Samson R. (1984) all have in common the following point: they demonstrate that capitalism already affected the social relations of production in fishing during the 19th century, thus destroying the image that it was a rather recent phenomenon.
9. The book of Sider G. (1986) is a convincing illustration of this process. Combining in a dynamic way the concepts of culture and class, he shows that fishermen's position must be first understood in terms of social relations instead of in strictly economic terms.
10. In her introduction to the special issue of the J.C.S. on Fisheries, P. Marchak positions well this problem, pointing out that this destabilization goes far beyond the distinction between small and large-scale fishing operations (p. 124).
11. The growing body of literature dealing with this issue Clement W. (1986), Lansom C. and Hanson J.H. (1984) and J.C.S. (1984) indicates that such an orientation is already established but there still room for clarifying the exact nature of fishermen's organi-

zations within this process of class differentiation.

12. This supposes at the same time that we should not "universalize" local or regional cases (Canadian fisheries are characterized by a great diversity which is sometimes disregarded when fishing is discussed at a paradigmatic level) we should pay more attention to similar process in other countries. For instance, anyone acquainted to some extent with the Mexican fisheries will detect that the nature of the relations between fishermen organization and the state apparatus is at the wake of the relations prevailing in the agrarian sector. This could lead to an interesting research hypothesis for the Canadian situation. I mean to which extent quotas, limited entries, marketing regulations, subsidies etc. are rooted in approaches already consolidated in the agricultural sector. Given the specificity of the resource in fishing, a too strict transposition of models already existing in agriculture could partially explain the difficulties encountered by the bureaucracy in its relations with fishermen.

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