

**SOCIAL REPRESENTATIONS OF NATURE:**  
**THE CASE OF THE *BRAER* OIL SPILL IN SHETLAND**

**Marie-Claude Gervais**

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Department of Social Psychology  
London School of Economics and Political Science  
University of London  
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...to my family, whom I missed so much

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## ABSTRACT

In this thesis, the work of Serge Moscovici on the human history of nature is made relevant to his theory of social representations. This theoretical synthesis breaks away both from the realist assumption of a given, immutable and non-socialised nature, and from the individualist conceptualisations of man-environment relations which still dominate environmental, ecological and social psychology. It is argued that social representations are not solely the concern of epistemology; they have ontological correlates and are involved in the social construction on nature. The empirical study investigates how social representations of nature functioned in Shetland - a society which combines traditional and late modern features - in the wake of the *Braer* oil spill in January 1993. The findings are based on the qualitative analysis of 17 individual interviews, five small group discussions, 375 articles from the newspaper *The Shetland Times*, the transcript of a public debate on the *Cost of the Braer for Shetland* and, more generally, participant observation. The analysis reveals the synchronic existence of three distinct, yet interrelated, social representations of nature: organic, mechanistic and cybernetic. Each of them is intrinsically related to a particular sense of identity, mode of knowledge, and mode of relations to nature. "Real Shetlanders" hold predominantly organic representations, whereby nature constitutes a repository of their history, a definer of their identity as a marginal but resilient community. It is known through direct engagement and participation in a life world. By contrast, "Sooth-Moothers" (outsiders) hold mechanistic and/or cybernetic representations which rest upon some universal, abstract knowledge of the systemic properties of "the environment". Their relations to nature oscillate between domination, mastery and protection. However, the imperatives facing the community, together with constant exchanges of information via the media, blur the boundaries between representations.

Key words: Social representations, nature, environment, social constructionism, Shetland, identity, transition, crisis.

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## INTRODUCTION

It is always difficult to identify the complex motivations and circumstances which lead to a thesis; and it is almost impossible to account for the actual process of conducting research in a way which respects the true chronology of events. This thesis stems from a long-running and deep-seated concern for the ways in which human beings represent, experience, create and change their social and material world. It attempts to understand how members of a society come to see their world as real, objective and natural, and how they produce and sustain a shared understanding of this world in the flux of everyday life.

No empirical object seemed to allow us to discuss such issues better than what is referred to, in common sense and science alike, as "nature". The choice of nature as an object of investigation is to be explained, partly, by the proliferation of scientific and moral discourses around the "natural question" over the last thirty years. These discourses are now integral to the common sense of Western societies. What was hitherto relatively unproblematic suddenly became the object of intense symbolic activity and the site of important power struggles. Once thought of as an orderly, stable and finite (if as yet undiscovered) set of matter and forces, "nature" now also appears as changing and fragile. Novel social representations of nature are forming before our very eyes. Their emergence raises profound practical and existential issues. The transformations in people's symbolic and material relations to "nature" - or rather, to "the environment" - made it both *possible* and *necessary* to reflect upon the socially constructed character of "nature" and to explore how different social groups create and contest the meanings surrounding this object.

Partly too, "nature" seemed to constitute a critical case with respect to the theory of social representations. This theory is firmly rooted in a social constructionist epistemology. It makes a number of claims concerning both the epistemological and the ontological status of social representations. First, social representations are systems of ideas, beliefs, images and practices which provide members of a given society with the resources for understanding their world. Second, social representations actually constitute the "environment" in which people live. Taken together, these propositions account for the two-fold status of social representations as psychological structures and as social realities. The fundamental

interrogation of this thesis is to investigate whether and how social representations can be said to actually create the "natural" world. Do social representations amount to nothing more than historically changing conceptions of otherwise identical objects (in this case, "nature"), or do they actually create new objects (and subjects)? The present study only aims to map out a coherent way of thinking about these issues.

My theoretical and analytical efforts were prompted by the grounding of the tanker *Braer* in Shetland. On the morning of January 5, 1993, the fully laden tanker *Braer* ran aground in Shetland, releasing its entire cargo of 85,000 tonnes of light crude oil on the southern and eastern coasts of the Shetland archipelago. Perversely, this crisis seemed to constitute an ideal methodological situation to investigate how people represent nature. The very location of the spill was favourable: Shetland is isolated by some two hundred miles of water from both the Scottish mainland and Norway. It has a distinct culture and dialect where British and Norse influences blend. It is a tight-knit community; dialogues and debates - to which the local newspapers would undoubtedly contribute - were likely to be intense in the wake of the oil spill. This was crucial: nature is so fundamental to the experience of everyday life, so taken-for-granted, that it is rarely discussed. A profoundly disruptive event of the scale of the *Braer* incident ensured that Shetlanders would become more aware of their feelings and thoughts about nature and would be better able to talk about them. This, coupled with the over-night arrival of more than a thousand foreigners - journalists, scientists, politicians, volunteers, environmentalists, etc. - was bound to generate new and contradictory meanings with respect to nature. Furthermore, the practical imperatives facing the community called for action, for social representations to be expressed in material practices. The sudden character of the oil spill also provided a rare opportunity to analyse social representations in the making.

I arrived in Shetland eight days after the incident with a number of questions in mind. How do Shetlanders represent nature? How does the physical environment become meaningful for individuals and groups? What are the other, non-indigenous, representations of nature circulating in Shetland? How does the local population assimilate, or reject, elements of these unfamiliar representations? What happens when a whole community is faced by such a profound disruption? What are the dynamics of change and stability, of conflict and consensus? Is the crisis simply the

stage for a battle between various representations, or do these conflicting representations themselves generate the crisis? These are some of the questions which appear *en filigrane* throughout the thesis and which orientate the analysis.

This study, then, is spatially and historically situated. It attempts to describe and explain the social psychological practices of different social actors in Shetland with respect to "nature", in the highly effervescent context of a major social and ecological crisis. To recognise the situational character of empirical work, however, is not to preclude the possibility of transcending, at least partly, the particularity of the case. It is, rather, to be committed to the basic principle that concrete human events are always rooted in a context and that there exists a mutual determination of events and context. It is to seek to preserve the integrity of social psychological phenomena.

What, then, allows us to transcend the immediate situation? Firstly, the inescapable consideration that human beings, as producers and users of symbols, do have the capacity to transcend their immediate reality and to bring their experience to bear in constructing other meanings, across different situations. Secondly, the trans-situational character of social representations themselves. Social representations are the result of the collective life of groups; they emerge in the course of social interaction and communication. In a word, they *circulate*. Thus, many aspects of social representations belong to the broader context of Western social life. Thirdly, the theoretical implications of the research findings. Refinement of the theory of social representations is bound to result in an increased power to describe and to explain a wider range of social psychological phenomena. And fourthly, the reflection about the state of the entire discipline of social psychology (and related disciplines) which this kind of research makes necessary. In particular, I am thinking about the perennial problem of coming to grips with the elusive "social", and that, at the epistemological, theoretical and methodological levels. For all these reasons, I believe that grounded, situational research can play a crucial role in developing better social science.

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The case of the *Braer* oil spill is central to this thesis. Unusually, and because of the sudden and relatively short-lived nature of the events which I sought to analyse as they unfolded, the data were collected prior to the full development of the theoretical framework. This is not to say that the data were gathered arbitrarily or that the analysis is entirely data-driven. It simply means that the theoretical framework was elaborated with a constant concern for Shetlanders' representations of nature, as I had already begun to apprehend them during the fieldwork.

The present thesis comprises three sections: three theoretical chapters, two concerning methodological issues, and three devoted to the empirical analysis. Chapter One critically examines the disciplines of environmental psychology and ecological psychology (or behavioural ecology). It follows my search through the psychological literature on "man-environment relations" for models to account for the data collected in Shetland. This search proved to be of little use, mainly because of the epistemological and methodological assumptions of the individualism which informs that literature and, as I would find out later, of the particular representations of nature which underpin most of the studies conducted by environmental and ecological psychologists. Thus, although this first chapter does not directly contribute to the analysis, it serves, *a contrario*, to clarify the perspective opened by the theory of social representations, and to highlight the radical character of the theoretical synthesis proposed here in the context of traditional psychology.

Chapter Two introduces the theory of social representations, its history, its workings and its aims. It focuses more particularly on two inter-related questions which are at the centre of contemporary debates: first, what exactly is the meaning of social constructionism in social representations theory?; and second, to what extent can the phenomena of social representations be said to be distinctly modern and particular to Western societies? I take a strong social constructionist stance and argue that the theory ought to favour an anti-generalist view of society and of social psychological phenomena. I also argue that the main contribution of this theory rests in its potential for overcoming a number of the dualisms which have plagued our discipline.

Chapter Three provides a counterpoint to the environmental and ecological psychological perspectives discussed in the first chapter. It proposes a

problematisation of nature as a social construct. This is achieved in two ways. First, I establish the relevance of the theory of social representations to this endeavour by examining social representational studies of objects as diverse as the human body, childhood or gender. Second, I draw on two essays by Serge Moscovici - Society against Nature (1972/1994) and Essai sur l'Histoire Humaine de la Nature (1968/1977) - to develop a theoretical perspective which allows us to apprehend nature as the objectifications of symbolic and material practices. These two essays are reframed within the perspective of the theory of social representations. They provide a tripartite typology with which to analyse the various representations of nature uncovered in Shetland in the aftermath of the *Braer*.

Methodological issues are addressed in two separate chapters. Chapter Four discusses the nature of case studies and their pertinence for the study of social representations. In the first part, I argue that in spite of the criticisms often levelled at case studies concerning their lack of generalisability, validity and replicability, the latter can offer invaluable insights into complex social psychological processes. I emphasise the value of a particular type of case - crises - to reveal latent representations, to demonstrate how novel realities are made familiar, to foster change, and to highlight the structural relations between representational activity and social processes. I then present a diary of the *Braer* incident: the main events, social actors, and political, economic and symbolic stakes which provide both the context and the object of my empirical investigation.

In Chapter Five, I turn to the specific methods of data collection and data analysis which were triangulated to account for the social representations of nature circulating in Shetland. Individual interviews with Shetland residents, discussions in "natural" groups, the local newspaper *The Shetland Times*, and a public debate organised by BBC Radio Scotland were all qualitatively content analysed. I also engaged in participant observation. This multi-method design enabled me to gain access to the multiple versions of reality constructed by different social actors in Shetland, to focus simultaneously on discourses and practices, and to grasp social representations of nature in their sociogenetic, microgenetic and ontogenetic dimensions. For each method, I provide a theoretical and empirical rationale, and

describe the specific procedures entailed. I then move on to discuss how the data from these diverse sources will be integrated.

In the remaining three chapters, I present my findings. In a typical anthropological fashion, I have selected and presented the data according to themes which were either empirically salient or theoretically significant, and I have linked the genesis of these various themes to particular social groups (or "natural categories"). Whenever possible, I have used data from all of the sources to support my interpretative claims. Some themes were theory-driven, others arose more directly from the data. The delineation of social groups was conspicuous in the discourses of Shetlanders themselves, who drew sharp distinctions between "real Shetlanders" (crofters and farmers, fishermen, or people working in fish factories), "born and bred Shetlanders" (the indigenous population who do not contribute to sustaining the idealised traditional culture, but often wish to modernise Shetland society and to integrate it into global structures), and "Sooth-Moothers" (those who are not born in Shetland, whether they reside there or not, and who explicitly threaten the local ethos). In chapter six, I explore the relationship between being a "real Shetlander" and participating in the traditional "way of life". The slow pace of change means that the physical world has remained remarkably stable over the centuries and that the indigenous population has evolved complex nature-related knowledges and practices - *organic* representations of nature - which are now inscribed in a landscape which symbolises the traditional way of life and which shapes Shetlanders' identity. I also discuss how traditional symbols are progressively being emptied of an reality but are nevertheless used to sustain a fiction of social homogeneity.

In Chapter Seven, I examine the impact of late modernity in Shetland. I show that Shetland, nowadays, is immersed in global processes which intertwine with traditional ones and deeply modify social relations, modes of knowledge, social and self-identity, as well as modes of relating to nature. I begin to explore the representations of nature of the Shetland residents who are excluded from the group of "real Shetlanders". These are salmon farmers, oil workers, town dwellers, people working in the tourist industry, scientists, etc.: Shetlanders and "Sooth-Moothers" (outsiders) who do not sustain the traditional "way of life". Their representations of nature stand in sharp contrast to those of "real Shetlanders"; they tend to combine

elements of what Moscovici calls the *mechanistic* and *cybernetic* states of nature. Nature, in this case, is represented as divorced from humankind, as an object of appropriation for the latter, as a set of resources to be exploited or protected, of forces to be rationally controlled or of systems to be monitored through disembodied expert knowledge. Such representations become objectified most ostensibly by the creation of protected areas which, quite literally, shape new natures.

In the final chapter, I turn to the *Braer* incident per se. The similarities and differences between cybernetic, mechanistic and organic representations of nature are explored in this critical context. I argue that the social crisis surrounding the oil spill must be explained in terms of a conflict between diverse, and often incompatible, representations. This claim is supported in a number of ways. I examine "real Shetlanders'" reactions to the spill itself. The metaphors of death and rape used by "real Shetlanders", and the meanings of such metaphors, are discussed. I then turn to Shetlanders' attitudes to the main actors involved during the spill: the local, national and international media; the master and the crew of the *Braer*; the environmentalists, Green activists and volunteers, collectively referred to as "the birdie people"; and the plethora of experts who came to Shetland in the immediate aftermath of the *Braer* disaster. Here, I analyse Shetlanders' arguments and evaluations, their coping strategies, the underlying representations of nature which all these reveal, and the functions of these representations. Finally, I examine how such representations are put to use to construct the *Braer* oil spill either as "a disaster" or simply as "an accident".

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To convey the essence of the experience of others is an impossible task. I have often found myself in the position of an alchemist: only this time, I was turning gold into lead. The intractable methodological difficulty of exploring other people's ideas, feelings and motivations confronted me all along. I have tried to give a voice to the subjects in this study, but the interpretation I suggest remains a version, *my* version: research practices cannot escape the mediation of the "I". This version stems from a particular epistemological and theoretical orientation. It is also deeply constrained

by the short time spent in Shetland and by the fact that there are precious few relevant ethnographic studies on Shetland society (with the notable exception of Anthony Cohen's excellent work).

Indeed, in the empirical analysis I try to make explicit the representational structures underlying the discourses and silences, the group dynamics and solitary struggles, the ideas and images which arose in Shetland in the process of making sense of the *Braer* oil spill. These processes vary from group to group, from person to person. Often, one individual is found to be articulating ideas and symbols which would correspond to three distinct representations of nature, and yet are strangely reconciled. This is the legacy of modernity. Rarely, nowadays, can a single representation dominate unproblematically one's mental universe: we have become "cognitively polyphasic".

The processes of making sense of new realities are also necessarily embedded in the history and culture of those affected by novelty. In Shetland, I encountered a community whose "way of life" had already been deeply altered by the oil industry. Oil breached the remoteness of the islands and projected Shetland into the modern era. It called for a renewal of Shetlandic culture and changed the community's relationships both to its culture and to its "nature". These societal changes occurred years before the oil spill which I witnessed. Their consequences can only be inferred from the intensity and particular quality of the psychic and collective efforts to establish clearly defined identities, to defend and to revive a moribund "way of life". Many of the interpretive claims I make depend upon similar inferences. Having had little idea of how the data might to be analysed at the time of the crisis, I sometimes failed to pay attention to details which would now be more meaningful. Whatever data I did gather have been the object of much selection and re-ordering to build a coherent account. Thus the reconstruction of the social representations of nature which I suggest circulated in Shetland at the time of the *Braer* oil spill remains not only my version, but also one with gaps and holes, hesitations and uncertainties. Sometimes, there was simply no way of knowing. And yet, by some miraculous synergy, the analysis maps onto and substantiates recent work in anthropology and sociology, two disciplines which have concerned themselves more explicitly than social psychology with the social construction of reality.

In spite of its numerous short-comings, this thesis - or rather the invisible learning process which, like the submerged part of the iceberg, underlies it - has helped me to understand how social representations function to create reality. It has begun to explore the foundations of many of the current debates about nature. I hope that this work can be taken further and serve to emancipate us from the ontological dualism between nature and society upon which modern societies are predicated but emphatically deny.

## **PART I: THEORY**

## 1.0. ENVIRONMENTAL AND ECOLOGICAL PSYCHOLOGY: A CRITIQUE

This chapter critically reviews past and present psychological theories and empirical studies which bear on three interrelated phenomena: perception, cognition and behaviour with respect to the physical (built or natural) environment. These phenomena have generated considerable interest amongst psychologists associated with schools as diverse as behaviourism, Gestalt psychology, and cognitive psychology. The theories developed by proponents of each school have, in turn, exerted a profound influence on the sub-discipline of environmental psychology. The latter emerged in the mid- to late sixties and early seventies as a result of two sets of factors: first, the recognition that psychology had failed to take into consideration the so-called "non-social" environment, and second, the concomitant realisation that the discipline had to deal more explicitly with environmental interaction, in the face of pressing ecological problems.

It is argued here that in spite of their radical divergences in perspective, behaviourists, Gestaltists and cognitive psychologists have all equally subscribed to both epistemological and methodological individualism. And since environmental psychologists have, by and large, rooted their research efforts in the path opened by early traditional psychologists, their work is fraught with similar short-comings: it often remains a-social, a-cultural and a-historical, albeit in different ways.

In the second part of the chapter, I consider another sub-discipline which has concerned itself with the environment *per se*, and with behaviour in environmental systems: ecological psychology (or behavioural ecology). The strengths and weaknesses of the theories and methods advanced by the main proponents of this field are discussed in relation to the empirical phenomena which this thesis investigates.

The chapter comes to a close with a discussion of recent debates within environmental and ecological psychology. It is shown that these fields are perhaps not as monolithic in their epistemological assumptions as might at first appear. In fact, many environmental psychologists are themselves highly critical of the reductionist nature of the models which have been indiscriminately borrowed from individual and social psychology. Some even advocate a complete separation between traditional (individual and social) psychology and environmental psychology. However, it will become apparent that the judicious critiques imputed by radical environmental

psychologists apply only to individualistic forms of psychology, and that their own work often falls short of meeting their intended requirements. My overall aim is to provide a background against which to pit a more adequate tradition of research in order to develop a genuinely *social* psychology of nature.

### 1.1. Theoretical antecedents of environmental psychology

Environmental psychology did not really emerge as a distinct scientific discipline until the decade between 1961 and 1971 (Proshansky, 1990; p. 20). Even during the following years work remained sporadic and scattered. It is with the publication of specialised journals, introductory textbooks and readers in the seventies (Altman & Wohlwill (eds), 1976, 1977, 1978, 1980; Canter & Stringer (eds), 1975; Ittelson *et al*, 1974; Proshansky *et al* (eds), 1970/1976; Stokols (ed), 1977) that environmental psychology began to take shape as an autonomous field of research. In this section, I review some formative works of early representatives of various schools who, although they did not always consider themselves as environmental psychologists, provided the cornerstones upon which the edifice of environmental psychology was to be built.

My choice of authors reflects the disciplinary, rather than the societal, antecedents of environmental psychology<sup>1</sup>. It necessarily leaves out many substantial and influential works. It is made on the basis of the following criteria: the importance of the studies, or approaches, in terms of the theoretical and empirical interest which they generated (as assessed in reviews of the field mainly by Fluckiger & Klaue (eds) (1991), Lévy-Leboyer (1980), Stokols (1977) and Proshansky (Proshansky & O'Hanlon, 1977; Proshansky, 1987; 1990); their respective relevance for environmental psychology; their pertinence, either as counterpoints, rivals or complementary theories with respect to the framework of social representations; and

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<sup>1</sup>Global problems such as overpopulation, urban stress, environmental degradation and the depletion of natural resources are not considered in the following section, although they have prompted an increased interest in man/environment relationships and significantly oriented research programmes. Extensive discussions of the societal antecedents of environmental research can be found in introductory textbooks, as well as in Proshansky & O'Hanlon (1977).

their relative suitability to account for the empirical phenomena which this thesis aims to uncover.

## **1.2. Antecedents in traditional psychology**

It is generally acknowledged by environmental psychologists themselves (Craik, 1973; Ittelson *et al*, 1974; Proshansky & O'Hanlon, 1977) that their programme of research is defined more by some common methodological assumptions and research commitments than by any formal theoretical structure and that, in spite of the steady growth of the field over the last three decades, the various contributions have not yet reached the stage of a coherent body of research (Giuliani & Feldman, 1993). Yet, the field did not develop in a theoretical vacuum. It was clearly influenced by major - if often contradictory - trends within psychology, all of which stressed the interaction of personal and environmental factors in determining behaviour. According to Stokols (1977), the advent of behaviourism (Watson, 1913), the developments of "field theories" in the areas of perceptual, cognitive and social psychology (Lewin, 1936) and the shift of focus in personality research from person-based (Adorno *et al*, 1950; Allport, 1937; Freud, 1904/1938) to situation-oriented (Mischel, 1968; 1973) explanations of behaviour, all contributed towards defining the orientation of the "new" field (Stokols, 1977; p.13). To these, I would add the wider contributions of the Gestalt School (Koffka, 1935; Lewin, 1951) and the Transactionalist School (Ittelson & Kilpatrick, 1952/1991; Ittelson, 1973) which helped to reconceptualise the organism/environment "interface", as well as those of cognitive mapping theory (Lynch, 1960) and of ecological psychology (Barker, 1963; 1968; Gibson, 1950; 1979/1986).

Behaviourism, at least in its early formulations, emphasised the environmental determinants of behaviour and banished all reference to mental processes or consciousness. It advocated a clear separation between the environment, a complex set of directly observable stimuli, and the organism responding to it. The limitations of this dualistic Watsonian conceptualisation of the "interactions" between man and his environment eventually became apparent; it was revised by others (Bandura, 1969; Rotter, 1954) to include cognitive mediational processes. The latter, it was argued,

determined the functional significance of stimuli for the individual. Rather than postulating a simple, unidirectional causal relationship between the environment and the individual's behavioural response, psychologists reintroduced subjective interpretations of the value of stimuli at the core of the analysis. The inclusion of such intervening "subjective interpretations" was meant to explain individual differences in behavioural outcomes. There were few, if any, references to the *content* of these mediational processes. Moreover, the emphasis was exclusively on the individual in his or her relationship to the environment. Perhaps more importantly, behaviourists never problematised the environment in holistic terms: it remained strictly the aggregate of discrete stimuli. In other words, regardless of the nature or complexity of the environment, it was assumed that the latter could be fragmented and described in the simplest terms, namely as stimuli evoking responses. The avowed intent of the behaviourists was to bring behaviour under stimulus control. The idea of an active *construction* of the "stimuli" by individual and collective social actors was rejected. I shall argue later that the theory of social representations can contribute to overcoming such problems.

In spite of the reductionist character of the behaviourist framework, these theoretical roots have influenced many environmental psychologists working in the sub-fields of crowding, territorial behaviour and defensible space, and the development of conservationist behaviour, to mention only a few. For instance, early studies of crowding (Epstein & Baum, 1978) would examine the direct impact of different forms of population density - that is social/environmental attributes - on psychological functioning and behaviour. Models were eventually elaborated to include the interactive effects of physical density, personal characteristics (age, sex, etc), and interpersonal qualities (attraction, social support and networks, etc) on behavioural outcomes, but with no fundamental revision of the dualist assumptions underlying such models. Similarly, research on territorial behaviour and the defense of personal space (Brown, 1987; Taylor, 1987) was based on the assumption that individual factors, group characteristics and environmental variables all interact to produce different degrees of perceived or actual territorial control and the ability to protect one's spatial environment. The principles of operant learning theory were also

used in order to modify behaviour such as recycling waste, using public transportation, or conserving energy (e.g. Cone & Hayes, 1980; Geller *et al*, 1982).

Countless studies could be cited here. However, it suffices to say that, although the adoption of a behaviourist framework is sometimes considered by environmental psychologists (e.g. Stokols, 1977) as some sort of guarantee of the genuinely "interactionist" nature of their work, as well as of its "scientific" nature, behaviourist approaches are limited. They do not provide a suitable framework for understanding the environment as a social construct and the symbolic and material practices of people in relation to it. The distinction between "environment" and "person" is defined from the perspective of the observer; it is derived from the behaviourists' conception of the individual as a biological organism: whatever lies outside of the bodily boundaries of the individual is considered as "environment". Since behaviour is performed exclusively by individuals, behavioural approaches view the whole as an additive outcome of the relations of its parts (Altman & Rogoff, 1987): they simply cannot handle properly *social psychological* phenomena.

According to Jodelet (1982), it is with Kurt Lewin's (1936) concept of the *life space* that the environment was first theorised in psychological terms. Indeed, Lewin introduced another version of "interactionism" which focused on the continual interplay between inner forces, such as personal needs and attitudes, and outer forces. Lewin considered psychological processes as being embedded in physical and social situations, forming a "life space". The concern of his field theory "was not with the objective environment *per se* but rather with the individual's subjective interpretation of that environment and the manner in which environmental perception guides individual behaviour" (Stokols, 1977; p.14). Behaviour was determined jointly by personal factors (motivational forces) and the perceived environment. This psychological environment involved only those features of the situation which were directly relevant to the present needs and characteristics of the person. This was akin to Koffka's (1935) distinction between geographical and behavioural environments. Geographical environments correspond to objective descriptions of spaces, whereas behavioural environments are defined by the individual's perception of physical space. Behavioural environments are unitary wholes (of which the subject is an integral part) loaded with subjective meanings that are anterior to, and extend beyond, the specific

aspects of each stimulus taken in isolation. The geographical environment itself can never be a cause of action, according to Koffka; only the behavioural one can play that role. Koffka postulated a continual reciprocal interaction between the two environments: not only is behaviour modified by the geographical environment, but the latter is also changed as a result of one's action within it.

Both Lewin and Koffka contributed to a redefinition of "environment" by moving away from its almost Euclidian conceptualisation as "space", objective and immutable. They conceived of environmental behaviour as being rooted in cognitive processes, i.e. as resulting from, and having consequences for, the meanings and conceptions that emerge from the perception of some physical reality. They also stated that different environments - or the same environment at different times - could change in meaning and thereby evoke corresponding changes in behaviour.

The recognition of the importance of the behavioural environment and of the life space by Gestaltists seemed to open up whole new avenues of research on environmental perception. But these avenues soon became cul-de-sacs because members of the School themselves emphasised the *personal* determinants of perception and because they elected to investigate mainly the perception of *objects* and *form*, rather than of *environments per se*. There are, however, fundamental distinctions between objects and environments.

The founders of the Transactionalist School, Ittelson and Kilpatrick, must be credited for having highlighted some of these differences. They critically reviewed the issues at stake in the discussion on perception and concluded that, above and beyond a number of theoretical cleavages, researchers had generally neglected the importance of the environmental context and focused erroneously on the perception of objects. As Ittelson (1973) pointed out, environments, unlike isolated objects, surround the perceiving organism, and the latter is an integral part of them. This means that environmental experience always takes on the systemic qualities of a coherent whole. Environments have to be actively explored, not simply observed. It also implies that the very identity of the organism is changed as a result of its being in the environment. Equally, environments do not have fixed boundaries, either in time or space; perceptual boundaries must be imposed upon them. Moreover, environments are multi-modal: they provide information (in fact, more information

than can be adequately handled) through all the senses. They also involve peripheral elements, i.e. elements of information that are not directly perceived by the organism and yet impinge upon it.

This short list of crucial distinctions illustrates the difficulties that arise when one uncritically transposes the theories and methods used to study the perception of objects to investigate the perception of the environment. This fact was recognised by most environmental psychologists (Altman & Wohlwill (eds), 1976; 1977; 1978; 1980; Proshansky *et al*, 1970/1976) from the outset. Ittelson (1973) thus introduced the distinction between space and environment, the former being a configuration of objects to which the subject reacts, and the latter being a milieu which includes the subject as a participant. By operating a series of "transactions" with their milieux, subjects confer on their own immersion in a space, and to space itself, stable significations (Fluckiger & Klaue (eds), 1991; p.28). The notion of transaction was intended to overcome the classic dichotomy between subject and object. This dichotomy was exploded when Ittelson and Kilpatrick (1952/1991) demonstrated, by means of a detour via optical geometry<sup>2</sup>, that a percept can derive directly neither from the properties of a given physical environment, nor from some physiological pattern of stimulation. Both are necessary, but not sufficient, conditions to explain the formation of percepts.

The Transactionalists made significant advances. They posited the necessary interrelationships between organisms and their environments; they assumed the inseparability of contexts, temporal factors, and physical and psychological phenomena. They established the dynamic and selective character of environmental perception and the active role played by the organism in the process. Their perspective was also essentially historical and it recognised the scientific value of unique *events*, considering the latter as their basic units of analysis. However, the Transactionalists failed to acknowledge the social nature of the relationship between

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<sup>2</sup>Ittelson & Kilpatrick (1952/1991) concerned themselves with the problem of "equivalent configurations", a classic issue in optical geometry. The fundamental question is to determine whether it is possible for different physical attributes to result in identical configurations in the observer and, conversely, for identical physical configurations to induce very dissimilar reactions in an organism. The answer to the first question was known since the Renaissance, but Ittelson and Kilpatrick's contribution was to show that the human organism was able to differentiate between identical environmental messages. If discrepant responses cannot be attributed to different stimuli then, they argued, the ability to make such distinctions must rest upon sources of information other than those comprised in the physical environment itself.

human beings and their environments. They defined perceptual processes as a dynamic fusion of some stimuli provided by the environment, of hypotheses elaborated by subjects on the basis of their past experiences, and of action. But questions pertaining to the genesis of such "hypotheses", to their content, structure and functions, remained unanswered. For Ittelson and Kilpatrick (1952/1991), each man's perceptions are his own, unique and personal. They may become common if similar experiences and motivations are shared by many individuals but, again, the origins and nature of this sharedness are not theorised. Thus, in spite of their far-reaching contributions, the transactionalists' work also remained essentially a-social.

Stokols (1977) takes the shift of focus in personality research to be one of the most influential developments towards the emergence of an interactionist perspective. The essence of this contribution is to have demonstrated that behaviour is not derived exclusively from a set of stable attributes comprising an individual's personality (Allport, 1937; Freud, 1904/1938; Adorno *et al*, 1950), but that it is in fact situation specific. The limitations inherent in trait-centred perspectives led Mischel (1968; 1973), for instance, to emphasise the cross-situational variability of behaviour and to develop the notion of *behaviour-contingency units* (Mischel, 1973). In short, situation-oriented explanations of behaviour provided a reinforcing argument for the view according to which there is a dynamic and necessary interchange between human beings and their environments. In my opinion, the impact of this new orientation on environmental psychology is not as clear as Stokols makes out, unless it is conceived in broad meta-theoretical terms. As far as I can appreciate, hardly any environmental psychological studies have been conducted within that framework.

Probably the most influential attempt at shifting the object of analysis from issues of perception to issues of cognition, and the level of analysis from that of the individual to that of the group, came from Kevin Lynch. By training, Kevin Lynch is an architect and not a psychologist, which makes the inclusion of his contribution under the heading "Traditional Psychology" objectionable. However, it seems justified by the fact that Lynch is widely recognised, by environmental psychologists at least, as one of the founding-fathers of modern cognitive psychology. His research on cognitive maps continues to mobilise considerable theoretical and empirical research in this area. According to Lévy-Leboyer (1980), he is one of the three figures -

alongside Hall (1966) and Sommer (1969) who both worked on personal space - who really gave the impetus to the emerging discipline of environmental psychology. Lynch's seminal work The Image of the City (1960) constitutes the first attempt to analyse the collective representations of major American cities. It analyses the "imageability" or "legibility" of urban environments in terms of structural elements - districts, nodes, paths, edges and landmarks - in the lay-out of the city. The images, or cognitive maps, which are formed in the heads of observers of that city are, for Lynch, the mental reflection of forms which are presupposed to exist in the urban fabric. Once the individual has acquired, stored, decoded and recalled the information present in his/her everyday environment, he/she can then use it to make spatial decisions (Kitchin, 1994)<sup>3</sup>.

Although Lynch's typology of five spatial elements has been challenged for not being theoretically justified and therefore open to revision in the light of changing environmental contexts (cf. Canter & Donald, 1987), as well as on methodological grounds (Burgess, 1979; Spencer & Dixon, 1983), his work still laid the grounds for most of the research on the formation of cognitive maps of physical surroundings (cf. Downs & Stea, 1973; 1977; Kaplan, 1973; Moore & Golledge, 1976; Spencer *et al*, 1989). It is important to note that Lynch was interested primarily in the visible features of the urban environment and in the ways in which the spatial characteristics of the city affect people's ability to represent it to themselves in some coherent pattern. In other words, his study was based on a conception of the environment as an independent variable. It is reasonable to assume, however, that the social values which environmental features embody and symbolise are probably more important in structuring representations than such physical attributes as clarity, simplicity and dominance. The role of affect was eventually recognised by some environmental psychologists. For instance, Spencer and his colleagues state:

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<sup>3</sup>Some social psychologists ostensibly working under the umbrella of the theory of social representations in fact conduct research on cognitive maps. Pailhous (1970), for instance, demonstrates how a taxi-driver uses features of the urban landscape in strange towns in order to plan journeys. Whilst a version of this research appears in Social Representations (Farr & Moscovici, 1984), conceptually and methodologically, it belongs to the tradition of environmental psychology, though it is also influenced by Russian research on an action theory of memory. This seems like an unfortunate narrowing of the scope of the theory of social representations.

"Cognitive maps are not isolated and contextless entities: they are formed during purposive activity in the everyday world of the child, and, in as much as they encode the resources, valued friends, memories, and aspirations as well as factual information about the geographical layout and routes, they should perhaps better be described as cognitive/affective maps". (Spencer *et al*, 1989; p.108)

But again, in this perspective, cognitive/affective maps are the product of the activity of an individual - a child - who makes sense, privately and uninfluenced by his/her society and culture, of the environment. Moore & Golledge (1976) seem to offer a much richer conceptualisation. Discussing environmental cognition, they define the latter as:

"the awareness, impressions, information, images, and beliefs that people have about environments... It implies not only that individuals and groups have information and images about the existence of these environments and of their constituent elements, but also that they have impressions about their character, function, dynamics, and structural interrelatedness, and that they imbue them with meaning, significance, and mythical/symbolic properties." (Moore & Golledge, 1976; p.xii)

The authors even state that because of the influence of society, we can expect cognitions about the environment to be shared. However, a careful reading of their empirical work makes it obvious that this "influence" is simply postulated, never investigated. As Moscovici (1982) argued with respect to social cognition, the framework for a genuinely social approach to (environmental) cognition has yet to be developed. This is where the theory of social representations can make a significant contribution to further advances in environmental psychology.

Some studies, using a social constructionist approach, have indeed demonstrated that the formation of cognitive maps cannot be explained without reference to value systems, normative beliefs and ideological standpoints. For instance, research conducted by Mummendey and Schlosstein (1978, quoted in Jodelet, 1989b), before the fall of the Iron Curtain, compares the cognitive maps drawn by West German students of two neighbouring nations: France, which is culturally and linguistically distinct, but economically and politically similar; and East Germany, with which West Germans share a common culture and language, but

which has a radically different political and economic system. The results are striking. The number of trips made by West German students to France increases the quality, quantity and precision of the elements drawn on the maps, but frequent visits to the G.D.R. do not improve their knowledge of this country. Furthermore, amongst students having paid an equal number of visits to both countries, subjects who had *more* acquaintances in East Germany drew *less* detailed and *less* accurate maps of that country than they did of France. Clearly, ideological cleavages mediated the appropriation of new information. The latter was stereotyped to reinforce the positive identity of G.F.R. students as democrats and capitalists. This research seriously undermines the view that the formation of cognitive maps is a value-free process and that the maps themselves are simply mental representations of objective environmental features. If one accepts that social representations always have two interrelated facets, one symbolic and the other iconic, then these findings become less surprising: one would expect the significant dimensions of social life to be conjured up in images.

A final point must be made about Lynch's contribution. One should recall that Lynch writes from the pragmatic standpoint of an architect. It is only of marginal relevance for him to determine whether collective - that is, shared - images emerge, first and foremost, because the physical urban environment directly affords some qualities, or because individuals partake in a common culture, or because they share an identical physiological nature. What matters is that these images do exist, that they are very similar amongst members of a given social group, and that knowledge of urban residents' cognitive maps may be drawn upon by architects and town-planners.

The seemingly ineradicable foundations of psychological theorising described above (behaviourism, phenomenology, personality research, cognitivism, etc.) have permeated much of the research in environmental psychology. Environmental psychologists have, by and large, rooted their research practice in either a positivist (naturalist) or a phenomenological epistemology. This preference has the consequences that their research is always individualistic, often based on laboratory experiments, and consistently a-social, a-cultural and a-historical. From studies on the perception and cognition of the environment (Downs & Stea, 1973; Kaplan, 1973) to analyses of the effects of crowding (Baum & Davies, 1976; Desor, 1972; Epstein & Baum, 1978); from the assessment of landscape and scenery preferences (Craik,

1972; Dunn, 1976; Kaplan & Kaplan, 1989) to research on reactions to natural hazards (White (ed), 1974) or noise pollution (Kryter, 1970; Smith, 1983), the bulk of the work carried out displays these attributes. And if, in the more refined studies, it so happens that the individual does think, his thoughts are only "mediational processes" rather than primary causes. And all of this thinking takes place "spontaneously", in a social and cultural void. It is difficult to see just how any of the theoretical orientations discussed in this section can account for the distinctive effects that collective social life has on the perception, and indeed the social construction, of the environment.

### 1.3. Antecedents in ecological psychology

So far, we have seen that environmental psychology developed mainly as an off-shoot of traditional psychology. It has derived its theories and its models from this discipline (Altman & Rogoff, 1987; Jodelet, 1982) - although it should be acknowledged that environmental psychologists have always collaborated and continue to work closely with architects, town-planners, geographers, etc. (Proshansky & O'Hanlon, 1977). However, environmental psychologists have also drawn extensively from another perspective - if not discipline - on man/environment relations: ecological psychology (or behavioural ecology).

The most significant theoretical contribution made by ecological psychologists is to have considered the environment not simply as a "dimension" which must be taken into account in empirical studies, but as the specific *object* of their theories. Jodelet (1982) cites other studies which did take the environment as their object. These are Hall's (1966) and Sommer's (1969) studies on personal space (or proxemics); the research reviewed by Altman & Wohwill (eds) (1976) and Edney (1974) on territoriality; and the studies critically assessed by Lécuyer (1975; 1976) on socio-spatial behaviours. But in all these studies, the environment is conceived either in terms of its relations to the (biophysical) needs of the individual, or in terms of its importance for the regulation of social interactions. Thus, these works are not directly relevant to this thesis.

Two far-reaching and distinctive approaches are subsumed under the heading of ecological psychology: those of James J. Gibson and of Roger G. Barker. Both of them have been profoundly influenced by biological ecology, although in very different ways (Willems, 1977; Stokols, 1977). Gibson (1950; 1979/1986) is certainly the author who most consistently attempted to give a content to the concept of space or the physical environment (he uses both terms almost interchangeably). Gibson was mainly concerned with issues of visual perception. The essential question, for him, was to understand how a tri-dimensional physical environment, projected by light onto a surface of two-dimensions, could nevertheless be perceived in three dimensions. To answer this question, he developed an ecological approach to visual perception: the theory of direct perception.

According to this theory, people are competent beings, able to perceive directly all the information available in the environmental lay-out. As a true "nativist", Gibson ruled out the need for mediating processes, such as transactions, hypotheses, cognitive maps or images, to explain environmental perception: everything is out there, ready to be picked-up by a well-adapted organism. The role played by past experience and learning is only marginal; it is considered strictly as the permanent residues of the changing perspectives of an organism which, having observed the world from a diversity of viewpoints, has come to isolate some invariant properties of things. If differences in perception cannot be attributed to differences between individual perceiving organisms, then the characteristics of the physical environment must become the primary source of information. Hence Gibson's attempt to describe as exhaustively and minutely as possible the infinitely rich information contained in the environment.

How does the Gibsonian approach handle the issue of meaning? Gibson rejects the empiricists' view that human beings perceive a given environment on the basis of previous knowledge and experience. Instead, he claims that all the potential uses of objects (which he terms "affordances") are directly perceivable. The particular affordances of an object which are detected depend upon the perceiver's species and, in the case of human beings, upon the individual's psychological state. People do not perceive chairs and pencils in terms of their physical characteristics; rather, they see

them in functional, utilitarian ways. Depending upon one's mood, an apple can be perceived either as an edible thing or as a projectile.

Clearly, the Gibsonian notion of affordances fails to do justice to the wealth of meaning which we perceive in spaces, objects and people. There is a growing literature which indicates that perception is not direct; that the significance of space for human beings is not strictly derived from the attributes of a given environmental lay-out; that functionality alone cannot dictate the potential uses to be made of objects. As I have mentioned earlier, perception and cognition are structurally related to social representations and collective practices. The considerable differences in individual representations challenge "bottom-up" theories of environmental perception. It would also be an error to reduce human activities to a set of adaptive spatial behaviour. Behaviour in space is still, fundamentally, *social* behaviour, resulting from collective practices themselves elaborated and enacted in conformity with prescriptive and constraining social norms and values. The theory of direct perception fails to explain culturally shared perceptions; immediate psychological states cannot account for collective meanings. Conversely, belonging to a given species is an insufficient condition to explain individual perceptual responses. As Kaminski writes, Gibson "devotes but very little attention to concrete socio-cultural happenings in human everyday life" (Kaminski, 1992; p.96). Since this thesis is about how social groups construct different environments and hold different "perceptions" and "cognitions" about them - and neither about human beings' perceptual equipment nor about the objective characteristics of Nature conceived as an intemporal given - Gibson's ecological viewpoint may be put to one side for the purposes of this thesis.

R.G. Barker (1963, 1968) and his school developed an entirely different brand of ecological psychology. Barker was a co-worker and intellectual descendant of Kurt Lewin. His approach was essentially an attempt at complementing Lewin's work which, according to Barker, only offered a "postperceptual psychology" as far as the environment was concerned. Thus, Barker set out to include the "preperceptual environment" in a field-theoretical analysis of human behaviour (Willems, 1977). He developed models to analyse the transactional character of organism/environment systems and made remarkable advances in establishing methods of research to study naturally occurring patterns of behaviour in given settings.

"Barker's conceptualization of ecological psychology involved an extension of ecological principles from the macro or community level of analysis to a consideration of microsocial phenomena" (Stokols, 1977; p.10). Barker proceeded by breaking down the physical environment of a community into smaller components, according to the kinds of behaviour which occur within these units. The fundamental "natural entities" (such as a church, a classroom, restaurants, or the market place) he identified in this way were termed "behaviour settings". The latter are defined as "bounded, self-regulated and ordered systems composed of replaceable human and non-human components that interact in a synchronized fashion to carry out an ordered sequence of events called the *setting program*" (Wicker, 1979; p.12). In other words, behaviour settings are environment-behavioural *units* whose structure and properties cannot be dissociated from the cyclical patterns of activity which occur within them. "Behaviour, places, and temporal dynamics are mutually interlocked such that behaviour gains meaning by virtue of its location in a particular spatial and temporal context, and the context gains meaning by virtue of the actors and actions that exist within it" (Altman & Rogoff, 1987; p.29).

The significance of Barker's approach is that he included the social, normative and temporal properties of a given setting at the very core of his definition. Each behaviour setting is bounded in time and space and has a structure which interrelates physical, social and cultural properties so that it elicits regularised forms of behaviour. This allowed him to overcome the opposition between subjectivism and environmental determinism: Barker was not concerned with individual, but with *en masse* behaviour. He hoped to demonstrate how non-psychological environmental factors can have consequences for typical behaviours.

Barker also developed a precise methodology to investigate the individual and collective activities being performed in various behaviour settings. In fact, ecological psychology's most influential export is probably of a methodological nature. This perspective has indeed often been equated with, and unjustifiably reduced to, the advocacy of naturalistic inquiry. Willems (1977) has identified the defining methodological attributes of ecological psychology. They include: an emphasis on the systemic properties of the relationships linking person, behaviour, social environment and physical environment; the use of a plurality of methods; the recourse to direct

and naturalistic observation of human behaviour (rather than questionnaires, interviews and laboratory experiments which all interrupt the natural flow of behaviour) as well as longitudinal designs; and the use of natural experiments. This last point is of particular relevance for the present thesis. Ecological psychologists, like (other) transactionalists, recognise the potential scientific value of events which occur in the real world and which are out of the researcher's direct control (such as the introduction of insecticides, institutional reforms and, indeed, the advent of ecological disasters), and yet have a profound impact on the phenomena which he or she is investigating.

The version of ecological psychology developed by Barker and his associates at the University of Kansas has exerted a profound influence on environmental psychology (Bronfenbrenner, 1979; Forgas & Brown, 1977; Willems, 1977). It goes a long way towards overcoming the reductionism inherent in the theories discussed in the previous section. It would even appear to be well suited to the empirical investigation of the behavioural consequences of the Shetland oil spill, especially as regards its methodological insights. However, since an ecological crisis takes place simultaneously in countless behaviour settings, it becomes impossible (in practice at least) to analyse each of them in accordance with Barker's approach. Its conceptual and methodological armoury is limited when it faces empirical realities of the scope of environmental disasters (Kaminski, 1992). Equally problematic from our perspective is the fact that Barker's model refers only incidentally to people's knowledge. It is ill-equipped to address such issues as language, communication, representations and symbolic reality in general. Barker's conceptualisation also implies that behaviour settings are almost exclusively constituted from the observer's perspective. These and other issues related to "ecological psychology's trouble with knowledge" have been more fully examined by Kaminski (1989, 1992). Thus, although Barker's programme aspired to some "ecological completeness", its neglect of knowledge and symbolic reality makes it less than complete. It is inadequate, at least as it now stands, for an analysis of people's relationships with their environment.

#### 1.4. Environmental and social psychology: Separation or cross-fertilisation?

This review of the theoretical antecedents of environmental psychology suggests that environmental psychologists have uncritically borrowed from psychology and behavioural ecology models which, because of their focus on individual perceptual, cognitive and behavioural processes, are unable to theorise the origins, nature and functions of shared beliefs, images and symbolic practices in relation to the material world. However, although environmental psychology has undoubtedly been deeply influenced by the theoretical frameworks outlined above, it would be a mistake to underestimate the efforts of the proponents of these disciplines to create a distinct perspective, one which avoids the pitfalls I have just highlighted. Their efforts can be best understood by considering the debate which took place in the seventies about how the relationships between environmental and social psychology should be envisaged.

Altman (1976), one of the early contributors to the field, was of the view that cross-fertilisation between the two disciplines could be fruitful, in spite of traditional social psychology's over-emphasis on "experimental laboratories studies" rather than naturalistic inquiries. He was critical of the ways in which social psychology, first, ignored the relationship between people and settings, and second, adopted an atomistic and analytic perspective which ruled out the possibility of studying group processes. Nevertheless, Altman believed that much could be gained from social psychological research on perception, cognition, beliefs and attitudes, if such concepts were critically transposed within environmental psychology.

Many environmental psychologists (Epstein, 1976; Stokols, 1976) took issue with Altman, but the most stimulating reaction came from Proshansky (1976), who openly disagreed with him and advocated a clear separation between the two disciplines. He stated that

"the emergence of a problem-oriented, interdisciplinary field of inquiry concerned with understanding person/environment relationships in the context of real life settings, must necessarily turn its back on... social psychology." (Proshansky, 1976; p.360)

Whatever Altman treated as somewhat superficial shortcomings in social psychology, Proshansky considered as evidence of a discipline at odds with its object, of a discipline which is resolutely positivist, which is not theoretically prepared to investigate "matters of content and substantive issues" (p. 362), of a science "in which the phenomena are "laundered", shaped and processed to fit the methodological model" (p. 360) and which, consequently, excludes social and cultural processes from the scope of its analysis. Clearly, Proshansky was acutely aware of the problems I have highlighted above; he thought that environmental psychology could overcome them if it rid itself of the "molecular" models inherited from individual and social psychology. In an attempt to clarify the approach of environmental psychology, he wrote:

"the problem-orientation of the field and the criterion of maintaining the integrity of the real world person/environment events to be studied, almost by definition require a theoretical orientation that involves all levels of analysis in the behavioural sciences, including the special task of establishing the conceptual linkages which will all relate these various analytical levels to each other. Psychological structure and process, group structure and process, organisational structure and process, and community structure and process, are all critically significant for the task of establishing the analytic dimensions and relationships of these events for the purposes of both understanding them and producing change. The concern for the individual and individual psychological processes is no less important in environmental psychology than it is for social psychology, but only if conceptualisations of these processes are theoretically and empirically derived from a directed concern with the structural social context which defines the content and meaning of what the person sees, feels, thinks, desires to do, and so on." (p. 361)

Let me first say that I concur with Proshansky's unflattering evaluation of the state of social psychology as it was in the seventies. As a matter of fact, his critical appraisal would unfortunately still be a valid assessment of much contemporary research, since social psychology remains plagued by epistemological and methodological individualism. But this state of affairs is being relentlessly challenged. The criticisms levelled by Proshansky apply mainly to individualistic forms of social psychology. I shall show that his account hardly does justice to more sociological and social constructionist approaches, such as the theory of social representations. The

latter specifically addresses matters of content and substantive issues as they emerge in real-life situations, and does so by using methods which are tailored to the particular problems under investigation. It is better equipped than any other theory formulated within environmental psychology to fulfill the programme envisaged by Proshansky for this discipline. Indeed, his optimistic prognosis for environmental psychology turned out to be unwarranted. The "global, molar perspective" which was to characterise environmental psychology was rarely adopted. Even a rapid glimpse at any table of contents or annotated bibliography pertaining to research in environmental psychology is enough to convince the reader that this discipline has yet to break away from the positivist and individualistic assumptions which it had originally set out to challenge. Very few took up the challenge of focusing on the person/environment unit and of locating this analytical unit within broader social systems. Stokols (1982) did attempt to bridge the dualism between subjectivism and physical determinism by proposing the concept of the "socio-physical environment". This concept refers to the material and symbolic construction of the physical environment through human action, and to the social dimension of this action which is apprehended in terms of significations. Proshansky himself (1978; 1990; Proshansky *et al*, 1983) elaborated the concept of place-identity, which defines people by their embeddedness in particular environments, and which was to be the cornerstone of environmental psychology. Place-identity is "a sub-structure of the self-identity of the person consisting of broadly conceived cognitions about the physical world in which the individual lives. These cognitions represent memories, ideas, feelings, attitudes, values, preferences, meanings, and conceptions of behaviour and experience which relate to the variety and complexity of physical settings that define the day-to-day existence of every human being" (Proshansky *et al*, 1983; p.59). Both concepts recognise the symbolic value of the physical world. But neither of them can account for the social origins and functions of the always particular *rapports* which human beings entertain with their environment, especially as these have developed over time.

If environmental psychology has not yet achieved its goals, perhaps one is justified in looking towards social psychology, but this time towards a sociological and social constructionist form of social psychology, in search of the conceptual tools

to apprehend the ways in which people, individually and collectively, invest their world with meanings<sup>4</sup>.

### 1.5. Conclusion

Craik (1973), in his introduction to the very first review of the field of environmental studies, largely ascribed the growth of the latter to "its lively and thoroughgoing multidisciplinary character". Yet, he chose to refer to the study of people-environment relations as "environmental psychology", a label which he qualified as "inclusive" and "theoretically neutral".

My own critical review was intended to show that, in fact, the choice was neither theoretically neutral, nor all encompassing. The framing of people-environment relations within the discipline of psychology, and thus the privileging of some intellectual ancestors over others, significantly oriented the selection of the objects of research, the theoretical constructs and the methods used in empirical research. It also carried with it a number of problems. Chief amongst those is, somewhat understandably, the individualistic nature of the research, whether of a behaviourist, Gestaltist/phenomenological, or cognitivist persuasion. The ontological subject, with a proper sense of self, was exploded as he/she was reduced to being either a "beholder", a perceiver or an information-processor. This, in turn, implied that the social, political, ideological and cultural dimensions which structure the material world itself, as well as material practices, were neither theorised nor investigated. Symbolic realities were also left outside the scope of the analysis. The sharedness of perceptions and cognitions, for instance, was attributed solely to the aggregation of identical individual experiences, rather than to processes of social communication and interaction.

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<sup>4</sup>It is interesting to note that one of the most influential books in environmental psychology in recent years is the one edited by Altman & Low (1992) on place attachment, a notion directly derived from Proshansky's concept of place-identity. Ironically for the advocate of complete disciplinary separation, Proshansky's concept has generated a wealth of research in social anthropology (e.g. Low, 1992; Lawrence, 1992) and humanistic geography (e.g. Brown & Perkins, 1992), as well as environmental psychology *per se* (e.g. Korpela, 1989). These contributions have focused essentially on the (collective) meanings which are attached to various sites, thereby partly substantiating Proshansky's notion of place-identity.

I also reviewed the contributions of Gibson's and Barker's schools of ecological psychology. The theory of direct perception was set aside because of its inability to account for the symbolic dimensions of the environment which, as I hope to demonstrate in the following chapters, are so central to the relations which bind people to their physical milieux. Barker's approach provides a useful theoretical and methodological framework to analyse the socio-normative factors that are integral to people's use of places. However, it is ill-equipped to deal with social knowledge, on the one hand, and with large-scale environments, on the other. Moreover, it is concerned exclusively with the "built" environment - churches, schools, etc. - and fails to recognise that the so-called "natural environment" is also imbued with meanings.

In the last section, I considered the important debate instigated by environmental psychologists about the possible interface between environmental/ecological psychology and social psychology. Although some have argued that these disciplines should remain separate, since inputs from social psychology would only serve to reduce the scope of environmental psychology, I contend that social psychology can indeed make important contributions to the study of man/environment relationships. In the following chapters, I shall therefore demonstrate that the theory of social representations provides a framework which enables one to understand how symbolic and material environments are produced as well as used, which shifts the analysis from the individual to the social group, and which is more genuinely "multidisciplinary", as it draws from anthropology, and sociology, as well as (social) psychology.

## 2.0. THE THEORY OF SOCIAL REPRESENTATIONS

Since its introduction to the discipline of social psychology more than three decades ago, the theory of social representations has received considerable attention. It has produced an important body of empirical research and, in recent years, fora for discussion have been opened to facilitate exchanges between the growing number of social psychologists from around the world who are now attracted to the theory: the birth of a specialised journal, Papers on Social Representations and the organisation of three International Conferences on Social Representations are indicators of the vitality of the field. This state of affairs dispenses me from introducing the theory, the concept, and the specific mechanisms of social representations in detail yet again, and enables me to focus on those aspects which I believe most need to be clarified. Authoritative work is widely available to the Anglo-Saxon world (e.g. Farr, 1987; 1993; Farr & Moscovici (eds), 1984; Herzlich, 1973; Jodelet, 1989/1991).

As the theory gains currency, it also runs the risk of becoming so "versatile" (Allansdottir *et al*, 1993) that it loses its specificity. I do not wish to advocate a premature closure to the undeniably fruitful dialogue currently under way: theoretical, methodological and empirical advances can only be expected if dissident voices are allowed to be heard. My intention, in this chapter, is to examine the radical elements which originally granted the theory its significance, so that the theory itself does not become anchored within the traditional forms of social psychology which it sought to challenge.

Moreover, I would want to argue that the theory of social representations can provide the cornerstone of a social constructionist social psychology (which can then serve to develop a social psychology of nature; see chapter 3). The theory also has the potential to overcome some of the dichotomies which permeate social psychology, a discipline still battling with the ghost of Descartes (Harré, 1981; Marková, 1982). This potential, no doubt, is not always fully realised. Nevertheless, I believe it can serve as a paradigm to guide our effort, to conquer a space within social psychology where symbolic phenomena may be apprehended in their full reality.

## 2.1. A brief overview

Unlike many theories in social psychology, the theory of social representations is not rooted in the hegemonic positivist epistemology of the natural sciences; its antecedents are found in sociology, anthropology and history, as well as in psychology. The conceptual integration of works from social scientists as diverse as Marx, Durkheim, Weber, Freud, Mead, Lévy-Brühl, Bartlett, Piaget and, later, Vygotsky, has led to the formulation of the theory of social representations. It was developed by Serge Moscovici (1961/1976) in La Psychanalyse, son image et son public. In this seminal work, Moscovici investigates how psychoanalysis diffused in France in the 1950s and was differently appropriated by lay people as a function of their social conditions, and by the Catholic and Marxist press as a function of their ideological commitments and their readership.

The study's main insights, which were to serve as an impetus for an extremely diversified and fruitful field of inquiry, are the following: firstly, social representations are *symbolic phenomena*, rather than the mere cognitions of isolated individuals. As such, they have to be sampled in the culture as well as in individual minds. Secondly, the structure and processes of social representations cannot be studied without reference to their *content*. There is a strong commitment to treat seriously the information circulating in society about the object of study. Thirdly, social representations could not exist as such without being *collectively realised*. They are rooted in social life, expressing and structuring the identity and social conditions of the actors who create, reproduce and change them. Social representations reveal, in their very structure, their conditions of production and circulation, as well as their social functions. Processes of communication and of social interaction therefore become central to the analysis. And finally, social representations *constitute* the material, social and symbolic worlds in which people live. They are not merely epiphenomena which would *reflect* people's social conditions.

## **2.2. The theory of social representations: A social psychology of knowledge.**

The theory of social representations proposes more than a psychology of cognitions about the social world. It provides the basis for a social psychological theory of knowledge. In developing this argument, I will explore the commonalities between Berger & Luckmann's sociology of knowledge and the theory of social representations, and emphasise the distinctive contribution made by the latter. This discussion will enable me to clarify two sets of issues which are central both to current theoretical debates on social representations and to my own work. The first concerns the notion of social constructionism in relation to the theory of social representations; the second concerns the dual aspects of the theory, the concept and the phenomena of social representations as both universal and particular. (These issues will be re-examined with respect to social representations of nature in the following chapter.)

### **2.2.1. The theory of social representations and the sociology of knowledge:**

#### **Points of convergence**

The following discussion is based on the sociology of knowledge as defined by Berger and Luckmann (1967) in their seminal work The Social Construction of Reality: A Treatise in the Sociology of Knowledge.

"A 'sociology of knowledge' will have to deal not only with the empirical variety of 'knowledge' in human societies, but also with the processes by which any body of 'knowledge' comes to be established as 'reality' [...] And in so far as all human 'knowledge' is developed, transmitted and maintained in social situations, the sociology of knowledge must seek to understand the processes by which this is done in such a way that a taken-for-granted 'reality' congeals for the man in the street. In other words, we contend that *the sociology of knowledge is concerned with the analysis of the social construction of reality*." (Berger & Luckmann, 1967; p. 15; *italics in original*)

The task of a sociology of knowledge thus defined is therefore to understand how the objectifications of subjective processes come to constitute an *intersubjective*

common-sense world, a world which is shared with others and, precisely for this reason, which appears to consciousness as self-evident and taken-for-granted. The world of everyday life, according to Berger and Luckmann, "is not only taken for granted as reality by the ordinary members of society in the subjectively meaningful conduct of their lives. It is a world that *originates* in their thoughts and actions, and is maintained as real by these" (*idem*, p.30; *italics added*). From this perspective, "knowledge about society is a *realization* in the double sense of the word, in the sense of apprehending the objectivated reality, and in the sense of ongoingly producing this reality" (*idem*; p.84; *italics in original*). Understanding this dual character of social knowledge is precisely the project of the theory of social representations.

Indeed, the theory of social representations is concerned with the social construction of reality and can contribute to a social psychological theory of knowledge along the lines of the programme defined by Berger and Luckmann. These sociologists drew on two fundamental insights: with Durkheim, they thought that "society does indeed possess objective facticity"; and with Weber, they thought that "society is indeed built up by activity that expresses subjective meanings" (*idem*; p.30). Moscovici would be in perfect accord. He, too, claims that the theory of social representations "focuses as much on the way in which men think or create their shared reality as on the content of their thinking" (Moscovici, 1981; p.181). He, too, refuses to treat social knowledge as epiphenomenal. He, too, is concerned with the processes by which "each representation realizes, literally, a different degree of objectification which corresponds to a different level of reality" (*idem*; p.198). Like Berger & Luckmann, he also aims to understand the dialectical relationship whereby what belonged to a social representation "is converted into a property of the phenomenon and thereby becomes the reference point" of the social representation (*idem*; p.200). Berger and Luckmann stressed that

"the symmetry between objective and subjective reality cannot be complete. The two realities correspond to each other, but they are not coextensive. There is always more reality 'available' than what is actually internalized in any individual consciousness, simply because the contents of socialization are determined by the social distribution of knowledge. No individual internalizes the totality of what is objectivated as reality in his society [...] On the other hand, there are always elements of subjective reality that have not originated in

socialization [...] Subjective biography is not fully social. The individual apprehends himself as being both inside and outside society. This implies that the symmetry between objective and subjective reality is never a static, once-for-all state of affairs. It must always be produced and reproduced *in actu*." (Berger & Luckmann, 1967; pp. 153-154)

Social representations theorists, again, would agree. In fact, they would add, it is precisely because there is a *décalage* between the object and the subject that the need for social representations arises (e.g. Jodelet, 1989a; Jovchelovitch, 1995; Moscovici, 1981; 1984a). Social representations, in this sense, mediate between the world which they ongoingly create, and the subjects who create them. And because social representations theorists broadly share the view that "the contents of socialization are determined by the social distribution of knowledge", many (e.g. Jodelet, 1989/1991; Moscovici, 1961/1976) have chosen to study the distribution of social representations and their changes as they circulate from one group to another. This is what Moscovici (1990) has termed "Bartlett's way" of conducting social representational research (as opposed to "Vygotsky's way", which is concerned with transformations in social representations in the course of ontogenesis).

Social representations theorists can make a significant contribution to a *social psychology of knowledge* because, unlike Berger & Luckmann, they attempt to identify the *motivations* for (making the unfamiliar familiar), and the *functions* of (the creation of a common order to enable the mastery of the social and physical environment, the protection of identities, resistance, etc.), the production of social representations. They consider how potential *content* (the total reality which is available in society at a given point in time) becomes the actual content of particular representations. They also single out some of the *processes* (anchoring, objectification, diffusion, propagation and propaganda) by which social representations are created. In this sense, the theory of social representations links psychic functioning, social communication, and social reality more explicitly than Berger & Luckmann. It also provides a conceptual apparatus which is more directly amenable to empirical research than the programmatic treatise offered by the latter sociologists.

### 2.2.2. Social representations and social constructionism

The discussion above can help to clarify two interrelated "misunderstandings". The first concerns the nature of social constructionism in social psychology (and other social sciences), and the second concerns the version of social constructionism endorsed by social representation theorists. From the 1980s onwards, "constructionism" has become a metatheoretical notion: everything, it seems, is a social construction. What this means, however, remains unclear. The ambiguity chiefly concerns whether this notion refers exclusively to epistemological issues or whether it also points to ontological ones. In the following discussion, I shall qualify the first version, which refers only to epistemology, as "weak", and the second, which also makes ontological claims, as "strong".

In an influential and paradigmatic paper, Gergen (1985) describes social constructionist inquiry as being "principally concerned with explicating the processes by which people come to describe, explain, or otherwise account for the world (including themselves) in which they live" (Gergen, 1985; p.266). He restricts the scope of social constructionism to epistemology or, as he puts it, to elucidating different "forms of knowledge" (*idem*; p.266). This "weak" version of social constructionism, it seems to me, is neither particularly insightful, nor particularly useful. To state that various individuals, groups and societies hold different representations of the world is a truism of little interest. More importantly perhaps, such a conceptualisation allows us to treat all representations as relative, equivalent, and commensurable. This, in turn, severs the intrinsic connection between knowledge and power. These problems stem immediately from the fact that the version of social constructionism proposed by Gergen and other discourse analysts (e.g. Best, 1993; Sarbin & Kitsuse (eds), 1994; Shotter & Gergen, 1989) does away with ontological issues: at once, they proclaim the "death of the subject" (Shotter & Gergen, 1989), they de-legitimise any concern with "mental representations" (Gergen, 1985) and they

refuse to recognise the ontological correlates of knowledge (Best, 1993)<sup>1</sup>.

Social representation theorists, on the other hand, ought to favour a "strong" version of social constructionism. Unfortunately, there is still considerable debate amongst them as to which version they endorse. Marková (1992), for instance, explicitly takes the view that the theory of social representations is exclusively concerned with epistemology. This perspective is implicitly shared by many (e.g. Abric, 1989; Flament, 1987; Guimelli, 1989; Herzlich, 1969/1973). In part, this debate has its roots in the definitional confusion surrounding the concept of social representations. Social representations have been variously defined as "branches of knowledge" or "theories in their own right" (Moscovici, foreword to Herzlich, 1973; p.xiii), as "everyday knowledge" (Flick, 1994) or as a "practical form of social knowledge" (Jodelet, 1984c; 1989a). Such definitions do not explicitly refer to the fact that social representations also *create* reality. On the basis of these definitions alone, it is therefore possible to assume that the theory of social representations is solely concerned with epistemological issues, with the cognitive productions of historically situated people. In other words, isolated from the entire theoretical body to which they relate, these definitions can be interpreted as implying that the theory promulgates a "weak" version of social constructionism. We have seen earlier, however, that Moscovici means more than just that. In his concluding address at the Second International Conference on Social Representations in Rio, he made it clear that social representations are *constitutive* of reality.

"[Social] representations are capable of *creating* and stipulating a reality by naming and objectifying notions and images, by directing material and symbolic practices towards this reality which corresponds to them. In short, giving a kind of public reality "out there" and *ontological status* to our representations and to the verbal and iconic symbols that represent them and act on our relationships and practices. Thereby, we situate ourselves in a world of shared reality."  
(Moscovici, 1994a; p.7; *italics added*)

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<sup>1</sup>More precisely, discourse analysts are opposed to a strong version of social constructionism - what they refer to as "strict" constructionism - on the grounds that, after all, ordinary members of society make claims about "something" (Best, 1993). Now, people may make claims about "something" but this "something" is not reality "as such" (Moscovici, 1988; p. 230). It is the historical product of prior constructions which have acquired some objective facticity. If discourse analysts adopted a diachronic perspective, this problem would probably not arise.

The theory of social representations, therefore, makes ontological claims; it opts for a "strong" version of social constructionism. This, in turn, prevents it from lapsing into a non-dialectical conception of the relationship between what social actors do and what they think; between the world in which they live, and the world which they represent and change. It prevents the theory from adopting a relativist stance towards social life. On the contrary, the adoption of a "strong" version of social constructionism allows us to understand why a social group converts its representations into reality.

"This happens in order to reduce commensurability, the arbitrariness of representations, and [to] turn them into a *norma agendi* for its members. The mark of power, one cannot help saying it, is to reduce the commensurability of representations, to do away with the feeling that one is as good as another, and [to] render one constitutive of shared reality." (*idem*; p.7)

Construction, in this sense, is a necessary feature of representational activity both at the level of the individual and of society.

### **2.2.3. The theory and phenomenon of social representations: Universal or particular?**

One of the corollaries of the "strong" version of social constructionism described above is that social representations are intrinsically related to social conditions; their structure owes much to processes of social communication and interaction, as well as to the contents which are created and diffused through the latter. As such, they change over time. To describe and explain historically and socially changing forms of social knowledge is precisely the aim of the theory of social representations (and of the project of a sociology of knowledge *à la* Berger & Luckmann). The theory of social representations must therefore account both for universal *and* particular phenomena.

"It seems impossible to overstress the following point: the theory of social representations is both a general theory and a particular theory. It is in the first place a vision of the whole of society. And in this vision stamped by the symbolic and the ritualistic, social representations are constitutive of bonds and common actions. [...] Then the theory is a particular theory of the collective forms of thought and belief and of the communications produced under the constraints of society. [...] Figuratively speaking, the general aspect of the theory can be associated with Durkheim and the particular aspect with Lévy-Brühl." (Moscovici, 1993; p.161)

With Durkheim, Moscovici saw communalistic ritual as the source of all social knowledge; he recognised that representations exist beyond individual cognitions, that they are relatively stable (though much less so than Durkheim assumed), prescriptive and conventionalising. Perhaps one should add that with Weber, Moscovici recognised the importance of representations as vectors of actions and as forms of knowledge which are loaded with symbolism and which exist both at an individual and a collective level. And with Freud, he drew attention to the social origins of knowledge within each individual, to the ways in which collective knowledge is internalised and bears the mark of its social origins. These intellectual ancestors provided the foundations for the "general" or universal aspects of the theory of social representations.

But Moscovici also drew on Weber, Lévy-Brühl and Piaget to develop, at once, the "particular" dimension of the theory of social representations. Weber taught sociologists why some men are more rational than others; he located the emergence of a specifically modern type of rationality in the diffusion of a puritanical Protestant ethic. Lévy-Brühl showed social anthropologists that singular acts and thoughts cannot be explained without a deeper understanding of the system of collective representations that prevail in a given society. Every single type of mentality is distinct and corresponds to the nature of the society under investigation, to its institutions and to its specific practices. Therefore, Moscovici claims, one cannot assume that there are some uniform mental operations which would be identical across all societies at all times; no single or unitary logical or psychological mechanism can ever explain the collective representations existing in different human groups. And Piaget invites us to consider the specificity of representations in psychic

terms, to uncover the concrete operations involved in representational thought, to investigate the complex issues of the genesis and processes of transformation of representations. Piaget's work effectively destroyed the presumption of homogeneity of thought that was characteristic of Durkheim and Lévy-Brühl, both of whom assumed that representations were transmitted unchanged from one generation to the next and were uniform within a given society.

Such insights are all integral to the theory of social representations. They do not in themselves help us to solve its "paradox". Indeed, this apparent paradox has been at the heart of the theory from its inception, and it continues to generate much debate. Perhaps the current confusion is understandable, considering that the concept of social representation occupies a "mixed position, at the crossroads of a series of sociological concepts and a series of psychological concepts" (Moscovici, 1976; p.39). Yet, it is of central theoretical and empirical interest, both for social representations theorists in general, and for this thesis, to keep at once its "universal" and "particular" aspects in mind when conducting research. Unfortunately, one often finds social representations theorists emphasising only one aspect, at the expense of the other. Doise (1996), for instance, has recently taken the view - albeit implicitly - that the theory and *the phenomena* of social representations are "universal". He advocated that the theory be used to analyse past historical forms of social knowledge. This invitation, it seems to me, seriously undermines the contribution of the theory of social representations to social psychology. From the outset, the programme of research on social representations aimed to investigate a new type of common sense, one whose structural and functional characteristics, as well as content, would be intrinsically linked to, and constitutive of, a new kind of public sphere, to novel forms of communications and social interactions, themselves related to a new natural division in society, to a greater social division of labour, to the diffusion of scientific knowledge through the mass media, to the breakdown of traditional morality, to pluralism, etc. The conceptual and methodological apparatus was tailored to the needs of an "anthropology of *modern* culture"; to use it as a universal framework to investigate any form of social organisation and knowledge seems highly inappropriate.

On the other hand, some want to stress that social representations are a "specifically modern social phenomenon" (Moscovici, 1984b; pp.952-53), that we have entered "the era of social representations" (Moscovici, 1982). It is argued that the qualitative difference between social representations and other forms of social knowledge (myths, religion, etc.) requires serious appraisal. Such a radical difference would stem from the diffusion and penetration of scientific knowledge in everyday life. Changes in the production, transformation and distribution of knowledge in contemporary western societies, now that science has become a major source of individual and social knowledge, would have produced an altogether new type of common sense: social representations.

"One central assumption of this theory is that the popularisation of the sciences and their results has become a major source of mundane stocks of knowledge and has *replaced* other, more traditional sources." (Flick, 1994; p.181, *italics added*)

The stress is on how social representations have *substituted* more traditional forms of knowledge, or common sense in the classical sense. The strength of the argument resides in its explicit concern with the relationships between, on the one hand, some structural societal changes, namely the establishment and dominance of institutions devoted to the production and diffusion of scientific knowledge and, on the other, psychological functioning and the content of thought. The weakness stems from this almost exclusive preoccupation with science, which tends to over-emphasise one particular dimension of modernity (see Giddens (1991) for a much broader discussion of late modernity in relation to psychic phenomena)

Yet another stance in relation to the paradox of the universal and the particular aspects of the theory of social representations is adopted by Billig (1988). Billig, who perhaps most clearly exposed the paradox, attempts to resolve it by distinguishing between the processes of objectification and anchoring. Objectification is generally defined as a process by which objects or ideas acquire a concrete reality. It is a process of materialisation of abstract notions whereby information is selectively chosen, integrated into a coherent structure, and then attributed the status of an objective entity. Anchoring refers to the integration of novelty into pre-existing

frameworks. Unfamiliar objects are named and classified so that they lose their threatening character and can serve as a basis for action. Knowledge thus becomes instrumental, or functional, in that it enables the mastery of the environment. Billig (1988) argues that only one of these processes, objectification, can be said to be "particular" to modern society, whereas the other, anchoring, seems to exist in every form of social organisation, and can thus be said to be "universal".

Billig clearly posits the terms of the debate and correctly points out that social representations theorists have not, to date, systematically analysed the necessary conditions for the emergence of social representations. His own solution, however, is less satisfactory. First, as Duveen and Lloyd (1990) have argued, objectification and anchoring, if they can be distinguished analytically, are nevertheless always inter-related.

"[Objectification and anchoring] are interdependent, in the sense that a representation can become securely anchored to the extent that it is also objectified, and *vice versa*, that objectification would be impossible unless a representation were anchored." (Duveen & Lloyd, 1990; p.2)

Thus, it seems incongruous to argue that one of the two processes could exist independently of the other, that is, in certain societies and not in others. Second, Billig also overlooks the fact that the anthropological literature is replete with examples of objectification in traditional as well as in modern societies (e.g. Descola, 1986/1994; Douglas, 1966/1991; Hastrup, 1992; Latour, 1991/1993; Lévi-Strauss, 1955/1961), which makes it difficult to claim that objectification would be a "particularistic" concept. The real challenge is to account for the universal sociological dependence of cognition in a fundamental and detailed manner, and to relate particular forms of knowledge to the historical societies which shape them, in which they express themselves, and which they contribute to create and change.

My proposal, which derives in part from existing social representational studies and from the empirical analysis which follows, is to restore the hypothesis of "cognitive polyphasia" (Moscovici, 1961/1976). This hypothesis suggests that different cognitive styles (some of which survive from earlier times, others of which emerge in today's societies) would co-exist, nowadays, to *apprehend* complex and

multi-faceted realities, and to *create* ambiguous realities as well. As early as 1961, Moscovici speculated that "the dynamic coexistence... of distinct modalities of knowledge, corresponding to defined relationships between human beings and their surroundings, *[would] engender a state of cognitive polyphasia*" (Moscovici, 1961/1976; p.186; *italics in original, personal translation*). Having to face and to resolve ever more complex social and natural problems, those living in modern societies would not only have to learn new "languages" but also to develop varied mental apparatuses. In his own research on psychoanalysis, Moscovici noted that a particular mode of reasoning was more apt to meet the demands of propaganda, another those of making economic decisions, a third those of science, and so on. Thus, there would be no unique cognitive process because different modes of reasoning serve different purposes and because some are better adapted to particular contexts than others.

A number of empirical studies support this hypothesis. Jodelet (1989/1991) found that, intrinsically related to modern medical knowledge, there survived magical beliefs about the contagious nature of mental illness. The social representations of madness she reconstructs articulate these different modes and contents of thought which enable the inhabitants of a village who have to live with the mad to deal with this threatening situation. Jovchelovitch (1995) describes how Brazilians' belief in the impurity of their own "corrupt" blood serves to explain and justify the corruption of the public sphere in general, and of political life in particular. The co-existence of scientific and magical knowledge and beliefs about even such modern phenomena as HIV/AIDS cannot but surprise those who would rather believe in our monolithic rationality. The notion of a "gay plague", theories of divine punishment, and conspiracy theories about viruses having been developed by the FBI with the express aim of eliminating unwanted populations continue to flourish in order to explain the genesis and consequences of the disease, in parallel with medical knowledge (Joffe, 1995). Thus, traditional forms of knowledge have not been completely eroded and replaced by science: religious metaphors, archaic moral prescriptions and proscriptions, superstitions and rituals of purification, for instance, do survive in

contemporary societies. Mary Douglas' work has taught us not to draw an over-sharp distinction between "primitive" and "modern" societies.

Endorsing the hypothesis of cognitive polyphasia entails the necessity of identifying the particular constraints which operate in order to produce a content which has some attributes and not others. The fruitfulness of this hypothesis is that it opens a path for "the analysis of the transformation - equilibrium and evolution - of these modalities of thought, of the relationships which are established between them, and of their adaptation" (Moscovici, 1961/1976; p.187; *personal translation*). More precisely, it allows social psychologists to bear in mind, simultaneously, the general and the particular aspects of the theory of social representations, which are crucial to account both for the necessary and universal dependency of ideation upon social conditions, and for the specificity of particular modes of knowledge.

### **2.3. Of some unfortunate dichotomies**

In many ways, the strength of the theory of social representations resides in the fact that it can overcome many of the dualisms which plague traditional social psychology. It is this constant struggle to reconcile what is often thought of in antithetical terms which guides the epistemological gaze of the theory. I believe it is now more crucial than ever, as the theory diffuses ever more widely and becomes appropriated - dare I say anchored? - by mainstream social psychologists, to insist on just what makes it such an important and radical contribution to this discipline. In particular, I would like to discuss how the theory aims to reconcile the false dichotomies between 1) individual and collective representations, 2) social and cognitive processes, 3) intentional and non-conscious processes, and 4) symbolic and material practices.

#### **2.3.1. Individual and collective representations**

Paradoxically, the theory of social representations has been criticised on the grounds of both sociological and psychological (individualistic) reductionism. McKinlay & Potter (1987), for instance, argue that the insistence on the "prescriptive

and conventional" nature of social representations, as well as on their "autonomous" character, denies the possibility of individual participation and rules out the very conditions of change in the social universe. In a different vein, but making a similar point, Billig (1987; 1993) argues that the theory of social representations rests upon an "unthinking image of the thinker" according to which individuals passively integrate novelty in terms of familiar schemata. This view of the "thinker" also renders negotiation, debate, and, ultimately, social change, impossible. It is precisely this conceptual flaw which, Billig claims, leads to an over-emphasis on consensus. I have discussed elsewhere (Rose *et al*, 1995) Billig's (mis)conception of consensus. But it is important to state that both he and McKinlay & Potter formulate convergent criticisms: the theory of social representations has yet to break away from Durkheim's conceptualisation of collective representations. Interestingly, proponents of the theory of social representations are also accused of committing the opposite "sin". Harré (1984a; 1984b), for instance, takes the view that the theory continues to promulgate a version of individualism by qualifying as "social" what are in fact merely distributed or aggregated individual representations.

This debate is not to be dismissed hastily. It points to real ambiguities within the theory itself, and these must be addressed. Although the theory of social representations is not homogeneous and, as such, is open to the criticisms briefly summarised above, it nevertheless constitutes one of the most fruitful and far-reaching attempts to conceptualise the relationships between individuals and society. A short review of Moscovici's rationale for abandoning the Durkheimian dichotomy between "représentations individuelles" and "représentations collectives" should contribute to a clarification of the theoretical status of social representations.

The substitution of the adjective "social" for the classic notion of "collective" representations indicates more than a terminological fancy. It lies at the core of Moscovici's ambition to develop a model of social ideation which can, at once, account for the diversity found in modern societies, emphasise the constant and necessary dialogue between society and its members, and locate the genesis of representational activity in communicative practices rather than in the minds of isolated individuals or in the productions of a collective, homogeneous and reified "single intelligence" (Durkheim, 1912/1995).

For Durkheim (1898, 1901/1958, 1912/1995), individual representations comprised the realm of the ephemeral. They were a set of fleeting and unstable perceptions and images. In opposition, collective representations were like "social facts": stable, often fixed in institutional customs and rituals, external to individuals and existing before or even independently of them, and they had a coercive and constraining power over individual thought and action. Durkheim conceived of collective representations as being elaborated by a sort of *group mind*, a universal, homogeneous and autonomous entity. Durkheim insisted on keeping the two types of representations apart because, he argued, these representations had a different "substratum" (the brain, the human group) and were operating in different realms (individual consciousness, collective consciousness). Durkheim's distinction - not least because it parallels Wundt's - continues to find echoes in contemporary psychology as well as in sociology.

The theory of social representations can overcome these distinctions. One of its most productive aspects is that it locates psychological activities in social life, in the *relationships* which bind, and separate, individuals. It locates the ontogenesis of the human subject, of the self, in the simultaneous processes of individuation and socialisation. Such a perspective is not entirely novel. It draws extensively on Mead's (1934) and Vygotsky's (1978) conceptualisations of the origins of mind in social interaction and communication. Mead, it will be recalled, conceived of thinking as an internal conversation in which significant symbols have the same meanings for the individual as they do for the group. Thus, Mead implied that "mind" does not exist solely in the heads of individuals but also in the social and cultural (particularly linguistic) contexts in which the activity of mind originates and expresses itself. And because human society is characterised by its capacity to produce cultural artifacts which together constitute a symbolically significant environment, Vygotsky added, the emergence of mind itself depends upon the socially constructed environment. Thus, psychological processes are the products of social processes and of cultural phenomena. But, conversely, individuals and social groups are also the producers of cultural phenomena, since the latter are created and sustained through their material and symbolic activity.

Thus, the theory of social representations attempts to conceptualise *at once* the power of social reality *and* the agency of social subjects. It allows us to understand both the ways in which socio-epistemic structures impinge on the subject to shape her ideas, beliefs, opinions, attitudes and practices, and the ways in which individuals and groups, in turn, participate in the creation of the "thinking society". It shows how representations are always and necessarily social products because society is at the very core of human subjectivity. Clearly, one "cannot conceive of 'individual' processes that are not at the same time bound up with social processes" (Moscovici, 1987; p.520).

Individual subjects do not simply respond to stimuli. They perceive social realities through the filter of already-existing representations and, thus, construct them into social objects. They invest their representations with their accumulated experience, with emotional and affective needs and desires, as well as with the images and words circulating in their material and social environments about these objects. Of course, to state that social representations are produced by individuals need not mean that they exist only in individual cognition. Chombart de Lauwe's (1971, 1979) work on the social representations of childhood illustrates how movies, novels, parks, ads, etc. equally constitute powerful vehicles for the transmission of these representations. Such a perspective de-emphasises the focus on individuals in order to understand how thought is rooted in a social and cultural world, which has its own requirements and which determines modes of knowing as well as the content of thought. It allows one to "study collective phenomena, that is phenomena resulting from a large number of interactions and revealing common features that no single individual can have" (Moscovici, 1987; p.516), whilst at the same time recognising the creative role of individuals. Social interaction and communication are the dynamic processes within which social representations originate, but also through which social representations are sustained and eventually acquire their prescriptive and conventional character.

### 2.3.2. Social and cognitive processes

Perhaps more particularly, the theory of social representations stresses how we *need* the social in order to know. In this sense, it also reconciles the social and cognitive functions of representational activity. These two sets of functions are often treated separately by psychologists, on the one hand, - who tend to conceptualise categorisation, assimilation or the formation of concepts in terms of individualistic cognitive functioning - and by sociologists, on the other, - who focus almost exclusively on the interplay of external forces (such as relations of production, power relations or ideologies) which determine both the form and the content of thought. Social representations theorists, however, disregard this unfortunate dichotomy and insist on the fact that cognitive elaboration is itself dependent upon the conceptions, norms and values which prevail within a given social group at a given time. Indeed, this is exactly what the generative mechanisms of anchoring and objectification are about: the selection and transformation, via integration into pre-existing frameworks, of aspects of the world in a manner that makes this information available and useful to social subjects. Thus, the cognitive functions of social representations - to render the abstract concrete, to select information, to assimilate novelty, to "take the place of", to make available to consciousness, etc - are intrinsically linked to their social functions - to organise and interpret the life-world, to orientate action, to serve as a guide for communication, to explicate, to legitimise or to undermine social relations, etc. For social representations theorists, "there are no content-free mechanisms and cognitions that can be arbitrarily dissociated from their mental context and social setting" (Moscovici, 1984b; p.950)

Theoretical and empirical works emphasise the necessary interdependence between the cognitive and social functions of social representations. Discussing the genesis of social representations from a developmental perspective, Duveen (Duveen & De Rosa, 1992) identifies an important paradox: "values cannot be organised in terms of a logical sequence which would provide the framework for a developmental study" (Duveen & DeRosa, 1992; p.98). Thus, developmental/cognitive approaches which rest upon a strict separation between the form and the content of knowledge - with progressively more mature logical structures providing the form through which

the content is organised - are unable to account for the evaluative dimensions inherent in representational activity. These evaluative dimensions can be deduced neither from the intrinsic qualities of the object of knowledge, nor from the canons of logic. They arise from social life, from the "social discourse of values" in which the child grows up. Culture, in this sense, does not simply "accelerate or retard the rate of development" without intervening "in the actual structures which develop" (Duveen & De Rosa, 1992; p.99) as Piaget would suggest; on the contrary, it is at the very core of social representations.

Grize (1989) makes a similar argument with respect to the relationship between social representations and "natural logic". The very concept of natural logic may be open to criticism, but it is useful in the present context. Grize's argument is simple. It is illustrated by the following examples:

- a) If elephants are pink (p) then, if  $3+3=6$  (q), elephants are pink (p);
- b) If he loves her (p) then, if he is honest (q), he will marry her (m).

The first proposition (a) is, in logic, perfectly valid; it has the form of a tautology. The second proposition (b), however, is only convincing from the moment one accepts the validity of the complex social representations of love, honesty and marriage which it implies. The causal link is precarious and, therefore, the validity of its conclusion is "undecidable".

"By asserting something which does not claim to be true, something which lies outside of the logic of non-contradiction, individuals immediately locate themselves in the social realm: it becomes a joint endeavour, for the speaker and the listener, to decide on the value, adequacy and relevance of the proposition." (Moscovici, 1989b; p.17. Preface to Jodelet; *personal translation*)

Everyday cognitive processes depend upon shared cultural forms (which encompass purely linguistic forms, such as the implicit meanings of words, and meanings which arise in conversational contexts) and the objectives of communication. They are intimately tied to the *sensus communis* of specific groups.

### 2.3.3. Intentional and non-conscious processes

As a sociological form of social psychology (Farr, 1987), the theory of social representations must confront problems similar to those with which both sociologists and psychologists have wrestled ever since the birth of their respective disciplines. One such problem concerns the relationship between intentional and "non-conscious" processes. The ways in which one conceptualises the relationships between these has important theoretical, methodological and analytical implications.

It is now a common place in sociology and psychology that not all ideas are accessible to the awareness of social subjects. The founding fathers of sociology all advocated different versions of the "principle of non-consciousness". Marx, for instance, argued that in the production of their life, men enter into determinate relations that are necessary and independent of their will. Similarly, for Weber, interpretive sociology was based upon the refusal to equate the cultural meaning of action with the subjective intentions of actors. And Durkheim suggested that one should study collective representations as social facts by "adopting the principle that one is ignorant of what they are, that their characteristic properties, like the unknown cause upon which they depend, cannot be discovered by even the most careful form of introspection." (Durkheim, 1901/1958; p. xii).

Sociologists, in keeping with the "principle of non-consciousness", generally outlaw from the scope of their investigation the representations that subjects form of their own experience. Rather, they search for the underlying, objective, material and social causes which are not fully apprehended by social subjects but which nevertheless explain social relations. This position is conceived as the *sine qua non* of a truly scientific sociological practice. To look for the "reasons", "opinions", "justifications" and "rationalisations" provided by subjects to explain their own conditions, it is argued, can only "stand in the way of the search for the social functions that the 'reasons' disguise..." (Bourdieu *et al*, 1968/1991, p.17).

Many psychologists also reject the conceptions elaborated by social subjects as viable explanations for human behaviour. Perhaps the two most radical forms which this principle assumes in psychology are behaviourism and psychoanalysis. The former negates altogether any reference to mental processes, and the latter dismisses

the rationalisations of the ego as valid explanations of the subject's representations and actions. There is a whole unconscious world, fraught with contradictions, within the human self.

However rich they may be, these positions need to be revised from the perspective of the theory of social representations. In their different ways, they amount to a radical dismissal of intentionality, of the phenomenological experiences which, no doubt, must be constitutive of social life. It is these experiences which subjects intend to communicate, and these experiences often become shared realities. It is important to restore a sense of intentionality and to take seriously *the meanings which social subjects give to their own experience*. The theory of social representations must, and does, focus not only on the structural factors which exist "outside" of the experience of social subjects, but on the ways in which lay people make sense of, and construct, their world. It is necessary to consider social representations as a distinct and legitimate object for social psychology.

Moreover, it is crucial that "non-conscious" realities be structurally related to social conditions as well as psychic drives without being reduced to either. The problem is to define and explain non-conscious regularities in ideas and practices without reference either to intra-psychic mechanisms, or to the power of ideologies or to relations of production<sup>2</sup>. One of the tasks facing social representations theorists is to account for the interplay between the intentional and non-conscious processes involved in the creation, maintenance and transformation of meanings. This has seldom been achieved, but Jodelet (1989/1991) provides a paradigmatic study. Social representations do not just result from, nor simply express, conscious, volitional or intentional acts. Clearly, the cultural meanings of actions may differ significantly from the intentions of the social subjects, just as each action may have a number of unintended consequences in addition to, and perhaps at odds with, those consciously

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<sup>2</sup>Durkheim explicitly spelled out the difference between the methodological affirmation that there are non-conscious regularities in behaviours, and the affirmation of an "unconscious" endowed with specific psychic characteristics. He wrote: "All that we wish to say is that certain phenomena occur in us which are of a psychic order and which are nevertheless not known by our conscious selves. Whether they are known to some other unknown "self" or whether they are outside the realm of all apprehension is not for us a matter of primary importance. All we wish to be granted is that representational life extends beyond our present consciousness." (Durkheim, 1898; p. 299; *personal translation*)

sought and foreseen by individuals. Yet, they do express and shape intentions, and this subjectivity must be acknowledged.

This entails the necessity of breaking away from the assumption of the transparency and universality of meanings, in order to locate significant practices in the specific contexts which give them their very significance and within which their objective consequences can be assessed. "The meaning of the most personal and "transparent" actions does not belong to the subject who performs them but to the complete system of relations in which and through which they are enacted" (Bourdieu *et al*, 1968/1991; p.17). Thus, although representational life is not entirely opaque to its participants, there are nevertheless taken-for-granted assumptions which extend beyond the consciousness of individuals. These can be realised in language, images and ritualistic practices, and must be retrieved through analytical procedures. Social representations theorists must work with this paradox in mind.

#### **2.3.4. Material and symbolic realities**

And finally, the theory of social representations effectively destroys the false dichotomy between the realm of the material and that of the symbolic which underpins research predicated upon a realist epistemology. Ideation, both individual and collective, is at the root of our practices and, conversely, our material world cannot be understood without reference to the representations which are constitutive of it and upon which our knowledge is based. Rather than causing each other, the "conceptual" and the "material" parts of reality are co-determining our experience of the world (Godelier, 1984). To presume that social realities exist independently of the activity of social subjects would simply eliminate the need to consider the efficacy of social ideation since the latter would be defined *a priori* as "false knowledge" or illusion and, in any case, as simple epiphenomenon. This conception is no longer acceptable. In the seventies, Althusser had already enriched Marxian analyses by considering what he called the "specific efficacy of super-structures" and the "material character of ideological practices". In spite of its limitations, this theorisation gave an enormous impetus to the study of symbolic realities in general,

and of ideology in particular. But it was Godelier (1984) who most explicitly stated the rapport between the "conceptual" and the "material".

"Any social relationship includes a conceptual component, an element of thought, of representations. These representations are not only the form which social relationships assume in our consciousness; they are an integral part of social relationships. One ought not to mistake the "conceptual" ("*idéal*") for the "ideal" or the "imaginary": representations do not appear "after the event", as it were, to make available to consciousness social realities which would have begun to exist before them, outside of them, or even without them. Far from being separate from social relationships, far from being their mere reflections, representations are a part of social relationships as soon as these begin to take shape and they are one of the very conditions of their formation." (Godelier, 1984; p.171-172; *personal translation*)

Symbols are constitutive of our material environments. Events and realities are registered and defined not only by reference to their inherent characteristics but by their significance in terms of the social systems where they occur and which they shape. This perspective, of course, is not entirely new, but it does recover and further develop elements of social scientific thought which had become marginalised as social psychology became individualised (Farr, 1996). It derives directly from a social constructionist epistemology (and ontology). This will be further discussed in the following chapter with respect to "nature".

## **2.4. Conclusion**

This chapter was intended as a broad discussion of some of the central tenets of the theory of social representations, with three aims in mind. Firstly, I wanted to introduce the theory and to clarify its specific contribution to social psychology, especially by focusing on its (often unrealised) potential to overcome a series of dichotomies which still cut across the entire discipline. Secondly, I proposed to examine its epistemological foundations, via the link with the sociology of knowledge. This, in turn, led me to affirm that the theory needs to promote a "strong" version of social constructionism and that it ought to address, simultaneously, the "general" and "particular" aspects of social ideation. And finally, I aimed to develop a

framework for the empirical analysis of the social representations of nature circulating in Shetland. Rather than opting for a simple presentation of the theory - which would have been infinitely more comforting both for myself and for the reader - I have chosen to emphasize precisely those aspects which are currently the object of vigorous academic debate. I had to resolve such issues in order to proceed to develop a social psychology of nature which would begin with a radical doubt about taken-for-granted social representations of Nature, and would then propose to reconstruct various representations, each being intrinsically related to particular social conditions, borne by specific individuals and social groups according to their positionings in society, and serving certain functions.

### 3.0. SOCIAL REPRESENTATIONS OF NATURE, SOCIAL REPRESENTATIONS IN NATURE

Building upon the previous two chapters, one may begin to develop a genuinely *social* psychology of nature. In what follows, I set out to lay down some of the foundations of such a programme. At its heart is the idea that "nature has a human history" (Moscovici, 1968/1977) and, therefore, that nature cannot be understood beyond the bounds of the particular social representations which both make it available to consciousness and construct it. A social psychology of nature will only succeed in constituting itself as a science if it ceases to endorse a naturalistic view, that is if it views nature as being constituted symbolically rather than merely given. Unless it is able to problematise "nature" as being itself the product of material and symbolic practices inextricably tied to specific cultures and historical times, this science - like environmental and ecological psychology - will only reproduce and validate the existing realist and dualist cosmology of modern societies.

The theory of social representations can play a central role in defining the scope and object of a social psychology of nature. It affords the conceptual tools to explore the structural relationships between the genesis of social representations in different socio-historical conditions, their content, and their transformation. Moreover, it is concerned with the mechanisms through which systems of ideas, values and images which exist at a collective level become subjectively real and efficacious for individuals in the course of ontogenesis, and through communication and social interaction. In its strong constructionist version, the theory also enables us to investigate how social representations *of* nature become objectified *in* nature, and vice versa. In fact, as we shall see below, social representation theorists have often chosen just those objects which, because they appear as given, would seem to fall outside of the symbolic activity of human groups. Together, their work can constitute a powerful challenge to the naturalism which still underpins most of social psychology and perpetuates the dichotomy between the realm of nature and that of culture or society.

But this general perspective does not suffice. One must also consider the specificity of nature as a particular object. To do so, I shall draw extensively on two essays by Serge Moscovici on the relations between human societies and the material world. The aim is to theorise the intrinsic connection between social life, nature and

knowledge. In essence, it will be argued that the history of the social constructions of nature is a continuation of the history of nature, that the development of new knowledge, skills and abilities is *integral* to the simultaneous evolution of social and natural life and of the human species itself. Moscovici also presents a three-fold typology of states of nature which will be described and, subsequently, used to analyse the data collected in Shetland.

### **3.1. Social representational studies of "natural" objects**

Three decades of research on social representations have produced a body of empirical studies which, though not about nature *per se*, implicitly challenge the dichotomy between "nature" and "society". Indeed, social representation theorists have investigated a range of so-called "natural" objects, such as the human body itself or its various attributes (sex, race, health, illness, etc.), inanimate objects and the physical world (houses, cities, parks, space). My review of these works is intended to show that the theory can reconcile these allegedly antithetical terms, but also to demonstrate that social representation theorists are not always agreed on the version of social constructionism they favour.

Jodelet (1984b) analysed social representations of the human body. She found that, over an interval of fifteen years, significant changes had taken place in the manners in which men and women represent and talk about their own bodies. As the feminist movement gained currency, it changed the relationships between the sexes and, concomitantly, the relation of each sex to its own body. Men became more aware of, and knowledgeable about, their bodily experiences, and women began to challenge hegemonic definitions of their status and the images of femininity which circulate in the mass media. Jodelet also noticed that, over this period, the ways of talking about the body - both privately and in the media - had changed considerably: the present discourse was characterised by more freedom, less hypocrisy, fewer taboos, greater diversity and flexibility. The study convincingly demonstrates that people's perceptions and conceptions of their body are not direct and unmediated. The questioning of ideological representations of the body by minority groups, and the decline of moral prohibitions on sexuality, together with the more widespread

diffusion of knowledge of biology via the educational system, popular science and the mass media of communication, generated important modifications in men and women's relations to their own body. Jodelet thus concluded that social representations, as social products, bear the mark of their genesis in social relations and have "a profound influence on the relationship which an individual maintains with his own body at the level of lived experience and of conduct" (Jodelet, 1984b; p.237).

In an early study, Herzlich (1969/1973) also showed that health and illness - two apparently neutral, medical, assessments of the state of the body - are neither clearly defined nor unambiguously recognised entities. Her work reveals the notions, the categories and the kind of language through which health and illness are socially constructed. It indicates that judgements about good or bad health are not simple assessments of one's physiological state; they are the result of evaluations of complex relations between individuals, society, and nature. Herzlich's interviewees state that good health stems from a harmonious relation between self and nature, whereas illness results from the "unnaturalness" of city life: air pollution, noise, the rhythm of life, and the poor quality of the food all contribute to causing ill health. Illness therefore is something which happens in the course of one's life and which must be explained. Good health, in comparison, does not seem to require any explanation: it is given. People are born with a good constitution. These results should not be interpreted as implying that good health is indeed a natural category: the fact that it is *represented as such* must not obnubilate the fact that this category is itself the product of representational activity, the outcome of an effort to make sense of what is perceived as a natural state.

Duveen and his colleague (Duveen & Lloyd (eds), 1990; Lloyd & Duveen, 1990; Duveen, 1993), adopting a strict constructionist perspective, analysed the processes through which children come to think, act, and feel in terms of already structured social representations of gender. In one study, Lloyd & Duveen (1990) videotaped women interacting with babies of between four and a half and eight months of age. Four different babies (two boys and two girls) participated in the study. Independently of the biological sex of the infants, their gender was manipulated by calling them either John or Jane and by dressing them either with a frilled dress or a blue terry "baby gro". Despite the imposition of gender-marked names and dress,

no differences were observed in the behaviour of the infants. "At this age children are not yet active in the semiotic field of gender" (Lloyd & Duveen, 1990; p.33). The women also had access to six different toys - two signifying femaleness, two signifying maleness, and two deemed neutral (as assessed in a pilot study conducted with the general public). The researchers observed no difference in the interest in gender-marked toys on the part of the infants themselves. Yet, regardless of the actual sex of the babies, the women were more likely to present the ones they thought to be girls with a doll, and the ones assumed to be boys with a rattle or a hammer. The women's response to the motor activity of the infants was also shaped by what they considered appropriate patterns of activity for babies of a given sex. "When dress and names signified maleness women offered verbal encouragement to the infant's gross motor activity and responded themselves with further motor stimulation. Yet the gross motor activity of the same infant whose dress and name signified femaleness elicited soothing and calming" (*idem*, p.34).

This study indicates that in the process of development, the child enters into a world which is already highly structured in terms of the social representations of gender shared by adults in a given community. Insofar as social representations of gender become objectified, that is, insofar as they are projected into the world, they are constitutive of the reality into which the child is born and grows up. The material culture (e.g. toys), as well as the social environment, are pre-constructed on the basis of representations of gender. Although toddlers are not themselves actors in the semiotic field of gender, they function as signifiers for others. Adults interact with them *as* boys or girls, and thus provide them with the symbolic resources to develop, initially through practical activity and later through intellectual understanding, a gender identity. Sex, through its inevitable coupling with gender identities, is therefore no more a "natural" category than the human body or health and illness.

What, then, would constitute a truly "nonsocial" object? Could inanimate objects, such as buildings, parks, monuments, or the physical environment in general, qualify as such? Milgram's (1984) analysis of "cities as social representations" disqualifies the built environment as a nonsocial object. He argues that cities are social objects *par excellence* since they represent "the product of intensive and prolonged social activity, containing the embodiments not only of one's

contemporaries, but of the accumulated labours, decisions, and values of earlier generations" (Milgram, 1984; p.293). His work with Jodelet (Milgram & Jodelet, 1976) on the image of Paris reveals that the evaluation of "arrondissements" - in terms of the expressed desire to live there, of the knowledge of their architectural characteristics, of their resident population and of the main types of social and economic activities found in each of them - is organised around a geographical and symbolic knot which corresponds to the historical heart of the city. Parisians today experience their city through socially shared representations which articulate and reify the past and present economic, political, and social struggles which have marked the development of the capital. The boundaries between known and unknown sectors of the city partly follow the route of the last wall of Paris, "les fermiers généraux", which was abolished in 1859. The working class areas and those occupied mainly by ethnic groups are equally less known and often stigmatised. Contemporaries' representations seem to reflect and express prejudices about the residents of various "arrondissements".

Chombart de Lauwe's (1971, 1979) analysis of the social representations of childhood also teaches us something about the ways in which the built environment is imbued with collective meanings which exert a coercive power over individuals. Her vast study on the evolution of the representations of childhood, which takes the second half of the 19<sup>th</sup> century as its starting point, uncovers these changing representations in a variety of media: novels, autobiographies, movies, etc. She also conducted a series of interviews with architects and town-planners in order to retrieve their conceptions of children. Cutting across the different social discourses she gathers, there appears a coherent and somewhat mythified representation of the child. The latter is consistently contrasted with the adult: in a series of binary oppositions, the child is associated with nature, spontaneity, authenticity, direct communication, and freedom, whereas the adult is coupled with society, normative conditioning, lack of authenticity, interested relationships and constraints. For the purpose of the argument, what matters is that there often exists a significant discrepancy between the real experiences of children and the social representations which adults hold about them. And yet, children do live in physical worlds which objectify the social representations of childhood held by adults. They go to playgrounds, kindergartens

and parks whose design crystallises how architects and town planners represent childhood. And so, children live and are socialised, indeed, in a "world apart".

Again, Jodelet's (1989/1991) work is relevant here. In her monograph on social representations of madness, she shows how the organisation of social spaces in Ainay-le-Château functions to circumscribe contacts with *bredins* - "loonies". Jodelet demonstrates how rules of spatial segregation are passed on and become more rigid from one generation to the next, and how they serve to instigate a social order which protects the inhabitants' identity. This study is instructive; the organisation of space, of the physical and social environment, does not emerge spontaneously, nor without consequences for social life. It is structured by ideology, cultural models of usage and normative beliefs. It also serves social and affective functions, notably the protection of identities.

As these examples show, the built environment, the world of inanimate objects, the organisation of space, cannot be said to be nonsocial. They are already constructed and structured in terms of social representations which give them meaning and which have direct consequences for human activity.

### **3.1.1. Two versions of social constructionism in social representations theory**

The studies reviewed above expose the fallacy of a dichotomy between the realm of the "social" and that of the "natural". So-called natural objects inevitably become social from the moment they begin to exist for human beings, that is from the moment they begin to signify something. An object is an object for someone - that is a Hegelian, rather than Cartesian, perspective. The ideas, beliefs and images which are held about these objects arise in social contexts; they originate in social communication and interaction. They are shared by members of a group and characterise this group. They also serve social functions. On these defining attributes, social representation theorists are in agreement. The rub of the matter concerns the extent to which social representations actually constitute reality itself. Different versions of social constructionism seem to be involved.

Some studies favour a "weak" version of social constructionism. Jodelet's (1984b) analysis of the social representations of body, Milgram and Jodelet's (1976)

investigation of the representations of Paris, and Herzlich's (1969/1973) research on health and illness belong to this group. The three studies are essentially concerned with changing ideas, images and evaluations about otherwise unchanging objects. This, I would argue, does not stem so much from the concept of social representation itself as from the methodological procedures used to investigate it empirically. Practices are not given due attention. One is therefore left having to infer the consequences of changing social representations.

For instance, in Jodelet's (1984b) work, men and women *talk* about and attempt to change the dominant images of the body which make up their symbolic environment. But what about non discursive practices? Do people try to shape their bodies? Young girls and, more recently, teenage boys suffer from anorexia nervosa and bulimia - both of which are spreading at an alarming rate. Diets, meditation, physical exercise as an activity in and for itself, or the practice of "safer sex" are all manifestations of the coercive exhortations to control one's body which permeate western societies. There may indeed be greater flexibility and diversity in the discourses around the body, but these novel representations are as prescriptive as ever (Foucault, 1979). It is reasonable to assume that a greater emphasis on practices would have yielded somewhat different results. It would certainly have shown that changing social representations of the body, in a very real sense, create different bodies. A similar critique could be made about Milgram's (1984) and Herzlich's (1969/1973) analyses.

Both Lloyd and Duveen (1990) and Chombart-de-Lauwe (1971; 1979), on the contrary, afford us a "strong" version of social constructionism. For them, social representations do not simply arise in social contexts and through social interaction; they also create reality. In their analysis of the development of identities in relation to social representations of gender, Lloyd and Duveen demonstrate how objectified representations are projected onto babies who, though not yet able to manipulate gender-related symbols themselves, nevertheless come to behave according to the expectations of their care-takers. By adopting a developmental perspective, they show how significations which circulate in society as a whole become subjectively real for individuals.

Chombart-de-Lauwe's analysis of childhood is also firmly rooted in a social constructionist epistemology. For her, representations of childhood are almost Durkheimian social facts. They have, at once, a subjective meaning for novelists, architects and town planners, and an objective existence in books, parks and nurseries. Objectified subjective processes - themselves related to prior social representations of childhood shared by adults - make up the world in which children grow up. Children are represented as being fundamentally different from adults, and a separate world is created around them which institutes and sanctions the difference.

If the theory of social representations is to propose a version of social constructionism which transcends phenomenology, then an explicit focus on practices and on objectification is necessary. There also ought to be a greater emphasis on change: developmental approaches and longitudinal research designs can make important contributions to the theory of social representations. In particular, more studies are needed on the circumstances under which social representations become "de-objectified", that is, when the taken-for-granted character of social representations disappears as new meanings challenge previous ones, as marginal social groups confront dominant ones, as new social psychological practices shake the foundations of those upon which the very objectivity of the world rests.

Two seminal studies, one by Lévi-Strauss (1955/1961), the other by Bourdieu (1970), exemplify how the physical environment objectifies meanings about the group, and how it is read as a representation by members of that group. The analysis of the Bororo village of Kejara proposed by Lévi-Strauss in Tristes Tropiques (1955/1961) is exemplary. The anthropologist describes the circular distribution of huts around a central house and the relation of this structure to the four cardinal points and the river nearby, on the one hand, and to the social structure and metaphysical system of the Bororo people, on the other hand. Without going into a detailed account of Lévi-Strauss's analysis, it suffices to say that the physical organisation of the village objectifies the social structure and the symbolic order of the Bororo: rules of filiation, myths of origins, relationships between the living and the dead, between man and the universe are all inscribed in the physical environment. The village itself represents an extraordinarily complex cosmology. Through the

process of objectification, space is read as a representation, refers to representations and is explained by representations.

Bourdieu (1970), in a tribute to Lévi-Strauss, analysed the structure of the Berber house and its function in the production and reproduction of social relations. The Berber - kabyle - house embodies and expresses a series of oppositions. Indeed, the house at once unites and separates the private and intimate world of women, and the public and open space of men; the life of the senses and the feelings, and the life of dialogue and exchange; the cooked and the raw; fire and water; darkness and light; night and day; high and low; culture and nature. "The relationships of opposition are expressed through a whole series of convergent signs which establish the relationships at the same time as receiving their meaning from them" (Bourdieu, 1970; p.153). Bourdieu's analysis makes it clear that the meanings attached to the house can only be understood in terms of some common principles which structure both space and social practices. The use of space - both inside and outside the house - is explained by reference to some underlying representation which also organises social relations. The theoretical unity between the physical environment, social relations, and symbolic practices is asserted.

### **3.2. Social representations and nature**

However insightful these studies may be, they are not concerned specifically with "nature". In fact, there is no literature on the social representations of nature *per se* (except, tangentially, and from a rather more cognitivist perspective, the work of Guimelli (1989) on hunting). This void is particularly remarkable in view of two considerations. First, no human society can exist without modifying the natural order, without some representation of their rapport to nature, and without some language to express and construct such representations. Second, the predominance of the "natural question" in contemporary societies would seem to make representations of nature a prime object of analysis. Indeed, our century has seen the developments of quantum physics, of the theory of relativity, of cybernetics, of molecular biology and "genetic engineering"; it has witnessed the explosion of nuclear bombs as well as ecological and geomorphological changes on an unprecedented scale. The sheer scale of the

transformations engendered by human beings, as well as the qualitatively different modes of intervention whereby we can effectively annihilate or preserve a species or a forest, create new synthetic matter, modify the atomic structure of existing elements, and even alter the DNA structure of our species, have brought about a fundamental shift of the traditional boundaries between "nature" and "culture"; they have brought to the fore the necessity of locating humankind amongst the forces of the material world. Such transformations are not issues for natural scientists alone. The general public is now weary of bio-technologies and finds it increasingly difficult to draw the line between "nature" and "culture". Important social movements were also born out of a growing disenchantment with the ideology of progress, itself based on a particular socio-historical relationship between man and nature. Environmental groups, thanks to the media, ensured that, by the 1980s, "ozone holes" and the "greenhouse effect" would be part of the layman's vocabulary. A complex conjunction of scientific developments, technological advances and ideological changes, together with the consequences of the economic boom, have transformed our social representations of nature. It is now necessary to propose a coherent theory of the genesis of different representations of nature, to map the origins of today's novel representations and to explore how they coexist with older ones.

### 3.3. Nature has a human history

Moscovici takes us a long way towards the development of a general theory of the creation, maintenance and transformation of social representations of nature<sup>1</sup>. In two complementary essays (Moscovici, 1968/1977; 1972/1994), he addresses himself to the issue of the relationships between nature and society. Although neither La Société Contre Nature (1972/1994) nor Essai sur l'Histoire Humaine de la Nature (1968/1977) are written explicitly from a social representational perspective, both are

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<sup>1</sup>In February 1997, I was asked to write a book review of the English translation of Eder's The Social Construction of Nature: A sociology of ecological enlightenment (1988/1996). I found out that my own work, developed some years before and presented in this chapter, contains remarkable parallels with Eder's. We both drew on Moscovici, and I would of course concur with Eder that "the starting point in Moscovici (1968) makes possible a more suitable conceptualization of the relationship between nature and culture than is possible with older and more recent sociological theoretical approaches" (Eder, 1996; p.9ff). A more detailed discussion of Eder's book and, implicitly, of the similarities and differences between his research and mine can be found in the **British Journal of Sociology**, Vol. 48 (4) to be published in December 1997.

germane to the present project. Moscovici's essential argument is that both the assumed non-historicity of nature and the separation of the latter from the sphere of human activities are simply (in)convenient fictions. Nothing warrants a strict dichotomy between some reified "Nature" untouched by human practice, and a "Culture" which would be divorced from its material substratum. The historicity of collective endeavours, in as much as it rests upon constantly renewed exchanges with material forces, suggests that natural orders must also have their history; *a decidedly human history* (Moscovici, 1968/1977).

Moscovici's thesis can be summarised in the following way<sup>2</sup>. Human beings have not remained the same throughout their history. Similarly, Nature as an immutable given is forever inaccessible; instead, what we find is a succession of *natures*. From the moment human beings begin to act upon material forces, Moscovici argues, they also create themselves, that is their historically and spatially located *states of nature*. A state of nature corresponds to a particular material configuration, itself brought about by the development of a given type of labour which, in turn, both reveals and fosters certain human skills and forms of knowledge. It is thus impossible to isolate what would constitute a "primary" or "original" human nature; one only encounters secondary natures, as it were, never reaching a primitive state out of which humankind would have been born. Particular natural configurations include *humankind as an internal, creative, organising factor*. They cannot be deduced from some autonomous natural processes. We must therefore relinquish conceptualisations of "nature" and "society" which reify these two terms as either unrelated or antithetical spheres of reality. From this perspective, sciences, techniques, arts, philosophies - in short that which is usually considered as quintessentially social or cultural - are but modalities of interaction with material forces, means through which *we create and reveal our nature*. Any human practice, by virtue of being human, belongs to the realm of nature. By the same token, any

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<sup>2</sup>This account of Moscovici's thesis is incomplete. Chief amongst the omissions is the scholarly analysis of artistic, philosophical and scientific treatises wherein Moscovici traces the transition from one natural state to the next. This thorough documentary analysis allows him to isolate the genesis of each state of nature at different historical times. I have also left out the social, political and scientific programme which Moscovici takes to be a necessary corollary of his conceptualisation of the social construction of nature. Despite these important omissions, and despite the fact that discussing Moscovici's empirical analysis clearly lies beyond my competence, I believe the presentation outlined below provides sufficient grounds to discuss the general thesis.

natural configuration is, in part, a human creation. The creation of states of nature must therefore be understood in terms of the concrete practices of specific social groups, or *natural categories*, which act as bearers of change. Natural categories are social groups who create new forms of labour.

Discussing the processes through which humanity jointly and simultaneously creates itself and its states of nature, Moscovici distinguishes between the production of objects and the creation of labour. It is the latter, defined as practices that engender new faculties, new skills, new "savoir-faire" - in contrast to the application of already existing knowledge and abilities to the production of goods - which, for Moscovici, constitutes the basis upon which the human species asserts itself as a subject both of, and in, nature. Two natural processes, in turn, are jointly involved in the creation of labour: invention and reproduction. Invention refers to "the methods by which man adds new abilities, knowledge, reflexes to already existing ones, thereby forcing phenomena in the material world to interact amongst themselves and with the human organism" (Moscovici, 1977; p.55) in novel ways. Invention in this sense does not create some artificial anti-nature: on the contrary, *it is the accomplishment of our very nature*. Reproduction, on the other hand, refers to the repetition of productive acts. It consolidates the relationships established by human beings among themselves, with other species and with their surroundings, thus linking their "biological" and "social" being to the physical environment. The reproduction of abilities and knowledge ensures the stability, permanence and expansion of our natural states. Since invention and reproduction generate new properties in the total universe of material, biological and social forces, they are essentially *natural* processes (Moscovici, 1972/1994). In short, the human history of nature is the history of the social construction of states of nature through the activities of members of natural categories who, by their labour, effect changes both in matter and in themselves.

Before I discuss the strengths and short-comings of this thesis, let me describe briefly the states of nature - organic, mechanistic and cybernetic - identified by Moscovici as having emerged from the natural division of society. These *ideal-types* will be used to analyse the data collected during the field work in Shetland.

### 3.3.1. Organic nature

According to Moscovici, the organic state of nature begins to appear towards the end of the neolithic period, reaches its quintessence in Greek art and philosophy, and disappears with the advent of the Renaissance. The main characteristics of this state of nature are that 1) labour has an essentially *artistic* quality, and 2) the material world is treated exclusively as a source of *raw material* (Moscovici, 1977; p.87). Whereas the farmer takes care that society reproduces itself, the craftsman - the new and key figure in the organic state of nature - transforms nature into something different, a second nature as it were, by producing pottery and metal objects. His labour is defined as much by his knowledge or potential creations as by his actual work. Corresponding to this craft activity is a partial differentiation of inventive knowledge. This knowledge, however, defies objectification in books, treatises or theories: bodily movements best express it. There is a relation of identity, as it were, between human beings and their abilities. In organic nature, Man is at the centre of the world, being at once its privileged subject and the most accomplished of its objects.

Human skills are directed towards material resources - wood, iron, stone - but these appear only as raw material, as given, as something which will be transformed by artistic labour. Of course, artistic labour does not imply an unmediated relationship to material resources; the creation of tools is a central feature of the organic state of nature. These tools, however, are essentially extensions of human organs, allowing individuals to intervene in areas where they could not easily have done so (the invention of tongs to handle red-hot iron), to develop better motor coordination (the potter's wheel), to amplify raw muscular strength (the lever, the pulley) and, in general, to increase efficiency. "There is therefore no radical discontinuity between man and the substances to which he gives shape, affixing on them the seal of his knowledge." (*idem*; p.90). The tools created and reproduced through and for artistic labour serve not only to produce goods: their primary creation, somewhat paradoxically, *is human beings themselves*; men and women with more sophisticated and better adapted organs, with new skills and abilities. Thus, in the organic natural order, human beings produce themselves as they reproduce what

has already been created. And they use material resources as substances, considering solely those qualities which can be used by the craftsman. Raw materials may assume different *forms* but their *structure* remains intact.

### 3.3.2. Mechanistic nature

With the Renaissance, things change dramatically. The organic solidarity which previously linked the biological substratum of the species to its manual and intellectual skills begins to dissolve, as both terms become more independent of one another. *Instrumental labour* and *matter as force* are the new elements of this natural state (Moscovici, 1977; p.93). The mechanisation of the world means that labour becomes an attribute of any material force, organic or not; each of these forces is envisaged in terms of its potential for producing work. The relative independence of instrumental labour from the worker manifests itself in a number of ways. First, it appears in the growing concern for effects rather than for causal agents: human beings, animals and water-falls become interchangeable as sources of energy insofar as they can generate similar effects. Second, the organic, qualitative link between skills and the labour force erodes as work takes on a purely quantitative character. Labour becomes measurable in terms of the expenditure of energy and time necessary for the creation of a given product. It is now endowed with general characteristics which permit one to separate it from the working subject: labour is transformed into an object which can be manipulated.

The instrumental quality of labour is also derived from its end which is, literally, the invention of instruments: the clock, the water pump, the astronomical telescope. Such inventions modify human biological qualities, sharpening some senses (sense of measure, of time, quantitative and abstract judgement) whilst rendering others subordinate (intuition, tactile sensitivity, qualitative judgement). Moreover, the important role attributed to invention creates a need for new means of acquiring and diffusing knowledge. Although most engineers - the key protagonists of this state of nature - still train in workshops, formal instruction supplements the traditional forms of education. And with the establishment of institutions devoted specifically to the

production and dissemination of knowledge, the process of invention now occupies a more central place: it is both permanent and widespread.

In this context, the quality of matter as a substance or raw material subsides and it appears primarily as a force, a source of energy. Its structure is that of a set of homogeneous bodies which can be set in motion and which produce movement. Attributes such as mass, volume or kinetic energy become more immediately relevant at the expense of the material qualities of shape, texture and colour which dominated in the organic natural order. Whether directly or indirectly, the principles of instrumental labour dictate how laws concerning the physical elements are formulated; these laws, in turn, inform practices. Reduced to being an organised set of forces, nature seems to be regulated by a set of precise and eventually uncoverable laws. These appear measurable, objective, independent of human action since man has become equivalent to any other material force.

"If, in the organic state of nature, man produces himself as he reproduces primarily what has already been created, in mechanistic nature it is presumed that the totality will be accessible and rendered transparent, as it were, at the end of man's incessant and predetermined inventive activity. In the first case, man recognises as real only what is deemed to be possible; in the other, he acknowledges as possible only what is already real." (*idem*; p. 98)

In the mechanistic order, Moscovici claims, nature itself appears limited and the discovery of its limits seems well within our reach. Once the laws of force and of movement are discovered, the universal machine will be doomed to endless repetition and reproduction.

### 3.3.3. Cybernetic nature

The transition from the organic to the mechanistic state of nature has seen a profound transformation in the nature, processes and function of labour from being artistic to being instrumental. Concomitantly, nature itself has changed from being a repository of raw material or substantive forms to being a set of forces and a source of energy. In the process, some human skills and faculties have disappeared whilst

others have developed. With the advent of the cybernetic state of nature at the end of the 19<sup>th</sup> century, more fundamental qualitative changes were to take place. For the first time and on a grand scale, human beings are not content with shaping, fashioning, reproducing and understanding existing material forces; they now endeavour to generate new ones. The revolution is striking: matter does not simply appear as given; rather it is its potentialities that are sought. In other words, the *final* rather than the primary qualities of matter become central (Moscovici, 1977; p.98). Indeed, the development of chemistry has provided the means of producing ever-new materials either by changing the internal structure of a given material system or by altering the interactions between two or more such systems. Thus, even if substance and force are still important, the central qualities of matter in the cybernetic order are their *structural and systemic* properties<sup>3</sup>. This is without doubt a decisive turning point in the human history of nature. We can no longer identify, quantify and foresee the evolution of matter since new, original products are continuously being created. The human relation to materiality has changed forever. What is available to our senses is but one of the multiple states which matter may assume. The cybernetic natural order is hierarchically structured, with different laws and determinisms governing each level<sup>4</sup>.

The emergence of the cybernetic state of nature is, of course, intimately tied to a new form of labour. The discovery of electricity and of electronic components has provided machines with a much greater degree of autonomy. Men and women no longer have to stand by machines to fix them in case of a mechanical breakdown: their role is to establish norms and programmes to regulate their functioning. Once the systems have been activated, human intervention is limited to the supervision, monitoring, control and interpretation of signals indicating the relative degree of

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<sup>3</sup>The matters produced through chemical reactions are generally referred to as "artificial" since they do not exist in Nature. However, their very existence being a product of human intervention, of novel interactions with the physical world, such materials clearly belong to *our* nature.

<sup>4</sup>The inherent relativity and historicity of material forces could not be more powerfully expressed than in the idea of a changing curvature of space as a function of time, of a geometry intrinsically linked to a chronological cycle. Time itself has lost the immutable character of a general external category which it still assumed in the mechanistic state of nature to become, instead, an internal dimension. These notions may not be definitive but they seem highly plausible. Moreover, it is now commonly accepted that matter (a star, for instance) has its own evolution, analogous to that of a biological species.

adequation of the system's operations to the norms fixed beforehand. Labour therefore becomes essentially *regulatory*. The phenomenal speed at which material forces are invented calls for a more systematic approach to invention and to the creation of labour. Scientists, in this context, become the main protagonists of the cybernetic order, devoting their efforts to the methodical creation of labour.

The table below graphically summarises Moscovici's typology of states of nature. The types of labour performed by given natural categories rest upon different uses of matter which, in turn, result in the creation of different states of nature.

**Table 3.1. Typology of states of nature, according to Moscovici (1977)**

State of nature	Matter	Type of labour	Natural category
<i>Organic</i> End of neolithic to Renaissance	Raw material, substance	Artistic	Craftsman
<i>Mechanistic</i> Renaissance to end of 19 <sup>th</sup> century	Force and energy	Instrumental	Engineer
<i>Cybernetic</i> End of 19 <sup>th</sup> century to now	Potential systems	Regulatory	Scientist

#### **3.3.4. States of nature and social representations of nature: Towards a social constructionist social psychology of nature**

How relevant are Moscovici's essays to the case study presented in this thesis, to the theory of social representations, and to the programme of a social psychology

of nature? What are the relationships between states of nature and social representations of nature? Can the tripartite typology - organic, mechanistic and cybernetic natures - be used to account for contemporary representations of nature? These are the issues to which I now turn.

#### 3.3.4.1. Nature problematised

There are a number of productive ideas in Moscovici's essays. First and foremost, we find a problematisation of nature through the notion of a human history of nature. Moscovici does not postulate a stable and unitary physical world which would operate in accordance with some immutable and objective laws, and in front of which humankind would stand as a passive observer. Rather, he seeks to find the roots of changing states of nature in the practices of various groups. His work is inherently social and historical; it focuses on the *knowledges* and skills carried by particular groups, on collective meanings and material practices. This is precisely what attracted me to the thesis<sup>5</sup>. Such a conceptualisation is undeniably a modern one, rendered possible by recent epistemological, scientific and ecological revolutions; these force upon us the recognition of the social nature of natural events. Whatever its sources, however, it shows that the boundaries between man and nature, as well as the content encompassed by both terms, do not correspond to some fixed reality but are social products; as such, they change over time. Where and why such boundaries are created becomes a matter of empirical investigation. The analysis of social representations of nature during the *Braer* crisis in Shetland will shed light on such issues.

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<sup>5</sup>I should perhaps open a parenthesis on the research process here. The ecological crisis which prompted the research happened early on, in January 1993, and so the data were collected with little clear view as to how they might be subsequently analysed, except for a strong commitment to study the social representations of nature/the environment which would emerge in this context. During the following year, I searched through the literature in social, environmental and ecological psychology to see if there existed a theoretical framework which shed light on the data. It was this (immediately) unfruitful quest which led to the critique of environmental and ecological psychology formulated in the first chapter. In parallel, I was conducting some preliminary data analysis and became convinced that the actors involved in the oil spill, whether the local residents or the outsiders who came to help, were not talking about the *same* nature. For some, the oil spill was an existential crisis, for others, a technical and scientific problem, and for others still, an economic disaster. Different social representations seemed to be involved. Moscovici's thesis provided an approach to conceptualising and investigating such divergent representations and to locating their genesis in the wider context of European thought. Thus, although the presentation of *Essai sur l'Histoire Humaine de la Nature* precedes the data analysis in the thesis itself, it was chosen for its potential in accounting for the early empirical findings as well as to further the analysis.

The radical character of Moscovici's theory becomes apparent if one also recalls how environmental and ecological psychologists conceptualised the "environment". They had little to say about the environment as an object which came into being as a result of the diffusion of scientific knowledge, which is constituted symbolically through communicative and material practices, and which is the focus of intense political, economic and ideological debate. Yet, an explicit concern for the conditions of emergence and for the content of this new object is crucial. Although both environmental and ecological psychology have been profoundly influenced by the so-called ecological crisis, the main protagonists of the disciplines continue to conceive of "the environment" in naturalistic terms. Underlying these otherwise radically different approaches, there remains a conception of the environment as a simple given (save for the Transactionalist School).

Moscovici, in contrast, does not adjudicate beforehand as to what constitutes the "nature". His thesis also successfully resolves the problem of the dichotomy between the "pre-perceptual" and the "post-perceptual" environments which so puzzled both Lewin and Barker; he does away with it altogether by positing humankind as their common denominator, as an internal, regulatory factor in the creation of nature. The Transactionalists did attempt to problematise the environment by focusing on the transactions between the latter and subjects. But they confined their analysis to the level of individual subjects, as though the accumulated past experience of a single person sufficed to explain his/her "hypotheses" about the environment. As the subjects entered the laboratory, they left their society, culture and history at the door. One is tempted to say that environmental and ecological psychologists themselves live in a finite and objective mechanistic state of nature, detached from human experience. Their theories are based on but one of the possible forms which the relationships between nature and society may assume; a form which sanctions the separation between humankind and nature.

### 3.3.4.2. Natural categories: Linking practices and knowledge in relation to nature

I should also emphasise the value of the concept of natural category. Its relevance to the empirical situation found in Shetland will be further discussed at a later stage (see chapter 6), but the elements which are directly related to the programme of a social psychology of nature can be assessed now. The strength of the concept lies in its potential for articulating the ideas and practices of specific groups about *nature itself* in a coherent fashion. Insofar as one is interested in the genesis, structure and content of social representations of nature (including material practices), it is essential to isolate the natural categories or social groups who participate in the construction of different representations. This approach implicitly rejects other commonly used sociological means of delineating social groups<sup>6</sup>. If one aims to understand the evolution of the symbiotic relations between human beings and material forces, an explicit concern with the changes in what is considered, used or represented as nature becomes necessary. Furthermore, it is essential to address the inalienable skills and *knowledges* possessed by members of natural categories and to accord them a constitutive, rather than epiphenomenal, status<sup>7</sup>.

This theoretical and methodological approach also contributes to the theory of social representations by explicitly binding practices to discourses, ideas and images. Most studies on social representations have privileged the analysis of verbal material at the expense of meaningful actions. Yet, practices can only be rendered intelligible

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<sup>6</sup>One such means would be to consider the positionings of social actors in terms of social classes. However, this would be inadequate. Since the fragmentation of societies into social classes concerns the objective laws according to which wealth is differentially appropriated by various social groups in the relations of production, such an analytical device refers mainly to social, economic and political processes.

<sup>7</sup>This approach may be taken as a critique of McKinlay and Potter's (1987) critique of social representations theory on the grounds of some circularity whereby social groups and representations are co-extensive. They have argued that one of the theory's major conceptual flaws is that "what makes a group a group is exactly the shared representations of its members" (McKinlay & Potter, 1987; p.474). Therefore, they tell us, social representation theorists are bound to find the representations they are looking for since they search for them in the very groups which are assumed to possess them. This criticism stems from a particular conception of science and, more specifically, from a positivist notion of causality. Social representation theorists, as social constructionists, do not endorse this conception: social representations are not *caused* by sociological determinants operating from the outside. They are structurally bound up with the social conditions of their production and use; their genesis, content and structure reveals and reflects such conditions. This is so because social representations exist both as psychological structures and as social realities. Identifying groups on the basis of their particular rapport to materiality is simply better suited to the object of analysis.

when they are conceived as part of a network of meanings. Conversely, these practices also participate in the elaboration of the ideas and images which constitute the total system of the representation. Jodelet's (1989/1991) study of the social representations of madness attests to the value of an explicit concern with practices as an expression of underlying representations, rather than as an outcome of the latter. Moscovici undertakes a similar project when he locates the genesis of different representations of nature in the meaningful actions of craftsmen, engineers and scientists. Although these practices are mainly accessed through written accounts (often by contemporary commentators), they have also resulted in the production of artifacts, of machines and buildings, of new chemical elements, all of which constitute the data used by Moscovici for the construction of his typology of the states of nature. These historical figures are central to his thesis because the social groups which they comprise are united by a common rapport to materiality.

#### **3.3.4.3. From states of nature to social representations of nature**

Moscovici discusses *states*, not *social representations*, of nature. Given that he is best known amongst British social psychologists for having introduced the theory of social representations, this choice may seem surprising. In any case, it cannot be dismissed lightly. I believe the rationale for this implicit rejection of the theory of social representations to be two-fold. First, Moscovici is concerned with establishing a general theory of society/nature which would be valid at all times and - although his tripartite typology is firmly rooted in European history - valid across all cultures. This classical endeavour appears incompatible with the theory of social representations. The latter aims to account for the genesis and nature of a new form of social knowledge which would characterise "the world of today" (Moscovici, 1988; p. 213). Social representations, then, would be associated with, and restricted to, the contemporary era (Moscovici, 1982; 1984a). Moscovici insists on distinguishing this form of knowledge from both primitive thought and science. However, since the organic state of nature is, at least partly, related to the former, and since both the mechanistic and cybernetic states are, to a large extent, outcomes of the latter, it seems logically necessary to treat the genesis of these natural states as unrelated to social representations (except in the

case of cybernetic nature), at least insofar as the latter are defined as modern, common sense knowledge.

Second, Moscovici's reluctance to frame his essays in terms of the genesis and diffusion of social representations of nature stems, apparently, from the explicit emphasis which he wishes to grant to practices, as opposed to ideas and values. In a discussion of Crombie's (1948) reflections on the history of scientific conceptions of nature wherein the historian identifies three main concepts of nature which, Moscovici concedes, perfectly map onto his own typology, Moscovici criticises the fact that Crombie restricts his analysis to the sphere of ideas, thereby precluding the attribution of "a concrete existence to abstractions" (Moscovici, 1968/1977; p. 109). Since I intend to use Moscovici's typology to investigate *contemporary social representations* of nature, it is important to address these two points - the specificity of social representations as modern phenomena, and the relation between ideas and practices. Both raise important epistemological and theoretical questions.

Are social representations exclusively modern phenomena? We are faced again with the paradox, discussed at length in the previous chapter, concerning the general and the particular aspects of the theory. As before, I believe it is necessary to favour an anti-generalist view and to consider social representations as structurally related to social conditions and, therefore, as particular forms of knowledge characteristic of modern societies. This seems coherent with Moscovici's determination not to use the concept of social representations in order to refer to sets of practices and modes of knowledge corresponding to past forms of social/natural organisation. The problem, then, is to describe and to explain how modes of knowledge and specific contents associated with past *states of nature* can survive in contemporary societies as *social representations of nature* or, more precisely, as elements in a heterogeneous representational field with respect to nature. I would argue that the very fact that these elements have survived in modern society is sufficient for them to qualify as social representations. This, in turn, would imply that social representations are not a simple, monolithic, form of knowledge, but that they themselves encompass various modalities of thought. This would correspond to what Moscovici (1961/1976) called "cognitive polyphasia". It would also support Jodelet's (1989/1991) findings that, in spite (or perhaps because) of scientific medical knowledge, there survived an "immense magical

conclave" in Ainay-le-Château. Generally, representations which have lain dormant for centuries often reappear and lend shape to new realities. The Renaissance epitomises this process of rediscovery and re-actualisation. Moscovici may be describing by-gone states of nature, but the collective representations generated in the past are still part of the stock of common sense knowledge today. Societies remember (Connerton, 1989; Halbwachs, 1950).

Concerning the relationships between ideas and practices, it is surprising that Moscovici should choose to refer to "states" of nature in order to link concepts about nature to exchanges with the material world. His critique of Crombie is entirely justified since Moscovici is not concerned with a succession of different "concepts" of an otherwise identical nature, but with very real transformations in both the physical world and human beings as a result of changing cognitive, symbolic and material practices. What is unclear, however, is why the concept of social representations is not used to this end. If social representations are indeed constitutive of the realities represented; if, as social constructionism suggests, the object and the subject of knowledge are no longer treated as separate and independent entities; if social representations are defined as "systems of values, ideas and practices" (Moscovici, 1973; p.xiii), then there is no theoretical reason to substitute the notion of state for social - or perhaps collective - representations. This only undermines the radical significance of the theory of social representations which was introduced in social psychology as "a critique of approaches which rested on a separation between cognitive and behavioural elements" (Duveen, 1994; p.208). Representations structure practices as much as they inform ideas and values, and meaningful actions transform the material world as well as social actors. This has always been an assumption of the theory.

Once it becomes possible to think of contemporary social representations of/in nature as "traces" of previous states of nature preserved in the human body, in rituals, artifacts, collective memory, and in "nature" itself in its current configuration, then the possibility of a critique of *any* social state of nature is opened up because there is nothing necessary about it. This paves the way, for instance, for a "symmetrical anthropology" (Latour, 1991/1993). The theory of social representations constitutes a privileged tool with which to analyse the social construction of the multiple representations of nature which circulate nowadays and create the highly complex states

of nature characteristic of modern societies. Few would dispute that we live in a nature which is not exclusively cybernetic. The latter should be the case if Moscovici's last state of nature were indeed the only characteristic state of the contemporary period. Organic and mechanistic *representations* circulate and interact with cybernetic ones, modifying all of them in the process. We must therefore be able to handle the complex interweaving of different systems of beliefs about, and practices in relation to, nature. The theory of social representations provides a space where heterogeneity is acknowledged (see Rose *et al*, 1995).

"In a society like ours, an assumption of uniformity would lead one to underestimate the profound diversity *among* groups and the meaning of this diversity". (Moscovici, 1984b; p.959; *emphasis added*)

"Meanings that are contradictory can coexist [within a representation] without cancelling each other out." (Moscovici, 1988; p.236)

The theory of social representations allows us to understand both permanence and change, uniformity and diversity, in today's thoughts and practices related to "nature". Perhaps more importantly, it enables us to understand the existential meaning, for social subjects, of particular representations of nature. In a world characterised by diversity and reflexivity, living by a given representation of nature involves selective appropriation. The programme of a social psychology of nature would therefore investigate 1) the content of the social representations of nature which circulate nowadays; 2) how such representations have emerged in specific contexts and how they combine; 3) how, in the face of a fragmented representational field, social subjects position themselves in relation to nature; 4) what the ideological, normative, affective and practical determinants are of such positionings; and 5) under what circumstances a change of representation can take place. Moscovici provides a brilliant analysis of the sociogenesis of representations of nature. He is silent, however, about the social psychological and existential consequences of living by a given representation of nature, and of living in a world structured by diverse representations.

#### 3.3.4.4. The sociogenesis of contemporary representations of nature

Essai sur l'Histoire Humaine de la Nature proposes a general theory of man/nature relations. But it also provides the lineaments of a framework to study the genesis and content of contemporary social representations of nature. Indeed, Moscovici's typology of organic, mechanistic and cybernetic states of nature is a useful starting point provided that, as I said, we can telescope each "state" into the modern era and consider them as *constitutive of today's representational field*, rather than as erstwhile states. It locates the sociogenesis of today's representations in the wider context of European history.

There is, however, a major limitation in Moscovici's work; it has to do with the issue of content. The theory of social representations, together with other constructionist approaches, is equally interested in the content of representations as it is in their genesis, structure and functions, since it is this very content which, through the mechanisms of anchoring and of objectification, becomes constitutive of the worlds in which we live. Yet, in his essay, Moscovici can only provide a general analysis of the content of each state/representation of nature, one which, of necessity, is unrelated to particular social contexts. Perhaps this is not so problematic for the mechanistic state, since it is inherent to the *representations* which emerged in this context that nature itself should be conceived, experienced and acted upon as though it were finite, universal and objective, that is independent from the knowledges and practices of human beings. In other words, the mechanistic representation of nature seems to imply a unique, global perspective on nature, one which is indifferent to place and context, and whose content can therefore be defined *a priori*, once and for all, as it were. Even so, it must be important to understand why some social actors (individuals and groups) favour such a representation when at least two others are also part of their thinking environment.

But the content of both organic and cybernetic representations, by definition, is expected to change according to different socio-historical contexts and interests. If the organic state of nature indeed emerges from the intrinsic solidarity which links human beings to their always particular material worlds, if Man is indeed at the centre of all things in this state of nature, then "the number of possible local perspectives is

potentially infinite" (Ingold, 1993; p.41), and the specific contents of organic representations must be described and explained. Similarly, the content of cybernetic representations of nature is not stable and unrelated to the particular interests of the people and institutions which diffuse them. The creation of our cybernetic nature crucially raises the old question of final causes, of the specific properties of material systems which are to be emphasised, and of the uses to which the latter are put. Since in cybernetic nature the creative manipulation of matter by humans is explicitly recognised and actively sought, the interests which shape the content of cybernetic representations of nature must be analysed in context. The contents and workings of both organic and cybernetic representations must therefore be investigated empirically.

It is to such a detailed examination that the current thesis is devoted. The empirical analysis will emphasise the content of the plural, complex, and interdependent representations of nature which were circulating in Shetland in the aftermath of the oil spill. It will also make implicit the functions served by each representation, as well as the social psychological and existential reality of living by any one of them.

### **3.4. Conclusion**

The object of this chapter was to provide a problematisation of nature as a social psychological object. I have begun by reviewing social representations studies which challenge the dichotomy between nature and society. This review had two aims: first, to examine how "natural" objects can be conceived as social constructs; and second, to discuss ambiguities within the theory of social representations concerning social constructionism and, by extension, the ontological status of social representations. I have argued that social representations theorists should adopt a strong version of social constructionism, that is one according to which social representations do not only pertain to changing ideas and images about unchanging objects, but where they actually construct the world in which we live, as well as our understanding of the latter.

I then introduced two essays by Moscovici on the relationships between nature and society. La Société contre Nature and Essai sur l'Histoire Humaine de la Nature

were chosen for a number of reasons. First, they propose an explicit problematisation of nature as the product of objectified human praxis. In this sense, they are genuinely social constructionist. Second, they offer a content-based typology of states of nature. The typology of organic, mechanistic and cybernetic states of nature provides some of the elements necessary for understanding the sociogenesis of contemporary representations of nature; it maps onto some preliminary analysis of the data collected in Shetland and will be substantiated by the analysis. Third, the concept of natural category is a key theoretical and methodological construct to relate the ideas and practices of particular social groups about nature *per se*. And fourth, Moscovici's essays have allowed us to reconsider the traditions of environmental and ecological psychology discussed earlier. Indeed, I have argued that these traditions are often themselves based upon a mechanistic representation of nature. Because scientists themselves implicitly sanction this representation - and fail to envisage other possible ways of relating to nature - they also sanction the split between humankind and nature which this representation implies. Consequently, they are also left unable to account for the ways in which the environment and, *a fortiori*, nature, are socially constructed.

## **PART II: METHODOLOGY**

#### **4.0. THE *BRAER* INCIDENT: A CASE STUDY**

This chapter is devoted to providing a rationale, both theoretical and empirical, for the selection of the particular case upon which the analysis rests, and to introducing the case itself. It does not deal with the various methods of data collection (semi-structured interviews, group discussions, the media coverage of the event constituting the case, and participant observation) which are embedded in the research design. These issues will be discussed in the next chapter.

The first section addresses the nature of case studies in general and the justifications for their use. I then examine the relevance of case studies for the empirical investigation of social representations and consider a particular type of case, "crises", in relation to the latter. Finally, I present a diary of the events which provide the context and the content of this case study.

#### **4.1. On the nature of single case studies**

Case studies have had such wavering support from social scientists that their use calls for some prior justification. Case studies are detailed examinations of phenomena which are believed to exhibit the operation of some identified general theoretical principle (Mitchell, 1983). They are a way of organising social data so as to preserve the unitary character of the object studied. Case studies investigate contemporary phenomena within their real-life context, when the boundaries between phenomena and context are not clearly evident. They also make use of multiple sources of evidence (Yin, 1989). These attributes differentiate case studies from laboratory experiments (which rule out extraneous factors or contextual conditions), from histories (which typically deal with complex, interrelated but non-contemporary events), and from surveys (which attempt to relate the phenomena to their wider context but, in doing so, exclude a number of significant "variables") (Yin, 1989).

The case itself may be of several types: a singular event or process, an organisation, an institution, or a whole community. For the present project, the case is a unique event - the grounding of the tanker *Braer* in Shetland and the crisis that ensued. This event was selected for its potential in revealing the structure, dynamics

and functioning of social representations of nature in relation to the particular socio-historical context of Shetland society.

Despite their relevance to, and significance for, the development of social psychological ideas (Dukes, 1965), case studies have often been criticised for lacking generalisability, validity and replicability. Boring (1954), for instance, argued that such studies are of almost no scientific value due to the absence of control in the design. Miles (1979) considered them to be "essentially intuitive, primitive and unmanageable" (1979; p.597), and unlikely to "transcend story-telling" (1979; p.600). Campbell (1961) and Campbell and Stanley (1966) also warned against some of their inherent dangers, such as the impossibility of comparing data obtained from a single case or the uninterpretability of comparisons between two instances, the total lack of degrees of freedom, the likelihood of various common-sensical rationalisations and over-interpretations going unchecked, the tendency to capitalise on chance, etc. These criticisms, however, seem to be based on a "caricature" of case studies, as Campbell (1975) himself acknowledged<sup>1</sup>. Before I discuss why and how I used a case study to investigate social representations of nature, let me first address the "problems" usually associated with case studies.

#### **4.1.1. External validity**

Criticisms concerning the lack of external validity (or generalisability) of case studies seem to rest upon a misconception of the basis upon which an analyst may justifiably extrapolate from a singular case to more general social processes. The first issue here is that of the typicality or representativeness of the case. The degree of typicality is not inherent in the case *ex nihilo*; it depends on the level of abstraction at which the case is considered and on the choice of the "relevant" characteristics to be compared and generalised across cases of the same type. Moreover, as Gergen

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<sup>1</sup>In fact, Campbell and his colleagues (e.g. Campbell, 1975; Campbell & Stanley, 1966; Cook & Campbell, 1976) were not entirely opposed to using case studies. They argued that there were "countervailing relationships" between internal and external validity. "Since some trade-offs are inevitable, we think it unrealistic to expect that a single piece of research will effectively answer all the validity questions surrounding even the simplest causal relationship." (Cook & Campbell, 1976; p.245). Their work on quasi-experimental designs can be seen as an attempt to redress the balance between internal and external validity in favour of the latter. They aimed at increasing the ecological validity of research designs. Nevertheless, these methodologists still conceived of case studies as the weakest form of quasi-experimental designs.

(1973) argued, not all social psychological phenomena are equally stable: some are more highly susceptible to historical influence than others. Thus, the level of typicality is a function of the extent to which the analyst can establish that the case selected is likely to reveal the operation of some underlying general theoretical principle (Mitchell, 1983). The selection of a given case should be justified by its theoretical relevance or explanatory power rather than by its "typicality".

What kinds of inferences are warranted? A good deal of confusion has arisen because of a failure to appreciate the fundamental differences between the procedures appropriate to making inferences from statistical data and those appropriate to the study of a single case.

"In case studies, statistical inference is not invoked at all. Instead the inferential process turns exclusively on the theoretically necessary linkages among the features in the case study. The validity of the extrapolation depends not [primarily] on the typicality or representativeness of the case but upon the cogency of the theoretical reasoning." (Mitchell, 1983, p.207)

The criterion of external validity, as it has been defined in the context of randomisation, does not apply to case studies. The latter rely on analytical generalisation, in a way analogous to that of the experimental scientist who generalises the results of a laboratory experiment to the theory rather than to some general population. Analytical generalisation may involve a kind of "pattern-matching" between some implications derived *from the theory* (concepts, propositions and empirical generalisations) and the observations made in the local setting (Campbell, 1975). It may also entail the systematic confrontation of rival explanations. This strategy offers useful probes for the theory. The scientific value of case studies in this respect was also emphasised by Becker (Becker, 1970) who noticed that social scientists using this research strategy almost invariably found out that their initial theories, beliefs and tentative explanations were proven to be untenable. This most certainly describes my own experience.

#### 4.1.2. Internal validity

Internal validity can be defined as the extent to which variations in an outcome (a dependent variable) can be attributed to controlled variation in an independent variable (Cook & Campbell; 1976). The task incumbent on the analyst is to control the factors which may bring about variations in outcomes or to randomise those factors, thus avoiding various "threats" (Campbell & Stanley, 1966) to the internal validity of the study. The ultimate test of internal validity is that of the fit (isomorphism) between the findings of an inquiry and the "real world". However, the determination of such an isomorphism is "impossible in principle" (Lincoln & Guba, 1985): it is beyond the logic of statistical sampling because it necessarily implies that one knows *a priori* the nature of that reality.

"To score naturalistic inquiry as non-trustworthy on the grounds that controls and/or randomisation were not effected is to miss the point that, at bottom, these techniques are appropriate *only insofar as one can buy into the assumption of naïve realism*. ... When naïve realism is replaced by the assumption of multiple constructed realities, there is no ultimate benchmark to which one can turn for justification..." (Lincoln & Guba, 1985; p.295, italics in original)

Thus, most of the threats (history, maturation, testing, instrumentation, differential selection, selection-maturation interaction, etc.) to the internal validity of a study identified by Campbell & Stanley (1966) cease to be considered as such; rather, they become part of the object of analysis and integral to the process of investigating.

#### 4.1.3. Replicability

Replicability, like validity, only becomes a methodological issue when one assumes social phenomena to be stable, unaffected by, and existing outside of, history and culture. To criticise case studies for not being replicable seems misguided since such studies are used precisely to investigate critical, unique or extreme cases (Yin, 1989): "unique" and complex cases by definition cannot occur in the same fashion many times. The particular set of events that constitute the case take place in society,

because of the activity of social beings, and they have consequences for their life in common. The very fact that these events happen changes the conditions of society. History does not repeat itself. Thus, not only is replication impossible, but it is not even desirable since it would imply ruling out precisely the phenomena which one sets out to analyse: the historically and culturally situated construction of reality.

#### **4.2. The use of case studies to investigate social representations**

Three interrelated considerations have led me to use a case study to study social representations of nature: first, the choice of a "theory-confirming" approach; second, the adoption of an "event-oriented" case study, where special attention is paid to crises; and third, the use of an embedded design.

##### **4.2.1. A theory-confirming approach**

Case studies are highly relevant strategies for generating hypotheses or for confirming (if not proving) and developing existing theories (Lijphart, 1971). I believe that I have provided ample external justification for adopting a theory-confirming strategy. Indeed, my review of environmental and ecological psychology was intended to show the inadequacies and shortcomings of a range of approaches which have attempted to apprehend the relationships between individuals and the material world. As against these approaches, I set out to demonstrate how the theory of social representations could provide a more adequate framework for the analysis of such relationships. This case study now serves to exemplify the workings of the theory. I shall reiterate some of the reasons invoked earlier and make explicit how a case study using a combination of ethnographic and participant observational methods, together with more traditional social psychological methods, can contribute to the development of a truly *social* psychology of the environment.

Jodelet (1986, 1989/1991) has insisted on the necessity of studying social representations in the real life contexts of their production, functioning and transformation. Since social representations circulate in a number of social settings and draw upon the resources of the (reconstructed) past, it is methodologically

important to find a context which is relatively specific and circumscribed. The "case" defines just such boundaries. Of course, many illuminating social representational studies have been conducted using different strategies. Social representations of the body (Jodelet, 1984b), of health and illness (Herzlich, 1969/1973), of madness (De Rosa, 1987), of cities (Milgram, 1984), and of the economy (Vergès, 1989) have all been analysed without reference to any specific context other than contemporary social life. However, case studies should be used more widely: they define the temporal and spatial scope of the analysis and allow one to isolate social practices, institutional frameworks, cultural models, and collective psychological phenomena (cognitions, affects, emotions) which relate to social representations (Jodelet, 1986; p.172).

Many invaluable studies have been conducted in very specific environments which, it could be argued, limit the validity of their findings. Jodelet's (1989/1991) study of madness, for instance, takes place in a small family colony, Ainay-le-Château, where local inhabitants act as foster parents for some 1,000 psychiatric patients. This "natural" situation is undeniably unusual; but this is precisely why it constitutes a unique opportunity to investigate the types of representations and related practices which emerge when a community lives in close proximity with the mentally ill. Goffman's (1953) analysis of linguistic and non-verbal communicative practices in Shetland (which provided the basis for his doctoral thesis as well as his book The Presentation of Self in Everyday Life (1959) and his social psychological study of Asylums (1961/1968), is a powerful example of the potential of single case studies. Even Festinger, a most rigorous experimentalist, believed it was possible to test a theory by means of a case study. His investigation of what happens when a small sect expects the end of the world, and is forced to admit that the apocalypse did not actually take place, is a cogent illustration of the workings of cognitive dissonance in real-life settings (Festinger *et al*, 1956). These works are all based on single case studies. It would be difficult however to criticise them for lacking generalisability and, consequently, for being of little scientific value.

Thus, for this project, the case study approach is used to "confirm" a theory which stipulates that people's symbolic and material practices in relation to the material world do not emerge in isolation but are the outcome of the social life of

groups; they engage emotions which are shared and cannot be understood outside of the particular historical and cultural context found today in Shetland; they draw on modes of communication, interactions and relations to nature which, in turn, participate in the construction of ever-changing "natures".

#### **4.2.2. An event-oriented case study**

The appropriateness of case studies depends upon the choice of the case itself. One has to find a real situation (i.e. not one artificially imposed by the researcher) in which the object of analysis is problematised and generates significant symbolic activity. This situation was found in the immediate aftermath of the oil spill which hit the Shetland Islands.

##### **4.2.2.1. "Crises" as significant complexes of events**

Crises are particularly informative social events. As Morin explains in La Rumeur d'Orléans (1969), where he develops his programme of research for a *sociologie du présent*, the value of crises is under-estimated amongst mainstream social scientists. The latter's predominant focus is on repetition, regularity, stability and structure, a perspective whose implicit aim is to discover the general laws governing social life. This *a priori* excludes events and crises as marginal, contingent, and therefore unworthy of scientific interest. In his own research, Morin sets out to investigate the development of rumours concerning the alleged abduction of local white women by Jews in Orléans in the late 1960s. The rumours spread, gain in importance and lead to general panic in the town. Together with a team of social scientists, Morin is parachuted into Orléans, to study the crisis "in the making". Drawing upon the heuristic postulates of Marx and Freud, he notes that crises are extremely informative because they uncover latent representations, make visible underlying social structures, and highlight the vital role of dialectical processes in the social universe. Perhaps more importantly, crises generate a social problematisation of what previously was taken-for-granted. Empirically, they offer the advantage of being relatively circumscribed phenomena.

Moscovici, like most French intellectuals in his generation, was profoundly influenced by Morin's unconventional research programme. He too recognises the importance of crises in uncovering representations.

"...the character of social representations is revealed especially in times of crisis and upheaval, when a group or its image are undergoing a change. People are then more willing to talk, images and expressions are livelier, collective memories are stirred and behaviour becomes more spontaneous. Individuals are motivated by their desire to understand an increasingly unfamiliar and perturbed world. Social reconstructions appear unadorned, since the divisions and barriers between private and public worlds have become blurred. But the worst crisis occurs when tensions between reified and consensual universes create a rift between the language of concepts and that of representations, between scientific and ordinary knowledge."  
(Moscovici, 1984a; p.54)

The crisis in Shetland affords an interesting case with respect to the theory of social representations. It is an ideal methodological situation in which to analyse people's attempt to render familiar a new experience whose own logic requires the temporary suspension of customary modes of interaction, but also calls for the mobilisation of collective resources, knowledge and traditions. The crisis brings together forms of representations (scientific and social) which are rarely found in the same context. The affective load associated with the "disaster" also favours intense symbolic activity. The *Braer* oil spill is an effervescent context which brings into sharp focus practices which are guided by social representations and practices which determine some aspects of these representations as rationalisation, legitimisation, justification, etc. In a nutshell, this dramatic case renders possible a contextualised study of the structure, content and functions of social representations of nature.

The very location of the ecological crisis is equally interesting. Islands are, by definition, separate entities. As such, they have often been selected to research specific processes, both in the natural sciences - Darwin's work on the Galapagos islands immediately springs to mind - and in the social sciences. For instance, Goffman's (1953) Ph.D. thesis on language and communicative practices was conducted in Shetland, and based on the assumption that particular linguistic and non-verbal communicative strategies would have evolved amongst Shetlanders as a result

of their geographical isolation. For a social representational study of nature, the peripheral geographical position and the marginal political situation of the islands, the distinct culture (where Viking, Scottish and English traditions merge) and dialect found in Shetland's close-knit communities, the importance of natural resources (oil, fish, land, etc.) for the local economy, the stability of the population over the past centuries and the sudden influx of immigrants followed by a period of rapid social change with the oil boom of the seventies, the ruggedness of the land and the uncompromising force of the elements, together with the ecological crisis itself, all concur to make Shetland an ideal place.

#### **4.2.3. An embedded design**

Complex aggregates of social events of the scale of an ecological "disaster" cannot be directly apprehended. Yet, the individual events of appropriating information, of discussing it with others, and of deciding how to handle the crisis are amenable to observation provided the researcher adopts an embedded design (Becker & Geer, 1958; Yin, 1989). Embedded designs involve the use of sub-units of analysis within the larger context of the case; they are case study designs in which data sources (and often methods of analysis) are triangulated. The data sources and methods which are triangulated in this study have been chosen for their respective and complementary potential in accounting for the interplay of symbolic and material, individual and collective practices of Shetlanders as they are faced with the crisis. These practices are present both at the interactional and collective levels; they emerge as a direct consequence of the oil spill but draw upon a considerable knowledge base shared by Shetlanders. They are historically situated (January 1993) but can only be understood in a diachronic perspective. The disaster is geographically located (Garths Ness) but it penetrates innumerable settings and is linked to the globalising tendencies of late modernity. The crisis also triggers very diverse types of cognitive, emotional and behavioural processes that are induced by the first-hand experience of the oil spill (seeing the black tides, breathing the fumes, etc.), by the dissemination of media messages, and by knowledge acquired through social interaction (with family

members, crew members, foreign and local journalists, friends, etc.). Thus, an embedded design is necessary to analyse such a complex set of events and processes.

#### 4.3. Diary of the *Braer* Incident

On the morning of Tuesday, 5 January 1993, one of Shetlanders' worst nightmares became a reality. A Liberian registered tanker, the *Braer*, en route from Norway to Canada, ran aground. She went onto the rocks at Garths Ness, in the south of Mainland, the biggest and most densely peopled island of the Shetland archipelago. The tanker was fully laden with 84,700 tonnes of crude oil, which is twice as much as the cargo of the *Exxon Valdez*. In addition, it carried some 1,600 tonnes of heavy fuel oil bunkers. Immediately upon impact, oil began to escape in large quantities until, eventually, the vessel's total cargo was spilled. By its sheer size, its suddenness, the potential ecological, economic, political and social consequences, the spill quickly assumed the proportions of a major crisis.

The information provided in this section is derived mainly from three official sources<sup>2</sup>, from my own observations during the fieldwork and, in rare instances, from the local newspapers' coverage of the incident. The latter were used with circumspection, when issues were not contentious. One of the three official documents used, that produced by the Marine Pollution Control Unit (MPCU), differs considerably from the others. The authors of the report spent many weeks on the islands and were closely involved with the local authorities in the co-ordination of the

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<sup>2</sup>These sources are: 1) a document published by the Department of Transport (1994b) entitled Safer Ships, Cleaner Seas: Report of Lord Donaldson's Inquiry into the Prevention of Pollution from Merchant Shipping which investigates the technical aspects of the *Braer* incident and addresses broad issues such as the role of key players (flag states, coastal states, port states, shipowners, charterers, cargo owners, shipbrokers, various maritime assistance organisations, etc); ship design, construction, maintenance, equipment and reliability; ship operation and crewing; the sources and effects of pollution on the local economy, the wildlife, and public health; international and national laws and agreements; navigation and guidance to mariners; routeing; identification and reporting; insurance; the cleaning up of oil spills; the cost of pollution prevention, etc; 2) a report written by the Marine Pollution Control Unit (MPCU) and published by the Department of Transport (1994c) entitled The *Braer* Incident: Shetland Islands, January 1993. The MPCU is a body responsible for dealing with spillages of oil, chemicals and hazardous substances from ships at sea which threaten UK interests. This report deals more exclusively with the *Braer* incident itself, the local response by the authorities on site, and the repercussions of the oil spill on the islands' economy; and 3) the Report of the Chief Inspector of Marine Accidents into the Engine Failure and Subsequent Grounding of the Motor Tanker *Braer* at Garths Ness, Shetland on 5 January 1993 (1994a). This report inquires into the circumstances which led to the wreck of the *Braer* and concludes that the immediate cause was a failure of the vessel's engines. These sources provide important information but, in the analytical chapters, they are themselves used as data sources to construct both the mechanistic and cybernetic representations of nature.

response to the grounding of the *Braer*. MPCU members were sitting on committees attended by Shetlanders. As a result, their views reflect the input of the local population. One example will suffice to illustrate this: the MPCU's report includes six paragraphs on the disruptive attitudes of media representatives and visitors, a concern widely shared amongst the Shetland Islanders. Reporters are described as "enormously intrusive", "heavily demanding", having "no scruples", "wasting people's time", etc. The difference in accounts between the MPCU's report and the other two sources is also largely explained by the fact that the former is reporting *on its own* operational response to the incident, whereas the latter are investigating other people's actions. They are produced by outside observers who did not stay in Shetland for any length of time, and who were interested in broad technical issues. With this cautionary note in mind, let us now turn to the events surrounding the *Braer* oil spill, as these unfolded over the three weeks immediately following the grounding.

On Tuesday 5, January 1993, at about 5.00 am, the master of the tanker *Braer* notified the Shetland Coastguard that his vessel had lost all engine power. Her estimated position was 10 miles south of Sumburgh Head and she was drifting in predominantly southwesterly winds force 10 to 11. It looked as though she could pass clear of the coast. In these circumstances, the Coastguard initially handled the request for help as a rescue operation rather than as a response to a potential ecological disaster. They suggested to the tanker's master that all non-essential personnel should be lifted ashore by helicopters. Sixteen of the 34 member crew were evacuated in this way. As the operation progressed, however, it became increasingly likely that the grounding could not be avoided. The master decided to abandon ship.

In the meantime, an anchor handling vessel based in Lerwick was making her way through ferocious tides, waves and winds, to reach the site in order to install a tow line which might prevent the disaster. The operation was risky; it required putting back on board two of the *Braer* crew members, an officer of the Marine Department of the Shetland Islands Council (SIC) and a helicopter winchman. But the long drawn-out efforts to attach a line to a heaving vessel proved ineffectual. Men were taken back to safety ashore and at 11.19 am, after a helpless westerly drift south of Horse Island and past Lady's Holm, the *Braer* finally hit the ground at Garths Ness, releasing oil instantly. The crisis had begun. Both on land and at sea,

Shetlanders were riveted to their "wireless", anxiously following the makings of the oil spill. Phone calls were being exchanged across the islands to inform family, friends and neighbours. Around Quendale Bay, cars were lining the roads as people gathered to watch the grounding. From the cliffs above Garths Ness, people could see, smell and taste the oil in the sea-spray thrown up by the mountainous waves pounding the wreck. The local, national and international press were on their way to report on the *Braer* "disaster" and, by 10.30 am, the Sumburgh Hotel was turning away bookings from media representatives.

The local authorities spent the first day organising logistical procedures and trying to come to terms with this dreadful new reality. They informed the relevant bodies (e.g. the London-based Director of Marine Emergencies Operation (DMEO), the Marine Pollution Control Unit (MPCU), various Ministers) and set up the Joint Response Centre (JRC) - a group of technicians, managers, environmentalists and local councillors - to co-ordinate and lead the response to what was already officially construed as a "disaster". Contingency plans were promptly established: the area around Quendale Bay was sealed off as there were fears of an explosion; the Housing Department was considering evacuating residents of the South Mainland if air-borne pollution reached dangerous levels; the DMEO was ordering remote sensing surveillance aircraft to monitor the spread of the oil around Shetland, and dispersant spraying aircraft to dissipate it. Indeed, local authorities - with the authorisation of the DMEO, the Scottish Natural Heritage (SNH) and the Scottish Office Agriculture and Fisheries Department (SOAFD) - had decided to spray chemical dispersants to hasten both the "natural" dispersal of oil in the water column, where the crude oil would affect fish, and on the surface of the sea, where it would harm birds and sea mammals. Alternative counter-pollution methods, such as the burning of the oil or its mechanical recovery, had all been ruled out because they were thought to be either too dangerous, or ineffective in the prevailing weather conditions. What little data were available on the characteristics of the oil also seemed to indicate that it would be amenable to treatment by chemical dispersant.

Day two of the disaster dawned with news that the oil was spreading. To counter this expansion, aircraft began full scale spraying in the vicinity of the wreck (see Annexe 1 for an account of the state of the pollution over the first week). Some

100 tonnes of dispersants<sup>3</sup> were sprinkled over the sea and carried by the sea-spray over land on that day. The first twenty-four hours also saw a growing realisation of what had happened and, with it, despair, frustration, anger, and apprehension about the consequences of the spill. In every pub, in every house, on every street, people were discussing the "disaster", its causes and potential effects. There were claims and counter-claims as to how the tragedy could have been avoided, about who was responsible, about the speed of the Coastguard's response, about the necessity of banning merchant shipping altogether from the strait between Fair Isle and Sumburgh Head, etc. It was also on the Wednesday that the Greenpeace research ship *Solo* arrived in Shetland. She was equipped with facilities to cure oiled birds and sea mammals.

On the third day, some people in Lerwick, 25 miles away from the scene of the wreck, reported having smelled fumes. Early morning aerial surveillance indicated that the oil was spreading still further away from Garths Ness; it was reaching the southern tip of the Burra Isles on the west coast, and was contaminating the southern part of the east coast. The SIC decided to co-ordinate the building of a rock and rubble barrier at the narrowest point between East and West Burra. The aim was to try to halt the progress of the sheen and to prevent it reaching salmon farms. Brown crude oil and heavy fuel were surrounding the wreck and streaky brown oil was migrating towards Sumburgh. Spraying resumed in spite of growing public concern over the effects of the dispersants on human health, crops, water supply, and on salmon farmers' fish stocks. However, the operations were curtailed by strengthening

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<sup>3</sup>Three types of dispersants were sprayed during the *Braer* incident: Slickgone LTSW (95 tonnes), Dispolene 34S (15 tonnes), and Enersperse 1583 (10 tonnes). These are all approved by the Ministry of Agriculture, Fisheries and Food (MAFF) for "use at sea from shipborne or airborne equipment designed to apply undiluted dispersants", and for use "on beaches from suitably designed spraying equipment, in advance of the rising tide, when the oil is less than 6mm thick, using an appropriate equipment which has been tested and found satisfactory for the purpose by Warren Spring Laboratory." (*The Braer Incident. Shetland Islands, January 1993* (Department of Transport, 1994c; p.24). People in the south of Mainland expressed great concern about the chemical composition of dispersants (which manufacturers refused to make public); about spraying procedures (which were indeed faulty: spray was deposited on a strip of land in Quendale and, because of the height of the aircraft, had been carried inland by the wind. It may have reached local houses as far away as 1 km); about their suitability for the shoreline around Garths Ness (are rocky shorelines similar enough to beaches?); and about their effects on human health. According to the MPCU's official report, dispersants are not hazardous to health but they do cause irritation to eyes, skin, nose and throat if exposure is prolonged, and may lead to light-headedness if inhaled in significant concentrations. Since the *Braer* incident, MAFF have announced a review of their testing and approval procedures for dispersants. They will also reconsider the criteria to determine when dispersants are the most effective way to protect the marine environment from oil spilled at sea, and address the problem of the availability of information on dispersants, including their composition, to people affected by a spill in which they are used.

winds after an hour. Dead sea-birds, covered in oil, were lying on the beaches and some seals and otters seemed to be in difficulty. Shoreline clean-up operations began at Quendale Bay. They were limited in scale and consisted of both mechanical and manual operations.

On Friday, 8 January, the weather deteriorated still further, with westerly winds gusting to force 11. Beach cleaning continued but it was impossible to spray under such circumstances, even though reports showed that the sheens of oil were extending to the important town of Scalloway and to West Burra, on the west coast, and as far as No Ness on the east side. There, the sheen had thinned considerably since the previous day but the spread of the oil was still causing much concern. Bad sea and wind conditions continued to impair the attempts of the *Braer*'s appointed salvors to recover any crude still left in the tanker. It was believed that she was breaking into two but there was still hope that oil could be recovered. A "voluntary" fishing ban was announced by Shetland fishermen's organisations shortly after the Scottish Office declared that it would introduce a compulsory no fishing zone.

Reports from aerial surveillance on Saturday morning showed that important quantities of fresh crude oil had been released from the wreck overnight, and that sheens had spread northwards on both the east and west coasts. This was to be the maximum extent of the oil pollution. St. Ninian's Isle (an area of outstanding beauty and a SNH-designated Site of Special Scientific Interest (SSCI)), and the Burra Isles (important salmon farming grounds) were surrounded by heavy sheens. Some fish farmers tried to protect their cages with absorbent booms. These emergency measures proved to be ineffective and, in fact, worsened the situation as booms trapped inside the oil that had already penetrated the perimeter of the cages. Near the wreck, 20 more tonnes of dispersants were sprayed in the course of an operation intended to satisfy the local authorities that spraying was conducted safely. The observers declared themselves content with the procedures but the weather remained too severe to permit spraying. And in the community concern was such that the SIC preferred to stop using dispersants altogether.

Many residents of the south Mainland were beginning to complain of health problems: skin irritation, sore throats, itchy eyes, headaches. Yet, the SIC and the Director of Public Health kept reiterating that the dispersants were innocuous.

Another crisis, social this time, was in the making: distrust in the local authorities and suspicion about their "real" interests were creeping in. Environmental groups charged the already tense atmosphere, alleging that some of the dispersants were toxic, that they were used only to convince Shetlanders that the oil had disappeared whereas in fact it was only "invisible", and that the local authorities had a political and economic interest in using dispersants despite the threat they posed to human health. Greenpeace issued a press release, said to be based on a report from a British toxicologist, which summarised the effects of chemical dispersants on oil spills as follows: dispersants make an oil slick spread more quickly, reduce the evaporation of the most dangerous components of the oil, increase the toxicity of the oil, slow down the degradation, make oil available for marine organisms that might not otherwise have been affected, and increase the amount of oil and the number of oil components which are carried ashore. The press release also stated that the three dispersants used during the spraying procedures were inadequate: Dispolene 34S had not been relicensed for use in the UK since 1985, and Dasic Slickgone LTSW and Enersperse 1037 were not cleared for use on rocky shorelines. More uncertainty, more tension.

Horrendous weather conditions also interrupted the clean-up operation, although some workers did continue to pick up debris on the St. Ninian's Tombolo (an isthmus linking St. Ninian's Island to the east coast of Mainland). Fresh leakage from the wreck was observed as oil tank lids sprang open. It became clear that some 15 square miles around the wreck had been affected by oil spray, three square miles severely so. The evacuation of sheep from their feeding grounds on the cliffs overlooking Garths Ness had begun on the first day of the incident, but with news of the spread of the spray, further widescale operations had to be conducted. Water supplies were still given a clean bill of health but crops visibly contaminated were declared unfit for human or animal consumption. Many V.I.P.s also arrived on the islands over the week-end to assess the damage caused by the spill.

The first direct economic consequences of the oil spill for the fishing and fish farming industries were suffered on the Saturday. Rumours and speculations concerning the cancellations of orders of fish produce were confirmed. Supermarket chains (Marks & Spencer and Tesco) temporarily suspended buying Shetland salmon,

awaiting reassurance about the safety of the merchandise. Other companies demanded tighter quality controls. The pillars of the islands' economy were crumbling. Salmon farming has an annual harvest value of approximately £35 million; the fishing industry generates some £20 million; and fish processing revenues are estimated at about £25 million. Shetlanders could not afford to let the *Braer* incident - and its media coverage in the national and international press - destroy the reputation of their produce. Maintaining an image of purity and cleanliness was also vital for the £22 million tourist industry. Every effort had to be made not to deter the 50,000 visitors attracted to Shetland's wildlife and scenery every year. The stakes were high. In this context, local authorities and various organisations representing fish farmers and fishermen had to play the incident down. There would be no more reference to the oil spill as a "disaster".

With Sunday, 10 January, came the first encouraging reports from aerial surveillance. Apart from the area around the *Braer* and a long, but narrow, stretch on the west coast, only light sheens were evident. A considerable quantity of oil seemed to have dispersed naturally, caught in gale-force winds and 60 feet-high waves. Clean-up operations had to be suspended because of the rough weather but the collection of seabirds and marine mammals for rehabilitation, and the recording and storage of casualties for scientific analysis, were still under way. Oiled birds were taken to the Wildlife Response Centre (WRC) at Boddam, and oiled otters and seals were brought to the Hillswick Animal Sanctuary, in the north of Mainland. The field teams conducting beach surveys consisted primarily of volunteers, both from Shetland and abroad, supplemented by staff from specialist organisations (e.g. SNH, RSPB, SSPCA). The SIC also announced that they were negotiating with the *Braer* owners' insurers for an immediate pay-out of £200,000 to assist with short-term economic difficulties. And the Director of Public Health declared that blood and urine tests would be made on 600 people in the south to check for liver or kidney problems.

By Monday, oil spray was thought to have affected up to 20 square miles of land and some 200 crofters had to move and confine their sheep, and to provide them with supplementary feed. Eleven fish farms in the exclusion zone were unable to harvest fish. A CESSNA flew over the wreck to ascertain which tanks still contained oil. The survey showed that there was still a considerable quantity of oil in the tanks

but salvors could not recover it in the prevailing winds, gusting to force 13 and 14. The cargo section of the vessel was in one piece, but perceptible movements were registered in some sections of the ship relative to the cargo area. During the afternoon, there was a massive release of oil. The tanks were now open to the sea and as the heavy swell broke over the wreck, oil was displaced by seawater. The pressure of the water was causing jets of oil to spurt from the tanker. However, because of the tremendous wave energy and the subsequent dispersion of the oil, the extent of the pollution remained relatively stable throughout the day. In London, the disaster was discussed in the House of Commons. The Secretary of State for Transport announced a full investigation by the Marine Accident Investigation Branch (MAIB). A bridging fund to help farmers, fishermen and fish farmers affected by short term cash flow problems was also set up.

A week had now elapsed since the grounding of the *Braer*. On Tuesday morning, 12 January, hopes that unspilled oil could eventually be retrieved, provided there was a lull in the weather, were dashed. Severe gales had broken the ship into three parts and it was unlikely that there was much oil left in the tanks. The only reassuring thought was that no more oil would come out. The peak of the ecological tragedy was now past. From Tuesday onwards, observers would continue to be surprised at the speed with which the oil was breaking up. The spread of oil also appeared to have halted.

That was the situation when I landed on Mainland, on Wednesday, 13 January. I was not the only newcomer: The Prince of Wales, the Duke of Edinburgh and the Labour Party's Transport Secretary also arrived on that day to pay their official visits. Weather conditions had temporarily eased, allowing closer inspection of the state of the wreck. Morning aerial surveillance indicated that the extent of the pollution remained unchanged. However, a significant reduction of sheens and of brown foam on the crest of waves was observed; there would be no further need for the spraying of dispersants, and so the spraying aircraft returned to their respective home bases. Only one CESSNA was kept at Sumburgh airport to continue monitoring the extent of the oil pollution until, by Friday 22 January, even these measures seemed no longer necessary. In fact, in just three weeks the visible signs of pollution had practically disappeared. On Monday 25, no oil was detected. Most of the contingency

plans were dismantled and the official response groups stopped their operations.

According to the scientists monitoring the spill, the astonishing rate at which the oil naturally dispersed into the water column, and the relatively small environmental impact of the oil spill, were due to a conjunction of factors: the characteristics of the oil and the severe weather conditions which prevailed in the weeks following the grounding. The *Braer* was laden with Gullfacks oil, a relatively volatile light crude which tends to disperse rapidly. The prolonged spell of rough weather also resulted in high waves which contributed to the quick dispersal of the oil. Moreover, the tendency of the Gullfacks crude to disperse seems to have contributed to the breaking-up of the 1,600 tonnes of heavy fuel oil: as fuel escaped from the tanks, it mixed with the light crude and formed a compound which was more easily dispersed. Thus few beaches were severely contaminated. Nine of the 39 sites considered at risk by the MPCU did need cleaning, and a further 11 sites were reported to be oiled with either foam or sheen but not to require clean-up operations. The immediate circumstances appeared quite favourable. But the nature of the coastline in Shetland (which encompasses a diversity of geological structures and natural habitats, ranging from cliffs and exposed rocky shores through sandy and muddy beaches to sheltered bays) makes it difficult to foresee the long-term, overall consequences of the pollution. Oil could become trapped in wetlands and lochs, or buried in beach sediments, and could leach for up to a decade.

During the three weeks following the spill, speculation had been running high about the possible damages to wildlife. An officer of the RSPB had put forward some distressing figures: as many as 10,000 birds could die. Other experts claimed that massive quantities of fish and sand eels would be washed ashore and that seals and otters would inevitably be amongst the casualties. In the event, the consequences far less catastrophic than had been anticipated: the MPCU's official report states that, up to Sunday 24 January, 1,549 birds of 28 different species were collected. Twenty-two seals and three otters were also brought to the Hillswick Animal Sanctuary. The diagnosis established that 14 seals were ill as a direct consequence of the spill, whilst in five cases oil was said to be worsening a pre-existing condition. The WRC also dealt with six dead otters, but none of the deaths were attributed to the spill. These figures necessarily under-estimate the actual number of deaths (since they represent

only the birds and sea mammals that were collected), but they do give some indication of the scale of the damage to wildlife. Countless more animals died as a result of storms and chronic pollution.

So, it did look as though the situation would soon be under control again. However, the *Braer* incident was not solely an environmental crisis. Even the most encouraging reports could not counterbalance the growing social and psychological disquiet. The crisis of confidence faced by the SIC and the Director of Public Health over the use of dispersants had assumed massive proportions in the south of Mainland. Local residents even formed *ad hoc* associations to investigate matters for themselves. They broke into a warehouse at Sumburgh airport at night and discovered barrels of dispersants which, they had been told by Greenpeace, were not approved for use on rocky shores. Nobody seemed to provide trustworthy information, not even Shetlanders. Environmental groups were either regarded with suspicion or vehemently criticised for capitalising on the crisis and failing to take account of Shetland's economic reality. "Experts" had little to offer: their knowledge of Shetland, its geomorphology, wildlife and resources, hardly compared with that of the locals, and the weather severely hampered their efforts anyway. Recommendations and advice were often dismissed as being ill-informed and poorly co-ordinated. Shetlanders generally assumed that "experts", especially the ones participating in the clean-up operations, had come to the islands hoping to make fast money by selling their untested latest technology.

Exasperation was also fuelled by a strong and generalised feeling of having been invaded by foreigners. The SIC estimated at about 1,400 the number of journalists, experts, environmentalists and politicians to have come to the islands in the wake of the oil spill. For two weeks, there was not a room available in the hotels of Lerwick and most of the "Bed and Breakfasts" had their "no vacancy" signs posted. The small car fleet at the rental shop was besieged by the temporary visitors. Shetlanders were particularly upset by the intrusive attitudes of media representatives - according to the MPCU, 500 of them were accredited to the press centre set up at Sumburgh airport - and the press coverage of the spill outside Shetland. Phone calls and letters of commiseration and of moral support by people who had visited the islands were coming in from Scotland, England and the rest of the world. Far from

achieving their intended purpose, however, they often served to infuriate Shetlanders, making them ever more fearful of the shattering consequences that media reports could have on the islands' economy. Save for *The Shetland Times*, no media could be relied upon.

The immensely complex crisis can be superficially described in the following way. On the one hand, there is a discourse, skilfully prepared by the SIC, the Shetland Fishermen's Association and the Shetland Salmon Farmers' Association, which is aimed at outsiders. It is essentially for "external consumption", fed to media representatives during official press conferences, and motivated by economic and political considerations. For economic reasons, this discourse aims to minimise the impact of the oil spill in order to maintain the commendable reputation of the local produce abroad, as well as to preserve intact the tourist industry. Thus, the effects of the pollution are played down. Simultaneously, however, another aim must be pursued. This one requires emphasising the negative consequences of the spill in order to mobilise the political will of Westminster and, in turn, to modify unsatisfactory national and international policies and practices surrounding merchant shipping.

On the other hand, there is a different, more complex, discourse running in parallel: this one is essentially for "internal consumption" and is motivated by economic and political considerations, but also by social ones. For economic reasons, workers directly or indirectly involved in the fishing and salmon farming industries cannot simply understate the incident: their livelihood depends upon the compensation they can obtain from the polluter's insurers. There is an obvious interest in maximising the effects of the "disaster" and the important financial losses which have ensued. The greater the losses attributable to the spill, the more substantial the compensation. In terms of local, or internal, politics, it is however crucial that the SIC establish their competence and credibility in handling the crisis. And so, about ten days after the grounding of the *Braer*, in an effort to reassure the local population, the SIC officially declared that "the crisis was over", that there was no health hazard, that Shetlanders "had been lucky" - a reference to the bad weather conditions which contributed to disperse the oil - and that "we should all get on with our lives". These statements angered many residents in the south of Mainland and, in particular, people

whose interests were not represented by any association or organisation (such as part-time fishermen), for whom the crisis lived on, and who feared that they would not be compensated individually. What about cancer or toxic poisoning? What about the long-term effects on the wildlife? What if the oil or the dispersants have entered the food chain? How does one assess the loss of amenity in financial terms? These and many other questions remained unanswered. The obvious disparity between the discourses, one downgrading the crisis, another emphasising its disastrous effects, made Shetlanders both weary and wary of their local representatives.

The individual and collective responses to the *Braer* incident cannot be explained exclusively in terms of the ecological, economic or political circumstances facing the community. The picture broadly sketched above is simply intended to provide the context within which Shetlanders' social representations of nature were analysed and which the latter, in turn, helped to shape.

#### 4.4. Conclusion

I have discussed the nature of single case studies and their relevance to the analysis of social representations. I have argued that the criticisms commonly levelled at case studies concerning their lack of generalisability, validity and replicability are, from the perspective of the theory of social representations, misguided: they either rest upon a naive realist ontology, presuppose a positivist epistemology, or involve a failure to appreciate the differences between statistical and analytical inferences.

I also introduced the case of the *Braer* oil spill, which is the context within which the empirical analysis was conducted. I have emphasised the status of a particular type of case, crises, as valuable methodological situations for the study of social representations. Crises such as the one triggered by the grounding of the tanker *Braer* are particularly informative because they reveal latent representations, confront social actors with a novelty which requires appraisal, call upon collective resources, highlight social conflicts and, generally, force a problematisation of what was previously taken-for-granted. I then provided a narrative of the grounding of the tanker *Braer*.

It is necessary to reflect upon the reconstruction of the sequence of events which I have described under the heading "Diary of the *Braer*". These events happened, to be sure. But the account is that of an outsider - myself - and it is largely based on the accounts of other outsiders. Thus, I have offered a *version* which, as the analysis will reveal, already presupposes a given representation of nature, one in which neither I nor my "official informants" figure as integral parts. This was perhaps inevitable but it is nevertheless significant. Moreover, the diary presented here draws upon a wealth of information which no single actor had access to at the time of the crisis. The situation in which the reader is mentally transported as she reads these pages is, therefore, not the one which was experienced by Shetlanders. I should also explicate the theoretical status of my version in relation to the social representations of nature held by Shetlanders. Does the situation reconstructed here provide the objective framework within which to make sense of the representations I am about to uncover? No. Is the crisis itself already the outcome of a conflict between various social representations? Yes, to a large extent. Was the oil spill rendered possible by a particular representation of nature? Clearly so, since the very possibility of an oil spill occurring depends upon the existence, at a societal and institutional level, of particular representations of nature (which are associated with specific modes of intervention and practices in relation to nature). The answer to such questions, however, should circumvent the logic of causality altogether: social representations of nature shaped the collective and private reactions to the oil spill, but they were also transformed in this effervescent context through communication and social interaction.

## **5.0. METHODOLOGY: THE MONITORING OF MONITORING**

Below, I explicate the theoretical considerations and methodological principles and strategies which guided my fieldwork in Shetland. I expound the rationale behind the combination of methods - content analysis of the coverage by the local newspapers of the oil spill and related issues, semi-structured individual interviews, small-group discussions, participant observation and a "public debate" - used in the collection of the data. The procedures followed for the analysis of each data set are described, together with the ways in which they will be integrated.

### **5.1. Triangulation: Combining methods to reach a deeper understanding**

As a methodological principle, triangulation has been imported into the social sciences in the context of the debate about the validity of qualitative methods and, more specifically, about unobtrusive measurement (Flick, 1992a). Originally, it involved the use of a plurality of methods, or data sources, in the study of a single phenomenon, in order to judge whether hypotheses formulated with regard to that phenomenon could withstand the test of complementary methods of investigation (Denzin, 1970/1978; Webb *et al*, 1966). Methodological triangulation involved a "process of playing off each method against the other so as to maximise the validity of field efforts" (Denzin, 1978; p.304), mainly by minimising the reactivity inherent in each method. Triangulation strategies were therefore conceived of as a source of validation of empirical procedures and results (Flick, 1992a). This conception of triangulation has been criticised (Garfinkel, 1967; Silverman, 1985) primarily because of its underlying positivist assumption of a

"master reality in terms of which all accounts and actions are to be judged. This casts great doubt on the argument that multiple research methods should be employed in a variety of settings in order to gain a "total" picture of some phenomenon [...] Putting the picture together is more problematic than some proponents of triangulation would imply. What goes on in one setting is not a simple corrective to what happens elsewhere - each must be understood in its own terms" (Silverman; 1985, p.21)

### 5.1.1. Triangulation and social representations: Sociogenesis, ontogenesis, microgenesis and methods

The theory of social representations suggests the use of a plurality of methods for coming to grips with different *versions of reality*. This is so because social representations are always at once *representations of something* and *representations of someone or of some collectivity*. Because different social groups and individuals are expected to hold and to construct different social representations according to their particular position in the wider society at a given historical junction, to their own life experience, to their immediate needs and concerns, etc., one must develop a methodological apparatus to apprehend how social representations emerge and function in different milieux.

Drawing upon Vygotsky, Duveen and Lloyd (1990) present a useful typology of the processes - sociogenesis, ontogenesis and microgenesis - involved in the constitution of social representations. These analytical distinctions offer the advantage of focusing one's attention on three separate, though interrelated, moments and functions in the life of a social representation, and of pointing to the individual, interactional (groupal) and societal lieux of its production. The methods of data collection and analysis which are triangulated should highlight these three genetic processes and their respective functions.

Sociogenesis refers to the socio-historical origins of a given form of knowledge, to the "construction and transformation of social representations of social groups about specific objects" (Duveen & Lloyd, 1990; p.6). It concerns the conditions which enable, *at the collective level*, the creation of a common reality. "Sociogenesis takes place in time, so that even when social representations are investigated at a particular moment in time, the resulting description needs to be viewed in a diachronic perspective" (*idem*; p.6). This preoccupation with the social contexts which permit changes to occur in pre-existing representations, or allow for the emergence of radically new objects of collective thought, highlights the interdependencies between the internal characteristics of a given corpus of knowledge and their external, sociological, determinants.

The second set of processes, ontogenesis, "concerns the development of individuals in relation to social representations" (*idem*; p.6). Here, the focus is on socialisation within a particular society or social group. By interacting and communicating with others, each and every individual becomes familiar with the languages of his/her relevant social worlds, re-constructs the representations circulating in his/her environment and, in doing so, develops a social identity. Ontogenesis is a complex process of creative appropriation of novelty by individuals in a world already structured by conventional and prescriptive representations (Moscovici, 1984a).

Finally, microgenesis can be construed as the actualisation of one's representations in an interactive context. In such a context, social representations are evoked "in the ways in which individuals construct an understanding of the situation and locate themselves and their interlocutors as social objects" (Duveen & Lloyd, 1990; p.8). In every interaction, there are social representations being exchanged, renewed, negotiated, constructed. Goffman (1959/1971) also showed that there are "selves" being constructed during encounters. This three-fold typology enables one to break away from dominant view in social psychology whereby social cognition is conceived as the activity of an individual mind reacting to an external, albeit social, reality. It provides a useful identification of the various spaces and moments where the genesis of representations occurs. I bore this in mind throughout my field work.

Considering the complexity of the concept of social representations, it is hardly surprising that, from the outset, triangulation should have been a distinctive feature of empirical work in this field. For instance, Moscovici (1961/1976) combined a content analysis of the press with questionnaires, an opinion poll, and open-ended interviews in six populations; Abric and Kahan (1982), in their studies on the effects of representations and behaviours in experimental games, used problem solving and creativity tasks in addition to questionnaires; Jodelet (1989/1991), in her seminal work on madness, combined a historical analysis (i.e. archival research) of the psychiatric institution in Ainay-le-Château, questionnaires for the staff, open-ended interviews with the foster families of the patients, and participant observation; and De Rosa (1987) analysed the social representations of mental illness in children and

adults using questionnaires, semantic differentials, drawings and social distance scales.

These examples show that a combination of methods may be fruitful provided it rests on some theoretical and methodological foundations. It should be clear, within the framework of social representations, that triangulation is not used in order to validate results or to obtain an "objective" description of an unproblematic reality existing "out there". On the contrary, different methods are used to gain access to the multiple versions of reality that are constructed. Inconsistencies in lay knowledge and contradictory statements are not to be dismissed or ruled out as "biases", but rather to be highlighted since *they are the phenomenon*. The role of the social scientist is not to adjudicate between competing versions of reality but to understand their origins and functions in the particular contexts within which they are constructed and put to work. Triangulation, thus, relates methods in a complementary fashion so as to add depth and breadth to our understanding of the multiple dimensions of the social construction of reality.

## **5.2. Methods of data collection and analysis**

The selection of methods is dictated by the interplay of the following factors: the theoretical considerations informing the research process and the practical circumstances structuring its execution, the characteristics of the empirical problem, and the kinds of data and potential analyses associated with each particular method. In this section, content analysis of the local media, semi-structured interviews with individuals, group discussions, and participant observation, as well as a "public debate", will be considered with respect to the object of study of the present thesis.

### **5.2.1. Analysis of the local newspapers: Description and justification**

The content analysis of the newspapers gives us access to social representations of nature existing at a collective level (sociogenesis). Newspapers are especially important because of their role in determining the kinds of arguments, the logical and symbolic connections, and the various significant assertions related to the

"disaster", as well as their relation to broader ideological stances. Unlike individual interviews and group discussions, content analyses of newspapers do not *generate* data per se. They make use of an existing data-source, produced for an entirely different purpose, and reinterpret the data through qualitative or quantitative analysis. The non-reactive nature of these data helps to ensure that the social representations which emerge from the analysis do not change by virtue of being investigated (Farr, 1993; Webb *et al*, 1966).

Analyses of the written media have been a standard feature of social representational studies since the publication of La Psychanalyse, son image et son public (Moscovici, 1961/1976). Moscovici's rationale for content analysing the press was that it was crucial to break away from the traditional, mainly Anglo-Saxon, conceptualisations of cognition which unduly individualised the phenomenon. He wanted to re-cast thought in the genuinely social context that participates in its very construction. Moscovici wanted to show that social representations of psychoanalysis were present in the culture - as reflected in the media - where they ought to be sampled and analysed, as well as in individual cognitions (Farr, 1992). This, at the time, was a profound and innovative idea. However, Moscovici somewhat oversimplified the relationship between the press and its public. He assumed that social representations were present in the press "prior to" being part of any individual's representations. The depiction of psychoanalysis in the press was conceived as providing the content upon which lay people would dwell as it becomes progressively detached from the original theory and enters the realm of everyday social communication. The theoretical ambition - to reintroduce culture as an integral part of social cognition - was impoverished by the adoption of a diffusionist or "agenda-setting" model of the role of the media. This approach is consistent with "Bartlett's way" of studying social representations (Moscovici, 1990), since it proposes to analyse the construction and transformation of the symbolic forms as they pass from one social group to another. However, the privileging of a diffusionist model undermined Moscovici's own appreciation of the processes of social

communication and interaction<sup>1</sup>.

It is now necessary to problematise the role of the media more richly. This can be achieved by transposing within social representational studies some of the insights offered by contemporary media analysts (e.g. Corner *et al*, 1990; Gamson & Modigliani, 1989; Hansen, 1991). They all concur that the processes of creating news, and of making sense of them, are not linear and do not follow a simple diffusionist logic. Gamson & Modigliani's (1989) concept of "parallel systems of meaning production" seems particularly relevant. It allows us to appreciate that, while social representations may emerge in one particular forum, their development and inflection take place through complex interaction, involving influence and feedback processes, between a number of key fora and social groups. No single social actor is responsible for the creation and elaboration of (meanings about) social realities. The perception of the "environmental disaster" in Garths Ness cannot be understood solely as the passive reflection in the heads of individual newsreaders of the local and national press coverage of the problem. In this sense, media representations have no primacy over representations circulating elsewhere in society: both feed on one another.

Hansen also criticises "media-centric" studies; he advocates the recognition of the "importance of cultural resonances in the privileging of some issues over others" (Hansen, 1991; p.444). Indeed, the media do not operate in isolation from the wider social context: they draw on cultural forms to construct messages. Hansen's approach permits us to focus on the representations that people hold about a given object before (or at the same time as) it is re-presented in the press, and which render possible the subjects' and groups' active appropriation of the media content. What appears in the papers is largely determined by what people want or are ready to read, and it is society as a whole which gives newspapers their credibility and importance, even if the power of the media obviously resides in their own capacity to impose opinions, values and concerns upon society's attention.

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<sup>1</sup>By separately analysing the Catholic and the Communist press, Moscovici recognised the existence of different fora. But he did not consider the active role played by the lay public (readership) in constructing social representations that were then appropriated by the press. In large-scale societies, this two-way process may not be of primary interest. But in smaller communities, it does require appraisal.

In Shetland, it is particularly important to have a model of the media which explicitly acknowledges the role of the public in shaping the local press coverage. Firstly, most journalists are personally known to fellow Shetlanders. Heads of local associations and reporters may very well be next door neighbours. Journalists have family involved in fishing, crofting, salmon farming, local politics, the oil industry, the tourist industry, etc. They are constantly reminded by the public of the issues at stake in the wake of the oil spill. It is, after all, an island community. Secondly, many Shetlanders had direct experience of the oil spill and became actively involved in obtaining information which was *then* appropriated by the media. In this sense, newspapers are really the medium of public life: they provide the link between individuals' private lives and the public realm, but perhaps in a more complex way than the one envisaged by Moscovici. The media coverage must be understood in relation to the nature of the social fabric in Shetland. The importance of "cultural resonances" will be highlighted throughout the analysis. (These "cultural resonances" cannot be uncovered solely by a content analysis. The latter must be coupled with participant observation for such symbolic correspondence to come to the fore).

Finally, newspaper production is a *process* which cannot be understood and defined on the basis of a single issue or even through the sporadic sampling of articles. It is a process of complex and endless feedback, with the content of a given issue provoking a response which will become news in the next. In this respect, the *Braer* oil spill is an interesting object of study from a social representational point of view: its coverage was extensive, done on a weekly basis, and yet was sufficiently limited in time for the research still to be empirically manageable<sup>2</sup>.

#### **5.2.1.1. Procedure**

Content analysis (in conjunction with participant observation) is used to make sense of all the linguistic data (verbal and written) collected during the field work. The procedure rests upon three basic assumptions: "that valid inferences can be made

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<sup>2</sup>Media coverage also defines how nature can literally be viewed, since the object lends itself easily to iconic representations. However, the figurative dimension of social representation will not be analysed specifically in this study.

between content and intended effect, that the study of manifest content is meaningful to communication, audience and analyst, and that the frequency of occurrence of various content characteristics is in and of itself meaningful" (Ferguson, 1983; p.212). Although I share these presuppositions, they deserve further elaboration and qualification.

Firstly, if inferences can be made from the relationship between content and intended effect, content analysis can also be used to retrieve the complex internal organisation of social representations, and hence to shed light on how conscious verbal productions can reveal "out of awareness" representational structures. In other words, the analysis does not end with the exposition of the "intended effect" but it also seeks to make explicit the efficacy of the symbolic forms which generate, and are expressed in, a given content.

Secondly, the study of manifest content is most certainly meaningful. However, social representations are not created, revealed and expressed only through language, but also through images, rituals and everyday practices. Hence, with respect to the study of social representations, content analysis does not suffice on its own. The data it produces should be analysed in relation to the qualitative data yielded by other methods and interpreted according to a theoretical framework which defines the possibilities and limits of the analysis.

And thirdly, the frequency of occurrence of various content characteristics is necessarily considered significant. Nevertheless, attention must be paid to infrequent mentions, to single instances and even to the complete absence of items which are thought to be of theoretical significance. The absence of some issues from the agenda may point to a number of different social processes: for instance, the topics may simply be irrelevant, or they may be "beyond discussion", which, in turn, may be explained by the fact that they are now taken-for-granted or too sensitive to be openly debated. Such ambiguity cannot be resolved but the use of multiple data sources can help to identify which issues are (not) discussed in which context and to provide some clues as to their interpretation.

### 5.2.1.2. Selection of newspapers

During the field work I subscribed to two local newspapers, *The Shetland Times* (for six months) and *The Shetland Fishing News* (for two months), and one magazine, *Shetland Life* (for six months). *The Shetland Fishing News* is a specialised monthly paper produced by the Shetland Fishermen's Association. It addresses economic and political issues related to the deep-sea fishing industry, provides reports on fishing activities and equipment, and offers technical and practical guidelines to fishermen. This newspaper will only be referred to sporadically. It will not be systematically analysed here because of its very small readership. The monthly magazine *Shetland Life* covers social and cultural issues. In spite of its relevance to the present thesis, this magazine will not be systematically content analysed either, again due to its small circulation. Both publications are nevertheless used as valuable sources of background information. Thus, the only local newspaper systematically analysed is *The Shetland Times*. With approximately 11,000 copies being sold weekly, it reaches just about every household in Shetland. *The Shetland Times* was established in 1872 and, today, it truly constitutes the voice of the community.

### 5.2.1.3. Method of analysis of *The Shetland Times*

Two sections of *The Shetland Times* are the object of this analysis: 1) the front page and editorial articles which are related to the oil spill; and 2) "The Tanker *Braer* Disaster". In the week immediately following the grounding of the *Braer*, the editorial board of *The Shetland Times* decided to devote a whole section of the newspaper to issues surrounding the spill. Under the heading "The Tanker *Braer* Disaster", readers could find detailed reports on the series of events leading up to the disaster, on local and national reactions to the spill (as perceived by Shetlanders), as well as information about its potential and actual consequences.

A coarse examination first looks at the number of articles, editorials and photographs devoted to the *Braer*. It charts the changing proportion of *The Shetland Times* occupied by the section entitled "The tanker *Braer* disaster" until it disappears altogether, in May 1993. In three issues, this section is either replaced by, or

supplemented with, articles bearing on issues related to the oil spill. These are: "Managing the Marine Environment: Conference Reports" (issues 13 and 14); and "The Donaldson Inquiry" (issue 20). The reports grouped under these headings were considered as if they were part of the section "The tanker *Braer* disaster". Annexe 2 provides both a qualitative and a quantitative synopsis of *The Shetland Times* based on the titles of the articles printed in the newspapers. This seems the most economical way of presenting the data since headlines are designed to capture the essence of the articles to which they refer. The tables comprising Annexe 2 are the following:

Table 1:	Headlines of front page and editorials
Table 2:	Headlines of "The tanker <i>Braer</i> disaster"
Table 2.1:	Headlines of Special section: "Managing the Marine Environment: Conference Reports"
Table 2.2:	Headlines of Special section: "The Donaldson Inquiry"
Table 3:	Quantitative Synopsis of <i>The Shetland Times</i> : Number of articles and photos per section.

Each article was coded separately according to: 1) the main themes being addressed, and 2) the social actors involved. For this finer-grained coding, the unit of analysis was the *unit of meaning* (a word, a sentence, a paragraph, etc.). The themes were mainly theory-driven and captured either the *content* of social representations or the *dynamics of their production*. For instance, "nature as system", "nature as forces", "quantification", "natural resources", "nature as self", "nature and social identity", "environment" or "monitoring" would be categories of meaning related to the content of social representations. The dynamics would be assessed through evaluative statements, logical and symbolic connections, stylistic devices, abstentions, images and photographs, etc. Contents and dynamics of production are structurally related. The "social actors" were classified into two broad categories: those whose views the articles reflect (often the editorial board of *The Shetland Times*, but sometimes also pressure groups, politicians, scientists, local residents, etc.), and those who are otherwise referred to in articles. The protagonists were grouped according to whether or not they were Shetlanders, and in terms of their occupation (which tended to overlap with "natural categories").

A third data set found in the newspapers, but not qualifying as news strictly speaking, is the section comprising letters to the editor: "Our Readers' Views". This single-page section provides information on lay people's reactions to statements made in previous issues, on their concerns about aspects of the "disaster" which have been overstated, overlooked, misrepresented, etc. It is also the institutionalised space of the public in the newspaper where journalists are explicitly held accountable to their readers. "Our Readers' Views" provides a forum for debate amongst different factions of Shetland society. However, it was not content analysed systematically. These data are, again, used as background information only.

This longitudinal analysis of the local newspaper coverage permits to assess the changes in the salience of issues, in social representations of nature, and in social life. The fact that the analysis of the newspapers produces time series data sets it apart from other methods of data collection and analysis which only offer discrete information.

### **5.2.2. Individual interviews: Description and justification**

In-depth, semi-structured individual interviews are a standard method of data collection for the study of social representations. Herzlich (1969/1973) went so far as to describe this form of interviewing as the only adequate technique of data collection for the study of social representations. Such interviews are advocated to circumvent some of the problems associated with more highly-structured methods of data collection. This stems from the necessity of not imposing the researcher's own views on those of the population whose representations she sets out to investigate (Farr, 1993). Since discourse itself is one of the lieux where the object is constructed, since subjects use language to create and communicate social representations, our methods must provide them with a great deal of freedom of expression. The openness and flexibility inherent in semi-structured interviews allow the interviewee to expand on the short list of broad themes singled out beforehand by the researcher, but also to make associations, pursue new ideas, explore personal feelings, report on other people's views, etc.

Individual interviews, like any other technique used to gather discursive material (such as questionnaires, life histories, etc.), raise a number of issues which relate to the construction of the object of analysis. Bourdieu, Passeron and Chamboredon (1968/1991), in their classic The Craft of Sociology, have highlighted some of these issues: firstly, the meanings that subjects confer on their material and symbolic worlds are analysed without reference to the specific social context within which they are produced and used; secondly, the very object of the research, as well as the researcher's own preconceptions and categories, are imposed upon the population under study; thirdly, there is an underlying assumption of transparency according to which words have stable meanings, independently of either the situation or the speaker; fourthly, responses are affected by demand characteristics and social desirability, etc. From the perspective of the theory of social representations, these issues are both "problems" and "data"; methodological rigour alone cannot circumvent all of them. The task of the analyst is to be aware of the ways in which the social situation of the interview constructs the object in a particular way and to recognise that interview data do not provide "facts" about the world, but socially constructed *versions* of reality. Depending upon the object of analysis, it might be necessary to supplement individual interviews (and group discussions, as we shall see) with other methodological approaches which provide information on the structural dimensions of the phenomenon studied and which are less reactive.

Di Giacomo (1980) has expressed doubt about the possibility of postulating the *social* nature of representations that are sampled exclusively in the discourse of individuals. This criticism, in my opinion, stems from a misguided theoretical dichotomisation between the cognitive functions (to assimilate novelty, to take the place of, to make available to consciousness, etc.) of social representations, and their social functions (to guide action and communication, to organise and interpret experience, to legitimise, prescribe and constrain, etc.), on the one hand, and between processes and content, on the other. If these opposition were reconciled, there could be no doubt that representations, even when they are analysed at the level of the individual, are social, because knowledge is always and necessarily social and historical knowledge.

#### 5.2.2.1. Selection of interviewees

"Unlike the procedures in many other types of research, sampling in [case studies] is not necessarily designed and executed in advance of data collection but is continually carried on throughout the study. [...] As a consequence, [field workers] can seldom *prescribe* their samples in advance but can only *describe* and justify them after the fact." (McCall & Simmons, 1969, p.64). In social representational studies, samples are not expected to be either representative or random. With respect to social representations, all subjects are not equal. In this study, differences amongst subjects were hypothesised to vary according to gender, age, occupation and place of residence, and origins.

Indeed, a rigid sexual division of labour still prevails in Shetland. By virtue of their occupations, women are expected to experience nature very differently from men. Men often work on fish farms or are members of fishing crews and spend days on end at sea. In contrast, women's involvement in the fishing industry is limited to the filleting and packaging of fish. Women contribute to crofting intensively during lambing time and the harvesting season. Few of them work in the oil industry. Women are generally involved in services, working in restaurants and shops, running Bed & Breakfast establishments, knitting at home, etc. Consequently, their social life also contrasts sharply with that of men. They are notably absent from the public sphere. One seldom sees women in pubs or other social places, apart from the Commercial Street where they are busy doing their shopping, and very few of them hold a key position in the council or other local associations. Their contacts with the rest of the community seem to be channelled mainly through the reports of their menfolk as they return home, the media and the frequent visits of neighbours who "drop in for a cup of tea". Thus, both the first-hand experience of nature and the modes of communication and interaction differ as between men and women. But for the reasons expressed above - the relative absence of women from the public domain - I conducted only five interviews with women compared to twelve with men (see Annexe 3, Table 4).

In Shetland, almost 70% of the total population of 22,000 live in rural areas. The remaining eight thousand or so are divided between two localities: Lerwick, the

capital, which has the greatest share by far with about 7,200 residents; and Scalloway, an important fish landing site and market place, which counts roughly 900 inhabitants. Both these towns are located in the centre of Shetland, on the East and West coasts respectively, and an imaginary line drawn between the two is used by the locals to provide a psychological demarcation between North and South Mainland. Beyond the rural/urban dichotomy, I also interviewed people whose livelihood was directly affected by the oil spill, whose crops had been destroyed, whose fishing had to be indefinitely interrupted, whose health was potentially jeopardised, whose landscape had changed, etc. This meant that I had to "over-represent" people living either in the southern area of the island (the districts of Quendale, Sumburgh and Dunrossness) or on the west coast where the bulk of the oil was driven (Bigton, Burra Isles, Trondra). Nine people from these regions were interviewed individually. The remainder came from Lerwick and its surroundings, and one person from the North of Mainland agreed to take part.

The choice of people coming from various regions of Shetland is also justified for three other reasons. First, the greater erosion of local traditions in urban centres compared to villages. Second, the fact that many sites are either statutory protected areas (officially designated as National Nature Reserves or SSSI's), or non-statutory protected areas but under the supervision of the Royal Society for the Protection of Birds or the Scottish Wildlife Trust. The designation of nature conservation areas in Shetland might imply a different appreciation of, and sensitivity to, nature among the resident population of such regions. And third, the strong correlation between the place of residence and predominant economic activities. For instance, the most fertile area, where the vast majority of farmers and crofters live and work, is South Mainland. Unfortunately, it was also the theatre of the "disaster". In contrast, Lerwick is the administrative centre and the main harbour of the islands. Most of the oil workers, civil servants and people working in the service industry are concentrated there. Many fishermen also live in town. This important overlap between the place of residence and the economic structure is likely to be related to social representations. I selected potential interviewees from the following economic sectors: the service industry (tourism and public administration), the oil industry, fishing and salmon farming, farming and crofting. Some officially unemployed people were also

interviewed. I contacted both native Shetlanders and non-Shetlanders, but all the participants were permanent residents of the islands.

The combination of these variables provided the criteria for the "purposive" or "theoretical" sampling of respondents (Patton, 1980). Various means were used to contact interviewees. To approach fishermen, for instance, I used a list produced by the Shetland's Fishermen's Association, which identifies boats by name and registration number and provides the name, address and telephone number of their respective skippers. In this case, I used the place of residence to choose respondents. A similar strategy was adopted to contact salmon farmers, farmers and crofters; these groups are all represented by local associations. Other respondents were recruited through "snowballing" (with each interviewee being asked to provide the names of two acquaintances). Yet other interviews were arranged at the end of the public meeting in Lerwick (see section 5.2.5.). The resulting sample meets the criteria of diversity and typicality required for social representational studies. I should add that roughly one person in three contacted refused to collaborate, and that some of the people who did consent to be interviewed had been advised by SIC personnel not to do so.

#### **5.2.2.2. Conducting interviews**

Most interviews took place in the respondents' homes (three were held in their offices and three at the Clickemin community centre in Lerwick). They were conducted according to the following sequence: during the preliminary phase, I introduced myself (which entailed dissociating myself from media representatives and "experts"), the main topic of the interview ("your personal views and feelings about the *Braer* incident and nature in Shetland"), and the context of my research (a doctoral dissertation).

The second phase began with the subjects introducing themselves - which generally involved providing their "genealogical history" - but mainly comprised their narration of the complex set of events which led to, and followed from, the grounding of the *Braer*. My role then was strictly to listen, take notes and ask questions on the themes discussed by the respondents themselves in the course of their narration. The

third phase was devoted to a further exploration of the themes already covered, but the scope was broadened by asking questions about related issues, such as "nature", "life in Shetland", "coping with uncertainty", etc. Although the interviews were "officially" terminated when the tape-recorder was switched off, casual conversations almost inevitably took place. This informative small talk, summarised in note form after each interview, is used for the interpretation of the content of the formal interview.

In many interviews, I had to deviate from this sequence. It seemed less productive to ask "neutral" questions than to assume the riskier attitude of a "quasi-Shetlander" by raising the arguments which were circulating in the community and against which the interviewees' thoughts could bounce. It soon became apparent that I had to appear to be involved in Shetlanders' critical situation in order to win their trust. Otherwise, the interviewees were not disposed to go beyond the official discourse skilfully prepared for consumption by outsiders (especially media representatives), and more or less willingly accepted by the locals in their interaction with foreigners. This approach yielded considerable benefits in terms of the richness of the verbal data but also in terms of access to social gatherings and events in the company of Shetlanders. At the end of the first week, I was nicknamed, and introduced as, "The Angel". This affectionate name given by Shetlanders - and hence bestowing trustworthiness - contributed to the overcoming of many a barrier during the research. The defensive manners encountered at first eventually melted, in most cases at least, and I was granted the "benefit of the doubt".

#### **5.2.2.3. Data analysis**

The analysis is based upon the assumption that "interview data display cultural realities which are neither biased nor accurate, but simply "real". Interview data... reproduce and rearticulate cultural particulars grounded in given patterns of social organisation." (Silverman, 1985; p.157) Thus, the dynamics of the interviews briefly alluded to above - the flexibility of the interview protocol and the resulting difficulty in comparing interviews, the divergence between "official" and "personal" discourse, the disclaimers used prior to expressing one's views, etc. - are all subjected to the

analysis since they are both "symptomatic" and "constitutive" of the respondents' social representations and identities. The conversational strategies used in interview, and the information provided therein, need not be contrasted with some other "objective reality" - what interviewees actually do, how serious the ecological crisis really is, etc.; they can be related to other fora of meaning construction, but each must be understood in its own terms. The soundness of analytic induction (Mitchell, 1983) is the criterion of validity. The analysis is primarily based on an interpretative reading (itself informed by the theory of social representations and a social constructionist conceptualisation of nature based on Moscovici's work) of the verbatim transcripts of the interviews. At a later stage, the preliminary results derived from the analysis of this data set were related to, and integrated with, data from other sources.

### 5.2.3. Group discussions: Description and justification

I also conducted small-group discussions<sup>3</sup>. This method aims at assessing more specifically the social interactional processes that come into play when people debate novel and unfamiliar ideas or react to unexpected events. It makes use of group interactions to generate data and insights which would otherwise have been less accessible. Group interviewing provides data on group interaction, on realities as defined in a group context, and on interpretations of events that reflect this dynamic input (Morgan, 1988; 1993). It also shows how social representations structure interaction and social communication.

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<sup>3</sup> "Small-group discussions" and "group interviews" are used interchangeably here. I prefer to avoid the term "focus groups" since this technique of qualitative data collection is rooted in a radically different research tradition - market research - whose objectives are not compatible with mine. In contrast to small-group discussions, focus groups function as an *ad hoc* collection of individuals. The participants typically meet for an hour or two and, in a constrained setting, they have to establish rapport between themselves and the moderator. It is incumbent on the moderator to provide the themes and to lead the discussions, either by asking direct questions to the participants or by introducing a variety of stimulus materials. The use of directed leadership and the heavy reliance on stimuli, together with the "once-only" nature of the gathering, have been criticised by Burgess *et al* (1991) for yielding superficial impressions and stereotypical responses. In a nutshell, focus groups can be criticised for having a focus, whilst not being real groups. All in all, it seems that the use of focus groups is motivated by pragmatic reasons - they are less costly and time-consuming to run than individual interviews - rather than epistemological considerations. In that context, I will continue to use the somewhat vaguer but more adequate terms "small-group discussions" and "group interviews".

Group discussions are simply a technique for collecting qualitative data, but one which is very much in line with Campbell & Stanley's (1966) and Webb *et al*'s (1966) plea for ecologically valid research strategies. Its very aim is to replicate, in so far as this is possible through a research design, the social settings in which people live and the conditions under which they would normally interact. Small groups enable individuals to share in a discussion within a social setting which in many ways mirrors real-life social conditions. This technique seems particularly suited to the elicitation of a wide array of views and opinions<sup>4</sup>.

Harré (1984a) wrote that social representations are "social" because they are rooted in the life of groups. Since social representations could not exist as such without the material and symbolic activity of groups, it seems appropriate to investigate them in the everyday context of their production and use. One can think of small-group discussions as attempts to reproduce what goes on in "the streets, in cafés, at places of work, in hospitals, laboratories, etc., [where people] are always making critical remarks, commenting, concocting spontaneous, non-official "philosophies" which have a decisive influence on their relations, their choices, their way of educating their children, making plans and so forth" (Moscovici, 1981; p.183). In other words, group interviews are small-scale empirical instances of the "thinking society".

Because they are grounded in people's daily lives (Glaser & Strauss, 1967), group discussions answer some of the problems usually associated with surveys and individual interviews, namely the fact that these methods of data collection do not take account of the specific social context in which the data are produced, and therefore lead to impoverished analyses. The method of small-group discussions

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<sup>4</sup> There is surprisingly little written on the relative merits of individual interviews and group discussions. How do the data collected in one setting compare with those generated in the other? Are respondents more inhibited when met individually by an outsider, or when interviewed as members of a group thus imposing a different set of constraints? To my knowledge, no systematic comparative analyses have been conducted. I can only hypothesise that interviewees are more likely to disclose intimate feelings, to explore ideas, to build a narrative, and to be critical when they do not have to take account of the views put forward by others immediately present in the social situation. However, the range or variety of opinions, ideas, images and emotions expressed in individual interviews is probably more limited than in group discussions. It seems reasonable to assume that the two techniques can be contrasted in terms of depth and breath: individual interviews being especially relevant to probe thoroughly into individual feelings, ideas, etc., and group discussions proving more valuable to draw out a wider array of issues, themes, arguments circulating in people's social networks, but which are less deep-seated. The benefits associated with each method may also depend on the topic and on the relationships existing between the members (e.g. prior knowledge of the participants).

"recognizes the significance of the *context* in any interpretation of discourse; it argues that the content of conversations within a group is inseparable from the *social structures* and the *processes of communication* within which it is spoken" (Burgess *et al*, 1988b; pp.457-458, *italics in original*). The participants provoke each other into responding and they must take account of other people's views in devising their own responses. By focusing on the processes of interaction amongst group members, one can begin to explore the ways in which people pool information gleaned from various sources, incorporate and transform it in the process of making sense of unfamiliar ideas or events. One can explore how people utilise collective resources to help structure accounts, develop arguments, attribute causes, negotiate value conflicts and justify actions in the course of interaction.

For this research, the use of group discussions was pertinent in yet another way. Not only do respondents spontaneously get together to *talk about* the disaster and their relationships to nature, but their first-hand experience of the latter usually occurs in groups. Fishermen, fishfarmers and crofters work in teams. Adults often go in small groups on leisure fishing trips, on walks, on bird watching expeditions, etc. "Physical world socialisation of the self" (Proshansky *et al*, 1983) is almost always carried out in the presence of family members, friends, teachers or schoolmates. Shetlanders' social representations of nature emerge in the context of groups and because of the company of others.

Do "once-only" groups really qualify as social groups? Burgess and her colleagues (Burgess *et al*, 1988a; 1988b; 1991) express some concerns about the value of "once-only" groups. They argue that one ought to distinguish between groups which meet only once, where the interactions between the participants are secondary to the discussion of the stimulus material, and in-depth longitudinal small groups, where the content of the conversation is interpreted with explicit reference to the structure of the group and the nature of the relations between its members.

"The once-only group... is not the most appropriate method for exploring environmental values which are deeply held and which clearly reflect a complex interpenetration of individual experiences and collective beliefs about nature, landscape, and society. The social context of the group, in which people may discuss their values and activities with one another, is crucial but we believe that the group needs much more time in which the members can develop and establish sufficient trust so as to be able to explore feelings in ways which are not continually being directed and manipulated by the researcher" (Burgess *et al*, 1988a; p.311-312).

The rationale behind this critique is that once-only groups do not, strictly speaking, constitute groups in a social psychological sense; they are merely *ad hoc* gatherings of individuals. Such one-off meetings are not characterised by stable patterns of relationships between group members, patterns which would then provide an internal structure to the group and mediate the processes of verbal and nonverbal communication within it.

#### **5.2.3.1. Using natural groups**

My research design circumvents the problems associated with "once-only" groups. Although the participants met only once *in the context of my research*, they were not selected at random. The participants had a previous history as group members, shared a unique culture, had their own concerns, conversational strategies, humour; they did not function dynamically as "collections of individuals". In this sense, the groups were "natural". They consisted of already existing social units: a family, salmon farmers working on the same farm, two groups of concerned citizens who had assembled after the oil spill to seek reparation and act on behalf of their local community, and a fishing crew (see Annexe 3; Table 5).

This choice, again, reflects concerns about typicality and diversity. Two of the groups were based in Lerwick and the remainder were in the areas directly affected by the oil spill. The group discussions were held in natural contexts: either at home or at the place of work (salmon farm). The participants were contacted in the same way as the subjects for the interviews (lists of associations, snowballing, direct approach after the public meeting). The number of participants in each group ranges

from three to four. This is attributable to the nature of the group and/or to the availability of the subjects.

#### **5.2.3.2. Conducting group discussions**

In this case, there was a match between my research interest and the participants' topics of ordinary conversation: they didn't need my intervention to start discussing the "disaster" or their relation to "nature". The topics were topical! Thus, the participants were prompted in the same way as for the semi-structured individual interviews, but the ensuing discussions did not follow a particular sequence. This is justified by my theoretical preoccupations: to see how people decide on the relevance of certain issues, negotiate meanings, compete and argue, support or oppose each other, reach consensus, etc. I only acted as a moderator when it was strictly necessary. There was no attempt at encouraging reticent people to talk, or at limiting the intervention of the more talkative participants, since it was assumed that conversational strategies had already developed between the group members and were, in themselves, significant. Throughout the group discussions, which were tape-recorded and lasted approximately for 90 to 120 minutes, I took notes on the interactions occurring between the participants (type of leadership, use of humour, reluctance to speak, etc). These interactional strategies are included in the analysis, which otherwise is similar to the that of semi-structured individual interviews<sup>5</sup>.

#### **5.2.4. Participant observation: Description and justification**

Participant observation has not enjoyed much recognition as a relevant method for social psychological research. Traditionally, participant observation has been used to obtain analytic descriptions of complex social organisations and thus has remained confined mainly to sociological and anthropological studies. Two notable exceptions

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<sup>5</sup>This does not amount to treating the group as a simple aggregate of individual attitudes and opinions which would have been equally accessible through the more time consuming technique of individual interviews. The context of the group, the dialogical nature of the arguments (Billig, 1987; 1993), the communicative strategies involved as people debate, the management of impressions amongst group members (Goffman, 1959), and so forth, are all taken into account in conjunction with a thematic analysis.

are Festinger *et al*'s classic study When Prophecy Fails (Festinger, Riecken & Schachter, 1956) and Jodelet's now seminal research Madness and Social Representations (Jodelet, 1989/1991). In spite of its fate, participant observation seems well suited to social representational studies. The latter aim at analysing the structure and content of people's ideas, attitudes and images as these relate to their conditions of emergence, to the specific communicative practices in which they are embedded and from which they spring, and to the functions which they serve in orienting one's actions and in mastering the material, social and symbolic environments. These aims can be best attained by using a generic method which allows the researcher to link discourse and practices by observing, and participating in, people's everyday activities in a real life context. Participant observation also retains, within the one method, perspectives that otherwise would be incompatible with each other, i.e. that of the actor and of the observer. In a sense, participant observation is the methodological equivalent to Mead's (1934) notion of "assuming the role of the other": researchers assume the role of the "generalised other" and incorporate the perspectives of all their informants without their own view being identical to any one of them.

"In my eyes, observation retains a privileged position in the study of thinking and communication. Through it the big break-throughs that allow us to understand the life of the mind were made, from Lévy-Bruhl to Piaget, from Freud to Vygotsky, from Lewin to Marc Bloch [...] Observation has a prominent role in the study of social representations. It frees us from premature qualification and experimentation, which chop up facts into tiny pieces and lead to meaningless findings [...] This approach may occupy a place in social psychology (Von Cranach, 1980) comparable to the position secured by the ethological approach in biology, and very much for the same reasons [...] For many years to come observation stimulated by theory and armed with subtle analytical methods will still give us the means of understanding the genesis and structure of social representations *in situ*." (Moscovici, 1988; pp. 240-241)

Participant observation has been defined more or less inclusively by its main proponents (e.g. Agar, 1980; Burgess, 1984; Jorgensen, 1989; Lofland, 1971/1984; McCall & Simmons, 1969). The research techniques subsumed under this label vary greatly: some emphasise covert observation, others advocate overt participation; some

favour systematic counting, others prefer more direct involvement with the subjects of the study. Choosing between these options should be based on the specific requirements of the situation and the characteristics of the object of investigation. But whatever distinctions are being made, participant observation is always characterised by an unusual quality of open-endedness in the study design, and an unusual degree of receptiveness to the subjects' conceptions (McCall & Simmons, 1969; p.19). Both are required for social representational inquiries.

In this thesis, participant observation is not defined as a single method, but rather as a characteristic blend of methods and techniques which involves some genuinely social interaction in the field with the subjects of the study, some direct observation of relevant events, a great deal of informal interviewing, and the collection of documents and artifacts (McCall & Simmons; 1969)<sup>6</sup>.

Becker and Geer (1957) consider participant observation "the most complete form of sociological datum, [...] a yardstick against which to measure the completeness of data gathered in other ways, a model which can serve to let us know what orders of information escape us when we use other methods." (p.28). Caution is required here in the interpretation of the word "yardstick" as it connotes positivist notions of objectivity and validity. Nevertheless, participant observation does enable the researcher to relate discourse to cultural models of behaviour and to material and symbolic practices. It maximises the inquirer's ability to grasp motives, beliefs, concerns, interests, customs and the like and, by positing her/him in a natural, ongoing situation, it permits the observer to build on tacit knowledge, to use her/himself as a data source. (Lincoln & Guba, 1985). This is not to say that "putting oneself in the shoes" of the people studied automatically allows one to recreate the mental organisation of the group; clearly, the intuitionist approach has the same disadvantages as introspection in general. But it means that immersion and the stimulations of participation can yield great benefits if one controls their products.

Moreover, I would argue that participant observation is virtually indispensable within the framework of social representations if these are not simply conceived as

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<sup>6</sup>Formal interviewing, either on a one-to-one basis or in groups, and the systematic collection of newspapers for content analytic purposes are not considered as parts of participant observation, although they do comprise the everyday activities of field research.

descriptions of behaviours, but in fact define, justify and otherwise refer to the latter. If Moscovici (1973) is correct when he describes social representations as "systems of values, ideas and practices" (p.xiii), then it must be necessary to consider practices as elements which signify or express representations, just as linguistic forms do. There are many aspects of people's representations, actions and relationships of which the main protagonists themselves are simply unaware. More generally, people may only vaguely perceive them and lack the cognitive or linguistic tools to communicate them. If perceived clearly, people might still be reluctant to disclose these aspects of their lives to outsiders. In all such cases, participant observation is useful. It also explicitly acknowledges that social representations should be studied in their natural context of production and use.

Considering the object of my research, the use of participant observation (informal interviewing, genuine social interaction, observation, the collection of artifacts, etc.) seems particularly relevant. How would it be possible to understand Shetlanders' social representations of their nature without having experienced, seen, explored, and smelled it for myself? How else could I have gained some insights into their ways of relating to the wave of incomers who came in the wake of the oil spill? This does not imply that I can now relate to "nature" in the way native Shetlanders do, but it may very well be that it is precisely in the distance between my experience of nature as a non-Shetlander and theirs that the space of social representations is to be found.

#### **5.2.4.1. Procedure**

I arrived in Shetland eight days after the tanker *Braer* had run aground and begun to spill oil<sup>7</sup>. Eight days which proved exhausting for a community having to

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<sup>7</sup>A note is necessary before I describe the procedures followed throughout the fieldwork. The preparation for the latter was minimal due to the sudden character of the event and the concomitant lack of time. Nevertheless, it involved, firstly, becoming somewhat familiar with the issues surrounding the spill by reading its coverage in all the London newspapers, by recording and watching the evening television news pertaining to the "*Braer* disaster" during the week between the 5th and 13th January 1993, and by contacting various organisations (Greenpeace, the Scottish Natural Heritage, The Royal Society for the Prevention of Cruelty to Animals (RSPCA)) to obtain more information about the situation. Secondly, it entailed acquiring some basic knowledge about Shetland, its population, geography, economic structure, political and social history and culture, through censuses, encyclopedias, books and articles. Thirdly, it meant addressing urgent methodological issues, such as the establishment of rough criteria for the sampling of respondents (for both individual and group

come to terms with the biggest crisis ever to face Shetland. Eight days during which, according to the SIC, some 1,400 "experts", environmentalists, politicians and journalists, flew in from all over the world. Eight days during which contradictory information, unco-ordinated advice and general uncertainty about almost every aspect of the crisis made the tension reach unprecedented peaks. Eight days in the course of which the vast majority of tired Shetlanders became more and more reticent about engaging in any type of interaction with outsiders.

In that context, gaining entrée into people's homes was often difficult and meeting officials almost impossible. My mere presence was loaded with pejorative attributes. The first step, therefore, was to observe how people discussed amongst themselves in pubs, at street corners, in small shops, and to get recent issues of *The Shetland Times* in order to gain a general understanding of the situation. I set out to "learn the ways" of Shetlanders so that I could eventually participate in the conversations whilst minimising the animosity and the inhibitory effects inevitably associated with the presence of yet another stranger.

In all of the public places I attended, the bulk of the conversations, not surprisingly, revolved around questions related to the "disaster". But of all the topics taken up, that of the attitudes of the journalists and "so-called" experts never failed to trigger new anecdotes, provoke hilarity, prompt exasperated comments and spark off heated debates. I had to differentiate myself from these people. Because of this extremely tense context, most of my observations during the 16 days spent in Shetland were conducted mainly in natural and public social settings: in pubs and shops, in the market, at the winter festival of Up-Helly-Aa, on the polluted cliffs of Garths Ness, where I walked with local inhabitants whilst listening to their impressions and stories about the place, at a public meeting held on the causes and consequences of the "disaster", etc. I kept a logbook recording my activities, significant events and some preliminary interpretations of these events. My observations, to some extent, oriented the selection of potential interviewees and

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interviews), the devising of interview schedules, the reviewing of the principles which guide participant observation and the conduct of group discussions. And finally, it meant organising the practical aspects of the fieldwork: securing transportation to and on the islands, booking accommodation, ensuring the financial support of the department, preparing the technical equipment (recording machine, microphones, tapes, portable computer, dictating machine, batteries, etc.).

suggested new research questions. All these activities generated data in their own right; they are used as background knowledge, crucial for the interpretation of the data collected through more formal methods.

#### **5.2.5. A public debate: At the interface of group discussions, media analysis and participant observation**

A public debate entitled "The Cost of the *Braer* for Shetland" constitutes another important source of data. The meeting was organised and broadcast by BBC Radio Scotland as part of a series entitled "Speaking Out with Leslie Riddoch". In essence, this debate was a radio audience discussion programme. Like their more widely analysed television counterparts (Livingstone & Lunt, 1992; Livingstone, 1996), radio audience discussion programmes are one of the fora in which social representations are formed and expressed. Livingstone & Lunt (1992) argue that audience discussion programmes stand in a metonymic relation to the real-life world outside the studio. The topics raised in such programmes reflect the discussions which spontaneously take place in other social gatherings.

The defining attributes of the genre (Livingstone & Lunt, 1992; Livingstone, 1996) are that such programmes are usually held at times of crisis, focus on issues of public concern, typically have a mixed studio audience of "ordinary" people and "experts" or "elite" participants, combine individuals and group representatives, and involve participation, access and active interpretation from the audience, both at home and in the studio. Unlike most media programmes, they integrate lay people's opinions and personal experiences with the perspectives of "experts". Thus they bring together forms of representations which are traditionally kept apart, whilst clearly privileging the voices and experiences of lay people and marginalised groups over those of experts. Audience discussion programmes explicitly favour exploratory speech. It is incumbent on the host to foster the expression of personal views, to protect the right to speak, and to maintain the quality of the discussion as an open-text. The debate is therefore not entirely under her/his control.

#### 5.2.5.1. "Speaking out with Leslie Riddoch: The Cost of the *Braer* for Shetland"

"The Cost of the *Braer* for Shetland" consisted in a one-hour debate during which some eighty Shetlanders and expert or elite participants questioned and criticised a panel of three key protagonists in Shetland society under the supervision of a host, Leslie Riddoch. The panel comprised the Director of Public Health, the Chief Executive of the Shetland Islands Council (SIC), and the Convenor of the SIC (who also recently created the Marine Environment Foundation in Shetland). The debate was held on January 19, 1993, at the Garrison Theatre in Lerwick. It was recorded for future transmission. I attended and got involved in the meeting, obtained a cassette of the programme and transcribed it verbatim. This "happening" deserves some attention because it exemplifies the nature of fieldwork, the often ambiguous types of data which are collected and the necessarily interpretative character of the analysis. How can this public meeting be defined? On the one hand, "The Cost of the *Braer* for Shetland" is clearly a product of the media. It is set up and transmitted by the BBC and, as I have argued earlier, it follows, to a large extent, the conventions of the genre of audience discussion programmes (even if the visual dimension and all the constraints associated with managing one's physical appearance are notably absent from radio programmes). Yet, it would be inadequate to analyse the data produced in the course of the programme with the coding frame developed for the content analysis of the local newspapers. Indeed, the qualitative data generated by this public debate are more akin to the ones obtained via group discussions since the content of the interventions can only be understood in the light of social dynamics: each intervention is prompted by an earlier comment. Like smaller group discussions, the public debate provides an excellent opportunity to tap into the stock of arguments existing in Shetland in the wake of the oil spill: opinions, "facts", ideas and beliefs are expressed simultaneously about the immediate and long-term consequences of the oil on the land, in the sea and for animals, etc. The role of the press, that of the "experts", the attitude of the SIC, the possibility of claiming compensation, the threat to the reputation of Shetland produce abroad, the "scandal" of flags of convenience,

people's concerns about their health and that of their children, the loss of amenity, etc. are all discussed in an emotionally-charged atmosphere.

The nature of the relations between members of the audience sets this public debate apart from most television audience discussion programmes, as well as from the small group interviews conducted during the fieldwork. Unlike the members gathered for television audience public debate, most of the participants in "The Cost of the *Braer* for Shetland" were not complete strangers. Their mutual knowledge, combined with the fact that the participants must go on living with each other when the debate is over, impose a number of constraints on their intervention. And unlike the participants in small group discussions, the studio audience was not homogenous, but comprised experts and lay people, Shetlanders and outsiders. The members of the audience did not have a prior history as a group - in this sense, "The Cost of the *Braer* for Shetland" qualifies as a "once-only" group - but the audience also constitutes a "natural group" in that the members were acquainted, sometimes intimately, with most of the other participants.

Finally, my own presence and involvement in the debate change the type of analysis which can be made of the data. For instance, the visual dimension of the interactions (shaking of heads, expressions of encouragement or disapproval, the spatial location of the participants, etc.), which is lost in the radio transmission as well as in the verbatim transcription, can be retained through the observations I jotted down as the meeting progressed. It is interesting to note that the "beginning" of the debate differs in the broadcast version from the actual public discussion: a pre-recorded introduction provides a context for the debate on the radio, but one which has little to do with the concerns expressed by Shetlanders themselves in the studio/theatre. This type of information would have been lost had I not attended the meeting.

#### **5.2.5.2. Analysis**

The material generated during this public meeting typifies the kind of data that would normally be excluded from more rigid research designs because it does not lend itself to any easy classification. The verbatim transcription of the cassette of the

programme provides the basis for a content analysis. The unit of analysis is the utterance, that is a conversational turn (or segments of conversational turn) in which an argument is put forward. Each utterance is coded according to who makes it (Shetlander vs non-Shetlander, expert vs lay person, member of the panel vs audience participant or host), what is being argued (themes) and how the topics are discussed (abstract vs concrete, scientific vs personal, generalised/global vs particular/local). This reading is then supplemented with a more interpretative analysis which integrates interactional processes with content, which brings in observational data and allows me to comment on the more subtle mechanisms used, for instance, to legitimise or disqualify a claim. A quantitative synopsis of the public debate which relates the number of utterances (and the pourcentage of the total debate which these represent) to the main protagonists can be found in Annexe 4.

### **5.3. Triangulation and integration**

The principle of triangulation introduced in the first part of this chapter deserves further qualification. Three types of triangulation are possible: triangulation of data, triangulation of methods of data collection, and triangulation of methods of analysis. The integration of such different types of data and methods of data collection and analysis is the central task facing the researcher using a multi-source and multi-method design. Yin (1981) indeed suggests that

"accounts should be organized around the substantive topics of the case study. Each narrative portion should integrate evidence from different data elements [...] The narrative must be organized around specific propositions, questions or activities, with flexibility provided for modifying these topics as analysis progresses [...] As for integrating evidence, quantitative and qualitative data that address the same topic should be assembled together; similarly, interview segments from different respondents but on the same topic should be integrated."  
(Yin, 1981; p.60)

In this sense, the integration of the data completely disregards the artificial dichotomy between qualitative and quantitative methods. The methods used in this thesis will provide the means of linking the collective construction of nature

(sociogenesis) to the ways in which such representations relate to Shetlanders' social and cultural identities (ontogenesis), as well as to the ways in which representations are put to use in, and structure, everyday social interaction (microgenesis). The analysis should also reveal the "embeddedness" of immediate reactions to the oil spill within long-established social representations of nature. It explicitly interrelates stability and change, structure and processes. The integration of the methods of analysis should maintain the specificity of each type of data but it should equally permit us highlighting the discrepancies between them. The incorporation of different types of data will serve to contextualise the extracts of verbal or written material and to support the analysis.

#### 5.4. Conclusion

The suddenness of the events which constitute the present case study meant that most of the methodological choices had to be made on the spot, often in difficult circumstances. There was little time to plan and to reflect. If the entire research project is marked by the early stages of the research process and by the short length of my stay, and if, consequently, the analysis is somewhat restricted, I still believe that it was necessary to grasp the unique opportunity provided by the *Braer* oil spill. My strong commitment to the theory of social representations, together with an awareness of the epistemological positions which underlie particular research methods, directed my research efforts. The choice of individual interviews, of small group discussions, of media analysis, and of participant observation, reflects theoretical concerns. The addition of a fifth data source, the public debate, was more directly the result of the reality of the field work. Throughout my stay in Shetland, I have tried to remain open to the possibilities which emerged in an ever-changing context.

To summarise: societal discourses on nature were reconstructed using a content analysis of 375 articles from the local newspaper, *The Shetland Times*; these reflected the concerns of the community and shaped their understanding. The processes of appropriation and transformation of collective meanings by individuals, as well as personal experiences and feelings about nature, were accessed through 17

in-depth interviews with Shetland residents. The actualisation of social representations in interactive, dialogical contexts was investigated in two different ways: firstly, I analysed the linguistic material produced in small-group discussions with five "natural" groups; and secondly, I analysed the transcript of a public debate organised by BBC Radio Scotland on the consequences of the *Braer*. This debate was particularly rich because it brought together various social actors, and laid bare the profound disparities existing between their respective *versions*. Finally, throughout my time on Shetland, I acted as a participant observer in order to examine the collective and private practices through which Shetlanders construct and reveal their representations of nature. A plethora of complementary, *ad hoc* sources were also used. The juxtaposition of the five data sources was not intended as a strategy for validation, but a means of understanding the multiple social representations of nature which co-existed in Shetland after the oil spill. I looked for the themes which cut across the entire corpus, and sought to retrieve the structure, content and functions of the social representations which were beginning to emerge.

The sheer quantity of data, the fact that identical coding frames could not be developed for all data sets, the difficulties of handling systematically participant observational data, and the realisation that preliminary coding frames were oversimplifying the complexity and the subtleties of the discourses, images, artifacts and practices encountered in Shetland, led me to adopt an interpretive analytical strategy. Although this strategy is more common in anthropology and ethnography than it is in social psychological research, I contend that it is particularly suited to social representational analyses. If social representations are not simply located in the heads of individuals, or in institutions, but also in the spaces of mediation between them, as well as in matter, then an analytical approach which links these various constructions is necessary.

This approach raises important analytical questions. How many themes should there be? How should one convey a sense of interactional dynamics and communicative practices whilst focusing on themes? Can the crisis be understood in terms of regular social functioning? The reader will be the judge of the extent to which these questions have been successfully answered. I have attempted to support each interpretive claim by quotes or illustrations which derived from different data

sources and, when a theme was conspicuously absent from one aspect of social life, to indicate and to explain why this might be the case.

### **PART III: RESULTS AND ANALYSIS**

## 6.0. LIVING OFF NATURE, LIVING WITH NATURE: ORGANIC REPRESENTATIONS AMONG "REAL SHETLANDERS"

Social representations do not appear to those who hold them as representations at all. They are coercive precisely because they are taken-for-granted and because each representation seems to engulf the whole of the "real", instead of being recognised as but one version of reality amongst a potentially infinite array of alternative ones. To reconstruct how organic social representations of nature - with their corresponding values, mode of knowledge, practices and ontology - emerged, and now function, in Shetland, is the object of the present chapter. This endeavour takes us to the heart of Shetlandic life, since it is in everyday life that past practices, traditions and collective memories are renewed and actualised.

To uncover from within, as it were, the roots, content and functions of Shetlanders' organic representations of nature, I begin by discussing how social identities are intrinsically tied to particular relations to "nature". In part, these social identities emerged and are sustained through simple processes of categorisation: arbitrating over who may or who may not be considered Shetlander is an important part of social life, especially since the immigration of oil-related settlers to Shetland. However, these identities also have deep existential meanings and resonances because they are intimately bound up with a specific mode of knowledge, a particular representation of nature, and a somewhat mythical "way of life". The predominance of this "way of life" over the centuries means that it now constitutes the paradigm for contemporary social life. But this stable "way of life" has also favoured the acquisition and refinement of certain skills, abilities and *knowledges*, and created, in a very real sense, a particular nature in Shetland.

### 6.1. Islands and insularity

Shetland is an archipelago. It is isolated by almost two hundred miles of ferocious waters from both the Norwegian coast and the Scottish mainland. These simple geographical facts have complex cultural repercussions. Reaching or leaving the islands, even today, is expensive and time-consuming. Ferries carrying passengers, cars and goods leave Aberdeen, Bergen and Torshavn regularly. Some

stop in Orkney on their way to Shetland, in which case the journey takes two days, whilst others go directly, thereby sparing the traveller a day on rough seas. Air travel is frequent and more convenient, with planes coming into Sumburgh airport from Aberdeen, London and Bergen everyday, but flying is three times more expensive than travelling by ferry and, just like the latter, is liable to cancellations because of extreme weather conditions. Not surprisingly, Shetlanders seldom venture away from their islands.

And for the incomer, the sense of isolation and remoteness is no less important. On a clear day, from the plane, the islands appear like the pieces of a giant puzzle, set between the North Sea and the Atlantic, sea-torn, treeless, peat-patterned, with grassy platforms shaved by sheep, and lonely houses dotted on the rocky headlands. And so, when the bus which links the airport to the capital releases its passengers in front of Lerwick's popular pub *Thule*, one cannot help thinking that it is an appropriate name indeed: this must be "the island at the edge of the world". Yet, Shetland's boundaries are symbolic more than physical. Here, I explore the meanings which Shetlanders themselves impute to these boundaries. Moving away from simple physical determinism, I consider the islands as symbols, as "things which stand for other things", as resources used to condense complex ideas, images and sentiments.

The islands themselves symbolise and are used to explain a number of aspects of social life in Shetland. Their objective physical isolation, for instance, becomes the point of articulation of complex dialectics between self-reliance - where the islands are at the centre of everything - and dependency - where the islands are not only distant from the British mainland, but also *peripheral* in relation to this powerful centre. Thus, Shetland folk declare with great pride: "We have everything up here. There are a lot of folk who don't even know where Shetland is but, as you can see yourself, there is everything you need" (I-09)<sup>1</sup>. Some Shetlanders have never ventured away from the islands because, they say, "there is no need to" (I-06), because "we never wanted for anything we couldn't get here" (I-02). But these same

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<sup>1</sup>The codes in parentheses refer to the particular individual interviews (I) or group discussions (G) from which the excerpts are selected. The subjects or groups to which the numbers refer can be found in Annexe 3, Table 4 (for individual interviews) and Table 5 (for discussion groups).

people would also proclaim, and decry, that they are, and always have been, at the mercy of politicians, bureaucrats or oil companies which exploit their islands and completely disregard the local population.

As we were walking across the windswept hills overlooking Garths Ness, a crofter from Hillwell described the circumstances of the cession of Shetland to the Scottish Crown as the single event which best captured the foreign perspective on Shetland<sup>2</sup>. This act of birth of a Scottish Shetland was going to mark the entire history of the islands: a story of abandonment and contempt which, this informant said, epitomises the outside world's attitude towards Shetland. She added that nobody was interested in Shetland because the islands were just "too far". However, one could argue that the perceived lack of interest expressed by Scots for Shetland significantly contributed to the recurrent and emphatic expression of difference from Scotland which is so alive nowadays and which, historically, has probably been one of the main shapers of the distinct local culture<sup>3</sup>. At any rate, there is no doubt that, some five hundred years after the abrogation of their freehold rights, Shetlanders still recall this humiliating episode of their history and the subsequent centuries of exploitation by the Scots. To this day, they try to preserve a distinct cultural identity which links them to their Norwegian roots. Shetlanders feel misrepresented and marginalised by both Scotland and England, and such feelings are at the core of their consciousness.

At another level, isolation, remoteness and a marginal status in the eyes of foreigners have induced in the population a sense that they should be relatively

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<sup>2</sup>Until the middle of the 15<sup>th</sup> century, the Shetland islands belonged to the Danish Crown. Shetland was a colony of freemen or *udallers*, independent free-holder farmers and fishermen, mainly descendants of earlier generations of Norse settlers. However, in 1469, the islands were pledged to Scotland for the sum of 8,000 florins by the ruler of the kingdom of Norway, Denmark and Sweden, King Christian I. Ridden by debts, the monarch mortgaged the islands to provide a dowry for his daughter. He pawned some of his royal estates as well as the right to collect taxes from the *udallers*. From the king, Shetlanders received a letter admonishing them to be dutiful and to pay their *skatt* (tax) to the kings of Scotland until the time might come when the islands could be redeemed. They never were, and the rule that ensued under the Scottish lairds often proved cruel.

<sup>3</sup>Peterson (1959), in an article entitled "The Shetlands - Do they exist?" published in *The New Shetlander*, argued that a careful analysis of Shetland's dialects and historical demography reveals intense and multi-stranded Scottish influences on the local culture. In a perverse fashion, it would be precisely the similarities between Shetlandic and Scottish cultures (themselves explained by the substantial Scottish immigration following the handover of the islands) which would have prompted the need perceived by Shetlanders to dissociate themselves from Scotland and to draw upon, and over-stress, their Norse origins in constituting their distinctive culture and identity. Interestingly, the article implies that, were the Shetlands to lose their Norse or Viking identity, they would cease to exist.

autarkic. The historical subsistence economy has long ago vanished and Shetland today is integrated in a much wider economic framework (Byron, 1986; Wills, 1991). But Shetlanders still think of themselves as self-sufficient (Cohen, 1980; 1986) and aim to rely predominantly upon the resources immediately available to them: the land and the sea<sup>4</sup>. Today, Shetlanders use people's engagement in traditional economic/natural practices as a means of allocating identity (Cohen, 1978). To be a "real Shetlander" is to be a crofter or a fisherman. The imagined traditional "way of life" of crofters and fishermen becomes the ethos of contemporary Shetland life in general.

"Shetland people tend to be fairly good at volunteering I would have thought. Someone needs something done, a lot of people in the community will rally together and do it. [...] It's always been like that. *It's like that when you live on an island.*" (I-17)

"[When you live on an island] you have to be, in a way you have to be very independent and yet you have to be willing to help at the same time. Although you are independent in one way, you have to be able to help and accept help as well. You are independent as a group. *We are independent as islanders, not maybe as individuals but as islanders.*" (I-13)

This is how simple geographical facts are transformed into social realities: they are used to explain Shetlanders' consciously preserved culture and identity, where autonomy and solidarity, resilience and vulnerability, the requirements of collective life and the needs of individuals are closely intertwined.

Moreover, the islands come to signify Shetland society in general, in a metonymic fashion, and with all the ambivalence which this entails. At times, the physical boundaries of the islands are perceived as a hindrance to the community's integration into wider economic, political and legal frameworks. Representatives of the progressive segments of Shetland society who want to modernise an "out-dated" social and economic system by capitalising on the oil industry have to deny the very

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<sup>4</sup>The traditional economy was based on fisheries and agriculture and the further exploitation of their products through fish-processing and knitting. The islands lie close to prolific fishing grounds and so, for centuries, fishing in the *Haaf* (the Norn word for ocean) and fish-processing have been the mainstays of the economy. Agriculture is also important but the main activity is, and always has been, the rearing of sheep and cattle. Most of the land comprises rough grassland, heather moorland and peatland, none of which is really suitable for cultivation (there are only 11,000 hectares of good grassland and little arable soil in Shetland). This means that crofting could never provide adequate standards of living on its own. Historically, it could only be combined with other activities such as fishing and knitting.

reality of the islands themselves in order to escape the insular mentality which is associated with them. As this well-travelled marine engineer and city councillor puts it:

*"We're not an island! You can't just be a Shetlander. You have to have the broader perspective of the rest of Europe derived from the country to work together..."*

**I: You're not an island?**

I was going to say *we're not an island*. I mean it was one of the stupidest things I've ever felt to say, *we're not an island!* But it's right, we are not insular. We shouldn't be insular. We may be an island and we may be an island race but we should not be insular. We should not lock ourselves away from the rest of Europe or the rest of Scotland. [...] We can't exist on our own. I'm a Shetlander first but I think that we can't be insular in that we have to look at the broader perspective of the whole of Europe, the whole of the world." (I-10)

Even this man cannot escape the intrinsic connection, so conspicuous in Shetland society, between the geography of the islands and their distinct culture. (He is also careful to reassert his local identity and to emphasise that he is "a Shetlander first", in spite of his modernist stance). These elements are again brought together in a statement which links natural features and social dynamics:

*"You can influence events in Shetland. Anyone can if you make the effort: it's small enough and it has a very tightly defined boundary. If you go over the boundary, you drown!"* (I-10)

"Tightly defined boundary" clearly refers both to social norms - what is permissible - and to the physical demarcation between land and sea. The figure of speech captures the prescriptive character of social life in a close-knit community and hints at the fatal consequences - "you drown!" - of trespassing local conventions. The sense of agency which may be found in small communities is constrained by coercive social norms.

Ambivalence towards the islands as symbols of social life sometimes assumes another form: that between strength and fragility, resilience and vulnerability. Indeed, on the one hand, the seas seem to offer a guarantee of cultural distinctiveness, some sort of natural protection against assimilation and the dissolution of the traditional way of life. In this case, the islands stand as an emblem of solidity, stability and permanence, as the name by which they are referred to locally - "The Old Rock" -

suggests<sup>5</sup>. On the other hand, however, it is sometimes a sense of fragility which prevails.

"We're just a bunch of rocks in the middle of the Atlantic and the North Sea!" (I-07)

"Sometimes I think a good gale could just wipe us out. No more Shetland." (I-09)

Again, these antithetical terms are inter-dependent: isolation, fragility, peripherality and marginality are at once deeply resented and actively used to construct and legitimise a distinct culture, to open up a space of resistance based on a secure location in the world. These dialectics are perfectly conjured up and illustrated by an artifact produced by the Shetland Tourist Information Office. It is worth describing. Conventional maps of Britain, such as the ones used for the weather reports on British television, seldom show Shetland in its true geographical position. For convenience, Shetland is usually contained in a little inset in the Moray Firth, thereby ignoring the 200 miles of sea which separate it from Aberdeen. The weather reports are interpreted by the locals as daily reminders of Shetland's peripherality and insignificance in the eyes of the South folk. With embittered and forceful humour, the Tourist Information Office riposted by producing its own revised version of British geography: a reversed map of Britain, printed on tea towels, with Shetland featuring at the very centre of the map, "larger than life", and the rest of the British Isles being squeezed together into a small box posited somewhere north-east of Unst. If the theory of social representations is correct in claiming that representations always combine a symbolic and an iconic dimension, that they reproduce complex and sometimes imprecise concepts as images, then it is scarcely surprising that Shetlanders should produce such artifacts. Interestingly, the tea towels, which were initially intended for consumption by tourists, are now found in Shetlanders' homes. I saw them twice in people's kitchens. They seem to encapsulate both Shetlanders' frustration vis-a-vis the outside world, and their efforts to resist marginalisation.

To sum up, the islands symbolise social life. The use of a natural metaphor for social life serves essentially conservative purposes. First, by naturalising, quite

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<sup>5</sup>It is no accident that the editorial page of *The Shetland Times* should also be entitled "The Old Rock": social commentaries are framed by this natural analogy to confer a sense of permanence and invulnerability on the local way of life.

literally, what are in fact political, economic, social and cultural realities, the possibilities of change are considerably reduced and the weight of tradition is reasserted. Second, this strategic naturalisation allows social life to go on without opening up debates which would be deleterious in such a close-knit community: "nature" justifies making important decisions concerning social life without ever being seen to have deliberately *chosen* a course of action, because it was natural and therefore necessary. Third, a whole ethos is also elaborated which emphasises collaboration, solidarity, resilience amongst Shetland folk, and resistance to outside influences; it is legitimated because it is intimately tied to a particular way of life which is itself deemed natural. The flexibility of the islands as symbols means that they can sustain diverse meanings and endow a broad range of experiences with moral justification. All this, in turn, suggests that nature is not to be tampered with: its stability guarantees that of social life (see below). Of course, only "real Shetlanders" truly know how to manipulate this symbol so that it can serve their multiple aims.

## 6.2. The "real Shetlander"

Who are these "real Shetlanders"? Why do Shetlanders insist on distinguishing between the local population in general, and "real Shetlanders"<sup>6</sup>? What does this social category mean? At the most fundamental level, being a "real Shetlander" implies a connection to the archipelago through both place of birth and upbringing. Although this criterion is a *sine qua non*, being accepted as a "real Shetlander" implies very much more than that. It also requires that one should participate in the Shetland "way of life". And this, in turn, implies that the "born and bred Shetlander" should belong to specific frameworks of social organisation, be a member of specific "natural categories", and be involved in the traditional economic activities upon which the much exalted "way of life" is based. It also implies the sharing and the

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<sup>6</sup>Although Peterson (1959) has analysed Shetlanders' relations to Scotland and shown how they involved processes of differentiation and distanciation, I have found no literature on the genesis of the social category of the "real Shetlander" *per se*. Its historical origins have not been traced. It is reasonable to assume that it emerged as a result of contacts with outsiders; otherwise, there simply would be no need to distinguish between Shetlanders, as everyone would belong equally. One can also hypothesise that the number of Shetlanders encompassed by this category would have tended to decrease over time, with the progressive erosion of the traditional "way of life". It is also likely that the context in which I conducted the research - a context which brought very many non-Shetlanders to the islands - exacerbated the need to differentiate between the locals and Others.

observance of moral codes. I shall consider these factors, bearing in mind how social change - especially due to the oil industry - has accentuated the need to define ever more clearly the very social categories it threatened.

#### 6.2.1. The "born and bred Shetlander"

Throughout the interviews, group discussions and during conversations overheard amongst Shetlanders, one theme continuously recurred: that of the difference between "the born and bred Shetlander" and more recent settlers or foreigners. This effort to distinguish the "real Shetlander" from outsiders may always have been part of Shetland life; however, the intensity with which Shetlanders now debate this issue, as well as the resources they summon to support their claims, make it plain that the oil industry has fundamentally threatened and changed Shetland society, and revived the need to defend the local identity.

"You must realise that the biggest oil boom-town in Europe is here. It must be understood that this is devastating for a small community. I would think we have come through reasonably well, but very much has been taken over. [...] About twenty years ago, we had the construction phase for ten years and while the construction phase was here, we had this tremendous opportunity to study human character. And with all the people that were in Shetland - they really were from all over the world, Black and White and Yellow included - the Englishman always came through. If the chips are down, always look after number one! My conclusion is that the Englishman is... an Englishman's philosophy is to take all and give nothing. And that's *the dead opposite of the Shetlander's philosophy*. It is a very dangerous philosophy, you see? So that's what happened in Shetland. We have very much been taken over in the name of oil and money." (I-03)

Whatever differences indeed existed between Shetlanders and outsiders, they were magnified to eventually become "the dead opposite of the Shetlander's philosophy". Asserting the radical difference was all the more necessary considering the growing appeal of the "Englishman's philosophy" to the youth of Shetland. Openly acknowledging the reality of social change - Shetlanders usually prefer to stress the continuity of community life - the same man declares:

"A young person in Shetland today realises that, in order to survive, he has to become more like the White man... It's a dog eat dog society we live in. They'll even knock the next guy down to take his position and that's what they do!

**I: You think that's the situation in Shetland today?**

Absolutely! It's the only way to survive. I am not going to knock it because it is the

only way to survive. There are some young Shetlanders doing well, a bloody good job! They are. But we've lost this beautiful old way of life which is wonderful to live in. [...] I think that is undoubtedly going to consume the indigenous population of Shetland." (I-03).

In a group discussion, one "real Shetlander" and her acculturated husband also talked about the consequences of the penetration of "Sooth" values into their society.

"T: There was more of a community. Now we don't have that.

**I: You think you have lost this sense of community?**

T: Yes.

S: Yeah, we've spoilt it. It's been spoilt, definitely, with the Sooth folk coming in [...] It's not the same. I know it's not the same. When we were young, everybody was working together. There was a lot of crofters together, they would all be working together and helping each other. You would go to one person one week and somebody else the next day or whatever. Not just your little problems. Now... I can't really put it into words. It's like, it's far more sort of you're in your own little family, in your own little boxes, I would say. And if you try to stick your nose out to help anybody, they think you're crazy. To be kind hearted and to be helpful now is looked down on by a lot of the community.

T: There's inbred kind of greed now, and jealousy, and envy which wasn't there before. People don't like to see someone get on ahead of them. They don't like to see them get more money or a better house or a better car. This sort of thing, you know?" (G-04)

The external menace now threatens to dissolve the community from within. The need to restore a distinct and superior local identity is pressing; Shetlanders must distinguish themselves from outsiders. The difference is instituted, first and foremost, by the place of birth: unless one is born and bred in Shetland, one will never be considered a real Shetlander. As the following family discussion reveals, even Rose, a woman who has arrived on the islands at the age of four months, is not fully considered by the locals as a Shetlander.

**"I: So what does it take to become a Shetlander?**

R: Well I don't suppose they [foreigners]'ll ever become a Shetlander.

M: You'd have to be born here.

R: Hum, hum. You would have to be born and brought up here to be a Shetlander, a true Shetlander, a real Shetlander. You see I don't think it would matter how long you stayed, you still would never be a Shetlander.

W: Like, like... Rose she was born in Aberdeen and she would be an Aberdonian really.

R: Hum, hum.

M: No, but everybody says she's a Shetlander because she was here when she was about what? four months old. [...] She's a Shetlander to me anyway, really. I mean you would class her as being a Shetlander. [silence]

**I: So Walter, what are you? Are you a Shetlander?**

R+M+W: No.

M: He's no a Shetlander.

W: Really, I'm an Orcadian [from Orkney] born of Shetland parents. I would be of Shetland blood but...

**I: But would you be considered by the locals as being a Shetlander?**

R+M+W: No, no, no.

W: I'm still an Orcadian.

R: You would have to be born and bred in Shetland, you see?"(G-02)

When Maria, the daughter, said she would class Rose as a Shetlander, her parents exchanged disapproving looks: they were not convinced that being raised in Shetland was a sufficient condition to become a real Shetlander. The father, still an outsider himself despite being of "Shetland blood", seemed particularly reluctant to accept Rose into the community. And the mother, without openly disagreeing, promptly reasserted the rules. Whether or not Rose and Walter can ultimately be considered real Shetlanders is, for the locals, a central issue. It is an object of negotiation which involves the entire community: "everybody says" something about Rose. When the two criteria of being *both* born and bred in Shetland are equivocal, it is imperative that Shetlanders resolve the uncertainty by assigning the person to a class. This crucial judgement concerns the integrity of the community. To what extent can we, as a collectivity, relax the rules which preserve our identity? How flexible may our boundaries be? These are the questions underpinning the dialogue.

Since being born and raised in Shetland are such determinant factors of one's social identity and, as we shall see, a guarantee of acceptability and credibility, one understands why the locals always insist on providing their interlocutor with their genealogical and residential credentials, as it were. When I asked people if they were Shetlanders, the answer always came in the form of a lengthy presentation of one's family history and area of settlement.

"I think that if I was completely honest, then I would have to say there is not a lot of Norse blood in me. And my name is not Norse. My first name is, Magnus, but [my family name] is not. So, I am probably a real outsider if you go back a few hundred years. But I would like to think I am a Shetlander now." (I-03)

**"I: Have you lived here all your life?**

Yes, and my parents too. And grandparents, yes. My great-grandfather is, as far back as I know." (I-04)

**"I: Are you a Shetlander?**

Yes, well... My mother's from Shetland, my father's from Orkney. So, I'm a half Shetlander. But my mother [has been a Shetlander] fae ever I ken. Grandad, granny, great-grandad, great-granny. They're all Shetlanders." (I-09)

"I am a Shetlander, born and bred. [My family line can be traced] as far as the registers would go back I would think. Yes, I would think so. From both my father and my mother's sides. [...] The occasion has never arisen to think about going anywhere else. We just were born here and I did stay in Lerwick for my secondary education but I came back when I got married and stayed here again. I was born in this house..." (I-13)

"I have lived here all my life. I have never been away except, the longest I have been away is probably for ten days at one time. [And my parents] were here as well. My mother came from the neighbouring village which is just down the road there and my father, as far as I know, was born here. He was born [on this croft]. [...] I know that there have been at least four generations here, of my family, in this house, but the end where you sat, in the kitchen, that's the original house. [...] And when my father was born in there, there were three families living there at that time. Three cradles, three babies in this house and they were all rocking them in the cradles and that was in 1882." (I-06)

"I am a born and bred Shetlander. I'll be the fifth generation to farm here.

**I: You mean on this land?**

Yes, in this place. And my son will be the sixth one, he is working here now." (I-02)

The sheer frequency of statements about one's family history points to the significance of being born and bred in Shetland. The previous quotations also indicate that geographic mobility is low<sup>7</sup>. If Shetlanders have to leave home to join the navy or to pursue further education, they still tend to come back to their original community, often to the very house where they were born. And even when they resettle permanently somewhere else on the islands, the place of birth forever remains where one "belongs".

"I just love hill walking and I go back to where I belong to, out in Bexter, and another hobby of mine is fishing. [...] And where I belong to, where I lived, there was just at each end of my house there was what we call lochs, small lakes." (I-01)

Therein lies the significance of being born and bred in Shetland: it makes belonging possible. And belonging means that one participates in the rarely defined, but constantly invoked, "way of life". Before we address the specific content of this

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<sup>7</sup>This phenomenon characterises the whole of Shetland but it may be particularly pronounced in the smaller islands which surround Mainland. Generally, there is "a profound identification of groups of kin with area and, especially, with particular townships. Indeed, there is evidence to suggest that the association of some families with particular townships and tracts of croft land goes back over two centuries. The extent of such continuity is extremely difficult to establish with any precision, partly because the documentation is insufficient, partly because family names have changed substantially through affinal absorption and through the erratic transformation of patronyms to surnames. It can be stated with some certainty, however, that the present location of most families in crofting townships dates back over at least two or three generations to the early years of this century..." (Cohen, 1982a; p.30).

way of life and its relations to Shetlanders' identity, let me clarify further the relationships between place, identity and belonging.

We have just seen that, when introducing themselves, Shetlanders often refer to the croft, the neighbourhood, the village where they were born. Identity is instituted by reference to a place which becomes the material support for the distinction between *wir folk* (us) and *yon folk* (them). This close identity with a place may be rapidly disappearing with the increase in geographical mobility brought about by the development of the oil industry (sudden immigration, a more extensive road network, migration towards the capital), but it has always been a feature of Shetlandic life<sup>8</sup>. Even *The Shetland Times* generally specify a person's place of residence when they refer to local inhabitants, as the following excerpts from the text accompanying photographs show:

"Banished from the fields. Farmer John Mainland, Noss, with a recent arrival." (*The Shetland Times*, 04/30/93, (17), p.1)

"...members of the Save our Shetland Team, Sheila Barclay, Mid Yell; Billy Middleton, Lerwick, and Ian Gunn, Boddam." (*The Shetland Times*, 01/22/93, (3), p.12)

"Crofter James Sinclair, Clavel, Bigton, on his way to feed his sheep after moving them away from the worst affected areas of grazing." (*The Shetland Times*, 01/15/93, (2), p.18)

"Crofter John Sinclair, Lerwick, Bigton, takes his sheep which had to be moved away from the pollution." (*The Shetland Times*, 01/15/93, (2), p.19)

"A petition was launched on Saturday afternoon with the aim of persuading the Prime Minister to take action to prevent another tanker disaster. Organisers Isobel Mitchell, Whiteness (left), and Paul Wood, Skeld (centre), have placed copies of the petition throughout Shetland and already signatures are pouring in. Among those who visited the Freefield Centre to sign the petition are Blair Bruce (back left) and Annabel Russell (right), both Scalloway." (*The Shetland Times*, 01/22/93, (3), p.9)

"...From left are the Lord Lieutenant Magnus Shearer, Bressay; convener of SIC Edward Thomason, Lerwick; chief executive of the Shetland Salmon Farmers' Association James Moncrieff, Sandsound; and chairman of the Salmon Farmers' Association Chris Young, Walls." (*The Shetland Times*, 01/15/93, (2), p.5)

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<sup>8</sup>For centuries, the Norse patronymic system, which involves adding "son" for men, and "dotter" for women to one's father's name, was used on the islands. This system, simple and convenient in small communities, proved unmanageable with an increase in population. Further specification was needed and so a place-name was added. This remained the custom until the second half of the 19th Century, when names became crystallised in official registries and ceased to indicate an association between individuals and places. Yet, to this day, the practice survives and one often hears of Magnus in Fetlar, Olaf in Murrister, or Thomas in Egilsay.

This association of people with places is highly normative. And it is skilfully, if not always intentionally, used as such by the press as well as in everyday conversations. This can be observed in relation to *who* is being connected to a place. Most of the people referred to in the quotations above are ordinary Shetland folk who either endured, with some degree of fortitude, the consequences of the oil spill (the two crofters and the farmer), or who were actively involved in organisations defending and promoting Shetlanders' livelihoods (the petition co-ordinators and the members of the *Save our Shetland* team). Their actions exemplify the "resilience" or "doggedness" of Shetlanders in the face of adversity. Rarely will members of the local council and other associations, professionals, or oil workers, for instance, be identified in this particular fashion. The last quote is unusual in this respect. However, the context in which it is presented may explain what, at first, appears to be an exception to the rule. Indeed, the representatives of the local associations were photographed during a successful media-inspired operation aimed at convincing "south buyers" that Shetland produce was beyond reproach. The article to which the photograph refers reads:

"On Tuesday night, just to prove there was absolutely no problem with the fish, the SFA held a reception in the fisheries college for the Press with a seafood buffet made from fish landed on Tuesday morning." (*The Shetland Times*, 01/15/93, (2), p.5)

The commendable effort and the good fortune of the reception, whose outcome was so crucial to the economy of the islands (and which was to be repeated the following day for the benefit of Prince Charles), deserved some recognition: it came in the form of the attribution of a place to the meritorious organisers, the symbol *par excellence* that one is accepted as a "real Shetlander". Thus, far from being an exception, the unusual allocation of a place-name reinforces the rule. But let us not anticipate further on what pertains directly to the *Braer* and return to what it means to be a "real Shetlander". We have seen that it presupposes being born and bred on the islands. It also entails participating in the traditional "way of life".

### 6.2.2. The Shetland "way of life"

Shetlanders endlessly talk about their "way of life". According to Anthony Cohen, an anthropologist who spent fifteen years studying community life on the island of Whalsay, there is no help to be gained from falling back on some such clichés as the "way of life" (Cohen, 1987; p.100) to make sense of Shetlanders' practices. Of course, references to the way of life do not in themselves constitute an explanation. To some extent, it is precisely because the way of life is invoked *as* an explanation that it absolves Shetlanders from having to reflect upon, and to disentangle, everything which is taken-for-granted. The ready-made formula of the "way of life" seems to defy description. Everything happens as though its power depends upon it not being articulated and defined. If it were, the profound internal social divisions which characterise Shetland society today could be open to debate, and this would severely threaten the integrity of the group. In this sense, the "way of life" is not so much a descriptive formula as a normative, prescriptive assertion about what *ought to be*. It is activated to construct homogeneity in the face of internal difference.

And yet, this functionalist perspective does not exhaust the real significance of the way of life. There is a whole phenomenological and ontological dimension which must be taken seriously, rather than simply explained away as false consciousness. Indeed, for *some* Shetlanders, this way of life is constitutive of who they are, of their culture and identity. It remains an unquestioned given, psychologically active in part because it is not an object over which they actively reflect.

"I just like Shetland. It is quiet and peaceful and beautiful and *it is just where I have always lived and just our way of life* and... I would not like to live elsewhere.(I-01)

"L: Well, it is something that... *You never really think much about it because it is something that you have been brought up with and it is just a way of life* and you don't know, I mean you probably don't know much different anyway so... But if you moved away for a while, if you went to Mainland and you worked in the Mainland for a while you would probably see the difference there, but here it is just the way it is.

**I: And what do you like about it?**

L: Well, it is just a close community and you ken everybody just about. There is a lot of people coming back and forth from the Sooth but you do ken most of the people so it is sort of a close environment." (G-01)

"It is just a *way of life*, isn't it? We go out [fishing] for ten, eleven days at a time, we work a week-end at sea and then a week-end off. So it is two weeks before I spend a week-end at home. [...] *It is just a way of life. I don't know what it is I like about it. I don't know.* I wouldn't like to stay in cities and towns. Some places I could stay but Shetland is for me." (I-04)

"It's a better way of life because I mean you *know what it's all about. You know, you don't have to explain and everybody understands.*" (G-03)

There is very little elaboration upon the content of what would constitute this way of life: *it is just a way of life which everybody understands*. For real Shetlanders, there is indeed no need for explanation since sharing in this way of life means precisely that one is an integral part of the complex social fabric of the community; an active participant in, and recipient of, its distinctive and consciously preserved culture; an expert in its idioms. Acquiring this expertise, however, is a long and admittedly difficult process. As this crofter puts it:

"... when I was a youngster, we were told actually: "Respect your elders, always". To be seen and not heard was the way you were brought up and by the time you start speaking, you should know what you are speaking about. Some of us probably failed pretty bad specifically on that! But this is the way. You listened to the old people. The old people, there were no TVs then and shit like that, and the old folks tell stories, and that is heritage, you see? Passed on heritage. And as you get older, you remember all that stuff and it was important because that is how you should conduct yourself in the future, and how you should apply it yourself to your children when they are brought up, when it is your time again to try and pass on these values. [...] My greatest hardship was trying to live up to how I was brought up." (I-03)

Sustaining traditional values in a modernising world is hard. There are TVs and national newspapers in Shetland today. There is money in abundance, and goods, and the desire to purchase them. There are Shetlanders who have relished the hustle-bustle of great capitals, and who have come back to tell their tale. All this erodes the Shetland way of life.

Having scanned, during the fieldwork, the two local magazines which specifically address cultural and social issues, I found only one article which explicitly tried to *define* the almost mythical Shetland way of life. Significantly, this account was written in 1974, during the construction phase of the oil terminal at Sullom Voe. The article reads:

"When I tried to crystallise what I think is meant by the Shetland way of life, at first I came up with the usual things. Shetland doggedness, that often gets the improbable, not to say the impossible, done. Faith, patience, humour. During the recent miserable winter, a crofter neighbour of my folks' said, typically: "If you hae your health - an your oilskin - you're aa richt!"

I thought of Shetland honesty. Trust among neighbours. Doors that don't need to be locked. Help freely given. The family feeling towards friend folk as well as your own. The creative element of thrift, despised by the foolish and the careless. I thought of the low crime incidence; the absence of cruelty to children; the help given to prevent cruelty to animals. The wholly civilised attitudes of the ordinary Shetlander, leaving the exceptions that prove the rule.

But there is far more to it than that. A way of life evolves continually. Fifty years ago, the Shetland woman was little regarded. Now, she is recognised as the equal that she has always been in fact. Fifty years ago, that a Shetland man should knit would have been unthinkable. Not now.

A way of life stems at its source from actual human thoughts, opinions, and principles. Personal values and behaviour shape the unspoken and unwritten rules by which a community lives, wittingly or not. Through the centuries, each of the many selves that went to our making left us something of the Shetland they knew and their attitudes to it. And the wells of our thinking are still fed, consciously or not, from their distilled experience. A man can teach his son to handle a boat or a tushkar, as his own father or grandfather taught him. In subtler ways, thoughts and concepts as native as our rock are handed down from mind to mind.

There is, of course, the discord to that harmony, the dark occasional contrast that at times saddens and disgusts. But an instinctive sense of what is right and just; a respect for life and human dignity; an intolerance of real evil; the preponderance of these qualities, I am certain, make our Shetland way of life truly unique, and a worthy pattern for any community large or small.

And there is something else. There is a factor which cannot be expressed or explained but of which we are intimately aware: that something in us and for us, which makes Shetland the place where we wish to remain." (*New Shetlander*, Spring, 1974)

This is indeed how Shetlanders think of their way of life: an idealised version of a reconstructed, harmonious past; a time of honesty, of collaboration between neighbours, and of hard work. The rhetoric of tradition, of centuries-old practices, of experience handed down from one generation to the next, of "thoughts and concepts as native as our rock" provides the resources to construct the community's solidarity against threats of disintegration. But, again, the community's perception of its way of life cannot be dismissed as pure ideology. It also stems from a genuine questioning of what it meant to be a Shetlander, of the specificity of the local culture, at a time when the potential consequences of a sudden and intense exposure to other ways seemed devastating. In general, "real Shetlanders" construe the effects of the oil industry on the local population as overwhelmingly negative.

"But we have lost a great deal, we've lost our culture, we've lost our way of life, we've lost the community spirit, we've lost our language, and if you take all that away from a community, there isn't much left. It doesn't have a recognition, it doesn't know itself. So the oil has taken far more away than it has ever given."  
(I-06)

Wills (1991) warns against taking such accounts at face-value. In his view, most Shetlanders fail to acknowledge the positive contribution made by the oil industry. He argues that oil-related settlers were often quite appreciative of Shetland's distinct culture and in fact contributed to a cultural renaissance. He maintains that the perceived threat felt by Shetlanders reawakened their interest in their own dialect, poetry, literature and music; that the oil cash enabled the SIC to inject massive funds into artistic activities; and that the general increase in prosperity meant that the local public could now buy the books, tapes and paintings which flooded into the market (Wills, 1991). One cannot doubt that a cultural renaissance followed the oil boom. However, the culture thus revived is simply not identical to the one which existed previously. Once a community has become conscious of its culture, its relationship to it changes, a fact which leaves neither the culture, nor the community, untouched. Thus, the awareness of the need to reawaken their *interest in their culture*, which Wills takes to be beneficial, gives greater credence to the pessimistic accounts of the old folk. Culture now appears as an external object, a set of artistic pursuits abstracted from everyday life, rather than an embedded set of practices, ideas, beliefs, myths, skills and artifacts effortlessly arising from life in common and of which the arts would be but one form. Moreover, the cultural revival necessarily happens from the perspective of the present; contemporary stakes and debates preside over the selection of what is to be remembered. It is not accidental, in an age of dependency upon massive oil companies, that the model of the exploitative Scottish lairds should prevail.

We therefore find that the constantly invoked "way of life" conceals two different, if inter-related, realities; that it reveals different relationships between realities, symbolic forms and subjectivity; and that it serves different functions. On the one hand, the "way of life" is a normative prescription which proposes an idealised version of the past and posits the latter as the model for contemporary social behaviour. The use of the "way of life" in this fashion is intended to hide the

deepening fragmentation of Shetland society, to counter the very processes of de-traditionalisation and modernisation which, in fact, make this way of life impossible, and to dissuade those who would be tempted to emigrate (the perennial threat of emigration runs deep in Shetlanders' consciousness). In many ways, the efficacy of the idiom depends upon it not being defined with any precision. If its content were to be articulated, it would soon become apparent that there is less and less "reality out there" to which the expression actually corresponds. How symbols can be emptied of their original content, and nevertheless subsist, is a problem which social psychologists have yet to address.

On the other hand, there are still some Shetlanders, "real Shetlanders", who do live by a particular, predominantly traditional way of life whose content has yet to be elaborated. Like the mythical "way of life" to which most Shetlanders refer, the content of the latter is not clearly defined either. But this time, it is mainly because it is truly *embedded* in everyday life that this content defies verbalisation. To a large extent, the way of life is carried and passed on through practices, skills, postures of the body and of the mind, rather than through theories and discourses. In the following sections, I shall try to show that this way of life is linked to membership in a given "natural category", to a particular sense of identity, to a particular mode of knowledge, and to a particular social representation of nature.

### **6.2.3. Some are more equal than others: The "way of life" and natural categories**

The previous section instructs us not only on the dual reality and function of the "way of life" but also, indirectly, on the natural categories which sustain them. First, the vast majority of the quotations are taken from individual interviews and group discussions with crofters and farmers; and second, the only natural category implicitly referred to is the one comprising crofters, farmers and fishermen. For instance, in the magazine article, it is said that a father can teach his son how to handle a boat or a *tushkar* (an indigenous tool used for casting, raising and turning peat) - that is, how to be a competent fisherman or crofter - but, and these omissions are important, not how to behave on an oil rig, keep proper accounts for the local council, or serve customers efficiently in the village pub. In this respect, all are not

equal in Shetland society: some natives of the islands are "real Shetlanders", others simply are not. Those who belong to the first group do so because they participate in the traditional "way of life" which, in turn, implies that they belong to clearly identified natural categories<sup>9</sup>. A crofter from Quendale sums up the traditional local view:

"The indigenous population here is crofters, farmers, fishermen; they run fish factories, processing factories." (I-03)

When I later remarked that he had not included oil workers (I had failed to notice that he had also excluded fish farmers) in his account, he answered:

"The oil industry [pause]... There is a lot of Shetlanders involved in the oil industry. Don't get me wrong. But this is very much run by incomers; it has always been controlled by incomers. Like the Shetland Islands Council, it is run by incomers." (I-03)

Clearly, members of the local Council or oil workers are excluded from the consensual definition of being a "real Shetlander", despite being born and bred in Shetland. They are categorised together with incomers. They belong to none of the frameworks identified by Cohen (1982a, 1987) as fundamental to the community's social organisation and sense of cultural distinctiveness, such as crofting neighbourhoods and fishing crews. It is arguably because they cannot be regarded as composites of - and almost reducible to - any such frameworks that oil workers and members of the Council are referred to as incomers in the first place, even though both the oil industry and the SIC now comprise a majority of native Shetlanders.

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<sup>9</sup>In Chapter 3, we considered the concept of natural categories in relation to the human history of nature and to social representations of nature. Now, we shall see how the concept maps onto the empirical reality in Shetland. Throughout the analysis, I hope to demonstrate the essential affinity between natural categories and the various social representations of nature associated with them, not only as a theoretical construct but also as a significant structuring factor for Shetlanders themselves. Indeed, Shetlanders intuitively distinguish between their fellowmen on the basis of what seems to amount to their rapport to nature, mode of knowledge and identity. One group of people comprises "real Shetlanders" or the "indigenous population", whereas other inhabitants of the islands can be grouped either simply as "born and bred Shetlanders" (which reveals little about their belonging to a particular natural category, save through differentiation from the "real Shetlanders") or as "Sooth-Moothers" (who will be described extensively in the next chapter). We shall see that it is first and foremost a common position in the "natural division of society" (Moscovici, 1968/1977), and therefore a particular mode of knowledge in relation to nature, which unites members of natural categories. However, social categories also build upon, and are superimposed onto, natural categories.

But I wish to suggest that there is another important dimension upon which these groups can be distinguished: "real Shetlanders" contrast sharply with outsiders in how they relate to "nature". These groups, I argue, hold very different social representations of nature. Being a real Shetlander would therefore entail being born and bred in Shetland, participating in the traditional way of life, and through the latter, acquiring and renewing a particular representation of nature.

### **6.3. Real Shetlanders, the way of life, and organic representations of nature**

The particular rapport to materiality which unites "real Shetlanders" - crofters, farmers, fishermen - corresponds closely to the "artistic labour" which Moscovici (1968/1977) associated with the organic state (representation) of nature. Their way of life is intimately linked to a representation of nature as one in which they partake, whose cycles determine their everyday activities, to which all their senses are attuned and over which they will not claim mastery. Deep-sea fishermen, inshore fishermen and crofters all claim that their lives are largely structured by Nature. This dimension of organic representations is a product of long-established traditions; it is rooted in a different, earlier, social, economic, political and technological era, when fishing and crofting were indeed a "way of life" which tied in with natural conditions.

#### **6.3.1. *Haaf* fishermen**

Nowadays, skippers are exposed to forces more unfathomable than the seas and which no amount of ingenuity and resourcefulness can counter. "The fishing grounds are the ever more complicated battleground in which the enemy is not so much the fish, nor even the weather. It is provided by other, less predictable adversaries: international politics, regulations, unfair foreign competition, the inanities of government policy, the fisheries protection officer, fluctuating interest rates, and human fallibility" (Cohen, 1986; p.48). Yet, the idea that Nature itself dictates the way of life still constructs today's reality. Fishermen claim that they "follow the fish", "work with the weather", and "respect the seas" as though natural elements in themselves sufficed to explain and organise their way of life.

"J: *It's just the weather, elements of the weather. We accept that as fishermen. Some weeks we might not go off for a month for bad weather.*

S: *Yeah, you just accept that. You allow for that. You're accepting that in a year so many weeks in the year you are not going to be able to go for risk of losing your life.*" (G-05)<sup>10</sup>

"K: There is the government trying to tell them when to go to sea, when they should go to sea and when they shouldn't. That won't work. That never worked with fishermen in fishing boats.

I: *Why?*

K: *Because they have to go when it's the weather to start with. They have to watch the weather and go when the weather is, go where the tides are.*" (G-05)

"*We just work until the wind comes, we just fish away until the wind comes and when it gets too bad, we just put the boat head in the wind and what we call "dodge". D.O.D.G.E., dodging. Until the weather falls away again and it is ready to work again. And then we work away, [...] as far as a hundred and fifty miles sometimes. Yes, that is west, when we go west. As far as a hundred and fifty, that is the most far we have been. Mostly forty, fifty, sixty miles, most of the time, up to eighty, a hundred, depending where the fish are. [...] We follow the fish. It depends on the seasons.*" (I-04)

"J: Only a fool wouldn't [respect the sea] because you don't know the capabilities of the sea. It can smash you into smithereens. It's a powerful thing. Any man who has been to sea knows what the sea can do." (G-05)

The winds, the waves, the tides and the fish determine when, where and how to go fishing. Fishing quotas which interfere with "natural cycles" and modify fishing practices are deeply resented. Although deep-sea fishing is a multi-million pound

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<sup>10</sup>The uneven status of crew members is conspicuous in these interactional and conversational dynamics. The reader will notice that in the quotations from this group discussion (G-05) where turn-taking is reproduced, it is systematically "J" (51 years-old), a skipper who has been at sea for thirty-seven years, who introduces new themes and expands upon them. "S" (25 years-old), his nephew, is the mate, that is the second in command on the boat in which he has had a share for seven years. Nevertheless, he never once disagreed with the skipper, rarely voiced his own opinion, and limited his interventions to skilful reformulations of what "J" had already said. "W" (29 years-old) is not linked by kinship to the other members of the fishing crew; he has no formal role on the boat and is noticeably absent from the discussion (5 utterances in total). Finally "K", the skipper's aunt, acts as the bearer of tradition. She provides information about the family's history, the qualities required of a good fisherman, the role of women in fishing and crofting communities, the attributes of "Sooth-Moothers", etc.

These interactional and conversational strategies cannot be adequately explained in terms of institutional functions and roles. Cohen (1978; 1982; 1982a; 1982b; 1982c; 1986; 1987) has provided very fine analyses of interactional dynamics among Whalsaymen. His work shows that the "individuality" of crew members is publicly constructed by the allocation of attributes to individuals. These attributions have to do more with the person's structural connections to the community than with his actual personality; they serve to link him ideologically and culturally to his fishing crew, kinship and neighbourhood, and to mitigate conflict. The contriving of responses evident in this group discussion may be described as stage-management strategies (Goffman, 1959/1971) but they must be related to Shetland's social structure. In this sense, this group (G-05) truly constitutes a microcosm of the wider society.

industry, this resentment is not only an economic matter. It also has to do with a mode of knowledge which is being devalued as TV charts, radar scans, and the whole paraphernalia of modern fishing, together with pre-defined fishing territories and imposed net sizes, undermine the status of these experienced fishermen. Cohen (1982a; 1982b; 1987) has reported extensively on these issues among the fishing communities of Whalsay.

What is this traditional knowledge? Even under the best of circumstances, it is hard to uncover this type of knowledge in a short time and mainly through discursive material. But in this case, the difficulty was compounded by the crisis itself, as well as by the fact that Shetland's *Haaf* fishermen are both reluctant and virtually unable to talk about their expertise. Their reluctance seems to stem from the fact that it is inadmissible in Shetland to talk about the particular skills required to be a good skipper. In fact, it is common to deny that successful fishing in fact demands any skill at all. "Luck" is invoked to explain differences in catch sizes, income and, thus, in prestige and economic status.

J: It's just a way of life that we like.

K: It's a kind of hard life mind you. It's rough but it's an honest life, it's very honest [...]

J: What we catch we get paid for.

K: Yes, that's right!

J: What we don't catch we get nothing.

K: You get nothing. It's a very honest, an honest life. [...] It's a hard life but honest life, I think. It can be pretty hard.

**I: What does it take to be a good fisherman?**

J+S+W: *A lot of luck.*" (G-05)

The answer comes immediately and in chorus. Appealing to luck, rather than competence, to explain differences in catch between fishermen is a sound strategy in small fishing communities where open competition and the acknowledgement of unequal individual aptitudes and merits would threaten the stability of the group<sup>11</sup>. Luck hardly constitutes a sufficient explanation, though. The astonishing level of

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<sup>11</sup>Cohen (1986) locates the origins of Shetlanders' remarkably non-competitive approach to fishing in their "shared subjection to the tyrannies, first of the lairds, and later of the fishing companies" (Cohen, 1986; p. 55). But he also concludes that, whatever the historical roots of this attitude may be, "it is significant that it should have survived into the modern circumstances of cut-throat fishing economics" (*idem*, p. 55).

expertise displayed by deep-sea fishermen - their knowledge of the fish, the tides, the currents, the water depths - and the long years of apprenticeship indicate that successful and safe fishing depends on something more than just luck. And yet, whenever expertise is claimed or paid tribute to, it is not an individual's competence and skills which are praised, but collective knowledge which is held only by Shetlanders, and almost by virtue of being a Shetlander. It is therefore very difficult to tap into the specialist knowledge which fishermen undoubtedly possess.

"J: When you've been in a fishing family and you've been brought up with the fishing and the boat, you see, this is what me fadder would say: "You needn't leave the pier if you are no going to come back". So this is the thing, you see? [...] *They need to know the Shetland waters. It's only Shetlanders dat ken.*

K: *The tides and the water and the rocks and everything. It's very difficult. It's only Shetlanders that ken.*" (G-05)

Disasters which occurred when fishermen followed "foolish" orders and put to sea under dangerous circumstances are recalled in yarns as well as in newspapers. This skipper remembers the death of his brother which, implicitly, he attributes to the decision of a reckless skipper who paid no heed to the weather forecast.

"It was on the fifth of January, ten years ago, and my brother came ashore after being at sea all his life; he drove a taxi for five years and he decided to go back to the fishing. On the fifth of January, it was a very nice morning but there was a very bad forecast, but the skipper of the boat decided to go off and it came over a bad night. Coming ashore and two of them were swept over the side with a wave. My brother was, when he was 42 years old and an 18 year-old boy. And my nephew was on the boat with his dad and he lost it. He never got to them." (G-05)

These tragedies bring the power of natural forces close to home. They are recalled to demonstrate that one cannot outdare the elements with impunity, that rather than trying to control nature, "real Shetlanders" ought to live with it. Such humility and respect are learned from experience. But it is a mediated experience of an already represented nature. It cannot be explained solely by reference to some objective "natural" demands<sup>12</sup>. Recklessness would be entirely inconsistent with the

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<sup>12</sup>If this were the case, one would expect similar diligence and respect for natural forces in other fishing communities where nearly identical natural conditions prevail. This is, indeed, the central tenet of the thesis of environmental or physical determinism. However, a number of researchers studying other North Atlantic fishing communities such as Newfoundland and Iceland have consistently reported that local fishermen engage in mindless displays of bravura, needlessly risking men's lives and boats (e.g. Byron, 1986; van den Hoonard, 1977; Tunstall, 1962; Warner, 1984).

local ethos wherein prudence, resourcefulness, responsibility, traditional wisdom and shrewdness are key values. It would be at odds with Shetlanders' representation of their way of life as "natural", harmonious, and respectful of the elements. It would also be incompatible with their organic representation of nature, which excludes the notion of mastery. Skippers embody this local ideal. Their status as "folk heroes" is only matched by that of crofters, as we shall see later.

Perhaps, also, the reluctance of fishermen to expand on their knowledge has to do with some superstition<sup>13</sup>. The likeliest explanation of the fishermen's reserve, however, must be their simple inability to talk about what they are hardly aware of knowing. Indeed, in many ways, *knowledges*, behavioural tendencies and skills are stored in their body, which is finely tuned to the demands of the task. Co-ordination on the boat is crucial: everyone has a role and a place. But, more importantly, fishermen seem to adapt to being at sea by modifying spontaneously their muscular tone, by changing their sense of balance, and by accentuating certain movements.

J: With bad weather, it's a relief to get into port. [At sea], you can't relax and every window is battened down and you're rolling around.

S: There's no rest. You're always rolling from side to side so you're always having to keep hold of something.

J: Every muscle in your body is tensed although you don't realise it. Once you are on shore you feel like, when you are walking, you lift your legs too high since you have been thrown about. You find that, once you have come ashore after a bad day. [...] You've lost your balance. That's what it is. You feel yourself swaying suddenly when you come home.

S: I don't feel that now, I used to feel that. I'm probably getting used to it. When I first went to sea and came ashore I started swaying! Ha! Ha! You'd think you were swaying.

J: You think you are still on the boat if you come ashore after a very bad day. You still feel you are moving and the house is moving. But it's not, it's just that you've got a right big shake up. Your body has been thrown about and it's no gotten used to coming on the firm ground again." (G-05)

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<sup>13</sup>Schei & Moberg (1988) allude to the existence of a traditional "sea language". Apparently, the old fishermen of Shetland, as those of Faroe and western Norway, believed "that there were many words and names one must not mention while fishing in the *Haaf*. In Shetland this sea language was richer than anywhere else." (Schei & Moberg, 1988; p.90) It was thought that "the truth of things had to be kept hidden from the evil forces lurking in the deeps, otherwise not only the catches of fish but even the lives of the fishermen were in danger. *The sea language was therefore quite unlike the language spoken ashore, and it could also vary from one boat crew to another*" (*idem*; p.90; *emphasis added*). The authors refer to a paper by O. Lundberg entitled "On the Shetland sea language as a source of old Norse literature" presented at the Viking Congress of Lerwick in 1950. I was unable to obtain a copy of the text. Whatever the extent of this practice, it does point to a *qualitatively different way of life on boat and ashore*: roles, rules, motion, even language, change from one environment to the other. This also indicates the importance of the crew as the context of socialisation.

Cohen (1978) also reports that many Whalsay men claim that they feel disoriented or otherwise uncomfortable when they spend any length of time out of sight of the sea<sup>14</sup>. In any case, a kind of interpenetration, or *organic solidarity*, seems to characterise the local fishermen's rapport to nature. The seas, for them, are a *lifeworld*.

### 6.3.2. In-shore fishermen

The same can be said of Shetland's in-shore fishermen (so far as I can judge from the single interview I conducted with a shellfish fisherman and from the limited data I could glean). Perhaps even more than deep-sea fishermen, who can and do rely on modern technology, in-shore fishermen still work very much according to the traditional ways (with the additional use of a Visual Display Unit, which shows scans of the sea bed). They, too, claim to work with nature. The following quotations give some indication of the complexity of selecting fishing grounds, of the in-depth understanding of shellfish behaviour, underwater currents, seasonal changes and weather conditions which fishing for shellfish requires.

"There's a lot of lobsters dat go frae dere to deep water, very deep water, in the wintertime. But the one thing dat scientists have never been able to find oot is exactly what the truth is aboot lobsters. [...] What I'm saying is dat, if it's the case dat all juvenile lobsters go deep doon in the cracks in the sea bed, close aroon the shore, cause I can't imagine them going into deep waters afore, I think they sat near the coast. I think they go into cracks, deep cracks and crevasses in the rocks and they're livin' dere till they're big enough to come oot into the open and fend for themselves, big enough so dat nothing else can kill them, they can fight off their predators, they're big enough to look after themselves. So if dat's the case, it could be a number o' years before you see juveniles dere. If dere's no *pyaa* [sign of life], if the sea bed is sterile after this, then anything dat comes frae dat area is not goin' to stay dere." (I-14)

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<sup>14</sup>Interestingly, almost two centuries ago, a Scottish doctor identified a "condition" which appeared to be found only amongst the Shetland Islanders. His "scientific" account reads as follows: "To such an extent is [the Shetlander's love of home] carried that, in the case of girls in service in the south, it often brings on a disease known to the Faculty as *morbis islandicus*. There is no other symptom than a gradual dwindling away, and the patient herself is often unaware of the cause of her illness, the only remedy for which is immediate return to the dearly beloved Old Rock." (John R. Tudor, *The Orkneys and Shetland*, 1813; p.176; quoted in Schei & Moberg, 1988; p.73). Could it be that the intrinsic connection between "real Shetlanders" and their place which I have uncovered is some trace of a relationship which used to be more widespread, at a time when just about everyone truly endorsed the traditional "way of life"?

"In April, I start fishing wi' pots again, go for lobsters frae Sumburgh and working west, going west around the island. And I just slowly work me way right up to Speggie and I have a mourern anchor at Speggie so the boat stays dere in the summer. In May, June through July, I start working back again. If the weather, because the weather starts changing through July and August, it's not, it's no a good place to fish. The weather... you donna get out everyday so I start working me way back, come back to tics (?) side and then go up to Cunningsburgh which is up here. And I work in Cunningsburgh in August...

**I: How do you know if it's a good area or a bad area?**

Well, I've fished here all my life. I know tics (?) like the back of my hand. [...] Certain times of the year, here, I mean you donna get too much in April, May, June. But dat's when the shellfish get their new shell and dere seems to be good fishing in dis area. So I fish here, maybe, I'd say, the last two weeks of July, or the last week of July, August, September, through to October, I fish around Cunningsburgh and I work around here." (I-14)

The segmentation of the sea shore into patches favours, in each individual person, a better, more intimate knowledge of the waters, of the cracks, crevasses and *gyos* (creeks with steep sides), of - the outsiders would say - the specific micro ecosystems found around the archipelago<sup>15</sup>. Dividing up the sea shores also reduces competition for already scarce resources amongst fishermen by avoiding the simultaneous presence of boats. In this sense, Nature is not the sole factor in determining the choice of fishing grounds: social, economic and ecological demands intersect.

"I'm based in Levenwick, Sandwick and go right across to Sandness as well, and me fadder, he's fishing frae Cunningsburgh and up to Lerwick, so I donna go dere.

**I: Because your father is there?**

Well, because dere's no point in two boats fishing at the same place.[...] All you do when you fish somewhere, you're on top of somebody else, so the grass [gross earnings] must come doon. [...] Your earnings, their earnings must get less if you're fishing in their area. You see what I mean? So, there's a lot of shellfish boats in Shetland but everybody seems to keep to their own patch." (I-14)

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<sup>15</sup>In fact, this knowledge of the sea bed and of the shore is also carried in language, and more specifically in place-names. The name of the capital Lerwick, for instance, would combine the Norse elements *leir-vík*, which means a bay with a bottom of clay or mud. Similarly, the site of the oil spill, Garths Ness, is a combination of the Norn word *garth* (also *gerdi*, *gaard*, *cru* or *crub*) which means an enclosed place or yard where sheep or cattle are kept, and of the English word *ness* (promontory or headland). Both the topographic features of the place and its social/natural/economic use are contained in the place-name. Considerable research has been conducted on Norse place-names in Shetland for almost one hundred and fifty years now. It shows that Norse place-names give quite matter-of-fact descriptions of the sea bed, scenery, fields, shoreline and other topographical features. The old language would have elements to express the most minute variations. Schei and Moberg (1988; drawing mainly on untranslated works by the Scandinavian linguist P.A. Munch (1853)) report, for instance, that there would have been some 20 words to describe hills of slightly different shapes and heights. They also state that coastal features, in particular, would have been described with great minutiae through place-names, presumably because, as the Sapir-Whorf hypothesis suggests, they were so central to survival on the islands. Naming is a means of identification: only a deep knowledge of the landscape and of the seas around Shetland could generate this identification system. Today, language serves to keep this knowledge alive.

Again, as for deep-sea fishermen, knowledge is acquired from experience, over years spent observing others (usually one's father) at work, trying out new "little bits and places", studying changes in the volume, sizes and quality of catches. It is a knowledge which is rarely articulated in words and which must be gained on one's own, especially since fellow in-shore fishermen will not share their craft or divulge their best fishing grounds.

"Every year, I work the same routine, fishin' in the same area, at the same time of the year. [...] I mean I know tis area probably as good as anybody knows it. I started fishin' in tis area since I left school. I started fishin' wi' me fader and I've known these grounds... I've been fishin' here for the last twenty years [...] Basically, for lobsters and velvet crabs, if you're working inshore, you have a good idea of the depth of water and where to go to but I mean some places it's different from others. Some places it's better. It's just a case o'... you've got to go and fish there and find it out. When somebody comes doon here, I mean I probably wouldnae tell dem just the exact truth. I wouldnae. You have your secrets and you... Each fisherman has the things dat they don't tell.

**I: Can I share your secrets? I'm not going to fish here, don't worry!**

No, it's just, dat's just different places and wee bits and rocky bottoms and gyos dat you just, you donnae tell anybody. [...] You find bits or areas dat you've maybe never fished there afore, so you try oot some parts and sometimes you come up well. And you just donnae tell things like dat." (I-14)

For now, I would like to establish that in-shore fishing truly is a "way of life". It dictates every aspect of daily life, brings a negligible income, and rests upon a thorough knowledge of the seas and the sea bed around Shetland - a knowledge which is acquired through experience and passed from father to son, mainly through observation. One indicator of the depth of this knowledge is the extent to which the smallest creek, crevasse, or bay is intimately known and even allocated a name which describes its main features. Again, this seems to point to the kind of organic representation of nature described by Moscovici (1968/1977). However, it is impossible to draw further conclusions from a single interview, especially since the data are otherwise scarce regarding the practices, the knowledge, or even the opinions of these fishermen. I believe this is because they earn very little compared to deep-sea fishermen and because, consequently, they are inadequately represented by the Shetland Fishermen's Association (which in itself indicates that Shetland has undergone profound transformations). The interests of in-shore fishermen were hardly discussed in *The Shetland Times*, or even in *The Shetland Fishing News* in the

aftermath of the oil spill, although they were unquestionably the most severely affected occupational group.

### 6.3.3. Crofters

Finally, Shetland's "indigenous population" also comprises crofters. In many ways, it is impossible to talk about crofters as though they constituted a distinct category. In the past, Shetlanders' everyday life consisted precisely of some interweaving of deep-sea and in-shore fishing with farming, cattle rearing and knitting. Crofting truly was a "way of life". Hence the status of crofters and of crofting in Shetland society today. They are testimony to the resilience of Shetlanders and to their independence as islanders. They are reminders of the particular quality of social life which prevailed on the islands when everyone indeed knew everyone else and laboured together. They epitomise an era when a range of skills and knowledges were embodied in a single person. They link the community to a time when every facet of life was dictated by the seasonal cycle, rather than by the clock.

"If you are thinking that being a crofter or a farmer is an eight to five job, it is not. I think you just have to accept that and try and work with the weather." (G-01)

"[Crofting] is a seven day a week job, sometimes eighteen hours a day.

**I: Eighteen hours a day?**

Sometimes yes. Certain times of the year, yes. When things do not go right and you get bad weather. [...] It affects the work. If you get long days of rain we can't get on the land to do the work. That's one of the biggest drawbacks here, that the season is so short, the growing season. And if it's late in the *Voar*, in the springtime, then it's late right up through the year." (I-02)

"Oh! Believe me, we struggle in Shetland. We struggle with the elements, with the weather. You have seen this last week. You cannot go about and feed sheep. My dad used to say it is the wind that had killed him all his life. It was double-Dutch but he did put a point through! [...] It is a place where you really can't relax; as long as you have work to do you mustn't relax. We used to have only hay and peats for the fire, and that was your whole summer taken up with either curing hay or getting your peats. No way would you ever consider having a day off or a half-day off until all that work was done. Then you relax and go on do what you felt like. That's in my younger days, and much more in my parents' young days. They never knew what like it was to relax.[...] They certainly were strained up, but it was their way of life and they accepted it. [...] Crofters are not frightened for hard work." (I-13)

Crofting was, and remains, closely adjusted to the seemingly unchanging rhythm of the seasons - of Shetland's *own* seasons, that is. Drawing upon a variety

of sources (Cohen, 1986; Knox, 1985; Smith, 1984; the local newspapers and magazines), it is possible to reconstruct the annual cycle of crofting. The *Voar* (end of March, first week of April) is spent delving, ploughing, fertilising arable land with dung and seaweed, and planting the staple crops: *tatties*, *neeps*, carrots, onions and beets. Crops are sown early in the *plantie crü* (a small drystone-walled enclosure for growing vegetables and protecting them from bad weather, as a remedy against bad harvests), and are then transplanted near the croft house. In May come the lambing and the cutting of peat from the local *scattald* (rough grazing land used as common pasture by various owners in proportion to their arable land). Curing the peat involves a sequence of operations which begins with removing the turf overlaying the peat bank with a ripper or peat spade. The peats are then cut with a *thuskar* (an operation called *castin'* the peat), turned on their ends (*raisin'* the peat), and left to dry in small stacks in the field for the whole summer. Finally in the *Hairst* (late summer, early autumn), the peats are taken home and stacked by the house for use as fuel during the long winter months.

From the end of the *Voar* onwards, most of the work on the croft is carried out by women and children: they are in charge of tending livestock and growing crops. This division of labour is inherited from a time when men would leave their homes in May to fish in the *Haaf* for the whole summer. Women and children take the sheep away from the *scattald*, drive them down to the *crü* (an enclosure, often on a small inlet, where the sheep are kept), where wool is *rooed* from the sheep (plucked by hand, as opposed to shorn) to be carded and spun, ready for knitting throughout the winter.

"I do just all the farm chores on the croft. I lend my hand to everything like curing the peat, driving the sheep across. We have vegetables and turnips in the field... I don't know what like they will be [as a result of the oil spill]. I have not been to look at them. We have nips, taaties, carrots, cabbage and kale. I take care of feeding the cows and cleaning them out, helping with calving time, helping at lambing time, feeding calves and lambs. They always say that new born calves and lambs always benefit from a woman's touch. We have more motherly instincts and we are made with maybe more patience. It all needs a motherly touch at times." (I-13)

By mid-autumn come the slaughter of young cattle and the curing of meat, as well as the beginning of the cottage industry activity, which is pursued right through the winter months. Now that fishing is practised by well-equipped, professional

fishermen, it takes place in the winter as well (although severe weather conditions often keep the men ashore, as we have seen).

That agricultural and other croft-related practices should be paced by the natural calendar does not suffice to explain why crofting has changed so little over the past hundred years<sup>16</sup>. To begin with, "croft" and "crofter" are legal statuses defined by the Crofters' Act of 1886<sup>17</sup>. The system of tenure of smallholdings as they exist today are a direct outcome of the Crofters' Act. Although the practice of small-scale agriculture existed in Shetland since Scandinavian times, crofting as such "is not the product of native processes nor, having been fixed by law, have the crofting practices altered greatly in response to social change and economic conditions in the last hundred years." (Byron, 1986; p.62).

In order to appreciate the significance of crofting and to grasp the dynamics of change and permanence, it is useful to distinguish between crofting as a set of agricultural practices, and crofting as a "way of life" linked to subsistence economy. The former have changed very little; the latter has virtually disappeared. Although there are more than 2,200 holdings today in Shetland, only some 1,500 people make a living out of crofting (Schei & Moberg, 1988). This is in part because some families run more than a single croft, but mainly because their main source of income is gained elsewhere (especially from the oil industry or fishing). According to Schei & Moberg (1988), 53% of crofters are in fact "hobby" crofters, as they are

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<sup>16</sup>Indeed, it is consistently reported that agricultural activities have not changed significantly over the past five hundred years (Byron, 1986; Knox, 1985; Smith, 1984). Knox (1985) states that, at the time of writing, "spade husbandry was still the primary method of cultivation" (Knox, 1985; p.11).

<sup>17</sup>In 1883, as a direct result of the growing number of evictions by lairds of tenants in the highlands and islands of Scotland, the Napier Commission was set up to investigate the plight of what were to become "crofters". "Testimonies of numerous Shetlanders were heard, and complaints varied from district to district. Major grievances voiced during the hearings included the general increase in rents over the last thirty years regardless of improvements made to the crofts by the tenants; the lack of leases and the constant threat of eviction; poor housing conditions; the removal of the *scattald* from the tenants and the charge placed on some tenants for stock kept on any remaining *scattald* land." (Knox, 1985; p. 176). The report of the Commission led to the passing of the Crofters' Act, three years later. The Act gave security of tenure, the right to heir their croft to their successor, and fair rent to the tenants. It defined the "crofter" as "a tenant of a holding from year to year, who habitually resides on his holding, the rent of which does not exceed £30 in money and which is situated in a crofting parish." A "crofting parish", in turn, was defined as "a parish in which there are at the commencement of this Act or have been, within eight years prior thereto, holdings consisting of arable land held with a right of pasturage in common with others and in which there are still crofters at the commencement of this Act." (Parliamentary Papers I, Crofters' Holding (Scot) Bill, 1884-1885, p. 318; quoted in Knox, 1985; p.236).

sometimes referred to locally. A young oil worker describes the reality of this kind of crofting as follows:

"My father has been into fishing since he left school and he has been fishing all his life [...] He's away from home maybe two weeks at a time and when he's home, he works about the house, gives a week to the croft and the sheep. It is just the land that is around the house, sort of thing, a good few acres. We grow our own potatoes and turnips and cabbages, that is feed stuff for the sheep, and corn and hay and all that sort of thing." (I-09)

Thus, for most, crofting nowadays amounts to small-scale farming, the occasional curing of peat (for otherwise centrally heated houses), and the rearing of sheep. Cattle rearing, which requires more tending, has markedly declined (Schei & Moberg, 1988). The traditional cottage industry of knitting is now more a social and recreational activity rather than an economic necessity, and it is practised by women throughout Shetland. In a nutshell, crofting is no longer the way of life it used to be (Cohen, 1986, 1987). And yet, because it is fixed by law and, consequently, remained practically unchanged by new technology, crofting has become the most potent symbol of Shetland life. This, in turn, contributes to its permanence: Shetlanders do not want to modify their agricultural practices.

So why do Shetlanders choose "a pretty strenuous hobby", "a kind of hard life", "a daily struggle with the elements"? Crofting is *not* an economically rational activity (Cohen, 1986; 1987; Schei & Moberg, 1988; Wills, 1990): the amount of time, energy and resources invested compared to the profits generated makes the very notion of "economy" inappropriate.

"Crofting doesn't pay very well. It really is a way of life. It really is a way of life. You cannot think of the money." (I-13)

"I would hate to think what the hourly rate would be. It would be so low. For the amount of work, the money you get at the end of the year, it really is [ridiculous]... But that is what I have always done." (I-02)

But, and this is the crux of the argument, this kind of instrumental rationality is alien to the mental and cultural universe of the traditional crofter. Crofting, as a way of life, projects one into the past, into a pre-modern era when people and places were known intimately, when economic life was based on barter trade, rather than

monetary exchanges<sup>18</sup>. The croft objectifies "the old ways", the labour of earlier generations of kin, family traditions, collective memories. Cohen (1986) perfectly sums up the symbolic significance of the croft. He writes:

"The croft, then, condenses the past through the landscape itself, and through its association with the natural calendar; with community; with an earlier mode of subsistence and the ideal of self-sufficiency. It evokes the astonishing breadth of skill, the ingenuity, the stamina necessary for survival in "da aald days". It may even be that it suggests an orientation to values somehow more substantial, more genuine, than those of the materialistic, debt-burdened, tax benefit-maximising present [...]. In this respect it is the very *irrationality* of crofting in economic terms which provides its attraction. [...People croft] not because it is *uneconomic*, but because it is *non-economic*: it belongs to quite a different realm of discourse.[...] To croft is to make a statement of commitment to the community and to the life it represents." (Cohen, 1986; p.109, *italics in original*)

The legal definition of crofting has favoured its stability over time. This, in turn, has played a role in making crofting the most powerful symbol of Shetland life and of Shetlanders' identity. According to Cohen (1986), it is therefore *because* crofting is, in some important ways, non-economic and pre-modern that, in spite of the psychological (and physical) strain of "carrying on in the old ways" in a modernising world, some Shetlanders still do it. I shall let one of them, this pillar of traditional Shetlandic life, describe the meaning of crofting.

"A croft, as far as I'm concerned, it's not boundaries. It's like a country. You fight, you would fight for your country, you would die for your country. People have done that all down the ages. So you fight for your heritage, which is the family croft. I am purely a steward here for a short time. This belongs to the family and it was passed down to me being the male and it will follow my line. But if I had a family that I didn't think was going to carry on in the old ways, I would think twice about going outside my family line. I was chosen in me generation because my old man knew that I would continue. I think it puts a lot of strain on your mind. That puts a lot of strain." (I-03)

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<sup>18</sup>Smith (1984) describes how, until the late 19<sup>th</sup> century, "a very large proportion of the material needs of the community were served without the need to enter trade" (Smith; 1984; p.2). Barter was the main form of economic exchange. Since the cession of Shetland to Scotland, local fishermen were bound by law to give some of their catch to Scottish landowners, who would fix the value of fish. Refusal to comply could result in eviction, and often did. Later, fishermen were also bound to sell their fish to merchants in return for the supply of shop goods. Ironically, this exploitative relationship was at the core of the traditional "way of life" which Shetlanders now enthuse about. Smith claims that the shift towards a trade structure based on the impersonal, abstract principles of market forces (heralded by the Truck Commission of 1872) was by far the most important factor in the dissolution of the way of life.

The notion of "stewardship" seems particularly important in shaping the crofters' relation to nature. Legally, landowners have the privilege of owning the land, but have no say over it and generate a negligible income from it. Crofters, on the other hand, do not own the land but have complete control over it. Nature is not their property; it is the source of a livelihood, and it ought to be kept "unchanged" for future generations. This world-view contributes to creating not only particular *knowledges* about nature, but also a different *state* of nature.

#### 6.4. Organic nature in Shetland

Knox (1985), in *The Making of the Shetland Landscape*, shows that what is conceived as quintessentially "natural" in Shetland today - the grassy headland, the treeless hills, the abundance of wildlife - is in fact to a large extent the outcome of remarkably stable human practices. Shetland, at the end of the Celtic occupation, was covered with trees. It is the introduction of sheep to the islands which dramatically changed the Shetland landscape, as young tree shoots were devoured before they could grow. Nowadays, trees are only found in significant numbers in Weisdale, where they were planted between 1908 and 1921. Knox's research traces changes in relation to land occupation and land use since the 18<sup>th</sup> century. It shows that the Shetland landscape as it exists today is but the "result of the changes already wrought by man in his physical habitat" (Knox, 1985; p.180). For instance, because of the division of arable land into small crofts, it was, and still is, impracticable to use any other method of cultivation than the spade: 90% of the arable land is cultivated in this way. Similarly, the division of the land into *scattalds* (which still make up more than 80% of the land) meant that such areas were not going to be cultivated, but simply left for pasturage. The practice of grazing in common on the *scattald*, in turn, meant that there could never be selective breeding, with the result that animals in Shetland were of very poor quality (Knox, 1985; p.24).

"I have a small herd of Shetland cattle, the native Shetland cattle. Now I have to say that the Shetland cow, she is not a beef cow. She is the cow that we used in the old days. She was a house cow. She produced milk of a very poor quality for the family [...] The old cow was raised in four hundred different ways and she was living on nil. She was living on nothing but still producing for that family. Most of us used to

have two on the croft. But they also had an ability to milk all year round. So they have qualities that most breeds don't have. [...] They are really durable little cattle, beautiful, simple, durable little cattle. They have character, tremendous brain. Oh yes, they have a good character!" (I-06)<sup>19</sup>.

But the making of Shetland's "nature" does not concern solely its landscape and domesticated animals. It is closely related to the changing use made of the nearby seas. From the mid-18<sup>th</sup> century to the passing of the Crofters' Act, the Scottish landowners in Shetland were enmeshed in fishing, fish curing and trade. They saw the economic value of land primarily in respect of its proximity to fishing grounds. This obviously led to the neglect of agriculture. But their commercial mindset also brought about significant changes in the quantities of ling to be found in the *Haaf*, and of saithe and cod closer to the shore (see Smith (1984) for a detailed historical analysis). The relative importance of fishing and agriculture in Shetland life, and the particular form both took, were therefore not dictated by Nature alone, as it were, but by the changing interests of the Scottish lairds. These objectified interests became constitutive of the Shetland landscape and the surrounding seas. This crofter is roughly right when he says that:

"...95% of Shetland is still the way it was hundreds of years ago. These are still virgin hills. There is only about 5% of Shetland suitable for the plough. Today there might be slightly more than that. And if anything the Shetlander has improved the land; I re-seeded in my land for grazing. But he has not been greedy with the island. This island is very much the way it was hundreds of years ago, that's why we have this abundance of wildlife." (I-03)<sup>20</sup>

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<sup>19</sup>Notwithstanding the comical attributions about the character and the brain of these cows, an important point is being made. In spite (or because) of the most rudimentary technical means, Shetlanders have evolved their own breeds of cattle, sheep and ponies (see Schei & Moberg (1988) for the origins and changes in these breeds). In part, the growth of these animals is restricted by severe climatic conditions. In part, however, it is the limited access they have to good grazing grounds (used for cultivation around the crofts), the fact that they were raised "on nil" on the *scattalds*, which accounts for their small stature and poor quality. Moreover, it is estimated that the Shetland cattle would have become extinct by the 1930s had some Shetlanders not grouped to form the Herd Book Society in 1910. Today, there are about one hundred purebred Shetland cattle, of which less than half are kept in Shetland. Rearing them is now subsidised by the Shetland Islands Council. Again, then, human beings are deeply involved in the construction of nature.

<sup>20</sup>It should be added, however, that the re-seeding and the improvement of the land is itself the product of a relatively new plan for agriculture put forward by the Shetland Islands Council after the end of the construction phase at Sullom Voe. The decline in oil-related jobs fostered the revival of traditional practices. Funds (either as grants or low interest loans) are made available for crofters to re-seed their land and to encourage the keeping of native breeds. This is yet another instance of the changes in Shetlanders' relationship to their own culture, nature and way of life brought about by the oil industry.

"Nature" - given, ahistorical, untouched by human labour - has no reality in Shetland. There, as elsewhere, it is to a large extent the product of human activity. If it has changed so slowly, and if the changes seem to concern mainly the "landscape", it is because, until very recently, Shetlanders' *knowledges* and modes of intervention did not profoundly alter the structure of matter, but mainly its form. The historically changing correspondence between social representations of nature, on the one hand, and the system of reproduction (institutions, techniques, etc.) which sustains them over time, defines, for "real Shetlanders", their state of nature. It links their biological and social being to the physical world.

### 6.5. "We are nature"

The stability of the culture and of the landscape is coupled with a particular sense of identity<sup>21</sup>. This sense of identity is derived from long and sustained processes of "physical world socialization" (Proshansky, 1978; Proshansky *et al*, 1983) in the particular social, cultural and material environment found in Shetland<sup>22</sup>. The most striking aspect of "real Shetlanders'" identity is the extent to which it is rooted, through meaningful everyday practices, in a particular place and becomes fused with the latter. Indeed, these Shetlanders' bodily movements and skills are perfectly attuned to the demands of the local environment (whether on the high seas, inshore or ashore); the old folk are remarkably sensitive to atmospheric, climatic or

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<sup>21</sup>By "sense of identity", I mean not only a social identity which would be derived from social comparison, in the course of inter-personal and inter-group processes, and motivated by the need for a positive self-concept (although, as we shall see, this is also involved in the making of social and personal identity in Shetland); nor do I mean the social allocation of particular qualities and traits to individuals in order to maximise the distribution of uniqueness and variety amongst the islanders, and to foster collaboration and co-operation which Cohen (1978) observed in Whalsay (although, again, such processes are also important in shaping one's identity). I am concerned more specifically with identity as an existential reality, with the identity that emerges as a result of participating in a traditional way of life, of living in a particular place, and of holding onto an organic representation of nature.

<sup>22</sup>This is very close to what Proshansky (1978) calls a "place identity". This is defined as "those dimensions of self that define the individual's personal identity in relation to the physical environment by means of a complex pattern of conscious and unconscious ideas, beliefs, preferences, feelings, values, goals, and behavioural tendencies and skills relevant to this environment." (Proshansky, 1978; p.155) Proshansky is interested in the socialisation process which takes place in urban settings and which participates in the development of a specifically urban place-identity. "The assumption being made", he writes, "is that the physical characteristics and requirements of life in the urban setting socialize the individual to move, think, feel, play social roles, and solve problems in relation to all physical settings in ways that are uniquely urban" (Proshansky, 1978; p.161). I am concerned with the identity which results from the socialisation to a particular, already-constructed, rural landscape in Shetland.

other "natural" changes<sup>23</sup>; fishermen and crofters constantly make subtle qualitative judgements in relation to bays, voes, fish migration, cattle, sheep, the soil, etc. In many ways, these skills and knowledges escape their full awareness. They may be part of real Shetlanders' behavioural and cognitive repertoire, and they may structure their identity, but they remain difficult to articulate: the greater part of these cognitive and behavioural structures indeed defies verbalisation. Typically, asking a crofter to describe his or her everyday practices provokes a shrugging of the shoulders, a smile and the following: "I would have to take you to the fields, really" (I-01); "I would have to show you. We just do it the way we always did" (I-06); or "I cannot put it into words" (I-13).

Of course, the "physical world socialization of the self" is also, at one and the same time, a social and cultural world socialisation. Perhaps more than anywhere else in Britain, *the physical world signifies* in Shetland: material and symbolic realities and practices merge. Elements of the landscape, such as walls, crofts, dykes, inlets, hills and lochs, are often known by the names of those who built them, dwelt on them or fished in them. The sense of rootedness is therefore accentuated by the wealth of meanings, beliefs, collective memories which are inscribed in the landscape, which are read by traditional Shetlanders, and which link each one of them not only to their own private history, but also to that of the entire local community. I learned to appreciate the meanings of the landscape for local Shetlanders during a walk over Garths Ness with a crofter. She pointed to some derelict stone walls and fences in the distance which, she claimed, were built from the houses of her ancestors, more than a hundred years ago. Indeed, in 1874, many families from the small crofting and fishing communities of Corston, Garth, Quam and Neeflans on the Quendale estate in Dunrossness were expelled from their properties by lairds who thought it more profitable to use the land for raising sheep than for growing vegetables. Having evicted the residents, they then used the stones of the empty houses to delimit their

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<sup>23</sup>For instance, most Shetlanders in rural areas seem perfectly able to tell you the precise direction of the wind (e.g. South-Westerly turning Westerly) and to indicate its velocity (e.g. gale-force 12). Perhaps more surprisingly, during my fieldwork they recalled with outstanding precision the weather conditions which prevailed at particular times of the day, over the previous two to three weeks. The particular circumstances of the oil spill - and more precisely the fact that the rescue operations, the spraying of dispersants, the clean-up work, etc., could not be undertaken under severe conditions - most certainly contributed to sharpening people's awareness of these conditions. Nevertheless, no urbanite has so acute a sensitivity to, and knowledge of, such ecological factors.

enclosures. Where I could only see some scattered stones, this Shetlander could retrieve her own history, that of her ancestors, and the collective struggles of the community. The material environment was imbued with meanings which could be almost directly apprehended, the fences constituting permanent reminders of past and present oppression, symbolising and celebrating the resilience of the Shetland folk. After all, she was there, able to recall how generations of kin had survived the lairds' ruthless regime. As Cohen (1987) writes:

"The past is ever-present, in yarns about characters of old, in the minutiae of place names; in the historical association of families with their crofts and parts of the isles. Walls, dykes, rocks, *geos* (deep narrow inlets in the shoreline), *crüis* (sheepfolds), *crubs* (circular stone enclosures within which seedlings were nurtured) may all be known by personal and family names dating back perhaps three hundred years.[...] In this and in the extensive knowledge of genealogy and kinship history there is a pervasive sense of rootedness, of belonging, as if people were as immovably and inherently part of the island as the very features of its landscape." (Cohen, 1987, p.3)

It should be added that houses, walls and other features of the landscape are highly visible for there are no trees to conceal them. The physical world is a gigantic mnemonic system: it constitutes a vast repository of past social and personal practices, values, experiences. Authoritative knowledge of the landscape makes one an expert on the community itself.

Thus, "real Shetlanders" learn how to know themselves through an already-constructed and already-symbolising local nature: it is through the latter that they acquire a full sense of who they are, of their history, of their position in the community. Nature, knowledge and identity form a cluster wherein each term shapes, and can only be understood in terms of, the other two. Experiences of "nature" are not *a priori* meaningful: they must be defined as such by the group in order to end up as cognitions and to become part of one's identity. Not every aspect of the local landscape and seascape is significant: there is nothing inherent in Nature which would automatically trigger cognitive or symbolic activity (as I discussed earlier in relation to cognitive mapping research). Nature is infinitely polysemic. The meanings it potentially contains are neither unambiguous, nor universally shared. The weight of tradition and history, together with the need to sustain a particular (individual and

social) identity, preside over the selection, interpretation, assimilation and use of these meanings.

What is unusual about "real Shetlanders" is that they still apprehend themselves as being organically related to nature. In spite of the overwhelming power of modern institutions in general, and of science in particular, they hold on (in part at least) to a pre-modern (sometimes apparently pre-Darwinian and even "creationist"), non-dualistic representation of nature.

"The whole of creation is nature and humans are nature. They better remember that they are nature and nothing better." (I-14)

"I never watched birds. I never had to. The birds are here. I'm here." (I-03)

"We are nature. We live with nature, we respect nature, we don't think about it because that is what we are." (I-13)

Everything appears as though Nature is not an "object" outside of oneself or of the group. We are nature. "Real Shetlanders" have a sense that, if they are to live off natural resources, they ought to live with Nature. They organise their lives in harmony with the natural calendar and the regular cycle of the seasons. "It is a sense of respect which best characterises their attitude... [Shetlanders] cope with natural conditions which they know intimately and study endlessly; they do not attempt to trounce them" (Cohen, 1986; p.30). Indeed, although Shetlanders constantly study their local nature, they never analyse, atomise, or dissect it into elements. It is striking that crofters, farmers or (deep-sea and in-shore) fishermen never give the impression of thinking of themselves as masters of nature.

"I have been a crofter all my life and brought up with people who either went to the sea or they were, in many cases, deep sea men... But if you work on the land all your life... You see, the North American Indian and Aborigine, they literally worshiped the land; they knew without looking after Mother Nature, they couldn't survive. You have tribes that worship the sun perhaps. Again, they had the knowledge that without the sun they couldn't survive. But certainly the Aborigine and North American Indian was people that love that land and I think that the Shetlander he has this tremendous close contact with the land and with the sea because that is what nature is here." (I-03)

"The environment is something that Shetlanders understand. We are the environment, we are nature<sup>24</sup>. We are involved in nature. The reason there is so much wildlife in Shetland is because the Shetlander was prepared to respect it and live with nature rather than, as an example, the south east of England which is a wildlife desert because of the greedy rich white man again. [...] The same white man which is now in Shetland in the name of conservation, I'm afraid he doesn't understand conservation. Conservation and nature you have to live with it, you have to be part of it, we are all in there." (I-03)

"R: We're used to get tough weather here in the winter, and because you get your livelihood from the land and the sea... But if you destroy that, then you have destroyed our environment but also our lives, so we have to get over it quickly. That's my, that's my views.

M: If you look after the land and the sea, you look after yourself, that's what it starts with. And we know that, the sea is part of you, it's all part of you.

R: It's like land. If you farm land too hard to get all out of it right now, you'll ruin it for the future.

M: See, we're not like people that's brought up in cities." (G-03)

These last quotations clarify yet another aspect of the constant articulation between organic representations of nature, local identity and the traditional "way of life" (with its own mode of knowledge of, and mode of relation to, nature), that is, the function of this cluster in resisting change and the values brought to Shetland by "city people" and the "greedy rich White man" who live in the South of England. Invoking the naturalness of the local way of life, and defining one's identity in relation to both the way of life and the landscape, amounts to establishing the superiority of Shetlanders. Paradoxically, this labour is rendered easier by the modern environmental movement which - having made the essential connection between "natural" and "better" - provides fresh moral justification to "real Shetlanders". From their perspective, they are no longer "backwards"; on the contrary, their "way of life" is now entirely vindicated, even (or especially) by English urbanites themselves.

The following table summarises the key elements involved in the construction of organic representations of nature. It shows how the past and the present, the

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<sup>24</sup>The close juxtaposition and the transition from "the environment" to "nature" is significant. Although this crofter initially talks about the environment - since this excerpt follows a lengthy discussion of the "environmental impact" of the oil spill as it was referred to and debated in *The Shetland Times* - he soon reverts to the local, traditional way of describing the physical world as "nature". This spontaneous switch gives us access to his representational universe. The inherent contradiction in the sentence "we are the environment" is inescapable and makes it necessary to change, in the same breath, to "we are nature". Indeed, the environment excludes self as it surrounds it. The representation of nature as an environment assumes and privileges an ontology of detachment which places self and human society outside what is residually construed as the physical world. "Nature", on the other hand, is represented as encompassing both self and world: the incompatibility between the two forces the linguistic switch.

individual and the collective, the material and the symbolic are deeply intertwined in these representations. It also shows how their content is socially conditioned to serve particular functions, most notably the defence of the community's identity.

**Table 6.1: Organic representations of nature in Shetland**

SELF	SOCIETY	NATURE
<p><b>Personal history</b></p> <ul style="list-style-type: none"> <li>* kinship</li> <li>* ancestors</li> <li>* neighbours</li> <li>* childhood memories</li> <li>* private experiences</li> </ul>	<p><b>Collective history</b></p> <ul style="list-style-type: none"> <li>* domination of/ opposition to lairds</li> <li>* Norwegian origins</li> <li>* resistance to "Sooth-Moothers" (oil workers, outsiders, SIC, etc)</li> </ul>	<p><b>Names</b></p> <ul style="list-style-type: none"> <li>* <b>from people to place:</b> <ul style="list-style-type: none"> <li>* crofts, walls, <i>crüis</i>, <i>geos</i>, <i>crubs</i>, hills, inlets, <i>voes</i>, etc.</li> <li>* allocation of patronyms and place-names</li> </ul> </li> <li>* <b>from place to people:</b> <ul style="list-style-type: none"> <li>* "Sooth-Mooth"</li> <li>* persistence of patronyms</li> </ul> </li> </ul>
<p><b>Personal qualities</b></p> <ul style="list-style-type: none"> <li>* "real Shetlander"</li> <li>* honesty</li> <li>* independence</li> <li>* resilience, fortitude, doggedness</li> <li>* discipline</li> <li>* humility</li> <li>* resourcefulness</li> </ul>	<p><b>Local ideology</b></p> <ul style="list-style-type: none"> <li>* "real Shetlanders"</li> <li>* "way of life"</li> <li>* egalitarianism</li> <li>* independence as islanders</li> <li>* respect for Nature</li> <li>* knowledge of community</li> </ul>	<p><b>Natural symbols</b></p> <ul style="list-style-type: none"> <li>* Shetland "way of life" sustained by farmers, crofters, fishermen</li> <li>* "The Old Rock"</li> <li>* purity</li> <li>* abundance of wildlife</li> <li>* knowledge of landscape</li> </ul>

## 6.6. Conclusion

Historically, the traditional "way of life" in Shetland was based on the small-scale exploitation of the resources of the land and the seas through crofting, deep-sea and in-shore fishing, and knitting. The Shetland "way of life" was characterised by an unusually high degree of inter-penetration between these activities. Until a century ago, it still operated outside of the logic of market forces, with economic exchanges being based on barter. Moreover, everyday life was structured by the rhythm of the seasons, rather than by the clock. And crofters and fishermen were intrinsically linked to the product of their labour, as well as to their community through kinship, neighbourhoods or fishing crews. Taken together, such attributes correspond to what Moscovici called the organic state of nature. The remarkable stability and simplicity of this natural division of labour over time is attributable to a combination of factors, notably the emphasis on reproductive (rather than inventive) activity, the fact that the status of crofters was fixed by law, the symbolic appeal of traditions, the ethos of self-sufficiency, and the remoteness of the archipelago, which limited exchanges with the outside world and protected the indigenous culture. Higher education has yet to become available in Shetland.

Geographic isolation and economic, cultural and social stability, have many consequences. Firstly, it means that the local organic state of nature itself has changed very little. This is most obvious in relation to patterns of land occupation and cultivation. Shetland's nature is, as elsewhere, a cultivated, socialised and historical nature, but one which, because of its relative permanence and stability, appears to consciousness as though it had eluded any process of construction. This illusion is all the more potent when Shetland's nature is compared to the other natures (such as cities) which humankind has also created. Greater contact with modern culture, and with the mechanistic and cybernetic representations of nature which it carries, have reinforced Shetlanders' conviction that their nature and way of life are more

*natural*<sup>25</sup>. The modes of intervention in nature typical of "real Shetlanders" concern essentially the form which raw substances will assume, the movements of the fish, the productivity of the soil untouched by mechanical devices or chemical fertilisation; they do not purposefully alter the structural or systemic properties of matter.

Secondly, the slow pace of change means that the indigenous population, and even specific local communities or particular fishing crews (*wir* folk), have evolved complex nature-related cognitions, norms, values, and practices. Crofters and fishermen have an intimate knowledge of water currents, tides, fish and animal behaviour, seasonal cycles, wind direction and forces, etc. Fishermen themselves move differently when ashore and on a boat, and some claim to feel dizzy when out of sight of the sea. There is also a slightly different language spoken in these two different milieux. Crofters also have an acute sensory knowledge of their land: they crumble soil in their hands, smell and even taste it in order to judge its acidity. Most of that knowledge is tacit and acquired through years of apprenticeship, quietly observing more experienced Shetland folk. This learning process perpetuates not only technical know-how, but also norms concerning the importance of traditions themselves, the proper behaviour expected of work mates, coping strategies, ways of articulating egalitarianism and independence with deference to authority and solidarity, etc. Participating in the traditional "way of life" confers on individuals a sense of belonging, a position in their community, a personal and social identity.

Thirdly, the fact that the local nature has changed so little also means that it is symbolically loaded. The socialisation process of traditional Shetlanders involves learning how to read the landscape, for it contains fragments of the history of the entire community. Walls, stones, dykes, voes and hills signify. They carry in them the labours of earlier generations of kins. They symbolise the strength, resilience, permanence and the superiority of the very "way of life" which has produced them (but which is believed to be a direct outcome of some immutable Nature). They

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<sup>25</sup>There now exists a quasi-universal assumption that what is *ostensibly* man-made is also artificial or *unnatural* (for instance, pollution, cloned sheep, atomic bombs) and often somehow bad, whereas what is less visibly man-made (such as open fields, *scattalds*, farmed salmon, or new breeds of cattle created through sexual reproduction) is deemed natural and, almost by virtue of that, somehow good. More research is needed to understand where, how and why the boundaries between "nature" and "culture" are established in the scientifically-informed common sense of contemporary Western societies.

provide each new individual with a sense of time and a sense of place, so that people become almost literally rooted in the land worked by their ancestors. They also provide the resources to resist further changes (especially those brought about by the oil industry), since the latter are exogenous in origins and, through symbolic association with a reconstructed version of the lairds' regime, tend to be perceived as wholly destructive. We therefore uncover an organic representation of nature which is structurally bound up with a particular sense of identity, of history and of community.

However, recent social and cultural changes mean that this representation no longer shapes the ontology of all Shetlanders. For most, it is *used* as a resource to provide an anchor in an idealised, but threatened, "way of life". Hence the distinction, within Shetland society itself, between "born and bred Shetlanders" and "real Shetlanders". The former often comprise the more progressive wing of Shetland society; for them, the "way of life" is a symbol progressively emptied of any reality but nevertheless used to sustain a fiction of homogeneity. The latter, on the other hand, truly live by, and renew, the organic representation of nature upon which the traditional "way of life" used to rest. This representation is constitutive of their self, of their community, and of their local nature. In different ways, therefore, the organic representation of nature serves an essentially conservative purpose: that of resisting change.

## 7.0. MECHANISTIC AND CYBERNETIC REPRESENTATIONS OF NATURE: THE IMPACT OF LATE MODERNITY IN SHETLAND

In this chapter, I shall explore the representations of nature held both by "born and bred Shetlanders" and by so-called "Sooth-Moothers". The analysis, of necessity, will take us beyond the bounds of the Shetland Isles where the social representations were apprehended empirically and where they are objectified. This is because, just as organic representations were structurally bound up with the traditional Shetland "way of life", mechanistic/cybernetic representations cannot be understood outside of the conditions of late modernity which they have partly created, which they reflect and which they contribute to changing. Indeed, we shall see that identities, rationality, representations and social structure are still deeply intertwined, albeit in completely different ways.

In the discussion below, I shall bracket off analytically the data that pertain directly to the oil spill. These will be treated in the following chapter. The aim is to identify how, to what extent, and with what consequences, Shetlanders' "way of life" and environment have been shaped by growing trade with outsiders under the "normal" circumstances of modern life. This will help us to understand many of the social and psychic dynamics which prevailed in the aftermath of the *Braer* oil spill.

### 7.1. The impact of late modernity in Shetland

A brief account of the most salient dimensions of high, or late, modernity is necessary to understand the dynamics of social life in Shetland<sup>1</sup>. I shall draw extensively on Giddens' (1990, 1991) discussion of high modernity - bearing in mind that the latter is not simply the backdrop of otherwise unchanging personal feelings, social relationships, and social representations, but that it is both the context and the product of the latter. If late modernity is characterised by a tension between the global and the local, and if "real Shetlanders", with their organic representations of nature, embody the local pole in this dialectical relationship, it is important to analyse

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<sup>1</sup>I refer to the contemporary period as late modernity, rather than post-modernity. This is coherent with the works of Giddens (1990, 1991) and Beck (1992), who both describe our times as ones wherein the consequences of modernity have been exacerbated, radicalised and universalised, rather than replaced by a fundamentally new social, cultural and epistemological order.

how the globalising tendencies of modernity also permeate Shetland society through and through. This other pole, embodied by "Sooth-Moothers" (foreigners) and symbolised by the oil industry, is equally constitutive of Shetlandic life. It is associated, as we shall see later, with quite different, mechanistic-cybernetic social representations of nature.

#### 7.1.1. The contours of high modernity

Modern life, according to Giddens (1990, 1991), is characterised by a structural *reorganisation of time and space*. In traditional settings, time and space were connected through the mediation of place. Modernity, however, brings about, and rests upon, a disjunction of traditional modes of time-reckoning and of local spatial markers. The fundamental change is that time and space are now reintegrated and co-ordinated, but without the mediation of a *particular* place. This means that social relations tend to become disembedded, free from the hold of specific locales and from temporal constraints, and that they are often now mediated rather than face-to-face. Particular *disembedding mechanisms* function to "lift out" social relations from their local contexts and to project them into global social systems. Money is one of the most important and pervasive mechanisms which unite people over time and across space. Written languages, especially since the invention of the printing press and of the electronic media, also play their role: they enable people to communicate across generations and cultures in ways which were unthinkable in purely oral cultures. Expert knowledge and technology also transcend the local conditions of their production; they have validity outside of the social relationships and institutional settings from which they emerge. They shape virtually every aspect of life (see also Gellner (1992) on the historic role of rationality and rationalism in the constitution of modernity). The combination of money, expert knowledge and technology, in turn, transforms fundamental dimensions of life into "objects".

The reorganisation of time and space, together with the effects of disembedding, profoundly alter the nature of both social and private life. Traditions are constantly being called into question; most aspects of personal life, of social activity and of material relations to nature are susceptible to chronic revision in the

light of new expert knowledge. Doubt, the corner stone of a modern rationality which aspired to erase it, now becomes its inescapable product, permeating everyday life as well as scientific consciousness. Giddens calls this constant awareness of the temporary and fragile character of the present, due to the institutionalised use of knowledge as a constitutive element in the organisation and transformation of social life, *reflexivity*. These three sets of elements - the separation of time and space, disembedding mechanisms, and institutional reflexivity - account for the dynamic character of modern social life, for the pace, scope, and depth of change, as well as for its inevitability.

### 7.1.2. "Local modernity" in Shetland

Indeed, no society is left untouched by these processes: each, by drawing upon its own history, culture and traditions, can only shape how they will be lived and rendered meaningful in the local context. Individual "local modernities" everywhere embody the dialectics of the global and the local, of the modern and the traditional. We have witnessed in the previous chapter some attempts by Shetlanders to root their identities within the local milieu, to locate themselves in the broader frameworks of community and kinship, to cultivate a sense of community pride, and to sustain traditional modes of knowledge. We have also seen that these attempts can only ever partially succeed because, perversely, they themselves reinforce the very reflexivity and uncertainty which prompted them in the first place. Shetland society, today, is thus immersed in worldwide abstract systems. Money, scientific and technical knowledge, the media, national and international political and legal frameworks, increased mobility, etc., all concur in re-structuring local practices by integrating them into wider, and qualitatively different, systems.

These changes have implications for every aspect of political, economic, social and personal life. The place of birth no longer constitutes the parameter of experience and the source of identity; traditions can no longer be renewed unproblematically in a rapidly changing society because they lose their relevance; private life and social relationships are becoming "internally referential" (Giddens, 1991), susceptible to planning and decision-making. Increased mobility, coupled with greater freedom from

external criteria, mean that the threat of out-migration is continually present. Materialistic and individualistic aspirations must be countered. Local attachments must be consolidated. Identities must be reinvented. How Shetland's traditional "way of life" interacts with modern imperatives to shape new social/self-identities is the object of this section.

## 7.2. Traditional and modern processes of identity construction in Shetland

Modernity breaks down small communities and traditions. Yet, small communities also have considerable symbolic resources which they can mobilise to inform the process of change, to give it meaning and, to some extent, to resist it. Disenfranchisement and loss intertwine with empowerment and revival to create new social and cultural systems which blend the new with the old. This applies to the dynamics of identity as well as to the more strictly societal dimensions of social life.

In order to address the issue of identity in contemporary Shetland, it is crucial to distinguish between *social* identity and *self*-identity (both are treated here as ideal-types). These do not correspond to the two ends of a *continuum*: social identity and self-identity are qualitatively distinct, if intrinsically related, social psychological phenomena. They cannot be reduced to a single dimension because, I would argue, they emerge from, and are constitutive of, different forms of social organisation.

Social identity, in the present context, refers to the set of traits which are granted to an individual by virtue of his or her participation in traditional social structures (such as neighbourhoods, crofting townships, fishing crews, or kinship), and which are accepted subjectively as integral to one's self<sup>2</sup>. In this sense, each person's identity is derived from the requirements of collective life (such as the

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<sup>2</sup>Cohen 1978; 1982; 1982b; 1986) has provided subtle and detailed accounts of the means by which Whalsay folk manage to articulate the apparently divergent requirements of continuously reasserting the homogeneity and integrity of the community, whilst simultaneously celebrating the idiosyncrasies and marks of distinctiveness of each individual. His ethnographic reports show that this is achieved by maximizing the distribution of uniqueness and variety amongst the islanders. Each islander is granted by the community some commendable trait - almost regardless of the actual qualities of the person. Thus, in a village, one will find a skilful fisherman, an inventive joiner, a resourceful crofter, a colourful "raconteur", etc. This restrictiveness in the allocation of personal qualities keeps "variety within acceptable and expectable limits and thus preserves the essential homogeneity of the community" (Cohen, 1978; p.452). It also guarantees some form of cooperation and collaboration: controlled social and personal differentiation, via the collective distribution of attributes, renders solidarity necessary.

creation of a collective Shetlandic identity to counter homogenising modern tendencies). The processes of social identity construction reveal the operation of coercive external criteria - social duties, moral obligations, kinship rules - which the community as a whole deems to be necessary to its survival. In other words, traditional collective life creates, contrives and constrains the bases on which members of the local community engage with each other and with the rest of the world. The community, in traditional cultures, is truly the context and the source of social identity. Cohen (1978) writes (incidentally supporting my interpretative claims about the link between identities and organic representations of nature):

"Whalsaymen are of their sea and their crofts. From these associations are drawn evaluative identities which are allocated with regard to a man's structural connections with the community and to the specific circumstances of the interactions in which the identity is allocated and subsequently reaffirmed. Thus, identities in Whalsay have idiomatic boundaries which preserve the essential cultural homogeneity of the community." (Cohen, 1978; p.462)<sup>3</sup>

Unlike social identity, which is *allocated* and derived from *traditional* social systems, self-identity is continuously *achieved* and is bound up with the ever changing conditions of *high modernity*. It is a "reflexive project" (Giddens, 1991). Lineage, kinship, township of origin or of residence, lose their hold on individuals while "the only significant connecting thread is the life trajectory as such" (*idem*; p.80). In the face of disjointed experiences, individuals must reconstruct the continuity of their own existence and find their place in the world. Developing and sustaining a narrative of one's biographical choices becomes central to the maintenance of self-identity. Integrated modern selves give "internally referential" accounts and justifications. Here is how non-Shetlanders living on the islands introduced themselves: work, immediate

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<sup>3</sup>It must be borne in mind that Cohen conducted his fieldwork in the 1970s and 1980s, and mainly on the island of Whalsay which, even by Shetland standards, is thought to be a very tight-knit, self-enclosed and self-reliant community. The passage of time, on the one hand, and the change of location from a small island to Mainland, on the other, both contribute to explain the differences between the relative importance of social-identity and self-identity in the construction of individuality in Shetland. It may well be that the processes described by Cohen in the almost autarkic fishing and crofting community are very similar to those which used to prevail throughout the archipelago but which are now endangered by recent societal changes.

family, personal circumstances, an active quest for a better quality of life, are central to their biographical narratives and self-identity.

**"I: Why did you come here?**

My husband came up for an interview and was offered a job and we *decided* to move.

**I: What kind of job?**

Planning officer for the SIC, sort of conservation planner, working at listed buildings, tree preservation, old buildings and environmental issues." (I-16)

"We lived in a quite depressed area of western Scotland. I had a job but my husband had finished university and did not have any employment, and we had visited Shetland before, and a job came up for me that I could go for on the small island of Whalsay, on the east side. He *decided* he would rather go unemployed in Shetland than where we lived and also, you know, the children, we *would rather* bring them up here. So, I went for the job and I got it. He sometimes works as a free-lance journalist and ecologist. He does a bit of writing for *The Shetland Times* every week; he has a wildlife column.[...] There is more freedom as well. In a sense, I think children have to be watched in Scotland whereas here, you feel that they can be left around the house and it's fine. That was just part of it, you know? Of course, *John and I appreciated the wildlife. That was a big reason for coming.*" (I-05)

"We came here in 1961 when my husband was appointed sheriff. He *asked* to become a sheriff and then he saw that Shetland was needing a sheriff. [...] He'd been here during the war on holiday and, really, he'd just taken to the place. He came to Orkney and Shetland and really he thought they were just quite special places and *when the opportunity came to come here, he took it.* I must say that I was a little bit upset.

**I: I was going to ask you. What about you? Did you want to come here?**

Not a bit! We both lived in Edinburgh at the time. I had given up full time medical work but I was still doing part time work. And I had been at school in Edinburgh, I had been to university and really quite enjoyed the life there. So really it was a big change to come here. I would say it took me three years to get used to it, which was rather long I think but after that, I never looked back.

**I: You would never want to leave this place now?**

Well, I wouldn't say never because *you can never know what circumstances are going to affect your life, but given how the family is placed and everything at the moment, we would like to stay here.*" (I-11)

"I do energy efficiency work and environmental management work and more general stuff, project development, that kind of thing. That's why I came to Shetland." (I-12)

Projects, plans, desires and decisions dominate these biographical narratives. Compare them with those of most "born and bred Shetlanders" and of "real Shetlanders" (section 6.2.2). Place-identity disappears altogether. Notions of family history and ancestry, so central to the lives and identity of traditional Shetlanders, are completely absent from the narratives provided by modern non-Shetlanders.

"Although this is my home now, it's not been my home for, not historically been my home. *I'm also aware of other places.* I'm aware of living in other cities, and so on. I come from Manchester, but I lived in Africa for a while. *What is constant is the feeling of never being at home.*" (I-12)

"We have interests, we have family hundreds of miles away. *We have a different view of the world.* I don't know. Maybe I think we believe that the Westminster government is interested, but they don't believe things like that. We have interests elsewhere, and very important interests. As I said, my first thought [when my husband told me there had been a disaster] was that someone was ill back home. My first thought was away from them, whereas *a Shetlander will always live in a much smaller sort of area of interest. We are not absolutely sure if we are going to stay here for the rest of our lives but I think that most Shetlanders won't say that. We don't know how long we are going to stay here but for them this is not really a question.*" (I-05)

Kinship is hardly mentioned either in people's accounts: only marital relationships engaged in through individual choice are invoked to explain one's decision to migrate to Shetland. But it is the very compulsion to construct a biographical narrative which is of central interest: non-Shetlanders never call upon traditions, "daa old ways", in order to justify their actions, in the way "real Shetlanders" do. They give accounts, and use the latter to structure their sense of self. These are crucially important new social psychological phenomena: they both derive from, and are constitutive of, high modernity.

These novel phenomena are not found exclusively among non-Shetlanders. Local people (especially the youth) are also subjected to the disembedding effects of money, the mass media, expert knowledge, global industry, science, etc. One oil worker explained that he had lost his Shetlandic accent and could not speak the dialect because he had lived almost two years in Newcastle, spent seven years in the navy, in contact with people of different nationalities, and was now working at Sullom Voe with yet other foreigners.

"It doesn't bother me [not to speak Shetlandic]", he said. "I know there is a lot of people that don't like to lose their identity but the world is the world..." (I-08).

His biography was structured around personal decisions - to leave, to return, to travel, to work in the oil industry - and was marked by attempts to resist marginalisation in the community. Another young oil worker was making plans to travel abroad for a year at the time of the interview. He described himself as a "born

and bred Shetlander" but, also, as a "citizen of the world". Asked what he thought about the oil industry in Shetland, he answered:

"A lot of people will say it has been a bad thing because it has changed the life, it has changed Shetland's lifestyle. Before the oil came up, it was the fishing and nothing. Crofting. It was nothing. That was the main thing really. But with Sullom Voe a lot of new people came up, a lot of folk from the South and there is plenty of money around, at the moment anyway. It's a good thing I would say. But then again, maybe some old folk would disagree because it has upset their lifestyle in a way. But it's a good thing." (I-07)

A "born and bred Shetlander" and salmon farmer expressed similar ideas in a group discussion:

**"I: Did the community feeling you describe change after Sullom Voe?**

(Silence in the group)

K: Not really, no. There was a big song and dance about it at the time because we had quite an influx of workers. There was a general drift of workers up to Shetland, which is no a bad thing because there's new blood, there's new faces. It's a bit of an injection into the islands. That's not a bad thing at all." (G-01)

The voice of "the old folk" is still strikingly present in all these discourses; but if local youngsters and the progressist factions of Shetlandic society face the disapproval of the "real Shetlanders", they nevertheless pursue their own individual choices. They are young and relatively rich; they see their world from the outside, as it were, and are determined to ride the tide of modernity. Their sense of identity and their more global outlook largely shape their representations of nature/the environment.

#### **7.2.1. The allocation of a social identity to foreigners: The social construction of "Sooth-Moothers"**

How do Shetlanders cope with all the foreigners in their midst? How do traditional and modern dynamics of (social and self) identity function in an ever more pluralistic context? How are non-Shetlanders categorised and treated by the islanders? Can they resist being marginalised on their own island? What are the consequences of such processes for everyone's identity?

Foreigners, by definition, belong to none of the traditional frameworks of social organisation. Yet, even they cannot escape the power of local traditions, of memory, and of organic representations of nature when these cultural resources are all summoned at one and the same time to defend a threatened collective identity. Indeed, although non-Shetlanders cannot be associated with a particular place (the majority come from England and the Scottish mainland, but the demographic landscape of Lerwick changes with the arrival of every ship or with the home-coming of off-shore oil workers), and although their narratives are much too complex to be explained by some common factor, they, too, are allocated a social identity by Shetlanders. The latter put traditional mechanisms to work, and use familiar anchors and symbols, in order to allocate social identities to people who would normally defy traditional identity markings.

We saw earlier that the Shetland islands themselves symbolise the entire "way of life", and that they are used to sustain and to naturalise the traditional ethos. We also explored how the islands act as a repository of the local history and culture, which are inscribed in the landscape and read by "real Shetlanders". Further, we observed that Shetlanders are intimately associated with a place and that this association is highly normative and evaluative, rather than merely descriptive. Now, *the same cultural resources are combined and drawn upon to attribute social identities (through place-identities) to foreigners*. This is how it operates: Historically, people who came to Shetland from anywhere else generally sailed through the South mouth of Lerwick harbour. For centuries, this bay constituted the main access to Shetland; it allowed foreigners to penetrate into the islands. Otherwise, the Shetland islands were almost impregnable, being isolated by at least one hundred and eighty miles of treacherous waters from their nearest neighbours and having a coastline of abrupt cliffs. Thus, the "Sooth Mooth" of Lerwick was one of Shetland's most vulnerable points. It has come to symbolise the boundary, the point of tension between the inside and the outside. Shetlanders have used precisely this weakness in the geography of the islands to defend their own identity. They have projected onto the incomers or foreigners, henceforth known as the "Sooth-Moothers", all the attributes that run counter to the collective definition of "being a Shetlander". Cohen (1987) summarises the natives' views on Sooth-Moothers as follows:

"Sooth folk are [to the Shetlander] a breed more to be pitied than envied; they are *handless* - incapable of self-sufficiency; wasteful, in that they do not make use of whatever resources are available to them; loud-mouthed, in that they are forever voicing their opinions; and deluded, in that they firmly believe their opinions to be correct. Their lives are frantic and unordered, lacking the essential regulation of the natural calendar which imposes an undeviating routine on the fisherman and crofter. They are, literally, irresponsible, in that they have abdicated their own obligations for decision and self-regulation by becoming dependent on policemen and priests and politicians. An encounter with, or discussion of, a "Sooth man" thus frequently finds Shetlanders reaffirming the ideal typical conception of the Shetlander's identity." (Cohen, 1987, p.466, *italics in original*)

The topographic feature of the South mouth is now enshrined in language, thereby extending to foreigners the indigenous means of allocating identity. However, whereas the social identity of the traditional groups of "born and bred Shetlanders" and "real Shetlanders" is coupled with almost wholly positive and somewhat romanticised values, Sooth-Moothers are nearly always perceived negatively. Their name itself crystallises Shetlanders' fear of being invaded. In this fashion, Shetlanders succeed, to some extent at least, in countering modern trends: their traditional approach subordinates individuality to collective identity and relegates those who threaten the homogeneity of the traditional group to the margins of the acknowledged social sphere. This strategic allocation of social identity disempowers the new-comers by undermining the appeal they may otherwise have. At the same time, it reasserts local values. Sooth-Moothers - members of the SIC, oil workers, experts, immigrants, and everyone else - may now be part of the social fabric, but they will remain, forever, outsiders. The locals have evolved complex strategies for undermining and discounting altogether their claims. Shetlanders will be delighted to tell you how Sooth-Moothers "like the sound of their own voice", are "all talk", "know it all", want to "rule the roost when they're still wet from the crossing", "think they can boss you around no end", etc. Control and superiority are perhaps the two most common features in the description of Sooth-Moothers. A crofter gave a humorous account of the social dynamics which, in his view, typically prevail when a newcomer arrives.

"This is the problem the Sooth-Moother has. He comes here: "What a wonderful place!" This is the first statement: "What a wonderful place!" And the minute he gets here, he has to change it! He must impose himself on the first committee that he can find, and if there is not a committee that suits him, he forms a committee! So he takes, he makes decisions on local issues. He has only been here ten minutes, mind you! That is the nature of the Brits. They must take it from school, I don't know... There is so many idiotic people... They usually learn. By eighteen months to two years, we manage to break them in. There are actually unwritten laws here, and rules. [...] But I am totally tired of trying to break in an Englishman. We are used to working with horses and training dogs, but the Englishman does try my patience!" (I-03)

It may seem surprising that traditional Shetlanders, who have evolved complex and sophisticated means of differentiating amongst various social groups within their own community, should nevertheless amalgamate complete foreigners (who have no direct contact whatever with Shetland) and non-Shetlanders who live in Shetland (sometimes for decades) under the single name or category of Sooth-Moother. Perhaps this apparent lack of differentiation must be understood as being itself structurally related to the conditions of late modernity? Sooth-Moothers living in Shetland merely *happen* to reside there; they could quite easily have chosen to live anywhere else. There is therefore truly much more in common between Sooth-Moothers residing in Shetland and residents of London or Boston, for instance, than there would be between Sooth-Moothers and traditional Shetlanders. In this sense, modernity not only fragments, it also unites, and the name given to all foreigners by Shetlanders accurately reflects these globalising and unifying tendencies.

### 7.2.2. Resisting social categorisation

Obviously, Shetlanders are not alone involved in the definition and construction of social categories; such processes are negotiated. Sooth-Moothers and local "modernisers" alike are acutely aware both of their own position in Shetland's social fabric, and of the general undermining of their contribution to Shetlandic life. But they benefit from some very powerful tools with which to restore a positive sense of identity - the very tools, in fact, which make them such a threat to traditional Shetlanders: a fundamental belief in the universal validity (and therefore legitimacy and superiority) of their own knowledge and rationality; the recognition of external

political, economic, scientific and legal institutions; and relative wealth in comparison to most traditional Shetlanders<sup>4</sup>. In the eyes of Sooth folk and of local modernisers, the "real Shetlanders" are also perceived as insular, slow, stubborn, narrow-minded and somewhat naïve. They are friendly, not materialistic, relaxed, but ultimately "backwards" and, from the perspective of Sooth-Moothers, very reluctant to admit strangers into their conservative small world.

"I think that people who know you just treat you as a person. I think people who don't know you and are defensive about Sooth-Moothers anyway, their first impression will be that you are a Sooth-Moother and... I think that we are treated differently even after this amount of time, after ten years and having three of the children here. The children are treated differently. They don't feel as Shetlanders. It creates barriers in a sense. [...] I mean it's not because of any disapproval or any distancing really by them. It's just because it's a very very difficult community to become part of. I think we had a funny lifestyle as well because John was at home with the kids and I was working, you know? Not on Whalsay! You don't do that here! [...] He didn't have any contact with other adults really because the women felt very strange about having him around and [...] the men are away fishing all week. [...] When you come from the Mainland, it seems a bit backwards, well, traditional." (I-05)

"It always is difficult [to settle in a new community] and I mean I always say I will never be a Shetlander. I'm always an outsider and I mean you are classified as Sooth-Moothers up here. You know I will always be a Sooth-Moother. But, I think people are a lot friendlier and a lot more relaxed and open than many in the North of England..." (I-16).

Perhaps more subtly, traditional Shetlanders tend to be represented as passive and fatalistic, two potent marks of otherness. Passivity and fatalism go hand in hand as they amount to a repudiation of a controlling orientation to the future in favour of an attitude which allows events to unfold as they will (Giddens, 1991). In this sense, fatalism is no less than the refusal of modernity, in its fundamental dimensions of control, prediction and intervention. It reflects a worldview according to which the

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<sup>4</sup>The power differential between modern and scientific rationality, on the one hand, and local knowledges and expertise, on the other, is acknowledged by all. During the fieldwork it was clear that, if real Shetlanders tried to narrow this gap by invoking the experience and wisdom of the local folk, they were often quite surprised that I should want to talk to them at all. Indeed, they would generally direct me to the local authorities and various environmental agencies. This points to some awareness by lay Shetlanders that there exist different types of knowledge and that some are endowed with authority and legitimacy (the kind of knowledge Shetlanders assumed I was trying to obtain), whilst others are not (the rich knowledges they indeed possessed but denied having because they thought I would not be interested in their "common sense"). The association of certain public figures and organisations with legitimated knowledge in the minds of locals does not mean that real Shetlanders accepted their authority and the validity of their claims. Far from it. It simply indicates a recognition that the knowledge which they produce and diffuse is the sort which is generally sought after by non-Shetlanders like myself.

order of things is neither pliable nor open to management, and it is therefore associated with passivity.

Finally, traditional Shetlanders are often thought of as unfit to fully master scientific knowledge (and, therefore, to assess properly the consequences of the oil spill), being engulfed as they are by the concrete.

"I think a lot of people don't realise the sheer disaster. They don't realise how much damage has been done because the physical evidence is not really there. They are looking for beaches with two or three inches of thick crude oil on it with seals trying to swim their way through it, but if you look at it, it's nowhere near that. But it's just as serious. It's the long-term effect that people don't realise." (I-12)

"I think the main problem will be the lack of interest now that there is no oil washed up on the beaches. I think people will tend to forget about it really quite quickly [...] because it doesn't seem to be a problem because it is not visual [...] I think people will end up arguing about silly things and not really care about the real environmental problem [...] It would have been far better for us if [*The Shetland Times*] had said: "Well the visible signs of the oil have evaporated but there will be still a lot of oil sinking down through the sea and there is a lot of damage done to the seabed and the fish and the birds and... rather than just losing interest because you can't see it when you fly over it"." (I-16)<sup>5</sup>

The disqualification of local knowledge and expertise by the modernising élite - both in Shetland and abroad - is another means of sustaining their own identity. Gradually, it does indeed contribute to de-skilling the local population or, at the very least, to delegitimising their traditional skills and replacing them with other abilities.

### 7.3. The emergence of new "natural categories" in contemporary Shetland

Such processes are closely intertwined with the emergence, within Shetland society, of new "natural categories". The narratives quoted in section 7.2. above indirectly introduced us to the lives of seven Sooth-Moothers and of two local oil workers. It is not accidental that all but one of them should be highly educated, and that most should have some form of expertise not available locally - three ecologists/conservationists, a retired chief medical doctor, a journalist, a school

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<sup>5</sup>It is of course perfectly correct to state that the sensory knowledge possessed by "real Shetlanders" does not suffice to understand "environmental problems" as they are now defined. In fact, theories, measurements, experiments, and instruments of all sorts are necessary even to define a situation as problematic or as hazardous at all. Without them, most "environmental problems", such as "the hole" in the ozone layer or the greenhouse effect, would certainly exist, but they would not enter people's awareness.

teacher. If Moscovici's account of the genesis of the two most recent states of nature - mechanistic and cybernetic - is correct, one would indeed expect members of the natural categories represented by the engineer and the scientist (and, more generally, anyone involved in the management and monitoring of social and natural activities, such as journalists and ecologists) to be central figures in contemporary Western societies, not least because expert knowledge is disembedded, detached from any particular locale and, therefore, readily exportable. As an expert in energy conservation said:

"I still am an outsider. I still am a Sooth-Mooother. I think I'll always be because I do work which goes outside the island. Certainly the first year and a half, maybe more than half my time was spent outside the island, and almost all my time was spent dealing with people not on the island. As a result, I don't get to know, I don't become as much a part of the community as local people do. But that's the advantage of my company. I have to be able to provide services and information and expertise that isn't available elsewhere locally." (I-12)

This man's work is quintessentially late modern, made possible by the reorganisation of time and space, by various disembedding mechanisms, and by the diffusion of cybernetic representations of nature. His work depends upon, and contributes to, institutionalised reflexivity about the most critical of human products: "the environment". In this sense, it is not surprising that an explicit concern for "the environment", or some proclaimed love of "nature", should also have been integral to many people's decision to live in Shetland (or to return to their islands). Such feelings are themselves products of late modernity, which fosters a reflexive appreciation of nature based largely on a fear of its destruction. The spread of the built environment *elsewhere* has transformed Shetland itself into a rural idyll, the epitome of the "countryside" and the "wild".

"You get a lot of people moving to Shetland who are like escaping from the rest of the country." (I-12)

"Of course, John and I appreciated the wildlife. That was a big reason for coming." (I-05)

The fact that so many "townies" should come to Shetland in pursuit of the "wilderness experience" does not leave Shetlanders' own appreciation of their place unchanged: they learn to see it through the eyes of outsiders. In the following pages,

I will discuss how three groups of people - salmon farmers, oil workers and those involved in the tourist industry - embody and foster the modern way of life in Shetland, just as deep-sea and inshore fishermen, crofters and farmers were key figures in the traditional way of life. These groups have been selected because Shetland's economy and way of life, nowadays, rest largely on their natural practices (Census, 1991). The latter are more consistent with mechanistic and cybernetic representations of nature than with organic ones.

### 7.3.1. Salmon farmers

Salmon farmers comprise a problematic group; "real Shetlanders" have trouble categorising them along traditional lines. An indication of their ambiguous position in the social fabric was given when a crofter began by excluding both fish farmers and oil workers as he described the "indigenous population", but, later in the interview, reviewed his original statement to include salmon farmers this time (still leaving out oil workers). The ambiguity expressed in this man's discourse reveals, I believe, some actual ambiguity in the status, sense of identity and rationality of salmon farmers in Shetland. On the one hand, their work is a blend of two activities which have always been the backbone of the Shetlandic economy and way of life, farming and fishing; it is regulated to some extent by the natural calendar and by weather conditions, and it is practised predominantly by "born and bred Shetlanders". Thus, it would seem to qualify as an indigenous form of labour normally associated with organic representations. Salmon farmers are keen to compare themselves with fishermen and crofters, and to stress the extent to which their work is still organised by the rigours of the weather and by the seasons.

"K: I would say a lot of Shetlanders involved in working outside, fishermen and fishfarmers, crofters, it's really weary I suppose this time of the year...

B: You see, all the work goes with the season. Things tend to really slow down in the winter.

K: If a rope gets broken or the nets need replacing, then you take the first opportunity with the weather to do that and the main thing is to get the fish seen to, whether it is feeding or treatment or whatever. To check them out. That is the main thing [...] Most of the way the weather affects us in Shetland, most aspects of the work outside in Shetland is that it goes crazy come April time. You have got to work right through until the holidays maybe start, maybe in August or July. It just goes crazy. We are working twelve hours a day..." (G-01)

On the other hand, and despite the ease with which salmon farming can be anchored within more traditional activities, it is Shetland's newest industry. It was established in the mid-80s and it operates according to a strictly modern rationality. Fish farming reduces the randomness of fishing in the wild by caging fish, installing predator nets around the cages, controlling the growth of smolts and salmon through precisely timed feeding twice a day, monitoring the water temperature, treating the salmon against disease, and even avoiding stress for the fish as the farmers go through these operations. The aim is to generate a considerable and predictable income, especially in rural areas where full-time jobs are scarce. Fish farming is a job, not a "way of life". Planning and monitoring are central to this new industry whose spin-offs are equally vital to Shetland's modern economy. Processing plants, polystyrene box manufactures and smokehouses are now part of the landscape while, in Lerwick, local associations and firms are responsible for controlling the quality of fish and for marketing the new industry abroad. The following quotations exemplify the rationale guiding salmon farming.

**"I: How did you decide to go into salmon farming?"**

Precisely? We have... The company that owns this company is a hatchery and also this company have a factory for making polystyrene salmon boxes, so the logical step would have been to have a salmon farm as well. So we bought into a salmon farm two years ago." (I-17)

"L: You put [the salmon] in May and by fourteen months, fifteen months, you get a percentage of the fish maturing and ready to go and spawn. You get to pick them out, say thirty percent, and the rest grows on and you come to April or May in the next year, then you get the rest of them all matured by then. And then they have to be harvested because they start going off feed, they start to change the colour of their flesh and all these kinds of things. And you have got to take them out. Two years really is the maximum.

K: I think the biggest barrier also for growing them for that amount of time, when you can't harvest them, is cash flow. And financially, the markets, you have to time it for when the markets haven't dropped. Like we were going to harvest at the end of January and we had to stop." (G-01)

Strict, clearly defined, uniform and *objective* criteria are also applied by official organisations employing people with recognised qualifications - the Shetland Salmon Farmers' Association, for instance, is headed by a lawyer and two "well-educated Sooth folk who are pretty much on the environmental bandwagon" - to control the quality of the fish caught, farmed or landed in Shetland.

"They're an independent body and they, they go regularly into factories and check fish going through. They check the fish once they've been packed. They'll open a few boxes and check if there's any problem. They'll open more up till they get it sorted out. The quality of fish is checked for, you know, fat content, quality, freshness, temperature, etc. The works! There's a whole, I mean, there's a thick manual of things to inspect." (G-01)

How far from the sensory knowledge which "real Shetlanders" could hardly "put into words"! "Thick manuals" are the repository of objective knowledge. Shetlanders are propelled into the global market. Salmon farming expands the traditional horizon of thought well beyond the islands. This different rationality and more mechanistic representation of nature - associated with the control, exploitation and domination of "natural resources" - partly explains why salmon farmers, in spite of being "born and bred Shetlanders" in the vast majority of cases, are excluded from the group of "real Shetlanders"<sup>6</sup>.

The following quotation illustrates how going out of the islands changes one's perspective on Shetland, on others, and on oneself. It is no accident that these well-travelled fish farmers should be able to develop an argument which weaves together the traditionally strong sense of rootedness and a more modern, detached, instrumental and, in this case, economic rationality.

B: You get more of a sense of being a Shetlander when you're outside of Shetland. You recognise somebody, a Shetlander, in Aberdeen or in London and you have kind of a bond there. You'll go and speak to them even if you don't know them. You just get their accent and you'll go and speak to them. When you get to Shetland, then you find you're into smaller groups of people again. [...]

L: You go on the Mainland and you're constantly looking for somebody you know.

B: In London, if you go in the underground, you look around and you think: "I don't see anybody here!" Everybody's anonymous.

**I: So you have been abroad a lot. Why do you come back to Shetland?**

B: It's the strangest thing. The minute you're away from Shetland, then you start to appreciate it. The further away you go from Shetland, the more the good things you can say. Well maybe that's just nostalgia but...

K: There's something very, very strong that attracts you back here.

B: Mind you there's good economic reasons for staying here because with the low unemployment, the chances of you finding a job anywhere else are a lot smaller, more limited, than working in Shetland. That's just the basic reason for staying here but I think there's got to be more...

K: It's home!" (G-01)

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<sup>6</sup>It is significant, for instance, that salmon farmers should be almost totally absent from the issues of the magazine *Shetland Life* I analysed - both as authors (as far as I could appreciate) and as objects of articles about contemporary life on the islands. There was only one article (April 1993, no 150) devoted to this growing industry. This is all the more surprising since the threat to marine life posed by the wreck directly affected salmon farmers.

The taken-for-grantedness of communal life, of people's knowledge of fellow islanders, of the beauty of the natural landscape, erodes as one ventures out. Adopting a broader, external perspective on one's life means that explanations must be sought for what used to be unquestioningly accepted. The work of reflexivity is undertaken.

### **7.3.2. The tourist industry: "Shetland, the natural choice"**

Tourism is also central to Shetland's economy, way of life, and to the collective identity of all Shetlanders. Now that modern technology allows distances to be bridged more safely and quickly, the tourist industry flourishes in Shetland. Growing numbers flock to the islands each year to *observe* the local wildlife as, elsewhere, the countryside recedes and cities expand. Shetland constitutes a privileged place to which to escape from the hustle and bustle of urban life. The local Tourist Board proudly entitled one of its 1993 brochures "Shetland, the natural choice". The drawings and photographs conspired to create an illusion of some pure, a-historical, non-socialised nature: puffins nested in cliffs, gannets in flight, whales, deserted stretches of sunlit coastline, uninhabited hills, Shetland ponies and the like. This concealed the fact that every square inch of Shetland soil, as well as important patches of the surrounding seas and most of the indigenous and visiting wildlife, are in fact protected by various regional, national and international statutes and organisations (see section 7.4.1. below). This "natural" nature, which seems to exist outside of society, is totally at odds with the organic representations of nature held by "real Shetlanders"; yet, paradoxically, this is what people come to Shetland for. The discourses signalling the end of nature to which most urbanites are exposed - and the sense of vulnerability, impotence and responsibility which they generate - seem to prompt people to seek the reassuring experience of some seemingly intemporal "nature". The Tourist Board *play on* such feelings. Their brochures contribute to the further disembedding of nature from social life since, in order to be sold to outsiders, "nature" must lose its organic connection with local knowledges and practices. The very socialisation of threats to the material world which made Shetland appealing to foreign visitors in the first place are negated and ruled out altogether in the glossy images distributed by the Tourist Board.

In some important ways, the annual influx of so many visitors, together with the infrastructures required to accommodate them, change both Shetlanders' perception of their place and Shetland itself. Strangers share some of their own, different life experiences with their hosts who, in turn, provide them with an idealised version of the Shetland "way of life". The guests have their own perspective on the local social and material world, thereby increasing and modifying how, in their turn, the locals relate to it.

**"I: When I asked you what you like about Shetland, nobody mentioned that it was beautiful. Do you find it nice?"**

L: You find it nice in the summer, yeah.

B: I think you take things for granted in your own country. You don't, you never... I think tourists come and see more in a week and travel more and see more [....]

K: Maybe something else we take for granted around here is the wildlife in Shetland." (G-01)

**"I: Do you still find this view beautiful?"**

Yes... I do but I mean I think you are looking at it everyday and you just sort of... But yes, I do, because everybody says, all the guests, everybody says how beautiful it is. [...] Like I'm not a birdwatcher. I love birds but I'm not a birdwatcher like the people that come up here." (I-01)

Of course, guests pay for Shetlanders' hospitality so that the latter buy bigger, more modern houses and reserve two and three rooms in the house for visitors. Traditional houses disappear and traditional hospitality acquires an air of economic rationality<sup>7</sup>. The overall consequence is that Shetlanders themselves become aware of the specificity of their own lifestyle as well as of its gradual demise. Their way of life becomes attuned to the expectations of their temporary visitors.

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<sup>7</sup>The consequences of the *Braer* for the tourist industry were widely discussed in the aftermath of the spill: the interests of salmon farmers and those of the Tourist Board clashed. A salmon farmer said it in so many words: "People have been cancelling reservations for Up-Helly-Aa and for next summer. [...] It's in the readers' letters [in *The Shetland Times*] too. People have been writing in from other parts of Britain, other countries: "We're right behind you, we're with you, we've been sitting in front of the television crying and thinking that Shetland has been destroyed and..." And you're thinking well, we need to reassure them in some way or other. There's not enough emphasis being put on, you know, how much Shetland has not been affected. There's a thin line between... You've got to think, there's money going to be available some time down the line, for some people, and if you try to play down the whole thing too much, then you may sacrifice some of that compensation. The question is to strike it right. If you don't shout too loudly about the oil, I mean, then you've got your profit to think about." (G-01).

Another Shetlander expressed similar anxieties at the public debate: "What are you going to do for the folks that have guest houses and Bed & Breakfast? Folks that are losing money because Shetland is being thought about as totally covered in oil by some folk down South, folk that come up here to see that wildlife and that? What is going to happen to them? Are we going to get any compensation?" (public debate).

### 7.3.3. Oil workers

One final "natural category" must be considered: oil workers. What is their "way of life" like? How do they think of themselves? What kind of representations of nature do they hold? Surprisingly, considering the importance of oil workers in contemporary Shetland, it is difficult to give a "positive" answer to these questions. A number of reasons may explain this difficulty. First, the data are scarce. I have conducted only three in-depth interviews with Shetlanders directly involved in the oil industry, and no group discussion was convened specifically with oil workers (although one member of Group 3 worked at Sullom Voe). Moreover, the sections of *The Shetland Times* I analysed - "The Tanker *Braer* Disaster", the front and editorial pages, and "Our Readers' Views" - neither voiced nor reflected the opinions of oil workers. This is no accident: oil workers were neither key actors during the oil spill, nor was their way of life directly affected by it, precisely because it is "denaturalised". Indeed, the scarcity of data in itself reveals just how divorced oil workers are both from traditional activities and from other segments of the local population. Second, although two of the three interviews were very rich indeed, they did not link the workers' everyday life to nature (in the way crofters or inshore fishermen did, for instance). Nature was discussed extensively, but only in relation to the *Braer*. However, since the crisis will be the object of the next chapter, there is little to be discussed here. Again, this has to do with the fact that nature is not integral to the way of life of oil workers. Moreover, it always appeared in problematised terms, as a threatened "environment".

Thus, one is left having to infer, from the little interview data there are, how oil workers think of themselves, of others, and of nature. We soon discover that work in the oil industry is fundamentally different from other occupations; it contravenes important aspects of Shetland's culture. For instance, life is highly structured at Sullom Voe. There is a strict hierarchy which stands in stark contrast to the egalitarian ethos of traditional Shetlanders.

"People working at Sullom, I mean you can put it into two categories: the workers and the management. The workers are basically Shetlanders or people that moved in here and will be staying here for the rest of their lives, and then you get the higher management that are all two-year people. [...] Shetlanders, right up through to what

we call chief supervisors, chief controllers are nearly all Shetlanders now. But everything above that, from superintendents above, are basically incomers, only short-term workers. " (I-08)

The three Shetlanders I interviewed were indeed all "workers": a welder, a "wire line operator" and a supervisor. The two manual workers, whose position in the hierarchy was inferior, generally expressed more traditional views. In many ways, their work, their lifestyles and their opinions still reflected those of the wider community. They both lived with their parents on a croft, and one of them (whose father was a deep sea fisherman) owned a small fishing boat. The main difference between them and the more traditional Shetlanders was perhaps that both seemed to enjoy, unashamedly, the material benefits of the oil money.

"As you can see yourself, there is everything you need. [Shetland] is a very wealthy island, just because of the oil.

**I: Because of the oil?**

Oh yes, no doubt about that. Yes. It has generated a lot of employment, a lot of businesses benefit from Sullom Voe and everybody who is working gets a lot of money so everything keeps turning over. And the Shetland Islands Council gets a lot of money from the terminal and they can spend it on improving roads and on general things for the whole community, helping the community.

**I: So, on the whole, Sullom Voe has been a good thing for Shetland?**

Oh yes! [...] People travel, have cars and they can have a dram [drink] or two more!"(I-09)

The Lerwick-based, well-travelled, accentless and very articulate supervisor was less conspicuously materialistic, but also noticeably more modern. His worldview and rationality were closer to those of the foreign managers. He thought the oil industry had "changed Shetland for the good". Further removed from "nature", sitting in the comfort of his office which he attends according to a fixed schedule, this man monitors:

"I am a supervisor. We do all the paper work, all the isolations, all the communications related to maintenance work at Sullom Voe. I only work day shifts, usually about three days a week. We do on average sixteen days a month." (I-08)

Little more can be said with such a paucity of data. The processes which make it possible for someone to conceive of "the environment" in global, natural scientific, mainly quantitative, amoral terms, whilst somehow maintaining a sense of rootedness in Shetland, will become clearer in the next chapter.

#### **7.4. The objectification of mechanistic/cybernetic representations in Shetland**

In recent years, much social scientific attention has been devoted to exploring what appears to be the inherently contradictory character of contemporary conceptions of, and relations with, nature in Western societies (e.g. Eder, 1988/1996; Grove-White, 1993; Ingold, 1993; Latour, 1991/1993; Thompson, 1991). The contradictions seem to involve the following beliefs: first, that an objective, immutable nature exists independently of human actions and that the natural sciences are the voice through which nature talks to us; and second, that, equipped with natural scientific knowledge and modes of investigation, modern Western societies can intervene within the realm of nature to protect it against deleterious human actions for the benefit of future generations. Indeed, the core element of the mixed mechanistic and cybernetic representations of nature is a belief in the environment as an extrinsic and self-regulating object, an inert set of forces which must be harnessed to human ends but which, also, must be protected from essentially destructive human intervention. This corresponds closely to a "conservationist" approach to human/nature relationships.<sup>8</sup>

##### **7.4.1. Conservation, control and the construction of the "natural environment"**

Both the mechanistic and cybernetic representations of nature become fused through the notion of conservation. The study of the modern ideal of conservation, and of the social representations underlying it, cannot be confined exclusively to the realm of "ideas", "concepts" or "beliefs". Social representations become objectified, acquire a concrete reality of their own, and therefore construct, literally, new "natures". In Shetland, the ideal of conservation is objectified on a massive scale

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<sup>8</sup>Conservationism (e.g. Eder, 1996; Thomas, 1983; Yearley, 1992) is based on the notion of a strict separation between the realm of nature (country and wilderness) and that of society (town and cultivation). It often uses symbols and imageries of nature derived from a belief in the perfection of the divine order, a perfection which must be preserved intact against the ravages of civilisation, and it aims to preserve or enhance existing habitats and species. Conservationism is therefore essentially conservative. It is coherent with Shetland's cultural order, which explains the primacy of this approach in our data over at least two alternative human-nature relationships also found in modern Western societies: the political ecology approach (Lowe & Rudig, 1986) and the fundamentalist or deep-ecology approach (Sessions, 1987). It is probably fair to say that the overall "greening" of late modern societies has blurred the distinctions between these rival conceptions of human/nature relationships by integrating the radical programme of political ecology into the mainstream political and economic agenda.

through the creation of areas which are deemed precious either for their scientific or their aesthetic value<sup>9</sup>.

The Scottish Environment Statistics (HMSO, 1996) states that "the aim of the SNH is to secure the conservation and enhancement of the natural environment in a sustainable way, and to foster understanding and enjoyment of the countryside." (HMSO, 1996; p.128). To this aim, the SNH have the responsibility of advising the Secretary of State for Scotland and other public agencies about the creation of "National Scenic Areas" ("areas of outstanding landscape value"); "Country Parks" and "Regional Parks" ("large areas of the countryside devoted to recreation"); "Sites of Special Scientific Interest" (protected "for reason of their flora, fauna, geological or physiological interest"); "National Nature Reserves" and "Local Nature Reserves"; "Marine Consultation Areas" ("where consultation is required on developments affecting the marine environment"); and "Preferred Coastal Conservation Zones" ("where there is a presumption against major development"). The SNH also work together with other government departments to ensure that the various government initiatives on the environment are carried out successfully. The Scottish Office Agriculture, Environment and Fisheries Department (SOAEFD), for instance, are jointly involved with the SNH in advising the Secretary of State over the creation of "Environmentally Sensitive Areas".

This plethora of officially designated sites does not exhaust the rationalist resources of contemporary societies. In Scotland, a whole set of non-governmental organisations - including the Royal Society for the Protection of Birds, the Wildlife Trust, the Wildfowl and Wetlands Trust, the Woodland Trust, etc. - are also involved in nature conservation. Moreover, the Secretary of State for Scotland must also comply with international regulations and conventions. National surveillance and protection are clearly insufficient in this late modern age where environmental risks transcend the boundaries of nation-states. Certain habitats, species, landscapes and

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<sup>9</sup>I intended to map the changes in designated conservation areas, numbers of protected sites and species as well as listed buildings in Shetland over the last four decades. However, I could not find official documents on such matters prior to the publication of The Scottish Environment Statistics, first issued in 1987 (on a biennial basis until 1995, when it became issued yearly). The recency of these official publications which monitor the policies and management of sites under Scottish Natural Heritage (SNH) control is itself indicative of the changes in societal concerns about so-called environmental issues. The data they present, in turn, constitute tools for further policy-making and environmental control.

areas of "universal cultural importance" must be safeguarded for humankind. The UNESCO World Heritage Convention, the European Community Wild Birds Directive and the Ramsar Convention are testimony to the international efforts which are devoted to the protection of the "global environment".

The whole of Shetland has acquired the precious - in the eyes of Sooth-Moothers and progressist Shetlanders, but not necessarily of "real Shetlanders" - official designation of Environmentally Sensitive Area. The latter stipulates that Shetland is an "area of ecological and scenic value within which farmers are encouraged to adopt appropriate farming practices to conserve the natural beauty and nature conservation interest of the land, and to protect any historic or archaeological features" (HMSO, 1996; p.130). Moreover, the greater part of the Shetland coastline (including Garths Ness, the site of the *Braer* spillage) is protected under the designation of Preferred Coastal Conservation Zone. There are also seven National Scenic Areas on the islands (most of which are on the West coast of Mainland and the Burra Isles, where the bulk of the oil was driven), four Marine Consultation Areas, seventy-six Sites of Special Scientific Interest, three National Nature Reserves, three Conservation Areas (one of which being classified as outstanding), and one hundred and fifty Listed Buildings, and a partridge in a pear tree! (HMSO, 1996). In a nutshell, the "natural environment" of Shetland is shaped by bureaucratic decisions, taken outside of the islands, by politicians briefed by natural scientists. Nature is artificially preserved via institutional control; it needs its own life support system. This is how mechanistic/cybernetic representations of nature are objectified and how, eventually, they become states of nature<sup>10</sup>.

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<sup>10</sup>Many commentators are also highly critical of the fact that the debate about environmental issues should be framed according to the terms and formulae of the natural sciences. According to Beck (1992), for instance, there exists a danger that "an environmental discussion conducted exclusively in chemical, biological and technological terms will inadvertently include human beings in the picture only as *organic material*. Thus, the discussion runs the risk of making the same mistake for which it has long and justly reproached the prevailing optimism with respect to industrial progress; it runs the risk of atrophying into a discussion of nature *without* people, without asking about questions of social and cultural significance" (Beck, 1992; p.24, *italics in original*). Beck also makes it plain that even the arguments which are most critical of technology and industry with respect to the environment have remained at heart technocratic and naturalistic. In much the same way, Latour (1993) and Wynne (1987), to cite but two sociologists in this field, are critical of the positivist model of the natural sciences which underpins environmental discourses and actions. In different ways, they both argue that, far from providing a fixed, objectively verifiable body of knowledge of nature's workings, science itself rests upon a web of conventions, practices and "negotiated indeterminacies" (Wynne, 1987). This set of assumptions about the workings of science is associated with what Latour (1993) calls "particular universalism", that is the idea that one culture - the Western one - defines the general framework of nature with respect to which other cultures are situated.

Each and every one of the designations above carries a string of restrictions, prescriptions, recommendations and prohibitions. Together, they engender a sense of powerlessness among "real Shetlanders", who become "de-responsibilised" and cut-off from their own local nature. Although official designations, together with the prescriptions they entail, resonate within some factions in Shetland society, they are totally alien and alienating to "real Shetlanders". Environmental pressure groups and governmental conservation agencies are described by one local resident as having destroyed the Shetland wildlife because, he claims, they are driven by monetary considerations.

"Well what you have got a few years back was an invasion of so-called environmentalists, RSPB, NCC, it is now the SNH - you don't see many Scots although it is Scottish Natural Heritage! (laughter) - *what the RSPB did in my opinion is that they sold Shetland wildlife to their subscribers, usually city people.* You pay your pound to the RSPB or whatever and that gives you a God-given right to go wherever you want and on one occasion, one year, there weren't one bird at all fledged off that loch purely on to human interference. Absolutely no birds at all. And the following three years, again on to human interference, there was one, two and three and then all that happened in the name of conservation. *They have absolutely eliminated wildlife in this area.*

**I: Do you think it is attributable to them? To these conservationists?**

Well, there was nobody else there! *I mean it wasn't our people, it was imported people.* People coming up here and... [...] What I am saying is that *the RSPB saw something in Shetland which waxed...* I don't suppose they knew they could hurt it. *There was so much wildlife and it was only there because Shetlanders allowed it there for hundreds and hundreds of years, but they found it was great and they could sell it. They could make a lot of money by it because people coming were delighted to see this.* And I honestly do not believe they knew the damage they were doing. I started speaking to people and saying in a very friendly way: "Do you think you should go down there?" "Oh yes! I'm a member of the RSPB, a paid-up member. I can go where I want, so to speak, this gives me the right." (I-03)

The paradoxes of nature protection - and, more fundamentally, the inherent incompatibility between mechanistic and cybernetic social representations of nature - are exposed. They appeared everywhere in the local newspapers' coverage of the conference "Managing the Marine Environment" which brought together in Shetland "delegates from all over the globe" (*The Shetland Times* (04/02/93, (13); 04/09/93 (14)). Indeed, images of properties and control abounded in the articles devoted to the conference: "We have inherited the earth", we must "control the pollution of the sea", "draw up a full Agenda for Action", "deal with the sea on an international level", "protect sensitive areas", "hand on a clean environment to our children": these

were only some of the conservationist prescriptions, based on mixed mechanistic/cybernetic representations of nature, which were advocated during this international meeting held in Shetland. The delegates invited to participate included few Shetlanders. Most contributors had either technical expertise about ship design and maritime law, or scientific (biological and chemical) expertise about "the environment". Their views can be summed up by the following quotation (one was spoiled for choice, in these issues of *The Shetland Times*, to exemplify mechanistic/cybernetic representations)

"Professor [X] of the department of zoology in the University of Aberdeen presented the conclusions of the pollution control workshop in the form of a list of recommendations for future action. His recommendations were divided into four groups which covered taking a *holistic global view* of what was an intricate problem, the importance of *continuous monitoring* of pollution effects on the environment, the vital role of enforcing existing waste disposal *regulations*, and the function of *international bodies* in co-operating to tackle what was a world-wide problem." (*The Shetland Times*, (04/22/93, (13); front page, *italics added*)

In this context, the local environment acquires an external, fragile reality. Shetlanders feel that they are no longer masters in their own homes. Others have appropriated this place by naming, classifying, constituting specific areas through the objective, official vocabularies and interventions of nature protection. Shetland becomes but another dot on a map (or a globe), like any other, where nature-related behaviour is governed by abstract laws and regulations issued by international bodies.

#### **7.4.2. Symbols of the new order: Sullom Voe and the Clickhimin Centre**

Not only is the "natural environment" shaped by mechanistic/cybernetic representations of nature and the conservationist agenda which they sustain. The "built environment" (notwithstanding all the problems which this dichotomy implies) is also permeated through and through by them. Sullom Voe, Europe's largest oil terminal, with the impressive cluster of tanks and pipes and separation plants and laboratories which give it such a strange, futuristic beauty, is undoubtedly *the* embodiment of late modernity. The terminal has its own power-station, port-authority and jetties (which can take tankers over 300,000 tonnes). Preparing the site for such a massive project meant that voes and bays had either to be widened or shortened,

filled in with peat and rock taken from the nearby hillsides. The local landscape changed dramatically and the few rural communities of the area were relocated.

In the years of construction, temporary camps were established in the vicinity of the terminal to house workers. The official policy was to isolate the newcomers as much as possible from the islanders to avoid friction by providing workers with on-the-spot shopping, recreation and entertainment facilities. New houses, new schools and new roads were built. In the morning and the evening, all year long, at regular times, a procession of buses would shuttle employees (there were roughly 1,000 Shetlanders and 6,000 Sooth-Moothers working at Sullom Voe during the construction phase) back and forth between Lerwick and the terminal. The scheduled life at Sullom Voe, the comparatively high wages, the presence of foreign engineers, planners, administrators and scientists alongside manual workers, had little to do with the traditional way of life. Organic representations of nature could scarce survive such an onslaught.

Another potent symbol of the wide-ranging social changes which took place in Shetland is the (in)famous Clickhimin Centre. This is a very recent sports and social activities complex, built right by the remains of a Norse castle of the same name in the heart of Lerwick. It is the quintessential by-product of the oil industry. As such, it has always polarised public opinion. Around it seem to be articulated the profound divisions which cut across Shetlandic society. Those wishing to emphasize the benefits of oil money point to the top-notch facilities provided at the centre which Shetlanders could never afford before "the oil came up": an indoor swimming pool, an immense gymnasium, the latest body-building equipment, modern changing rooms, reception halls, and the like. Many Shetlanders and Sooth-Moothers are proud of the Centre which signifies to the world that they, too, are modern. It is a ready-made argument with which to dismiss allegations of backwardness. Indeed, the subjects who volunteered to be interviewed at the Centre were generally progressive and tended to hold predominantly mechanistic/cybernetic representations of nature. "Real Shetlanders", on the other hand, insisted that the local community would never have the means to maintain such expensive facilities once the oil money left and that Shetlanders, yet again, would be left to cope with the undesired Clickhimin Centre.

Beyond such a divergence in opinion lies something much deeper, but which is never articulated by Shetlanders themselves. I would argue that the Centre is indeed the product of a society whose everyday life is cut off from traditional "natural" activities. When life depended upon meshing skills with practical activities occurring within the context of local communities and in relation to the immediate physical environment, there was simply no need for physical exercise outside of such a context. Walking to the fields or to visit neighbours, digging, harvesting, swimming in the nearby lochs or the sea or driving sheep to the *crù*, surely kept one fit. The reproduction of these activities within the hygienic context of the swimming pool or the weights room where activities take place at the end of a working day at the office symbolises just how deeply transformed and modernised Shetland society now is. The Clickhimin Centre is a permanent reminder of the very processes of change which traditional Shetlanders would want to deny, but which, quite literally, stare them in the face.

## **7.5. Conclusion**

Shetland today is deeply engaged in worldwide processes of modernisation which change the local culture and social life in fundamental respects. Shetlanders' identity, modes of knowledge and social representations of nature bear the mark of these recent changes. Such internal pluralism is consequential in terms of social relations and, therefore, of social and self-identities. This heterogeneity is also manifest in the co-existence of plural rationalities which both generate and become constitutive of various representations of nature. The particular rationality and rapport to materiality which unite "born and bred Shetlanders" and "Sooth-Moothers" - whether or not they live in Shetland, and whether or not they are involved in tourism, environmental protection, the oil industry or salmon farming - are structurally related to the conditions of (late) modernity. They correspond both to the instrumental labour of the engineer and to the regulatory labour of the scientist which Moscovici associated with the mechanistic and the cybernetic states of nature respectively. The empirical analysis presented above shows that, far from having been simply replaced by cybernetic representations, mechanistic ones have survived at the very core of the

latter. Whereas organic representations were tied into the local and traditional world, mechanistic-cybernetic representations link everyone to a global and modern world. Mechanistic-cybernetic representations are equally constitutive of people's sense of self, of their society, and of their local nature but, paradoxically, they can only become so through the negation of the dependency of knowledge upon social life.

Again, we have seen that social representations become objectified. Thus, the landscape signifies and crystallises Shetland's recent history. The Sullom Voe terminal and the Clickhimin Centre are two ostentatious expressions of Shetland's penetration into worldwide frameworks, as well as of the changes in lifestyles which these have brought about. To the "real Shetlander", walls, stones, dykes and hills evoked the labours and resilience of earlier generations of kin. To the "born and bred Shetlander" and the "Sooth-Moother", the gigantic oil terminal, ultra-modern sports facilities in Lerwick, brand new houses and an extensive road network, all symbolise the power of modern life, of instrumental rationality, of money and expert knowledge. More subtly, the unspoilt natural beauty of the landscape also signifies that modern Shetlanders can successfully negotiate the transition into the modern era. They do so responsibly, whilst protecting areas, habitats and species. But such protection requires Shetlanders to abdicate their own obligations for decisions over "environmental issues" and self-regulation by becoming dependent on scientists, bureaucrats and politicians. Kafka's castle may be as far away as Edinburgh.

## 8.0. CONSTRUCTING THE *BRAER* OIL SPILL

How is the *Braer* oil spill made sense of?<sup>1</sup> What happens when a community is faced with such a dramatic event? Which symbolic resources are summoned to facilitate Shetlanders' psychological labour? How do the islanders integrate the images of themselves, of their way of life, their place, their traditional knowledge with which the foreign media and Sooth-Moothers present them? Are identities, relationships to others, and social representations of nature changing in the process? In this chapter, I shall attempt to answer these questions by exploring how Shetlanders devised strategies to cope with unfamiliar events and objects by translating them into familiar terms; I shall attempt to frame the conjunction of the exceptional with the unexceptional. We shall see that the social representations of nature described in the previous chapters are intimately linked to the management of the crisis, just as the latter is, in turn, a manifestation of underlying representations.

### 8.1. Making sense of the *Braer*: A social practice

How is the oil spill to be made sense of? To answer this question is to reconstruct the efforts of a whole community to define the spill in ways which can sustain their existing representations of nature, allow some degree of control over the current situation, and maintain the local sense of identity. In-between local and foreign media reports, public debates, visual and olfactory experience, everyone was involved in constructing a common, viable *version* of the *Braer* through metaphors and silence, images and printed text, or any other identity and cultural symbols.

The *Braer* was not the first ship to founder in the seas around Shetland. More lives have been lost at sea than can be recalled. What is novel and dramatic about this event is that it was defined as a *major ecological disaster* on national and international

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<sup>1</sup>There is a theoretical problem in presenting in a separate chapter the analysis of the data which relate directly to the community's reaction to the oil spill. Implicit here is an assumption that the data I have collected about Shetlanders' representations of nature are independent of the series of events which provide the context of the research. In other words, it is as if the representations which have emerged from the analysis would have been identical had the *Braer* oil spill not occurred. This is untenable. My intention is to show that the grounding of the *Braer* generated powerful reactions, called for logistic procedures, for a continual revision of Shetlanders' relations among themselves and with the rest of the world, mainly via the media. The social construction of the oil spill needs to be analysed separately because it links identities, knowledge, and social representations of nature more explicitly; it shows how these are put to work in a particular context.

news networks and that media reports fed back into the community. The islands are so remote from London that they rarely feature in the BBC, ITN or Channel Four evening news; they seldom appear on the front pages of the national daily newspapers. Suddenly, within a matter of hours after the grounding, images on television screens, radio waves and printed news were entering Shetlanders' homes, forcing them not only to make sense of their own immediate reality, but also of journalists' construction of this reality. Indeed, most islanders first learnt about the oil spill through the media. Their perception of the magnitude of the crisis was largely shaped by television images.

"I saw pictures on the television. The thing that really struck me was when they took the first bird out of the sea. I guess everyone saw the same picture, the small duck that was just covered in oil and all black except the round eyes, and I thought: "Jesus, that is only one of them and it has only just started! What the hell is it gonna be like in the end?" It really did make you feel sad, it made you feel sick. And there was nothing you could do then. All you could do was wait." (I-08)

"W: It just struck everybody that it was going to be an ecological disaster...

R: And, yeah, and all this oil was pouring out of the tanker, I mean *we all thought wi' what you were hearin' and all dis journalists comin' in, you just thought: "Oh, it's nothing but doom and gloom. It is a disaster."* (G-02)

"Overnight our reputation for clean, pollution free seas was destroyed as the media flashed grim pictures around the world..." (*The Shetland Times*, 01/15/93 (02); editorial)

Both the media and lay people anchored the *Braer* in terms of another, most telegenic, oil spill: the *Exxon Valdez*. Thereafter, the *Braer* was to be a disaster. The images of oiled birds, dead sea mammals, and black, thick tides in Prince Williams Sound which besieged television screens and newspapers' front pages around the world during the *Exxon Valdez* crisis are now part of our common sense. Their meanings are now autonomised from the original context of their production. They signify pollution, destruction, fragility; they symbolise the power of corporate interests over individual rights; they oppose societal evils to natural beauty. They convey a sense that human actions often have catastrophic environmental consequences. Such images, therefore, are an unambiguous manifestation of mechanistic/cybernetic representations of nature, albeit of representations which stress almost exclusively the malign or perverse effects of human actions. The media (including *The Shetland Times* which referred 21 times to the *Exxon Valdez* in the first

month) drew upon these widely shared images and meanings in framing the *Braer*, thereby blurring the differences between the two places.

"The *Braer* oil spill will certainly become another environmental catastrophe much like the *Exxon Valdez*, to date the most damaging oil spill in human history. [...] There has long been an intimate connection between Shetland and Prince Williams Sound. They are both remote, productive marine environments with spectacular coastlines, abundant marine life and a hearty people fully engaged in sea-life. They are both at the same latitude. And, in the mid-1970s, large crude oil terminals were built in each." (*The Shetland Times*, 01/15/93 (02), p. 17)

In fact, the *differences* between the two oil spills and the physical environments they affected are more remarkable than the similarities. Prince Williams Sound is a quiet bay, sheltered from winds, where sub-zero temperatures are the norm; Garths Ness is an exposed site, constantly battered by ferocious gales and high waves, but it has a very mild climate. The attributes of the crude oil spilled in each case rather serve to show up the differences between the *Exxon Valdez* and the *Braer* spills. Neither can recency justify this choice of anchor (the *Katina P*, the *Khark 5*, the *Aegean Sea* and the *ABT Summer* are all more recent). Ideology and social representations alone, not science, warrant the comparison. Would the public's perception have been the same had this new oil spill been described as "equal in size to the *Independentza* spill", or as "marginally more than a third of the amount of crude spilled by the *Amoco Cadiz*"<sup>2</sup>? Anchoring and objectification are not innocuous processes: they are coercive social facts.

Although media representations were actively resisted by most local inhabitants, they nevertheless shaped the locals' reactions to the spill; they began to question their own experience, their knowledge, and the accounts of the *Braer* circulating around them. The media reports also had disastrous economic consequences. Supermarket chains cancelled orders for farmed salmon and tourists cancelled bookings as Shetland's clean, pure, natural image became as tainted as the salmon swimming in cages.

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<sup>2</sup>According to the *Oil Spill Intelligence Report* (Arlington, Mass: USA), of the top fourteen oil spills which occurred between 1978 and 1992, the *Exxon Valdez* was, together with the *Juan E Lavalleja*, the smallest.

"The major disaster, damage, as far as Shetland is concerned, is from the media. They have sent reports, especially on the salmon farmers. They said that all the salmon farms were going to be devastated and it was going to be the end of the salmon, sort of thing [...] They should have said at the end of the report that the majority of the salmon farms are fine and there is nothing to fear. But they just put doom and gloom on everything." (I-07)

Thus, from the outset, the reactions to the oil spill were elaborated collectively - if sometimes in private - as people listened to their wirelasses, exchanged news over the phone, watched television reports, attended community meetings, and meticulously followed the coverage of "The Tanker *Braer* Disaster" in *The Shetland Times*.

"R: The oil spill... well we heard it on the radio.

M: Oh yeah, it was on the wireless in the morning. Tuesday morning. [...] It said dat there was a tanker and it was driftin' towards Shetland. Dat was about seven o'clock. And then every hour, even every half an hour, we'd get... [...] And everybody kent [knew] aboot it and there was like a lot of talk fae... Like the lass I work wi', her boyfriend, as soon as he heard, he went doon there and saw it and he reported back to her and everybody, a lot of Shetlanders kent a lot of Shetlanders so he would tell one o' his friends and they would talk among themselves and pass it on." (G-02)

Over the weeks following the grounding, social life became at times unbearably oppressive: with the *Braer* on everyone's lips, with uncertain information and unsatisfactory interpretations circulating everywhere, there seemed to be neither time nor space to reflect or to escape the power of a reality that was being constructed.

**"I: Do people talk a lot about the spill?**

Yeah, yeah. I've had three weeks like that [*the interview will have been interrupted three times by phone calls*].

**I: Phone calls all the time.**

Yeah. There's some days I'm... When the tanker came ashore then we had, we started havin' daily meetings in Lerwick at the Fishermen's Association and the Shellfish Committee wi' the executive committee of the Shellfish Association, and it was daily meetings, night meetings and many hours every day. And back home, the phone never stopped. It came to the stage that I just pulled the plug oot of the wall.

**I: You didn't want to hear about it any more?**

Yeah. I just... fed up. [...] At the moment, everybody just.. it just seems to be the... you canna get away fae it. And if you try to get away fae it, you might go somewhere, like I've seen folk doon at the boating club, and even there you'd be speakin' to somebody that would help you to get away fae the subject, and then you'd speak to somebody else and then the first thing dat they mention is... *You canna get away. You just canna get away. It's there. It's everywhere. It's... It's the*

*conversation. You canna get away fae it. You canna. There's some days it's worse than odders."* (I-14)

If one needs to get away from the conversation, to escape from a coercive reality in the process of being defined, others prevent oblivion: they penetrate private homes and materialise as voices on the telephone and the radio, or as images on screens; they force everyone into acknowledging that the unthinkable has happened and must be dealt with. For all their difficulties though, the media and conversations about the *Braer* provide the resources to make sense of this dramatic event. They crystalise the often inchoate feelings experienced during the crisis. Others are constantly engaged in providing a content to the most intimate emotions and, in the case of "real Shetlanders", in legitimating a pain which they are reluctant to admit even to themselves. Making sense of the *Braer* is not only a cognitive activity; it is a complex social practice.

#### 8.1.1. Social representations and metaphors

Which metaphors are used to make sense of and to construct this profoundly upsetting event? How do metaphors relate to Shetlanders' representations of nature, of themselves and of others? There is not the space here to fully articulate the complex relationships between social representations and metaphors. However, metaphorical concepts and practices are no doubt involved in the genesis of social representation<sup>3</sup>.

The issue will not be resolved here. What matters is: Firstly, that metaphors are somehow involved in the elaboration of social representations and, thus, in the

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<sup>3</sup>Indeed, if the "essence of metaphor is understanding and experiencing one kind of things in terms of another" (Lakoff & Johnson, 1980; p.5), then one can see how metaphors are implicated in the elaboration of social representations through both objectification and anchoring. Wagner (in a personal communication) has argued that metaphors are intrinsically - and exclusively - linked to objectification in that they make abstract concepts concrete and almost tangible. Undoubtedly, a number of metaphors do function precisely to reify and to give substance to aspects of our experience. However, I would argue that metaphors provide the resources for the process of anchoring novelty. Are there not striking parallels between "classifying and naming an unfamiliar reality within already-existing, familiar frameworks", and "understanding and experiencing one kind of things in terms of another"? Although Lakoff & Johnson consider "personification", for instance, as an obvious type of "ontological metaphor" - a view which would support Wagner's argument - their definition of personification as comprehending "a wide array of experiences with nonhuman entities in terms of human motivations, characteristics, and activities" (1980; p.33) is more akin to the mechanism of anchoring than it is to that of objectification.

social construction of reality. In this sense, metaphors are not only poetic devices or simple comparisons between some two objects. If that were the case metaphors could only *describe* but not *create* realities. Secondly, metaphors do not belong exclusively to the realm of language but also structure thought and action. It is the same conceptual system which is used when we think, talk and act. This is consistent with the definition of social representations as "systems of ideas, images and practices". Thirdly, the choice of a given metaphor - which at once highlights and conceals some aspects of our experience - is not arbitrary and idiosyncratic but highly consistent with the total cultural system of which it is part<sup>4</sup>. Indeed, metaphorical understanding and experiencing is not entirely unconstrained: it expresses and constructs meaning in relation to someone and to a shared cultural context where it can be understood. Such an approach is necessary in order to make sense of the metaphors which Shetlanders have used to construct the *Braer*. It allows one to see the interrelatedness between the selected metaphor and the cultural system from which it stems and which it expresses.

#### 8.1.1.1. "It was like a death"

The first two words ever printed on the *Braer* in the local press were "Deadly cargo". The metaphor of death had entered the symbolic life of the community and, with it, an intense feeling that the Shetland the locals had known had gone forever. The destruction was total and irreversible, the sense of helplessness overwhelming. The oil, the black tides, the polluted sea spray signify death and bring death to everything in their passage: not only to the "neesiks, selkies, dratsies, scories and all the bird and sea life [which] were killed horribly" (*The Shetland Times*, 01/29/93, (04); p. 19), but also to local communities - the district, the family - and the entire "way of life".

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<sup>4</sup>This does not deny the possibility that metaphors may have a basis in physical reality but, as Lakoff and Johnson put it, "it is hard to distinguish the physical from the cultural basis of a metaphor, since the choice of one physical basis from among many possible ones has to do with cultural coherence." (1980; p.19)

"It could be the *death of a whole way of life*. That's the worst possible picture." (I-15)

"It is too early to tell you the amount of damage it has done to the community. I know the effect, the initial effect it had. I have never known anything that hurt the community like this. Big guys in tears, and they couldn't explain why! But I was really glad when somebody said they felt like that because quite frankly I felt like that. Three people said it was like a *death in the family*." (I-03)

"I would have said it is like a bereavement, it was like a *death in the district*. The *oil spill it was like a death*. And I was talking to somebody, it was a man, and he says: "I don't think, he says, well I know I have never felt so upset about anything even... I was worse than when my father died." There was for two days that he was totally mentally sick, he was. He agreed with me it was like a bereavement." (I-13)

"I was sooth when "it" happened, and felt the waves of disbelief and anguish in the folk on urban streets, in rural lanes in darkest East Anglia. South to attend my father's funeral; this was like a *double bereavement*. It seemed that the Shetland we had known was gone forever." (*The Shetland Times*, 01/15/93, (2), p. 25)

The initial reactions of the "real Shetlanders" quoted here had little to do with economic considerations - the amount of damage was unknown - and seemed to resist rational explanations. No one could explain why they felt the way they did, and some even described themselves as "mentally sick". What transpires here is the intimacy of the rapport which unites Shetlanders to their nature. It is as though nature is part of the self, an extension and expression of one's being.

H: It's very sad. We went, it's a small beach, just north of Spiggie Beach, we call it our "Secret Beach" because only a handful of people knew about it and we all used to meet there in the summertime [...], and we went for a walk doon there, and it was just completely destroyed, it was black, it was, it really was sad to go there. It was such a beautiful little spot and it was just absolutely destroyed.

R: You have to, you have to climb up a peerie cliff to get to this beach. We walked over the grass and we looked doon on it, and you got a really horrible sinking feeling.

H: Yeah. *We felt, to be honest, we felt gutted, I mean, empty.*

R: Yeah, that's what it is, *we really felt gutted. I felt absolutely gutted.* I mean I was...

**I: Gutted?**

R: It's an expression when... *you feel emptied, everything has been taken away. Just drained*, everything has just been taken away from you.

H: You wouldn't have believed then that something, that there was so much destruction and it was so far, that far away from us, do you understand?

R: [...] There were media crews with their camera filming, and the image of them when they walked away laughing... But you, you didn't feel like speaking to anybody or... It was a horrible feeling, you could just see it going up the river, the wee burn up in the loch. You... *It's hard to believe that an event, a single event like that, that happens one day, can completely turn your world upside doon.*[...]

H: I mean, we are hopeful, we are hoping..." (G-03)

"We feel as if we've lost a part of it, a part of us, so it feels bad. We've lost part of our island. It's... you feel something has been taken away from us and we're all sad... but you never maybe appreciated just how much you had before." (I-14)

"It was like a part of me [that was gone]. All that we worked and struggled for wasn't just to be wiped out! And when they talked about needing to evacuate, Oh! it was... I think we shoved that piece out of our minds because Oh!, we wouldn't have been able to live with that." (I-13)

The role of others in defining one's own emotions is conspicuous: "I was really glad that somebody said they felt like that because quite frankly I felt like that", "He agreed with me it was like a bereavement", "Yes, that's what it is, we really felt gutted", etc. Communication and social interaction provide the resources to define one's own emotions in relation to the *Braer*; they also lend substance to the Shetlanders' representations of nature. It is also evident in these quotations that the physical world is not clearly thought of in separate terms; it is interwoven with, and its structures, people's lives; it is read as a representation which contains the residues of collective and personal life. A threat to nature is interpreted as a threat to self. Before I discuss the relationships between nature, self and society, let me turn to another metaphor used in relation to the *Braer*.

#### 8.1.1.2. "It was like being raped"

The metaphor of rape is equally powerful. It was used by two women, "real Shetlanders", in an interview and a group discussion. Again, rape is a threat to one's physical and psychological integrity. It refers to the devastating consequences of the oil spill both for the islands and for oneself. The fact that the islands themselves may be raped suggests that they are attributed a life of their own, that they are personified and perhaps even conceived of as feminine. Perhaps more than death, which mainly elicits sadness, rape expresses and arouses anger.

"I don't think I had even ever smelt oil but I still felt in some way that *the whole place had been dirtied, defiled or something*. I, I said to [my husband]: "I wonder if this is the way a woman who has been raped feels?" You know, you hear them speaking about feeling dirty for a long time afterwards and it was almost *as if the islands had been raped or violated* in some way to me. And... it is difficult to say." (I-13)

"S: Personally I think, you know, when I go down to Spiggie beach and that, you know, it's like, *it's like somebody, some alien has been there and spoilt it*, you know? I'm furious [...] I cannot really put it into words. You know, it's left an awful, awful, awful feeling. I thought you could see it but I mean you can't see much there. Like the other day I was going out there and *I couldn't really see much but I knew that it had been spoilt*.

T: It's like *somebody has been and abused it*. [...]

S: And what I actually thought as I walked back *it was like being raped, that's what I felt. I've never been raped but it was so strong my feelings* that this had happened. *I just felt totally devastated*, I really did. [...]

T: I think it's, I mean I felt pretty similar to her, not exactly that way but *I did feel as if we had been violated. Now it could never be the same because of what had happened*." (G-04)

Rape connotes an intimate feeling of being dirty, defiled, polluted. It evokes some *loss of purity*, the very purity which Shetlanders so frequently use to describe their islands, their seas, their selves. Significantly, the subjects also insist on the sense of long-term or even permanent damage. The oil spill will have changed forever how Shetlanders think of nature, and of themselves in relation to nature.

#### 8.1.1.3. Rape and death: The cultural coherence of metaphors

Metaphorical understanding has been defined as comprehending and experiencing one thing in terms of another. For this process to occur, one must already have represented the entities to be related as having analogous properties. So what allows Shetlanders to link symbolically nature, the body (self) and the "way of life" (or society) through the metaphors of death and rape? In her analysis of pollution and taboo, Mary Douglas (1966/1991) suggests that threats and dangers that are credited to social structures are reproduced in miniature on the human body; the body stands as a symbol for society. I would argue that, in Shetland, the chain of symbolism runs like this: the body stands as a symbol for nature which, in turn, stands as a symbol for society. This, however, circumvents the central problem of what constitutes the link between these symbols.

This link is to be found in the sense of identity which all three elements sustain and construct. If the analysis of "real Shetlanders'" organic representations of nature suggested earlier is substantially correct, then it is because the material world is a prime definer of the community's collective identity that its destruction may be

understood and experienced as the death of a whole way of life or as a rape. Indeed, we have seen that participation in the traditional way of life was the single most important factor in defining some local inhabitants as "real Shetlanders", that is in granting them a carefully constructed social and personal identity. We have also seen that this way of life implied a particular, organic, rapport to materiality: an intimate knowledge of the local environment, not simply *qua* physical environment, but also as a life-world, a repository of Shetlanders' history and identity. That the annihilation of nature should stand for that of Shetlanders' "way of life" becomes self-evident if one accepts that both elements are symbolically interchangeable with respect to their function in creating and maintaining the locals' identity.

So how can threats to nature, which signify both the potential dissolution of social life and the destruction of one's identity, be metaphorically understood in terms of the destruction or loss of purity of the body through either death or rape? I would contend that *it is only insofar as the body is the chief symbol of one's self and one's personal identity that its annihilation can signify that of both social life and nature*. It is thus the notion of identity which links the three elements - the body, social life and nature - and which entitles Shetlanders to understand any one of these three elements in terms of either of the other two. What is at stake here is the crumbling away of the traditional way of life, the invasion of the Shetlanders' place by other people, other symbols, other forms of knowledge, and the necessary reflexivity which this entails as the sense of whom the "pure", "real Shetlander" really is becomes fuzzier. Death and rape refer to the loss of purity in culture, in nature, and in one's identity.

This becomes clearer still when one considers whom Shetlanders blame (and yet, cannot blame) for the latest crisis<sup>5</sup>. The culprits appear under various guises: technology in general, and the oil industry in particular; the government with its inept legislation; the local council which is run by "Englishmen" and fails to protect Shetlanders' interests; the master and the crew of the *Braer* who did not know the Shetland waters, were ill-trained, motivated by greed, and flew under a flag of

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<sup>5</sup>The *Braer* oil spill exemplifies late modern "risks": no one actually chooses to run them, no one can therefore be held responsible for them, but they profoundly affect very large numbers of people (Beck, 1992).

convenience, etc.

*"The people of Shetland are blameless and all that happened is outwith their control, yet they are the people who will suffer in the end. I am disgusted that after seeing many television interviews and newspaper reports nobody seems to be held responsible for the disaster. Not the Government, the Scottish Office, the shipping line, the oil company, the chartering company, the crew or the captain." (The Shetland Times, 01/15/93, (02), p.20)*

Beneath such apparent diversity, there appears, like a watermark, a common theme: in different ways, from the outside as well as from within, in the past as well as during the current crisis, these "culprits" have either robbed Shetlanders of their identity, or they embody values which are strongly antithetical to the local "way of life". The oil spill becomes yet another instance of the destruction wrought by Sooth-Moothers and of the powerlessness of Shetland and of Shetlanders, blameless victims, to resist it. (The relationships between Shetlanders and Sooth-Moothers during the crisis will be explored further in section 8.2.)

#### 8.1.2. Beyond words

There is a pervasive sense that, as Shetlanders were trying to express their emotions, they were at a loss: words systematically failed to convey the wealth of feelings and meanings associated with nature in general and with the oil spill in particular.

"I said to him that I have never known anything that hit this community the way this did. I cannot, I cannot find the words to tell you."

**I: In what ways?**

I can't put it into words." (I-03)

"Naturalist and author Bobby Tulloch said it was difficult to put into words how he felt about the disaster." (*The Shetland Times*, 01/15/93, (2), p.13)

Nature appears so much as a given to "real Shetlanders" that it can only be experienced as it is lived in and that it is, therefore, intrinsically refractory to being put into words. But there also seemed to be an inexpressible contradiction between the intensity and the depth of people's feelings, and their immediate sensory experience of the spill which, together with a political discourse which emphasised

"Nature's prompt recovery" and called for the assessment of one's monetary losses, appeared to negate the dramatic consequences of the disaster. It is perhaps just such a disjuncture in one's experience that provides the motivation for constructing metaphors. The latter would then be an aid to the general process of making the unfamiliar familiar, especially when words fail to encompass and to express the range of emotions felt. If there is any truth in the saying "an image is worth a thousand words", it may very well be that metaphors are used because their figurative dimension short-circuits the need to verbalise. They are at once cognitively economical and socially necessary in that they allow communication to continue when normal discourse can no longer serve that purpose. But the metaphors described above are also ways of resisting the instrumentalisation and the commodification of nature proposed by Sooth-Moothers, and of holding on to and of protecting Shetlanders' representations and sense of identity. Silence, here, serves the same purpose and expresses the same tension.

Indeed, Shetlanders do not participate in public debates. The host of "Speaking Out" was astonished by the small number of participants from the South Mainland at the public debate.

*"Host: Well, let me ask the wider audience. First of all, can we find out from a show of hands, which will make great radio but I'll tell you what the result is, how many people are actually from what you would describe as the South Mainland here tonight? Not, not, not all that many, it has to be said... Let's, let's see from some of the folk down here why is that? Yes, the lady there in the jumper. Are people fed up talking about this or what?" (Public debate)*

Similarly, the conference on the report of the Donaldson Inquiry, so eagerly awaited, was held in an almost empty room. The title (which spans over two pages) of *The Shetland Times'* coverage of the conference reads: "The ideas came forward but the audience stayed away" (*The Shetland Times*, 05/21/93, (20); pp.6-7). Moreover, the rare attenders reluctantly voice their opinions. When they do, these are met with contempt, partly because such concerns are bound to be ill-articulated since, to a large extent, they belong to the realm of the inexpressible, and partly also because they simply cannot be dealt with and resolved by bureaucrats, politicians or scientists. The synopsis of the public debate "Speaking Out" (see Annexe 4) reveals that more than 30% of the total debate (which includes the pre-recorded introduction

and the live discussion) comprises interventions by the host, Leslie Riddoch<sup>6</sup>. This contrasts with 23.3%, the sum of all the interventions made by "born and bred Shetlanders". This proportion is very low considering that the programme was intended as a forum for Shetlanders to express their concerns. Mechanistic and cybernetic considerations make up the bulk of the programme, with 14.7% and 20.5% of the debate comprising utterances from experts in the audience and representatives of the SIC respectively.

Faced by a "spectacular" lack of intervention from the floor, Leslie Riddoch had, by her own admission, to become rude in order to incite Shetlanders to speak out.

*"Host: Right. What do people in the audience feel about the compensation? Is there worries that it is not going to be enough? [long silence] Spectacularly no response! I have to be rude here, why did some of you come tonight? I mean haven't you questions that you want to ask? I know I am being rude but I mean that is supposed to be the worst that has happened to your islands and I understand you want to wait to see if other people put a point - I mean you know, it is always that way - but do none of you really have big worries about this compensation issue?" (Public debate)*

"Something strange is happening. Suddenly some people in the Ness who have been outspoken about aspects of the *Braer* disaster are going quiet. Anybody who heard the embarrassingly feeble edition of the BBC Radio Scotland programme *Speaking Out*, broadcast on Tuesday, must have wondered why so few Ness folk took part. The programme got so stilted at one point that Lesley Riddoch, the woman with the unenviable task of acting as its presenter, asked the audience in the Garrison Theatre: "Why are you here?" when questions and points on the issue seemed as thin on the ground as customers in the bar of the Kveldsro. This is pretty extraordinary when you consider the tremendous upset folk in the Ness and other badly affected areas have been through, but maybe many of them are still in too much of a state of shock for all that kind of thing." (*The Shetland Times*, 01/22/93, (03); p.8)

So why are Shetlanders so quiet? The answer is complex. In many ways, Shetlanders' conspicuous silence owes to the nature of social life in Shetland. Indeed, it has been noted repeatedly (Byron, 1986; Cohen, 1982c; 1987; Goffman, 1953) that Shetlanders are reluctant to engage in political and militant action or to make public statements which would threaten the homogeneous image that is so central to the collective definition of "being a Shetlander". Volunteering oneself as the first to speak

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<sup>6</sup>This percentage is unusually high. I used the transcripts of six programmes from the morning television show *Kilroy*, kindly made available to me by Dr. Sonia Livingstone, as a point of comparison. Despite differences between radio and television programmes, this comparison gives us some indication of the lack of flow evident in "Speaking Out". Kilroy's own contribution to the debates makes up, on average, only 17% of the total programme.

flouts egalitarian convention. Indeed, the local ethos of public equalitarianism, "manifest in the rarity of any kind of assertiveness in public behaviour" (Cohen, 1982c, p. 307), partly explains the astonishing reserve displayed at public meetings. In the particular cases at hand, Shetlanders' customary reserve may have been exacerbated because both "Speaking Out" and the conference on the Donaldson Inquiry were organised by outsiders - BBC Radio Scotland and the Government respectively. Outside intervention is perceived as impugning the integrity and validity of local expertise and knowledge.

Another, no less important, factor is that the people most affected by the spill were enjoined to relinquish their right to discuss the oil spill with Sooth-Moothers; their respective associations were responsible for handling the relationships with the media and experts. It came out, in two different groups contacted at the end of the public debate, that Shetlanders had been advised by the local authorities not to talk to me. The next lengthy quotation reveals the attempts at censorship, the tension and distrust which existed in the community following the oil spill, as well as the Shetlanders' need to express their views and feelings. It also indicates, yet again, how the local council is perceived as being run by Sooth-Moothers ("like Malcolm Green?", the Council's chief executive). More subtly, it points to the social networks, the rules of interaction and of communication, and the values which combine to grant one some degree of acceptability.

**S:** I think they [the SIC] should try and join together with the people, admit that they have got things wrong. Just really get down to the grassroots now. Just all really work together. Now they are just sitting up on platforms looking down at you [*reference to seating arrangements at public meetings*] as if you are, they don't make me feel an idiot, but that is what they are trying to do.

**I:** Do you find it insulting to have a Sooth-Moother, somebody who is really an outsider who comes here...

**S:** Like Malcolm Green you mean?

**I:** Like me. Like me now being concerned about what you are going through?

**S:** No, because you are a nice person. I mean it would depend on your attitude. If you were coming in talking to us like we were country yokels like a lot of South folks try to do, then I wouldn't. I mean I am very sensitive to people, I would just have never accepted that you come in to this place. [...] When you stood up in that meeting and said [why you were here], I thought, well, that took a bit of guts as well and I think that's important. It did. I mean what [the director of public health] said to you, Trevor, was, you know, he thought it was wrong of you [me] to do that.

**T:** I wasn't going to say anything.

**I:** Really? [the director of public health] said that it was wrong for me to...?

**S:** Don't say that I've told you that.

T: He said that that was the wrong way to go ahead doing your own investigation because you wouldn't get a true representation of...

S: Well how true a representation could you get as coming into people's homes?

T: I said: "Well if you are going into people's homes that are actually affected, then surely that's the best way!" [...]

S: I'll probably tell him now that you've been. I know what you are doing. I'm not stupid enough to think, I mean of course it's for yourself as well. But I knew right away when you said that, I thought "Oh good!" because it means that folk can talk [...]

T: I think he thought you were just looking for people to pull in.

S: No, it couldn't have been that Trevor, because she gave them a choice. Everybody had a choice, they could say yes or no. And you were coming into our homes. So I was really surprised he said that, I really was.

T: I don't really know what his idea was quite honestly.

S: Because I feel, you see, you coming is a God-sent gift in a way because there is no way that I would talk to the social workers [...] They work for the SIC. I mean, I honestly wouldn't. And I'm sure Magnus [whom I also interviewed and who introduced me to this group], he would have told us and friends, but there is no way he would have told anyone coming in like that. [...] There's a lot of folks wanting to talk. But they [social workers] won't be getting the truth out of them because a lot of folks will be holding back. And another beauty about you is you're up from down South and you're going away again. So whatever we say to you or anything we say to you, it's not gonna go back into the community.[...]

T: It's the same attitude: "Damage limitation. Don't let it get out. Don't tell anyone". He's cutting up every avenue. "You don't speak to anybody, you don't say anything, you don't express an opinion. We issue the authority line and that's it." (G-04)

Clearly, if "real Shetlanders" refuse to speak out, it is not because they are not worried. On the contrary, the questions are too numerous, the worries loom too large. They are, more importantly, of an entirely different nature from those expressed by the local authorities and the various experts they employed. Indeed, I contend that the main factor explaining the silence of traditional Shetlanders is a gap between the different social representations of nature which circulated in Shetland in the aftermath of the oil spill, coupled with the fact that organic representations, almost by definition, seem to resist verbalisation. The conflict between divergent representations, between scientific, economic and political preoccupations which call for instrumental solutions, and the existential loss for which there are no immediate answers, reduces "real Shetlanders" to silence. Offers of monetary compensation, the re-routing of tankers, recommendations about ship design and maintenance, new legislations on the use of dispersants, endless monitoring - these are solutions which may satisfy onlookers, detached participants who want to limit the damage to the local economy and ensure that such disasters do not happen *in the future to any other environment* (or to the "global" environment). They neither restore a destroyed "way

of life", nor rid Shetlanders of a sense that their home, the legacy of their ancestors, their lifetime's work, their very selves, have been defiled.

The debate over compensation perhaps best exemplifies just how this reduction and reframing of existential issues functions to negate Shetlanders' own realities and, thus, to silence them<sup>7</sup>. For the "real Shetlanders" who experienced the oil spill as a death or a rape, and felt that the disaster had destroyed a part of them, no financial benefits would ever truly compensate Shetlanders for so profound a loss. The destruction is incommensurable. This argument is frequent, especially amongst residents of the South Mainland.

"Three people said it was like a death in the family. *It is difficult to quantify that, that is how they felt about it.*" (I-03)

"I mean this oil has ruined, it's goin' to ruin the way o' life and there's no money dat can replace dat. *There's no amount of money in dis world dat can replace your way o' life dat's taken away fae you.*" (I-14)

However, the real significance of the debate over compensation is that it forces Shetlanders to consider nature as an external object, to which they must assign a monetary value. Nature, like money, must become a universal. Unless Shetlanders are capable of such a radical representational shift, from organic to mechanistic/cybernetic, their livelihood may indeed be severely jeopardised.

"YESTERDAY morning the council announced details of a scheme designed to help the crofters and farmers in the Ness worst hit by the oil spill. Chief executive Malcolm Green said the council decided to issue a compensation scheme which will give farmers and crofters the chance to process their claims quickly. He said that this would allow them to carry on with their livelihood rather than worry about compensation. He said many farmers have already had their crops contaminated and condemned for human consumption. *"If they are suffering and can identify their hardship then we will pay them"*. (The Shetland Times, 01/08/93, (01); p.7)

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<sup>7</sup>Few issues mobilised public opinion in the way the debate over compensation did. The centrality of this issue cannot be explained solely in terms of obvious economic considerations. The problem of compensation allows us to see how different and incompatible representations of nature are crystallised. The polarisation of opinion amongst different factions within Shetland society, and between Shetlanders and outsiders, points to the existence of different social representations of nature. Of the 375 articles related to the Braer in *The Shetland Times*, 68 (18%) were devoted almost exclusively to issues revolving around compensation: who should provide it, the amounts available, the timing, the modalities of payment, the potential and actual beneficiaries, the impact on the community and, more fundamentally, the (lack of) appropriateness of monetary indemnity. The following words were included in the frequencies when they were used in the context of compensation: assistance, bridging fund, claims, compensation, IOPC (International Oil Pollution Compensation Fund), money and subsidies. The figure excludes articles which refer to other economic consequences (for instance, mentions of the damage to Shetland's image or the cancellation of orders for salmon by supermarket chains) or to the loss of amenity and the destruction of livelihoods.

Undoubtedly, Shetlanders are suffering. Teams of social workers are touring the isles listening to people and providing support. South Mainland residents endlessly talk about their sense of helplessness, loss, grief and anger. *The Shetland Times* often referred to "the psychological damage done to individuals", to "fears over mental health", to "the sense of loss that Shetlanders must feel", to "a rise in crime, divorce, and what psychologists call "post-traumatic-stress-disorder"", to the "huge psycho-emotional toll" which the disaster levies on the local residents, etc. And yet, for most, it is impossible to "identify their hardship" in quantifiable, and therefore procedurally acceptable, ways.

To conclude, the Shetlanders' silence cannot be explained solely by reference to their organic representations of nature; complex and ramified social and cultural processes come into play. Nevertheless, I contend that they are the single most important factor in making sense of Shetlanders' reactions to the oil spill. This will be brought into sharper focus as we turn to the relationships between Shetlanders and Sooth-Moothers during the crisis.

## **8.2. The *Braer* and Sooth-Moothers**

I have discussed earlier how Sooth-Moothers are generally perceived by the islanders. In the present section, I shall unpack this broad category more carefully and consider how Shetlanders dealt with the most prominent groups of Sooth-Moothers to be involved in the crisis: the national and international press reporters, the master and the crew of the *Braer*, the academic and governmental experts monitoring the spread of the oil and the levels of pollution, and the environmental pressure groups, whose work also involved scientific assessment but which had a more explicit political agenda.

### **8.2.1. The local, national and international media**

The mere physical presence of some 500 journalists accredited by the press office set up by the local council was, in itself, a disaster. Shetlanders had to see their place through the eyes of foreign reporters: the islands became just another disaster-

stricken area, which journalists often compared to Prince Williams Sound, but also to Sarajevo and Cambodia, where civil war raged. The media were not content with reporting on the oil spill itself either; the institutional reflexivity characteristic of late modernity meant that BBC television crews were also sent to document the effects of the media themselves during ecological and social crises. More mundanely, roads were blocked, Lerwick and Sumburgh were overcrowded, residents felt harassed by requests for photographs, etc. The reporters' logistic needs were also a source of temptation for some Shetlanders who rented out rooms and cars, and offered their services at exorbitant prices, thereby threatening to corrupt "from within" the core values of abstemiousness, of free and mutual aid which are integral to Shetland's ethos. The relations between the islanders and media representatives revealed, and perhaps created, internal divisions within Shetland society.

"There are a lot of journalists, people from the Mainland here [...] And you can make some extra money out of them! The prices they was paying for their rooms they were staying in!" (I-17)

"There is a lot of people that I know of that made quite a lot of money out of the disaster through hiring vehicles and even hiring out drivers and things like that to drive the media people around. That is just someone trying to make a bit of money but for someone who had their whole livelihood destroyed because of the oil and see somebody else making a fortune out of the disaster, it's gonna cause trouble between people. Once it is all over, in a year or so when it's all settled down, you will still have people thinking: "That bastard! He's made a fortune out of this disaster but me I have lost a lot!" and that is where the trouble is going to come. The people in the community will probably suffer more than the actual environment itself in the long term. The environment will clean eventually. It may take ten years, maybe. But you will probably find division in the community." (I-08)

The perception of the media reports and of the journalists themselves was divided: on the one hand, those for whom the *Braer* oil spill was experienced as a disaster generally described the foreign media as unobtrusive, accurate in their reports, and even helpful in that they raised issues that had hitherto not been considered by the locals. This "minority" opinion, however, was a self-conscious one. All Shetlanders were acutely aware of the predominantly negative view of the world's press; they spontaneously addressed and challenged the most common criticisms of the media as they exposed their own, marginal, view.

**"I: What about the journalists that were here?"**

I got along very well with them. *I didnae think them too pushy at all.* I tell you there was one or two who were too pushy. They were on a big holiday, they wanted to come to Shetland for four hours, get the story and get the hell out [...] But *most of that people I think they were very good. In actual fact, they could tell us quite a lot, because some of these boys were, they had seen this sort of things before, they knew, they could tell us what to expect in the long term aspects of it. They could tell us more than our own people was prepared to. [...] They were really unobtrusive I thought. I really think they did very well.*" (I-03)

"It has just been great how people [*from England*] have been affected and worried and annoyed and I think they were even more upset than us because they could not see for themselves. And when you can't see something first hand, your mind can conjure up much more horror things, if that is possible in this situation.

**I: Would that be because of the media?**

Yes, no doubt. *But I always felt that the media didn't exaggerate this.* [...] It's [*an*] unusual [*opinion*] but I think that what we were seeing was worse than the pictures that they were showing certainly. They were no worse than what it was. And another thing is that they couldn't show the smell. So I really felt that in this case they didn't exaggerate [...] The television and the papers, I didnae think that they were making it worse, I must say for sure." (I-13)

On the other hand, those who either had vested interests in minimising the dramatic consequences of the spill (usually coupled with mechanistic/cybernetic representations), or who simply could not come to terms with the far-reaching and dramatic consequences of the oil spill for their way of life (usually coupled with organic representations), generally reviled the media. Allegations of lies, of fabricated images, humorous descriptions of how journalists had been exploited, analogies between media representatives and construction workers, tales of media intrusiveness all conspired to vilify and to discredit journalists and their work.

"...there is one Shetlander that he works in the fish, he said on the TV that he thought that the four hundred odd journalists that had been here had done more damage than the oil will do. You know, spreading the news that the oil is everywhere and that it is a disaster. I am sure that people hearing this and not knowing any better just thought that the whole of Shetland was absolutely covered in oil. There was even stories down in Scotland that there was so many hundreds being evacuated and so many thousands waiting to go! That's what they were telling. I don't know but they must have read that in the papers or heard it on the news. I mean it's absolutely crazy! Just ridiculous to say such a thing. And somebody said about the people in Lerwick going with masks on, you know, twenty-five miles away, because they were frightened for their health and they were going with masks on, but it was nonsense! That was not true!" (I-01)

"There was a report in one of the Australian papers that we were evacuating the whole south end of the island. Now things like that don't do anybody any good. They don't even do the paper any good. We had telephone calls: "When were we being evacuated?"" (I-10)

"W: Well, it's just an understood thing dat journalists, the majority o' them, they must get a story. It's their living. And if they can get big splash headlines it sells the papers. And they blow things oot o' proportions, really.

R: I was doin' shopping on the Commercial Street and doon at the back o' the shop there at the sea front, there was a journalist interviewing this woman and he got her to put dis mask on her face and then he was taking photographs and speakin' aboot it. This would have been, I mean we never saw it in the paper but it quite probably would have been in a paper dat we were having to wear masks here in Lerwick which is twenty-five miles away. And this is absolute nonsense." (G-02)

"No safe camps this time from the invasion of media and environmentalist "construction" worker equivalents..." (*The Shetland Times*, 01/15/93, (02); p. 25)

The local attitude to both the media and environmentalists is perfectly summed up and prescribed in the last quotation from *The Shetland Times*: by coupling these groups with construction workers, the past is summoned to frame the present and to decree what to think, how to feel and how to behave in ways which resonate among Shetlanders.

Yet, not everyone follows this prescription. As evidenced in the quotations above, those who are sympathetic to the media live in the area immediately affected by the spill; they are crofters, farmers and inshore fishermen. They are the "real Shetlanders" who hold organic representations of nature, whose livelihoods have been destroyed, and for whom the dramatic consequences of the oil spill cannot be overstated. In contrast, SIC councillors, salmon farmers, those involved in the tourist industry, Lerwick residents, and reporters from *The Shetland Times* massively criticise the national and international media. Their sources of income may be temporarily jeopardised (until compensation deals are struck), but they never invoke the destruction of their "way of life" to describe the effects of the spill. The latter is not experienced as an attack on self, only as damage to "the environment" and to the industries which it supports.

Some themes concerning the foreign media, however, found unanimous support: they encompassed the familiar and conventional rhetoric of marginalisation, abandonment, and betrayal.

"When the Government ministers who have allowed this to happen, and the media pack have long departed, Shetlanders will be left alone again to pick up the pieces as best they can. We do not despair because we have always been resilient. The anger will probably come later. But now there is only pain and a terrible aching sadness that it had to happen." (*The Shetland Times*, 01/08/93, (01); editorial)

"Where will the international media be when the oil clean-up is complete and the world markets must be won back?" (*The Shetland Times*, 01/15/93, (02); p.20)

Accusations of betrayal and of desertion are the most powerful means of discrediting the media: they draw upon feelings of resentment and frustration towards the outside world with which Shetlanders are all too familiar. Often, the general theme of marginalisation takes the particular form of an alleged dismissal of the locals' views. Time and time again, people complained that media representatives had not listened to them and had turned exclusively to "experts", as though the local inhabitants were "country yokels" who knew nothing about nature.

"I think that is the problem. We are not allowed a voice, you see? We don't know anything!" (I-03)

"No one has interviewed a Shetlander on the television. It is all the so-called experts that have come in and the so-called experts that live here already, and there was this feeling: "Where are all the Shetlanders gone? Aren't there any Shetlanders around for people to speak to?" So that was another thing..." (I-05)

"H: I think a lot of interviews that they did up here were, they all went to, they didn't go to very many ordinary people. Whereas if they had gone to ordinary people, they would have got a totally different story. If they did go to ordinary people, but they didn't quote what they said.

R: One night, me and a friend actually went down to a hotel where journalists were staying to look for the reporters; we were that mad, we were so angry, we went to the hotel to look for the reporters to give them a true story of what it was." (G-03)

In protesting against the denigration of local knowledge by the media, Shetlanders are also claiming its superiority; they are building a consensus out of otherwise heterogeneous views; they are constructing the *Braer* as yet another proof of their peripheral status in the eyes of Sooth folk; they are, finally, creating their history and renewing their identity as a resilient people, but one which is at the mercy of inept outside forces.

What about *The Shetland Times*? In the wake of the crisis, the local newspaper shaped the way Shetlanders should relate to other media representatives and reports. Its coverage celebrated the "common sense and wisdom" by which Shetlanders would see through the inaccurate reporting of foreign media, thereby reaffirming the coherence and continuity of the social world. It actively contributed to the general process of vilification of the outsiders who came to Shetland during the crisis. The

*Braer* oil spill was used to demonstrate the recuperative strengths of the community: the resilience and solidarity of crofters, farmers and fish farmers, the competence displayed by the local authorities, the collaboration of all to returning to some normal functioning, despite the alleged concerted efforts of the media to create maximum disruption.

"There have been days when nothing happened and nothing really changed, and as a result *the media has been crowded into Sumburgh, trying to justify their existence by scraping around for man bites dog stories, or better still, trying to set conservationists at fish farmers' throats, or vice versa.* On the whole they have not succeeded, because on the whole, folk and organisations here have been drawn together, have buckled down, and have tried to address the long term, in the knowledge that the SIC has done a magnificent job of addressing the immediate consequences." (*The Shetland Times*, 01/15/93, (02); p. 19)

The coverage also emphasised the *integrative function* of the disaster. It hovered between "describing" how Shetlanders had always stood together in the past and still did so during the present crisis, and stating that Shetlanders should and would surmount this latest disaster.

"Overnight our reputation for clean, pollution free seas was destroyed as the media flashed grim pictures around the world, and regaining a ruined reputation will take some time [...] *But Shetlanders have really shown their true colours* this week. Quite apart from the magnificent efforts of our MP, of practically every council worker, and all the volunteers who offered their services to comb the shores for dead and dying animals, in the most appalling conditions; crofters, farmers, fishermen and those involved in the tourist industry have fought back against the tide of black propaganda, using the media to demonstrate that our products remain quality products. *We have become more united, perhaps because of the invasion of experts, officials and government ministers who flooded in to tell us how to run our affairs. We fought back.*" (*The Shetland Times*, 01/15/93, (02); editorial)

*The Shetland Times*, representing the community and therefore sharing its moral attributes, was also to avoid exaggerated and foolish reports motivated by sensationalism. In a self-critical exercise, the newspaper found itself to be "accurate" and "responsible" in its reporting, unlike most "hysterical" foreign newspapers which were blowing things "out of all proportion". Level-headedness in the coverage was important not only for the sake of truthful reporting, but to avoid producing greater damage and, consequently, the *loss of self-reliance*. In a nutshell, *The Shetland Times* drew on a series of familiar idioms to construct the oil spill and to engineer the desired social response to it. Not surprisingly, *The Shetland Times* was

overwhelmingly praised by its readership. With the few exceptions of those who accused it of engaging in a "damage limitation exercise", the paper was commended for its "responsible attitude", for "sticking to the facts", for presenting them "as straight as they could", and for "avoiding the damage" so frequently condemned in the national and international media. By virtue of being local, *The Shetland Times* is also unquestionably truthful and trustworthy.

"R: I would trust only the locals. [...] Well you see, the Shetlanders run *The Shetland Times*, they have their own journals, like they have in England.

M: Dis is like I was saying earlier on, I mean, you trust Shetland folk more as you do wi' some Sooth person. And we would, I mean *The Shetland Times* would no write anythin' dat, like last week and dis week, dat's been like what's in the odder papers. I mean all dat's in *The Shetland Times*, everybody in Shetland will believe what's in *The Shetland Times*, unless it was completely exaggerated but... I mean I would believe everything dat's in *The Shetland Times* but I wouldnae believe everything dat would be in the *Daily Record* or whatever.

W: Well that's a fact and it's been proved. The articles dat's been in the Sooth papers, like Maxwell, dat's one, dat there was stories dat they knew wasnae true." (G-02)

"In *The Shetland Times*, I think the coverage has been excellent. [...] There has been no scaremongering. There has been factual reports. I have got a great deal of respect for what *The Shetland Times* has done." (I-10)

"The local media were, our papers, they told the true facts. And they were angry in our papers and some of them said the same as I am saying. They were saying in their reports that the press was not helping Shetland in a lot of ways. They said in the local newspapers." (I-07)

My own content analysis undermines this appraisal. In fact, *The Shetland Times'* coverage of the *Braer* incident was highly inconsistent, misrepresented the views of local Shetlanders - whilst drawing upon familiar idioms and values - and, after the first issue, systematically downplayed the consequences of the spill<sup>8</sup>. The

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<sup>8</sup>The reasons for this state of affairs are numerous. Some stem from the nature of social life in Shetland. Indeed, the local papers had to represent the views and interests of the different factions of the community. These views and interests being themselves often irreconcilable, it is not surprising that reports about them should also be contradictory. Second, heterogeneous reporting is to be expected from any newspaper since the latter is produced by a collective. Third, much of the inconsistency in the reporting has to do with the fact that environmental debates are themselves structured by many different representations of nature, and different rationalities. Multiple sets of convictions about the nature of the world we live in co-exist in spite of being fundamentally at odds with each other. Moreover, organic representations of nature, for instance, are refractory to being expressed in words and are thus unlikely to be discussed explicitly in the press. Fourth, even within the realm of a particular, say cybernetic, representation, remarkably different assessments (both of environmental problems and of the solutions which are deemed appropriate or feasible) are possible. In fact, for many environmental problems, a single, true solution is demonstrably unknowable or incapable of existing (Thompson, 1991). Fifth, the sheer passage of time and, with it, the production of ever greater and more varied knowledge, Shetlanders' habituation to their plight, the frustration at the lack of progress, the mental exhaustion, the results of political negotiation, etc, were bound to generate inconsistencies.

evaluation of the coverage of the spill, therefore, has to do more with the identity of journalists either as Shetlanders or as Sooth-Moothers than with the actual content of the articles.

### 8.2.2. The master and the crew

Immediately after the initial shock of the grounding, the Shetlanders' attention turned to trying to identify the causes of the accident. Could it have been prevented? Everybody thought so. How? Opinions were divided. Commercial pressures, flaws in international law, flag state control, the lack of surveillance of, and guidance to, mariners, inadequate agreements over insurance and liability, were all discussed and, to a lesser or greater extent, blamed for the current crisis. However, "human error" was the issue which generated the most debate. Ostensibly, there is nothing surprising in the choice of this particular dimension of the accident and in the insistence with which Shetlanders debated it since it is generally accepted that four fifths of marine accidents are caused by human error (Department of Transport, 1994b). But I would suggest that the privileging of this issue indicates more than the mere reflection of some objective state of affairs.

First and foremost, the discussions about the master and the crew are expressions of a people proud of a culture and expertise proven over the years but which are either ignored or derided by outsiders. This is explicit in the commonly shared view that, had there been local seafarers on board the tanker or in the incident room, the disaster could have been avoided.

"Looking on the TV, they [*the crew*] obviously didnae know the currents. *If there had been local knowledge, they'd have been able to say: "Well, you'll no go on dat island."* They thought she was goin' to come in here to begin wi'. And then they thought she was goin' to hit Horse Isle. But wi' the way the current was running, the current took her right past [...] But *there must have been some of the local men doon there dat knew dat she wouldnae hit the Horse Isle [...]* It's a very dangerous piece o' water unless you know exactly what you're doin'. See if the tanker, if they'd been, the tanker... *The old fishermen fae the Sumburgh area all said you never ever hit, you never ever go ashore at Horse Isle, your boat can never ever go ashore on the rocks of Horse Isle because the current comes dis way. It keeps you off the Horse Isle. And dat's what happened.*" (I-14)

"There is a local fisherman, he has been a fisherman all his life, inshore fisherman, he watched the whole thing go on. They thought she was coming in on the Horse Holm, which is next to Sumburgh Head, she was quite close, and he said: "No, she won't come in there." Because he knew the tide, very strong tides sort of between the two seas. It runs north two hours more than it runs the other way, the west tide is the strong one. He said: "It won't be there." It is like a river in the sea, really strong river. He said: "When she is hitting the tide, the tide will take her off again." Actually, when she got in the tide, she stayed still for a little while and then she started to move away with the tide. You could really think she was under steam, she was running so fast. He said: "There is another problem. With the amount of wind forcing her onto the side of the tide", she was like hitting a wall you know, "if you manage to get her out of the tide, that will be a problem. If the tide is not strong enough to hold her", he said, "if she is going out of the tide, she will come on the west side of the Quendale Ness", which she did. And he gave the time she would come, and he was just within two or three minutes out. Now, don't you think he would have been some use in the incident room? [...] I am probably not supposed to say that but I think that *if you had had Shetland men handling the situation it wouldn't have happened.*" (I-03)

"I think they should have paid attention to the local people, the men that knew the tide. Our own inshore fishermen would have known better. They knew the place." (I-13)

"Shetland fishermen are experienced seamen and have intimate knowledge of the seas and tides in the Roost. In the view of these mariners this is an accident which could have been avoided." (*The Shetland Times*, 01/15/93, (02); p.5)

In *The Shetland Times*, the early reports exalted local knowledge and blamed the Greek master for the disaster. Insidiously, reporters questioned the crew's seamanship, implicitly contrasting the latter's lack of diligence and readiness to abandon ship with the ethos of local fishermen, where such attitudes and actions would be inconceivable.

"Even the oldest rustbucket of a ship can be operated safely if there's a competent crew on board and a competent management ashore." (*The Shetland Times* 01/08/93, (01), editorial)

"Asked who he blamed for the accident, [an SIC councillor] said: "I blame the crew for this disaster. I don't think they acted quickly enough"." (*The Shetland Times* 01/08/93, (01); p.5)

"Mr Lowe [helicopter operator for the Coastguard] said it was the master's decision to abandon ship but with the advice from Shetland Coastguard. Asked if the master was reluctant to leave his tanker, Mr Lowe said: "No"." [end of the article] (*The Shetland Times* 01/08/93, (01); p.5)<sup>9</sup>

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<sup>9</sup>The subsequent coverage in *The Shetland Times* condemned the racist abuse suffered by the master and his crew which it had partly fuelled in the previous week, and distanced itself from any calumnious comment made in relation to these seafarers.

The almost exclusive focus on human error, and the insistence that Shetland seafarers should have been consulted in the incident room, both serve to reassert Shetlanders' identity by claiming the superiority of local knowledge. Such strategies appeal to the familiar values of seamanship and responsibility; they build upon accumulated resentment and frustration towards the centres of power.

### 8.2.3. The "birdie people"

The ambivalence of Shetlanders' feelings towards environmental pressure groups (epitomised by Greenpeace but including the RSPB, the WWF, the SNH, etc.) is summed up in the following quotation; three arguments and one explanation are linked by the conjunction "but", expressing contradictory ideas, relations of exclusion, and objections.

"They [fellow Shetlanders] were quite happy with the things that Greenpeace, the tests that Greenpeace were doing. They were delighted that there was somebody up here doing it independently, *but* they do things that, one of them actually said to me: "If Greenpeace came on a dying seal or a dying man, they would go for the seal!" There is still a thread of humour running through it. And they said that one of the endangered species in Shetland now was the ethnic Shetland crofter and salmon farmer. This was one of the things that was an endangered species! *But* it is true they were delighted that Greenpeace came *but* then they said that some of the scaremongering, what they called the scaremongering that Greenpeace was doing, wasn't helping. *But they were looking purely from their own point of view.*" (I-10)

In a very short statement, this man first testifies to the community's gratitude for the "independent knowledge" provided by Greenpeace - a valuable contribution especially since the local authorities have been discredited over the misuse of dispersants, by declaring that there were no health risks, and by calling the crisis "officially over". He then points to the discrepancy between the Shetlanders' immediate preoccupations and Greenpeace's aims: the former are concerned with their livelihoods ("a dying man"), the latter with the protection of ecosystems ("a dying seal"). Indeed, traditional Shetlanders deeply resent being subordinated to "external" authorities which appear to be more concerned with meeting environmental and urban recreational demands on the country than with the livelihoods of the indigenous population. In a humorous but significant attempt to bridge these two universes, Shetlanders state that they themselves are an endangered species: it is they who

deserve protection if their way of life is not to become extinct.

Moreover, and for all their help, Greenpeace shake Shetlanders' conviction that they can get over this disaster "better than anybody else". By framing the oil spill in terms of its "environmental impact", they disempower the locals: the Shetlanders' resilience can do nothing to surmount what are defined as strictly ecological/biological/chemical problems. Green groups frustrate the Shetlanders' psychological labour to minimise the consequences of the disaster. They are also oblivious to the local economic, social and symbolic dimensions of what they perceive as an objective, global issue to be tackled through scientific knowledge and technical surveillance of environmentally sensitive sites. And thus, the interviewee concludes by explaining that, if Shetlanders had some difficulty accepting Greenpeace's ideas, it is because "they were looking purely from their own point of view", that is, from the local perspective.

In-between these contradictions, there indeed appears a struggle to defend the local point of view, to force the recognition of another, devalued, organic representation of nature within which livelihoods are intimately tied to nature, and to oppose the global, dominant, mechanistic/cybernetic representations which inform the discourse and practices of environmental pressure groups. For Shetlanders, the wildlife is an integral part of their milieu, something they cherish essentially because of its deep familiarity; it is at once intimately known and taken-for-granted.

"I never watched birds. I never had to. The birds are here. I'm here." (I-03)

Shetlanders take it as axiomatic that they can take animals for their livelihoods (this is reminiscent of the debate over whaling in which Icelanders have been opposing conservationists for years). They have killed fish and sheep for centuries; they have worked their land to ensure their survival and shaped it so that it now constitutes an expression of their collective history. They belong to Nature; Nature does not belong to them. From such a perspective, the green movement is but another "fashionable" expression of modernity, whilst environmentalists are seen as extremists who "scaremonger" the local population and create "havoc":

"The Shetlander cares for the environment. The Canadians and perhaps the Americans are very up on the environment at the moment, it is very fashionable to be environmentally friendly, and a few years ago it was feminism, and we support all that here too, but we would rather believe in a common understanding. And the environment is something that Shetlanders understand. We are the environment, we are nature. We are involved in nature. The reason there is so much wildlife in Shetland is because the Shetlander was prepared to respect it and live with nature..." (I-03)

"I think what [Greenpeace] wanted to do was to get people mobilised into approaching the government and doing things nationally and the thing backfired on them because it caused local disagreement. And I think that what they didn't take into consideration was Shetland doesn't really feel part of the nation and local problems in Shetland have always been dealt with, or people feel that they should be dealt with, at the local level." (I-16)

"[After the *Braer*], these environmental groups can just go off to some other disaster somewhere and create havoc." (*The Shetland Times*, 01/15/93 (02); p.1)

At best, green groups are perceived as having some romantic fascination for the wildlife. Hence the pejorative name by which Shetlanders designate them: the "birdie people". Greenpeace's almost exclusive preoccupation with "the environment" after the grounding of the *Braer* was totally at odds with Shetlanders' own concerns.

*"The only problem with Greenpeace is they were not concerned with people's livelihoods. They were more concerned with seals and birds. I don't have anything against Greenpeace but I would have thought that if they had been a bit more concerned about people's livelihoods rather than just a few dead birds, they would have been seen better."*

**I: They weren't perceived too well here?**

*I wouldn't have said that people of Shetlands are against them, but I would have said that most of the ones I have spoken to was more concerned... I would have said *the birds and that was maybe the second thing on their minds. They were probably more concerned with people's livelihoods, fishing, you know, salmon farming, things like this. I would have said maybe the birds and the mammals, although fairly important, but maybe not the first thing on a lot of people's minds.*" (I-17)*

Paradoxically perhaps, environmentalists are perceived as "non-holistic" by real Shetlanders holding organic social representations of nature; they criticise them for "cutting bits off", for "not understanding conservation" and, as "White men", for having "driven ethnic peoples to extinction".

"We have had environmental bodies such as the RSPB, NCC which is now Scottish Natural Heritage, coming in and telling us, in the name of conservation... Now we can go back to the North American Indian, the Aborigine, in fact the ethnic peoples of the world, which have been more or less driven to extinction. The same White man which is now in Shetland in the name of conservation, I'm afraid he doesn't

understand conservation. Conservation and nature you have to live with it, you have to be part of it, we are all in there. The environment is a total thing, not just something that you can cut bits off..." (I-03)

This assessment is made possible by the conjunction of two factors: first, and in spite of a discourse which emphasises the inseparability and the necessary interdependency between human beings and the physical world, environmental pressure groups continue to conceive of the environment as an external object, as some earlier quotations indicate. And second, the green movement has grown out of a *désenchantement* with capitalist, industrial practices and modern philosophy. It is, essentially, an urban movement. And so, real Shetlanders are left to ponder the adequacy of a discourse propounded by people who, unlike them, have not successfully "managed" their own relationships with nature in an urban context. As "townies", what can they teach Shetlanders?

*"And townies from the South coming up here and telling us how to live our lives, when we have got on alright for hundreds of years without them... And I think that Greenpeace on a lot of occasions would have been perceived that way. Shetlanders are like that even with people who have been here for years like us. [...] I think there is a lot of Shetlanders who don't like people from outside [...] coming in and telling them how to live their lives. And this is said over and over again about the South people coming into Shetland, and very very many of the environmentalists and ecologists and so on are English. And that's even worse than being Scottish! (laughter)" (I-05)*

And yet, many Shetlanders are truly grateful for some of the work conducted by environmental groups. They avidly seek reassurance from (natural) scientific knowledge in order to reduce, somehow, the overwhelming uncertainty surrounding the consequences of the *Braer*. Like most of us, they expect science to provide answers, and they are prepared to rely, to some extent at least, on Greenpeace's expertise.

"I want it monitored but I want the monitorin' to be a cross section, no just somebody. I want Greenpeace to be in on the monitoring; people that is going to tell you the truth. I mean maybe it'll come with a few scare stories but I want a cross section of monitoring. I donnae want somebody monitoring that is government based alone. Government people that come on TV and tell you there is nothing to worry about, I don't trust them.

**I: And who do you trust?**

Well I'm always a great believer there's no smoke without fire. Maybe the government guys will tell you there's nothing to worry about. Greenpeace, they maybe go a bit over board the other way and scare stories get too big. But I

always... If Greenpeace unearth something, then there is something to worry about. That's what I always think. Maybe not to the extent that they say but, put it this way, I would like to know the story in-between the two. The government experts on one side, and Greenpeace on the other." (I-15)

In many ways, the crisis surrounding the oil spill exists because Shetlanders must create for themselves "the story in-between the two" (or three, or four), a process which is highly anxiogenic. As we turn to Shetlanders' perception of the other experts involved in the clean-up and monitoring of the spill, the local community's uneasy reaction to the results of scientific research in general - and to Greenpeace's work in particular - will become more explicit. And so will the divergence between their respective representations of nature/the environment.

#### 8.2.4. The "so-called experts"

Alongside environmental groups, a plethora of scientists representing various governmental agencies, universities, research centres and private companies were also carrying out a battery of tests on fish, seawater, sand, arable soil, air, animals, human health, the oil itself, the dispersants used to break it up, and the interactions between any and all of these. It soon became clear that "plural rationalities" and "contradictory certainties" (Thompson, 1991) were jeopardising dialogues between experts, and that endemic distrust made the local populace very wary of constantly changing expert opinions and advice. Shetlanders wanted certainties and expected them to be defined in their own terms, there and then. They were forever dissatisfied.

"And despite all the speculation from all the instant "experts", who have appeared from all corners of the earth, we do not know what further damage is yet to be done." (*The Shetland Times*, 01/08/93 (01); editorial)

"Isn't it amazing when there is a disaster how so many people turn out to be new born experts and environmentalists? The experts who say there is no human risk either live well north in the island or are from the mainland and they will die of old age when the next generation now living at the "Sooth end" will be coughing their lives away in 20 years with cancer and bronchitis with no hope of compensation because they will be unable to prove that the air borne oil or fumes caused it." (*The Shetland Times*, 01/22/93, (03); p.15 )

"I really hate these experts that keep coming on the radio and TV and telling you there's nothing to worry about. They don't have a bloody clue whether there is anything to worry about or no." (I-15)

"This big boat came along, it happened to hit the shore, a little bit of light oil spilled out - oh! it's gone away. Where's it gone to? What happened to the actual bunker fuel on board? These are the answers we're not getting and until we do, you can present facts, figures, everything, wonderfully well. But at the end of the day the people sitting here have got to believe you." (*The Shetland Times*, 02/26/93, (08); p.9)

How are we to explain this dissatisfaction? To begin with, biologists, chemists and environmentalists could not provide answers which would even meet their *own* institutional and professional requirements: the prevailing weather conditions, the unknown characteristics of the oil and of the dispersants, the variety of habitats affected by the spill (and complex interactions between all these "variables"), all concurred to render impossible or, at best, to delay, a proper scientific assessment.

*"Shetlander:* Hum... Can I just say that *I don't think there is such a thing as an expert in these areas because there has never ever been an oil spill that has involved air pollution before, so how can they say that they are experts?*

*Host:* Well, that is a good enough question. Let's put it to anyone who cares to answer it. How can you be an expert when you've got such a unique set of circumstances? I mean, is it... have you done it as well as you can, or can you say that you have got the absolute experts in the world on hand? How do you react?

*Convener of SIC:* Well, we have engaged people that we thought had the qualities that were needed. And we have had no reason to suspect they were not able to give us advice. *It is entirely new* and that is running through everybody's head. *There has been no experience of this type of thing before.* The oil, the spray of the oil landing on the crofts and the... We have engaged the advice of people that we hope can help, perhaps. If they can't, it will be revealed but at the moment we are trusting them at their job."(public debate)

"The disaster presented the majority of wildlife workers with a situation they had never faced before and Ms Briggs admitted she had not known what to expect. "The full impact is very difficult to assess at this stage," she said." (*The Shetland Times*, 01/15/93 (02); p.13)

"That's just a totally unique sort of oil spill because it's light crude and they don't know what the effects of this kind of stuff can be on the marine life and on the shore life and the land. They're taking all the soil samples down to the Mainland, to Aberdeen to have them, to see what the effects of these chemicals and the oil is going to have on the plant life and the grass and different types of crops. It's just... we're the Guinea pigs, if you know what I mean?" (I-14)

"This has never happened before, the professionals do not know the effect it is going to have and I think you can gather from that that the community is extremely worried. [...] We know that they don't know because that is new." (I-03)

The widespread unease, distrust and fears are compounded by the fact that, even when the information is indeed known, it is not necessarily made available to

Shetlanders; legislation on commercial confidentiality, for instance, prevented the authorities from divulging the contents of the dispersants. Lay conspiracy theories began to circulate. Some Shetlanders decided to investigate for themselves the nature of the dispersants. They discovered that some of the chemicals they contained had neither been approved by the Government for use on rocky shores, nor had they been re-licenced.

"H: I feel that right from the start, you've probably heard about all the spraying that they did to begin with, and the locals put a stop to it but it should never have been done in the first place. They also issued respiratory masks that were supposed to protect us and I have been told that the masks were absolutely useless. They were no use for this kind of chemicals.[...]

M: Yes. I don't think... there is no point that they supply these masks late like that. The action they did... There would have been actually no action at all if there had not been a few people up here that kept our heads up.

R: That's right!

M: That's exactly what it is [...] All we want to know is the truth here and they didn't tell us the truth. They are suddenly telling you things to stop you from panicking which even they themselves didn't even know.

R: They were telling us everything was all right but they had never done any tests so how can they ken whether everything was all right or not?[...] And they didn't even know what the dispersants they were using were. We challenged them. We knew what the dispersants were.

**I: How did you know?**

R: Because we went on our own to find out. We went and found drums of stuff. We went to the storage place in Lerwick and to some other place where they were storing them at the aerodrome. We go in through the security, we go up to get the name of the stuff, and then we went to Greenpeace with it because they know." (G-03)

Initially, the local activists were labelled by fellow Shetlanders as "trouble-makers" or "scaremongers" because of their association with, and reliance upon, Greenpeace; because they were, at least implicitly, challenging the "splendid job" done by the local authorities; and because they spoke to the foreign media. They were bringing unwelcome news. But soon, another appraisal emerged. The "trouble-makers" became icons of Shetlanders' resilience and of the infallibility of local knowledge. They had refused to listen to "experts" and were proven right.

*"... the so-called "troublemakers" have made a worthwhile contribution. Their questions and protests alerted the authorities to two very important but perhaps unwelcome things — firstly that the huge, well organised twice-daily effort to deal with the national and international media at Sumburgh Airport was not getting the message through to a lot of very worried local people; and secondly that the concerns of those people arising out of the disaster were not being addressed in a way they felt was convincing. When the first spraying of dispersants was badly handled by Government experts, who got the method of spraying altered? The "troublemakers".*

And then *there's the local doctor — who I hesitate to call a troublemaker, but maybe in this context it's an honourable title* — who cautioned people in the Ness about possible dangers posed by exposure to crude oil after the grounding. He appeared on television and also expressed his fears at a public meeting, but his views were made light of by the local health authorities who appeared to be intent on soothing everybody into a state of complacency — presumably on the advice of Government experts. These, as we have already seen in the spraying botch-up, and in the giving of incorrect details as to which brands of dispersants they were using, are not infallible." (*The Shetland Times*, 01/22/93, (03); p.8)

From Shetlanders' attitudes towards experts in general, and from their reactions to the "trouble-makers" in particular, much can be learned about the relationships between knowledge and identity, and about how these become intertwined with the dynamics of social life, especially in the case of marginalised and de-traditionalised communities. We saw earlier (section 8.2.2.) that Shetlanders relentlessly demanded the recognition of local knowledge: they claimed that they knew better; they wanted to be consulted and directly involved; they wanted their voice, the voice of experience, to be heard.

"Maybe some day the "experts" with their book learning will listen to the people with experience." (*The Shetland Times*, 01/22/93, (03), p.15 )

Shetlanders found, in the battle for knowledge about the dispersants, the confirmation, as it were, that when the locals are listened to, they are proven right. In this sense, it is no accident that the activities of these few Shetlanders should have been the object of much media coverage and of praise in everyday conversations. Yet, local knowledge is progressively losing its legitimacy, as scientific knowledge and modern technology also penetrate, and profoundly modify, Shetland society. Shetland's very foundations, its traditions and knowledges, and the way of life which rests upon them, are undermined. Confidence in local knowledge erodes. Even the most traditional folks now seek reassurance from "experts". Expert knowledge is received with a mixture of deference and scepticism, trust and fear.

The reaction to expert knowledge was deeply enmeshed with the particular quality of social life in Shetland too. For one thing, the typical scientific idiom of certainty and control was culturally discordant with that of "real Shetlanders", whose way of life demands constant flexibility and adaptation to changing circumstances, rather than prediction and control. The dominance of scientific discourses and

practices in the aftermath of the oil spill served to silence the Shetlanders who were indeed specialists within their own sphere, either as farmers or as fishermen. This institutional undermining of local knowledge, in turn, threatened the locals' social identity<sup>10</sup>.

But some "internal" cultural censorship was also at play. The powerful ethos of egalitarianism, coupled with a profound disdain for "foolish" and "loud-mouthed" people, reduced to silence those who *did* possess traditional local knowledge and expertise, and who *did* master the local conditions. The stigma attached to what is too easily conceived as arrogant and boastful displays of knowledge - of which "real Shetlanders" in particular would be acutely aware - prevented those who otherwise showed real mastery from sharing it, lest they be derided by fellow Shetlanders.

"We don't know what tomorrow will bring. We don't know what the so-called experts will tell us about it.

I: "So-called"?

Oh yes, yes. I would add "so-called", yes. I trust them very little. *I have seen local guys that I have known all my life suddenly becoming experts. When you see that, you can add "so-called".* (I-02)

Local knowledge thus tends to become an important ideological and cultural resource but, at least when multiple rationalities are found in the same context, it no longer constitutes a trusted tool to make sense of the real. In a globalising world, Shetlanders are left having to rely on the alien discourse of foreign environmentalists and scientists. This discourse is meant to be axiologically neutral; it is supposed to be based upon the rigorous assessment of discrete and clearly identifiable physical problems which are conceived as having an independent, objective existence in nature (for a critique, see for instance Beck, 1992; Latour, 1987; Latour & Woolgar, 1979; Thompson, 1991; Wynne, 1988; 1992). Indeed, environmentalists and scientists design contingency plans, monitoring techniques and tests which are, by their very nature, applicable to *any* environment which displays specific bio-chemical

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<sup>10</sup>These dynamics are remarkably similar to the ones discussed by McKechnie (1996) on the Isle of Man, and by Wynne (1992) among Cumbrian sheep farmers. McKechnie (1996) gave a detailed ethnographic account of how the Manxian population establishes boundaries between insiders and outsiders, referred to either as "Stopovers" or "Comeovers", and described how such identity categories impinged on the construction of expert knowledge in the local debates surrounding the emission of radioactive waste from the Sellafield nuclear plant. In the same vein, Wynne (1992) studied how hill sheep farmers fought to establish the legitimacy of their experiential knowledge when, in the wake of the Chernobyl nuclear fall-out, they had to confront government "experts" and environmentalists who dictated policies which sheep farmers knew to be unsustainable in their particular environment.

characteristics. They provide test results which refer exclusively to such characteristics.

"The *Shetland Times* has obtained confidential Scottish Office figures with detailed results of testing that took place on salmon farms and in the open sea between 13th and 24th January. These show that the three highest toxic readings for hydrocarbons in open waters were a somewhat freakish 640.5 microgrammes per litre one nautical mile south of Sumburgh Head on 19th January, 125.5 microgrammes three-quarters of a mile west of Fitful Head (within the exclusion zone) on 14th January, and 70.9 microgrammes one and a half nautical miles north west of Fitful Head..." (*The Shetland Times*, 02/12/93, (06); p.8)

"Seawater samples collected on 11th and 12th February showed levels in the southern part of the zone fell from 40-60 microgrammes per litre (ug/l) to 10-25 ug/l. In the north west voes concentrations fell from 20-30 ug/l to 5-10 ug/l. Immediately to the west of the zone, levels remained just slightly above natural background levels, as they did both in and outside the eastern part of the zone." (*The Shetland Times*, 02/26/93, (08); p.8)

"PAH concentrations in fish inside the exclusion zone show the highest levels to have been 2.16 parts per million (ppm) in oil-tainted dabs up to two miles west of Fitful Head on 17th January and 1.81 ppm in tainted dabs three miles west of Blackstacks on the same day. Outside the first exclusion zone the highest reading is 2.69 ppm on 17th January on untainted whiting six miles south west of Forra Ness." (*The Shetland Times*, 02/26/93, (08); p.8)

These results are incomprehensible to Shetlanders, not only because they lack the scientific knowledge necessary to understand the meaning of the figures, but because these are presented in isolation, that is, without a discussion of their repercussions for Shetlanders. They rest upon a representation of nature which excludes humankind as an internal and creative factor. If the problems targeted by natural scientists have important human ramifications, they nevertheless posit the people affected by the spill as though they were another "variable". Moreover, the endemic discontent stems from the fact that the scientific knowledge which informs mechanistic/cybernetic representations appears to negate the experiential, sensory knowledge possessed by real Shetlanders.

The simultaneous clashes between experiential and formal knowledge, between local and global modes of apprehension, between "an active perceptual engagement with components of the dwelt-in world... [and] the detached, disinterested observation of a world apart" (Ingold, 1993; p.40), between organic and mechanistic/cybernetic representations, are constitutive of the crisis surrounding the *Braer* because they are at the very core of the dynamics of social life, and of identity maintenance and

change, in de-traditionalised communities. Different modes of knowing, of doing and of being meet and collide. People must position themselves, which inevitably entails choosing between contents and modes of knowledge when such choice is, in the widest sense of the word, deeply political. For Shetlanders, such positionings are made according both to prevailing and/or desired social relations, and to the social and cultural implications of knowledge claims.

Two brief examples suffice to illustrate the clashes mentioned above. The first is found in *The Shetland Times*, in the section entitled "Our Readers' Views". It is a plea for the recognition of Shetland as a meaningful place, and for a change in the dominant discourse which considers the oil spill in terms of its bio-chemical effects on the environment *in general*.

"I refer to the article in last week's *Shetland Times* concerning the *Braer* disaster in which a senior council marine member of staff was quoted as saying "a tanker load of oil is bugger all in the Atlantic Ocean." It may well have been bugger all, as he aptly describes it, had the tanker been in the middle of the Atlantic. Unfortunately Shetland just happened to be in the way. I'm sure the people of Quendale and surrounding areas will not be amused to hear this disaster described as bugger all." (*The Shetland Times*, 01/22/93, (03), p.15)

The second example is taken from the public debate. A highly distressed Quendale resident claims she *knows* that the oil has not gone and that "it is not all right to go out" because she saw oil on the beach, because her husband came home "all red in the face". Her anxieties are met with scientific reassurances from experts - via the Council - which go unheeded because they do not address relevant issues.

"*Shetlander*: I have just never been happy since day one because we have never got the proper information across since day one. We are still very concerned about the health risks and I think that the people from the South Mainland are just fed up asking and asking and asking. Because we keep getting the same thing peddled across all the time and, you know, we were told a few days ago that the oil had gone and I walked down my local beach and saw that there it was again. I mean *I know it is not gone. It can't be gone!* And you know, is it safe for the kids to go to the beach, is it safe for our kids to drink the water? I mean we are told that everything is O.K. and that it is all over but we just don't believe that!

*Chief executive of SIC*: Nobody said it is all over.

*Shetlander*: Pardon?

*Chief executive of SIC*: The media have perhaps said it is all over but...

*Shetlander*: No. The media, I got the complete opposite from the media whenever I talked to them. They thought it had been played down far too far. And they were very concerned about our nature.

*Chief executive of SIC*: The Council has not said it is all over.

*Shetlander*: And what I would like... I am very pleased to hear Greenpeace are taking independent studies and I would like a lot more of that because there is such a lot, I mean people are just not trusting and believing what they are hearing.

*Chief executive of SIC*: Maybe you are not hearing what you want to hear!

*Shetlander*: [shouting] Well, I certainly do not want to hear that my family or my friends and anybody else is at risk over this! And I do know a lot of people in the area that has not been well! My own family was out working, sprayed with that stuff that the planes sprayed all over them. I saw him coming home at night all red in the face and down his neck. So I do know what I am talking about!

*Chief executive of SIC*: Yes, but the Council is taking advice on behalf of the community from the experts on these issues and there is no reason to disbelieve them.

*Shetlander*: [shouting] Yes, well, I have heard a lot about, a lot other. A lot of the experts are, they don't tell what I am hearing from the Council, I am sorry.

*Chief executive of SIC*: So, they should personally talk to us then, so we can assess them.

*Host*: Well, can we try and clarify this a bit. I mean what precisely, if you could narrow it down to about three things, what would you like to know now? I should have given you a notice of that actually but give it a shot.

*Shetlander*: Well, the health is one thing. I am very concerned about the health of young people.

*Host*: Like specifically, is it all right to go out or...

*Shetlander*: Well, *I know it is not all right to go out*. We kept the kids in for over a week. I am very worried about that. I am very worried about the long-term, five to ten years, effects on the people's health in that local area. I am not the only one. And we still get a lot of feedbacks from people that have been not well and concerned about... There is a lot of people not happy."(Public debate)

The "proper information" demanded by Shetlanders will *never*, in the aftermath of the *Braer*, be heard and assimilated because nature, for the islanders, is not the same as the nature which is being investigated by experts. Shetlanders and experts live in quite different, but deeply interrelated, worlds. Whereas the former are concerned with their livelihoods, the land of their ancestors, their physical and mental health, that of their children, with the "loss of amenity" (a rather technical locution to *communicate to others* the pleasures of meditating on the shores of a loch, of taking the bairns for a walk on the hills, of fly fishing, etc.), the latter define the oil spill as a complex of scientific problems to be researched in themselves. Communication presupposes commonality and communality; without them, the gap between the representations of "real Shetlanders" and of Sooth-Moothers cannot be bridged. In Shetland, social groups, with their different positionings and the wealth of already existing meanings conferred upon these very positionings, could not communicate: they lacked both commonality and communality.

### 8.3. Conflicts and consensus: Is the *Braer* a disaster?

It is in adjudicating over whether or not the *Braer* was a disaster that the representational and identity work was perhaps most obvious. The lack of any certainty, or rather the co-existence of contradictory certainties and plural rationalities, concerning the long-term consequences of the oil spill, made possible various assessments about the potential consequences of the *Braer*. Six different sets of arguments can be retrieved: an opposing pair - "a disaster", "not a disaster" - for each underlying representation - organic, mechanistic and cybernetic. It would be a mistake to consider these as matters of discourse or of social cognition only: interventions of all sorts objectified the positions based on various representations, thereby participating in the continual creation of nature. There was, of course, much cross-fertilisation between the various representations as arguments, opinions and information circulated; the resulting social, political and "natural" interventions often reflected such mixed input. Often, too, contradictory evaluations of the consequences of the *Braer* were juxtaposed in the discourses and practices of social (individual and collective) actors. Nevertheless, the boundaries of the representational field were rigid enough to allow a systematic presentation of the arguments put forward by the proponents of each of them.

#### 8.3.1. Organic representations: Destruction and resilience

For some "real Shetlanders", the simultaneous destruction of the wilderness, of a landscape of personal and collective memories organically woven with the traditional "way of life", and the symbolic death of the subject whose identity is so profoundly rooted in both the landscape and the life of the community, conspired to create a sense of complete disaster. These symbolic associations were captured by the metaphors of death and rape used to describe the oil spill; they were also manifest in the refusal to frame the consequences of the *Braer* in economic terms. Analogies between the *Braer* and the oil construction phase also indicated that Shetlanders feared a massive *social*, rather than merely ecological, disaster. They feared the dissolution of the social fabric through the typically "Sooth" evils of greed, dishonesty and envy

which would bring about unsustainable social inequalities.

A much quoted and discussed article by an Alaskan "expert", published in *The Shetland Times*, summarises Shetlanders' fears.

" Put simply, the Shetland way of life will never be the same. With this much at stake, and this much international attention, community structures will reorganise. Relationships within and between communities on the island will change. And, on an individual level, the psychological effect of a technological disaster such as this is almost beyond comprehension. *Those whose identity is closely tied to the sea generally find a ghostly emptiness within them when the sea, their identity, is so severely poisoned. Such was the case in Prince William Sound.*" (*The Shetland Times*, 01/15/93, (2); p.17)

Clearly, the *Braer* is not simply an environmental issue: it is, first and foremost, a social and existential crisis. This is rendered all the more visible by the occasional, but significant, references to the perennial threat of outmigration. In Lerwick, people expressed surprise and dismay at the fact that some residents in the Ness should have temporarily moved away from the area because "Shetland folk are not like dat". Local representatives were also keen to emphasise that "Shetland is still a good place to be", that "there is a future in Shetland" (*The Shetland Times*, 01/08/93 (01); p.4).

But organic representations of nature were often associated with diametrically opposed assessments concerning the impact of the *Braer*. The intrinsic connection between self, society and nature remained the same, but different cultural resources were drawn upon in evaluating the effects of the spill. For instance, the geomorphology of the islands was used to convey a sense of solidity and permanence upon the Shetlandic "way of life". The "Old Rock" symbolised Shetlanders' tenacity, strength, and "resilience". Most "real Shetlanders" were also left unmoved by the strictly *ecological* catastrophe forecast by environmentalists and experts: "a few dead birds" hardly constitute a disaster. Moreover, Shetlanders intimately believe that little can prevent Nature from taking its course; in *The Shetland Times* as well as in conversations, it was constantly emphasized that the sheer power of the elements would clean up the oil. "Nature will be left to take its own course as far as the cleaning of oil from Shetland beaches goes" (*The Shetland Times*, 02/12/93, (06); p.8). Thus, not spraying chemical dispersants, not putting up booms or burning the oil, for instance, were types of interventions consonant with the traditional ethos and

with local knowledge: "you do not try to outdare the elements".

We therefore find some ambivalence among "real Shetlanders" regarding the consequences of the oil spill. This ambivalence engendered apparently contradictory statements from the locals. It was often said, by the same person, and within the space of less than a minute, that nothing had ever hit the community like the oil spill, that it would split the community, that the pain, sadness and anger aroused by the *Braer* compared to being raped and to losing a loved one, that it was a disaster "too horrific for the imagination to grasp", etc. Yet, in the same breath, the locals would also stress that they would recover, that it could not have happened in a better place, that everything would go back to normal, that the spill was merely an incident or an accident, but not a disaster. The more positive assessments were rooted in the belief that Shetlanders will always show their true colours, overcome problems and get the impossible done. They are as solid as their islands.

To conclude, a number of "real Shetlanders" used the metaphors of death and rape to structure and communicate the painful emotions aroused by the oil spill. They linked its ecological impact to the dissolution of both social life and self. They criticised those who have earned, or may be tempted to gain, substantial compensation at the expense of "the next door neighbour". They anchored the *Braer* in terms of two other "disasters": the oil construction phase in Shetland and the *Exxon Valdez* (which, in this case, was envisaged in terms of its long-term, devastating social and psychological consequences). They also blamed those who elected to leave their homes in the immediate aftermath of the spill, and attempted to counter a potential wave of outmigration. Together, these discourses unambiguously indicate that, for them, the *Braer* either already was a disaster, or threatened to become "the last nail in the coffin." Others stressed that both Shetlanders and Nature would be resilient enough to overcome this latest crisis, that the locals had shown their true colours and had become more united, that local knowledge was superior and would eventually triumph over that of Sooth-Moothers. All in all, Shetland was still a good place to be. Thus, "real Shetlanders" transformed the extraordinary event of the grounding of the *Braer* into an ordinary reproduction of the past, of their scorned and flouted identity in the eyes of others and, yet, of their resilience in the face of adversity. The past was invoked to limit the multiple potential meanings of the present

and, by displacing the problem, it allowed Shetlanders to confer old significations to a disturbing, novel event. These old significations, reworked in common, served to protect the Shetlanders' collective identity.

### 8.3.2. Mechanistic representations: Resources, the market and control

An altogether different set of arguments and interventions, predicated mainly upon mechanistic representations of nature, were also advanced and implemented in the wake of the oil spill. If the construction of the *Braer* in terms of organic representations transformed the spillage of 85,000 tonnes of light crude oil into a potential social and existential crisis, for those holding mechanistic representations, it became essentially an economic (and, more marginally, a political) crisis. First, the *Braer* was discussed with respect to its impact on "natural resources". In this context, nature acquires an instrumental quality and becomes envisaged in terms of its potential in providing "resources" which can serve human needs. Second, and closely intertwined with the former, much attention was devoted to the consequences of the spill for the local economy. Again, nature appears in atomised, fragmented form, as though it were a source of interchangeable products extrinsic to human activity. Indeed, production and consumption are central aspects of relations to nature based on mechanistic representations. Nature becomes a commodity, with a particular exchange value attached to it, and which enables it to become detached from the total social universe of which it is both part and product; hence, the possibility of compensating Shetlanders for their loss. Third, mechanistic representations were also manifest in the urge to control and predict the consequences of the spill by summoning to Shetland disembedded natural scientific expertise. National regulations were demanded by the Chief Executive of the SIC, the Tourist Board and the local MP, as well as by salmon farmers and deep-sea fishermen, to re-route tankers away from Shetland.

The *Exxon Valdez* was also used as an anchor to convey a sense of disaster. But this time, it was the damage to the local economy and the endless legal delays in granting compensation (as well as the insufficient amounts of money handed out) which had been experienced in Alaska to which people alluded. Evaluations of the oil

spill as either "a disaster" or simply "an accident" were based largely on some conjunction of the above three factors. Various uncertain and more or less meaningful results of laboratory tests conducted outside of the islands were invoked either to support the view that the *Braer* would be crippling or that Shetland would recover. Similarly, some claimed that compensation would arrive in due course and in sufficient amounts, whilst others feared it would not. Again, radically different assessments of the consequences of the *Braer* were possible on the basis of a predominantly mechanistic representation of nature. Incidentally, this provides important empirical support for one of the early claims made by social representation theorists (Moscovici, 1963), namely that social representations are more *basic* than attitudes.

### 8.3.3. Cybernetic representations: Ecosystems and science

Finally, cybernetic representations, according to which nature (the environment) is conceived as a global eco-system which exists outside society but which humankind must protect in order to ensure its own survival, led to other sets of arguments in the construction of the *Braer* either as a disaster or as a simple accident or incident. The *Exxon Valdez* was probably most often referred to in this context by those stressing the far-reaching and long-term damage wrought by the oil spill to the local fauna and flora. Much emphasis was also put on human responsibility for the current crisis, both locally and globally, immediately and more generally. For some, everyone (Shetlanders and Sooth-Moothers alike) was to blame for using oil (thereby making it necessary to transport oil and increasing the likelihood of a major catastrophe). They would stress the "unsustainable" character of such practices and call upon, with some degree of scepticism, international bodies to regulate the transport of hazardous substances. They would also draw attention to "worrying scientific results", and enjoin the authorities to take action to ensure that such a disaster could never be repeated elsewhere.

But, on the basis of the same representation, others would make diametrically opposed claims. The differences between the ecosystems in Shetland and in Prince Williams Sound would be stated, and the environmental consequences of the *Braer*

would be minimised by adopting a global perspective and by assessing the impact of the latest spill in terms of world pollution and long-term damage to the Earth as a whole. Scientific research was also summoned to this aim. It served to reinforce the cybernetic view of the environment as a homeostatic system which would recover on its own. Thus, some would advocate a laissez-faire approach - since the environment has self-healing qualities- and leave the waves and the winds to do the clean-up; others would rather spray with dispersants to break up the oil into smaller particles which would then get dispersed more quickly and evenly, and spare the local wildlife by spreading across the Atlantic Ocean. One representation, different evaluations, and even contradictory prescriptions and interventions.

The table below summarises the arguments which serve to construct the *Braer* oil spill either as a "disaster" or "not a disaster". These arguments differ according to the particular social representations of nature of the people who formulate them. If there is some oscillation between the assessments of the consequences of the oil spill (either disastrous and enduring or relatively circumscribed and short-lived) within a given representational universe, the boundaries between representations are more rigid.

Table 8.1. "A disaster", "not a disaster": Constructing the *Braer* oil spill

Representation	"A disaster"	"Not a disaster"
<i>Organic</i>	<ul style="list-style-type: none"> <li>- Like the <i>Exxon Valdez</i></li> <li>- Like the oil construction phase</li> <li>- Death of the Shetland "way of life"</li> <li>- Loss of identity</li> <li>- Split in the community and social inequalities</li> <li>- Destruction of wilderness</li> <li>- Devaluation of local knowledge</li> <li>- No possible financial compensation</li> <li>- Threat of outmigration</li> <li>- Rape and death</li> </ul>	<ul style="list-style-type: none"> <li>- Unlike the <i>Exxon Valdez</i></li> <li>- Nature will clean up the oil spill</li> <li>- The "Old Rock" is resilient</li> <li>- The oil spill unites people</li> <li>- Local knowledge is superior</li> <li>- Shetlanders will resist Sooth-Moothers</li> <li>- Shetlanders show their true colours</li> <li>- Shetland is still a good place to be</li> </ul>
<i>Mechanistic</i>	<ul style="list-style-type: none"> <li>- Like the <i>Exxon Valdez</i></li> <li>- Destruction of "natural resources"</li> <li>- Economic damage (fishing, salmon farming, farming, and tourism)</li> <li>- Compensation may be too late or insufficient</li> </ul>	<ul style="list-style-type: none"> <li>- Unlike the <i>Exxon Valdez</i></li> <li>- Damage limited to particular areas</li> <li>- Fair financial compensation deal will be agreed</li> <li>- The SIC do a splendid job</li> <li>- Tourism will recover</li> </ul>
<i>Cybernetic</i>	<ul style="list-style-type: none"> <li>- Like the <i>Exxon Valdez</i></li> <li>- Destruction of eco-systems</li> <li>- Ecological disasters are caused by human choices</li> <li>- Apocalyptic view: unsustainable practices</li> <li>- Ban transportation of hazardous substances</li> <li>- Uncertain and worrying scientific results</li> </ul>	<ul style="list-style-type: none"> <li>- Unlike the <i>Exxon Valdez</i></li> <li>- The <i>Braer</i> is insignificant in terms of world pollution</li> <li>- The environment is an homeostatic system; it will recover on its own</li> <li>- Scientific results are encouraging</li> <li>- The <i>Braer</i> may lead to better environmental management</li> </ul>

#### 8.4. Conclusions

A number of conclusions can be derived from this case study. The analysis revealed how central social representations of nature were in framing reactions to the oil spill, but also in providing a rationale for various "interventions" in its aftermath. The empirical focus was firmly placed on "real Shetlanders". We have seen that, through the filter of their organic representations, "real Shetlanders" experienced the oil spill as a fundamental attack on self and on the community - a rape, the death of a whole "way of life" - but that they could also escape the most dramatic consequences of the oil spill by drawing upon the common idioms of resilience and solidarity. For them, the oil spill was defined as yet another instance of foreign incursion into local affairs, with the catastrophic consequences which this normally entails, but against which the locals would unite and show their true colours. In other words, the analysis highlighted the fundamental importance of identity processes in maintaining boundaries between insiders and outsiders. These processes were no doubt exacerbated by the perceived and very real denigration of local knowledges by Sooth-Moothers, and by the "disaster" itself, which triggered a defensive attitude. However, the systematic use of certain symbolic resources (such as analogies with the oil workers or with "The Old Rock") for maintaining and protecting the locals' identity signals more enduring defensive and affirmative identity processes.

The social heterogeneity described in the previous chapters both manifested itself during the crisis and contributed to its making: Sooth-Moothers and other de-traditionalised Shetlanders (such as members of the local council, the Tourist Board, oil workers and most Lerwick residents) had an entirely different approach to the crisis, which left "real Shetlanders" profoundly dissatisfied and distraught. For Sooth-Moothers, the issues raised by the oil spill seemed *external* to people, divorced from their existence; they had to be addressed systematically and rationally, through science and the law. Conflicting *interests* dominated the discourses between these various factions of Shetlandic society, who otherwise shared a common representation which integrated elements of both the mechanistic and cybernetic states of nature described by Moscovici. It is worth reiterating that the smooth and unproblematic passage from

one state of nature to the next conceptualised in the essay of the human history of nature finds no empirical support: today's representational field of nature is fraught with contradictions because it integrates dimensions of each of the three states.

This partly explains why relationships between Shetlanders and Sooth-Moothers during the crisis were characterised by misunderstandings, tension, distrust and, at times, by an almost complete breakdown in communication and social interaction. This was evidenced by Shetlanders' reactions to: 1) the master of the tanker *Braer* and her crew, whose seamanship was called into question because they lacked local knowledge and did not display the traditional ethos of Shetland fishermen; 2) the "experts", who were discredited by the use of the qualifier "so-called" to preface any reference to them, even if they provided reassuring knowledge about the results of scientific monitoring; 3) the "birdie people", whose fascination with wildlife and exclusive focus on the ecological damage wrought by the oil and the dispersants angered the locals; and 4) the dishonest and over-dramatic media constructions of the oil spill abroad, which were blamed for creating the crisis in the first place. The communication and interaction breakdown was also manifest in the remarkably low level of attendance at the public meetings which aimed to bring together the various protagonists involved in the crisis (such as the "Donaldson Inquiry" meeting or, indeed, the "Cost of the *Braer* for Shetland" debate), as well as in the silence of "real Shetlanders".

Cutting across all these, we uncovered deep and closely intertwined oppositions between scientific knowledge and local knowledges, between the global and the local, between control and adaptation, between Sooth-Moothers and "real Shetlanders", between modernity and tradition, between mechanistic/cybernetic representations and organic ones. The social construction of the *Braer* oil spill is the complex and multifaceted product of the interplay of these different modes of knowledge, modes of relations to nature, identities, and social representations. They are all bound up with the structural transformation of Shetlandic society.

## 9.0. Epilogue

The aim of this thesis was to substantiate the project of the theory of social representations as an "anthropology of modern life" by exploring how different social groups represent and construct "natures". The analysis, based on fieldwork carried out in the context of the *Braer* oil spill in Shetland, I believe, contributes to this aim. It shows that natures are socially constructed through ideas, images and practices; it provides a description of the various representations of nature circulating in Shetland at the time, and of their joint involvement in the construction of the ecological/social crisis. The case study also enables me to confirm important aspects of the theory of social representations, to clarify others, and to raise new theoretical issues.

In the pages that follow, I shall summarise my theoretical perspective on social representations of nature, as well as my findings on the structure and content of organic, mechanistic and cybernetic representations respectively, and discuss some of their theoretical, methodological and practical implications. This will entail a re-examination of Moscovici's general theory of the socio-historical nature of nature and of his three-fold typology. This discussion also suggests some refinements to the theory of social representations. Much work is still needed to understand the complex relationships between social representations, identities and modes of knowledge. Greater theoretical and analytical effort should also be devoted to grasping the dynamics of permanence and change in real life, where representational fields are more often than not plural, fragmented and heterogeneous.

### 9.1. "Weak" and "strong" social constructionism and social representations of nature

Social life, whether ordinary and routinised, or eventful and dramatic, is at one and the same time the *product*, the *condition* and the *object* of social representations. It is the very reality which social representations partly construct and which shapes them, to which they correspond and which they symbolise; it is the space where they are exchanged and negotiated, and which they simultaneously change and maintain. In this thesis, I have argued, and tried to demonstrate empirically, that the same is true of "nature", to the extent that it is also socially constructed, that it has a human

history, that it is socialised by human activities, and that, paradoxically, it remains an external object which shapes our material and symbolic practices.

To analyse how natures are expressed in symbols and how different representations of nature realise patterns of power, modes of knowledge, social relations, etc, I proposed distinguishing between "strong" and "weak" versions of social constructionism and adopting the former<sup>1</sup>. My own version of "strong" social constructionism can be summarised as follows. First, social representations are not only innocuous opinions and beliefs held by individuals. They are complex systems of images, ideas and practices which have *ontological correlates*. To represent is not only to re-present an object to consciousness or even to remodel it. It is also more than just the culturally and socially conditioned activity of a subject who would invest a passive, already-existing object with meaning. Rather, to represent is, in a very real sense, *to transform social knowledge into reality*. As people interact with existing material forces, they interpret, shape and change them in ways which reveal the

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<sup>1</sup>Dittmar (1992), Dickens (1996) and Tester (1991) also propose a distinction between "weak" and "strong" social constructionism in relation to "nature". However, they and I confer different significations upon these concepts and draw different conclusions from them. "Weak" constructionism, we agree, refers exclusively to epistemology. It states that various social groups understand and communicate about an *otherwise stable natural world* in ways which reflect their insertion in particular cultures. This perspective is often endorsed by philosophers and historians of science concerned with tracing our changing "concepts" or "ideas" of nature throughout history (e.g. Collingwood, 1945; Crombie, 1948; Haraway, 1989; 1991). "Strong" social constructionism, according to Dittmar (1992) and Tester (1991), by contrast, is the view that "nature" is *only* what human beings make of it. Nature itself does not exist; only discourses about it do. This perspective denies that there are features of the world which exist independent of discourses and cognitions. Extra-discursive phenomena are ruled out altogether (Tester, 1991). This seems plainly untenable. It is also squarely incompatible with the notion of "strong" social constructionism I propose. It would be an intellectual *tour de force* to deny, for instance, that gravity affects people universally and quite independently of the knowledge people may have, or of the discourses they may engage in, concerning materiality.

Dickens (1996) claims that his version of "strong" social constructionism is not in the least incompatible with realism. For him, there is a "false dichotomy" between these philosophical views: "a realist can indeed handle both perspectives and view them as dialectically interdependent" (Dickens, 1996; p.83). The dichotomy is allegedly resolved because realist natural sciences give us insights into the structures and processes of the world, whereas constructionist social sciences make us aware of the differences and particularities of time and place. In a paradoxical fashion, Dickens goes on to say that "we must [nevertheless] make a crucial distinction... between material processes and relations on the one hand, and our understanding of, and communications about, the processes on the other" (Dickens, 1996; p.83). This perspective seems to *institute* (or at the very least *confirm*), rather than *dissolve*, the dichotomy. This statement betrays a materialist empiricism which views representations as secondary elaborations; it also points to an excessive reverence for the natural sciences and for the hegemonic *representations* of nature which they have developed. Such a view does not acknowledge that the "conceptual" or "ideal" part of reality is no less concrete than its material part (Godelier, 1984). Dickens fails to appreciate that physicists, chemists, biologists and ecologists operate on the basis of particular, and no doubt legitimised, representations of nature. These do not simply reflect an objective and unchanging Nature; they participate in the creation of new natures. As knowledge evolves, so do our possibilities to intervene in the world and to shape nature according to our interests. The fact that natural scientists are sporadically interested in the exotic representations of nature of other people, whilst they themselves keep uncovering the "true nature of Nature" in no way resolves the dichotomy. Dickens' perspective corresponds precisely to Latour's (1991/1993) notion of "particular universalism": according to this world view, one culture - ours - has a privileged access to Nature which sets it apart from the others. How this can be justified is never demonstrated.

operation of culturally-shaped assumptions about the world. In other words, as representations become objectified, they acquire a concrete existence and construct ever-new material systems, or "natures". Thus, and this is the second aspect of the argument, although natural phenomena do exist and indeed profoundly impact upon all forms of life, the essence of Nature as an immutable given is forever inaccessible to human beings<sup>2</sup>. The main question is to uncover and explain the very diversity of the processes of objectification through which human beings construct themselves and their natures. This is a central task for social psychologists.

This perspective, although highly compatible with a particular version of the theory of social representations, was mainly elaborated from sources derived from sociology (e.g. Berger & Luckmann, 1967; Latour, 1991/1993), anthropology (e.g. Descola, 1992, 1996; Douglas, 1970/1996; Godelier, 1984; Ingold, 1993) and the history of science/sociology of knowledge (e.g. Horigan, 1988; Moscovici, 1968/1977; 1972/1994). There is simply no literature on the social representations of nature. There is of course, as we have seen, a plethora of studies on environmental cognitions, attitudes, values, behaviours, perception and the like; but they rarely question the notion of the Environment itself. How this novel object came into existence, how it

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<sup>2</sup>One may wonder why it is so difficult to conceive of natures as being socially constructed. Some have argued that we hold on to the boundaries between "nature" and "culture" because they justify and legitimise the institutional existence of the human sciences as autonomous disciplines (Horigan, 1988). But the main objections, I believe, to redefining the boundaries seem to be that this new conceptualisation would reinforce the anthropocentrism so vehemently criticised by conservationists as well as environmental sociologists (Dunlap & Catton, 1994), and that it leads to complete relativism (Benton, 1993). Upon closer inspection, however, it turns out that neither argument is founded, or rather, that both deserve further qualification. The main problem with anthropocentrism seems to be that nature is conceived as a mere repository of resources to be used by human beings. This, in turn, could lead to so-called "unsustainable" economic practices and, ultimately, to the extermination of the human species. I would contend that the essential problem is not with anthropocentrism *per se*, but with the particular, mechanistic, social representation of nature upon which anthropocentrism of the form criticised by environmental sociologists is predicated. However, it would be difficult to state that the novel cybernetic representation of nature, or of the "environment", is not itself anthropocentric. Is the disappearance of a particular species problematic in itself? Nature - whatever that may be - would change, indeed, but then again it has always done so. The desire to protect particular species, and amongst them whales and dolphins before spiders and sand eels, is justified strictly from an anthropocentric perspective. Without human intervention, "nature" would equilibrate itself as new species would inhabit niches previously occupied by others. Nature conservation is a human problem, not a natural one. This is equally anthropocentric.

Now, to emphasize the variety of social representations of nature does not amount to complete relativism. To acknowledge the reality of plural representations of nature and to point to the social transformations of "natures" in no way precludes the possibility of comparing them either in respect of their internal coherence, or of their efficacy in given circumstances (Douglas, 1987). It does question, however, the contemporary western assumption of a universalistic conception of Nature. The projection of such an assumption upon various social groups prevents an adequate understanding of local forms of ecological knowledge. Some anthropologists have come to this conclusion earlier than social psychologists because their fieldwork experience taught them that the nature/culture dichotomy was meaningless among the peoples they studied. My own research also prompted me to question this dichotomy because it could only account for some representations.

differs from, and relates to, older representations of nature, how it can co-exist with them and with what consequences for those who hold them, such issues have not been addressed by social psychologists. They have not paid much attention either to the relationships between cognition, affect and desire, and still less to the articulation of the above with broader social conditions, on the one hand, and with symbolic and material practices, on the other. I hope I have contributed to the development of a genuinely social constructionist social psychology better able to address these issues.

## **9.2. Three social representations of nature in Shetland**

In my own research, I tried to apprehend the multiple facets of social representations by conducting the empirical research within the concrete social-natural totality where social representations are put to work. This was necessary to uncover the structural relationships which - as anthropologists studying exotic cultures know but social psychologists studying modern societies deny - always exist between social representations of nature, forms of social organisation, economic practices, political institutions and types of rationality.

The *Braer* oil spill, in spite of its extraordinary character, constituted an ideal empirical situation in which to investigate how different social groups represent and construct natures. The oil spill itself defined the temporal and spatial scope of the analysis. It brought together in one place groups of people who do not normally interact face-to-face. The simultaneous presence of diverse representations of nature opened up the critical possibility of questioning the criteria involved in the determination of the issues to be investigated, the indubitability of the "facts" submitted to scientific analyses, the availability of unambiguous "hard data" (see Latour & Woolgar, 1979; Latour, 1987; Nothnagel, 1996, for a discussion of the social construction of Nature in scientific laboratories and discourses). One could observe, under dramatic circumstances, how realities are created, negotiated and changed. Lewin once commented that to understand a phenomenon one needs to study it in the process of change. This applies to social representations as well as to attitudes. By using a broad range of methods (individual interviews, group discussions, a content analysis of the local newspapers, and participant observation across a number of social

situations), I was able to retrieve the diverse representations of nature proposed by those involved, in different capacities, in the social construction of the *Braer* oil spill. The theory of social representations, coupled with Moscovici's (1968) typology of "states of nature", provided the necessary conceptual framework to analyse the content, the structure and the functions associated with different representations of nature, as well as the dynamics of their transformation. I could describe in a particular context, without privileging the modern or natural scientific vantage point, how different social groups represent and construct natures. Let me summarise my findings concerning organic, mechanistic and cybernetic social representations.

### **9.2.1. Organic representations of nature**

Perhaps the main distinguishing feature of organic representations is that they are almost "pre-modern" (Latour, 1991/1993) in the sense that those who hold them do not impose rigid boundaries between Nature and Society. As we have seen, Shetlanders rarely talk about nature as an object. Nature is conceived and experienced as a lifeworld. They see themselves as creators of their nature ("The reason there is so much wildlife here is because the Shetlander was prepared to respect it, to live with nature.") rather than as simple users of resources. Real Shetlanders cannot conceive of modifying material forces without, at the same time, also transforming the social order, and *vice versa*. The two are intrinsically related. I have shown in the empirical analysis that, for real Shetlanders, personal biography, collective memory and the physical world are all intimately linked. Their close association was revealed, for instance, in how real Shetlanders introduce themselves: stating who one is inevitably entails providing a detailed description of one's family history, of one's rootedness in a particular place and social network. Walls, dikes, bays and hills are known by the names of those who built them, fished in them, or dwelt on them. The lines of demarcation between Nature and Society tend to become blurred, as rocks carried and carved by one's ancestor become imbued with meanings; as everyday activities are shaped through and through by the land, the seas and the winds; as ancestral knowledge is kept alive in bodily movements which no one can recall ever having learned and yet knows to be distinctly Shetlandic. One's private experiences and

biographical memories merge with, and are explained in terms of, the history and the culture of the community, for which the landscape constitutes a gigantic mnemonic device.

The correspondence between society and nature also came to the fore in the association between being a real Shetlander and participating in the elusive way of life through crofting, fishing, knitting or curing peat. Only such natural-social practices were thought to be coherent with the traditional form of social organisation, the self-proclaimed moral qualities of Shetlanders, and the material world: Society, Self and Nature tie in through them. In many ways, one is reminded of Lévy-Brühl's (1949/1975) notion of *participation*: Shetlanders participate of their society and natural order as much as they are constituted by them. For "real Shetlanders", participation is what is given in the first place; it is a datum, not a post-hoc reconstruction of a clearly apprehended relationship between two and three distinct entities.

The social construction of the crisis itself further revealed the structure and the content of organic representations. As often as not, the existence of such representations was revealed by their very *absence* from public discourse, by Shetlanders' self-proclaimed inability to "put into words" how they felt about the effects of the oil spill. The content of organic representations was revealed mainly through metaphors about the *Braer* (in particular those of death and rape, which linked the oil spill, the entire way of life, and personal identity), stories about the place (one's genealogy, narratives of the rule of the Scottish lairds) or via practices or accounts of practices ("I don't watch birds, I never had to. The birds are here; I'm here."). The refusal to seek compensation or to speak out in public, the inability to quantify one's loss, the resistance to the framing of the oil spill in terms of its "environmental" damage, the constant effort to reinstate the local perspective over against the global one propounded by experts, the criticism levelled at environmental groups for "cutting bits off", all attested to the specificity of organic representations. So did silence. Moreover, whether real Shetlanders characterised the oil spill as a "disaster" or as just another accident soon to be overcome, the arguments invoked on either side were identical in nature: they all rested on the correspondence between the social and the natural worlds. Thus, for some, Shetlanders were going to cope with this latest crisis, just as the Old Rock itself had withstood more devastating blows in

the past; Nature would be "resilient", just as Shetlanders themselves are. Conversely, for others, the destruction of nature, of the wilderness, of a landscape of memories would bring about a parallel destruction in the way of life of the local community, with its distinct culture, history and sense of identity.

### 9.2.2. Mechanistic representations of nature

Diametrically opposed to the organic representation of nature, we find the fully fledged "modern", mechanistic social representation. This representation is so familiar, so taken-for-granted that it is difficult to de-naturalise. Western scientific and lay epistemologies are predicated upon it. It permeates how we think of ourselves and of others (Descola, 1996). It is also the representation upon which many of the environmental and ecological psychological theories which I discussed at the outset are founded. Essentially, mechanistic representations assume and privilege an ontology of separation which places human societies outside of what is residually construed as Nature or the "physical world". If systematic correspondence and participation between nature and society characterised the organic representation, a complete dichotomy of the two terms, and the reification of both as distinct domains, are the most striking features of the mechanistic representation. What are in fact the joint, historical products of human activity become irremediably opposed, disconnected (Moscovici, 1972/1994). According to this particular representation, Nature is never socialised; there is no room for reason or meaning within its orderly system. It is represented and constructed in such a way as to lend itself to instrumentalisation, domination and exploitation. Nature appears as a given, immutable, ahistorical world of substances and forces governed by principles extraneous both to chance and to human intervention, but which, nevertheless, impact on social life and serve human needs. It is a place of necessity where nothing happens without a cause and an explanation. The laws governing the natural world of things-in-themselves are to be revealed by Science.

The crisis surrounding the *Braer* oil spill began in earnest with the anchoring, by the international media and, later, by lay people, of the latter in terms of the *Exxon Valdez*. Time, place, the specificity of the local context and culture were all excluded. Nature - universal, external, objective - was at stake. The selection of the *Exxon*

*Valdez* as a suitable anchor for the *Braer* was motivated by ideology, politics, economics and, importantly, by a combination of mechanistic and cybernetic social representations. Only a representation of nature as a universal object detached from local meanings and experiences, but towards which human beings are responsible, could allow for this process of anchoring. And yet, it all seemed so natural! The detached expertise of scientists from various universities was avidly sought after by most in the wake of the *Braer*. Members of the Shetland Islands Council, local reporters, salmon farmers, Lerwick residents - in fact, everyone but some rare real Shetlanders who insisted on the superiority of local knowledge - expected to learn from scientists the objective causes and consequences of the "natural" disaster. Scientists are trusted: they are impartial, have no interests other than revealing the truth about some objective, universal Nature. They are thought to be free from tradition, authority, local circumstances. A large number of articles began to appear in *The Shetland Times* about the characteristics of the spilled oil and of the chemicals used to disperse it, the damage caused to animal and vegetable life (fish, lambs, birds, grass, tatties, nippies, etc.), the safety of water supplies, and the results of various other scientific studies and assessment exercises conducted in laboratories abroad.

In the empirical analysis, I have insisted on a symptomatic manifestation of the mechanistic representation: the issue of compensation. Arguably, it is over compensation that the clash between representations was most acute and revealing<sup>3</sup>. The very notion of compensation implies, in some fundamental way, the dissociation of Nature from the local meanings and identities which may otherwise be derived from it. It rests upon the assumption that Nature is nothing but a set of resources which can be quantified and that it has a strictly instrumental value. As such, it can be substituted by another instrument: money. Money itself has no connection with particular values; in order to be, money must be detached from everything. By attributing a monetary value to Nature, the latter can emerge as a true "universal", cut off from any particular way of life, identity, experiences. The unity between the

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<sup>3</sup>The very idea of attributing an economic value to nature is exogenous to both organic and cybernetic representations. For those who hold organic representations, nature cannot be valued in economic terms because it is intrinsically linked to their sense of self. And those who hold cybernetic representations oppose such quantification because Nature is not to be valued extrinsically; it has value in itself and for itself.

natural and the social world postulated by real Shetlanders, as well as the existential meanings attached to it, are excluded altogether. Of course Shetlanders wanted to get some money to survive the material consequences of the crisis, but they never thought money could *compensate* for their loss: an entire way of life.

The arguments used to construct the oil spill either as a disaster or as an accident focused essentially on natural resources, on the amount and timing of money available for compensation, on legal issues, on the long-term effects of the oil spill on the reputation of Shetland produce, and on the health consequences. One person could emphasize the destruction of natural resources; another Nature's prompt recovery. Some could assert that the oil spill constituted a serious health hazard; others could retort, with supporting facts and figures, that the results of health tests were reassuring. In the face of such complex events as oil spills, the accuracy of scientific claims and counter-claims is very often simply undecidable. Indeterminacy and uncertainty are endemic. The scope for redefining and integrating ever more scientific evidence is almost infinite.

### 9.2.3. Cybernetic representations of nature

Cybernetic representations of nature also emerged in the scientific domain, at the turn of this century, where they challenged the hegemonic status of mechanistic representations. The proliferation of hybrids paradoxically favoured by the dualist modern *épistémè* (Latour, 1991/1993) forced upon some scientists the realisation that human beings were indeed agents in the creation of nature (Moscovici, 1972/1994). But it is only in the sixties that these novel representations began to permeate the consensual universe, especially through environmentalist or conservationist movements. This sudden diffusion may have been the indirect result of technological advances: seeing the Earth from outer space rendered convincing the idea that we lived on a fragile and unique *globe*. At any rate, a whole new set of realities were created before our eyes: eco-systems and rare or even extinct species, global warming, the ozone layer, pollution, deforestation, etc. These new constructs were meant to articulate the necessary interdependency between natural and social processes. In many ways, this was a new departure. In others, it was a mere retrieval, continuation and

development of the dominant mechanistic representations.

The present case study showed that cybernetic representations only partially succeeded in changing pre-existing conceptualisations of nature. The analysis revealed that the social actors who held them - especially environmentalists, but also lay Shetlanders (oil workers, local volunteers involved in the clean-up, etc.) and some Sooth-Moothers (journalists, volunteers from the British mainland, etc.) - opposed the instrumentalisation of nature characteristic of mechanistic representations. They focused on the interplay of political, economic, ideological and scientific factors both as causes of, and solutions to, the *Braer* disaster. They pointed to such "hybrids" (Latour, 1991/1993) as the hole in the ozone layer, pollution, the potential genetic mutations engendered by the introduction of unknown chemical substances, the destruction of eco-systems, and other such realities objectified by their very representations. They also, importantly, consistently used the substantive Environment, rather than Nature, in an attempt to emphasize the simultaneous construction of natures-societies, to retrieve a sense of historicity in nature and social life alike.

And yet, they also fetishised Nature as some transcendental object in its own right, to be protected against industrialism and predatory capitalism, and to be rationally controlled by responsible, "sustainable" economic practices. Far from questioning the foundations of Western cosmology, environmentalists tended to perpetuate the ontological dualism typical of modern societies and of their corresponding mechanistic representations. The duality persists and the ideal of mastery survives, but the roles attributed to human beings change: from one of domination and exploitation of natural resources, to one of protection of the eco-systems. For instance, in the wake of the *Braer*, a whole conference, entitled "Managing the Marine Environment", was set up. Similarly, *The Shetland Times* published a series of articles on the need to protect the Earth - which we would have inherited "untouched" by our ancestors and should pass on as such to our children. The creation of a sanctuary for seals and otters in Hillswick (manned mainly by Sooth-Moother volunteers, interestingly), and the organisation of birds rescue operations by the RSPB, were also typical expressions of cybernetic representations. These actions reveal a concern for the protection of the Environment for its own sake. In a different way, the opposition to the spraying of dispersants by "green" groups

indicate a representation of nature as a system endowed with self-regulatory mechanisms, a system which can regenerate itself without explicit human intervention.

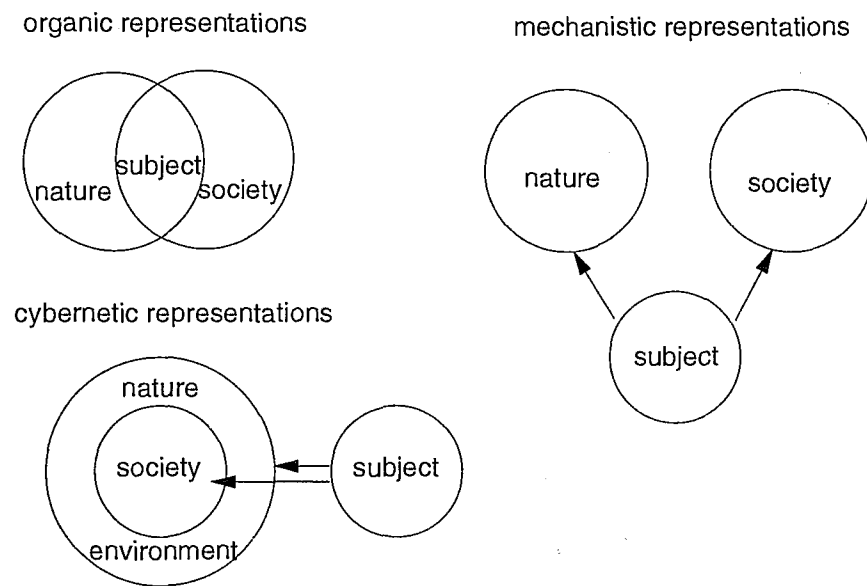
In spite of these novel dimensions, the project of environmentalism derived from cybernetic representations seems unable to escape the conditions of modernity in order to propose a radical re-conceptualisation of natures-societies. I would argue that this, in large part, is due to the association of environmentalism with the natural sciences and their epistemology. Even the notoriously anti-establishment organisation *Greenpeace* has appointed an academic scientist as its director and relies heavily on its high-tech "mobile laboratory" in order to monitor "environmental problems". The latter are regarded as physical problems, arising from specific forms of human intervention in natural systems. Their character and boundaries are given by Nature, their authenticity guaranteed by natural scientific investigation. Cybernetic representations have been anchored in mechanistic ones, sharing their reification of both Nature and Society as antithetical ontological domains. They have nevertheless emerged as a distinct representation mainly through their emphasis on the systemic properties of matter, their attribution of some inherent value to Nature and their re-definition of the role of human beings in relation to it.

How were cybernetic representations used in order to construct the *Braer* oil spill either as an accident or as a disaster? One could alternate between considering the oil spill in terms of its local impact, in which case it seemed quite disastrous, or considering it in the global context of world pollution, in which case it appeared quite insignificant. One could focus on the relatively small toll levied by the spill on the local wildlife, or emphasize the inherent value of life, stressing how a single dead bird or otter is a tragedy when it is unnecessarily caused by human foolishness. Furthermore, one could manipulate the temporal register: in the short-term, the destruction of the local eco-systems seemed rather dramatic; in the longer-term, the Environment would re-equilibrate itself and thus the damage would be minimal. By calling upon ambiguous and constantly revised scientific evidence, one could construct the oil spill as just about anything, from a total catastrophe to a barely noticeable blip. Ideological, political and economic commitments ensured, however, that the former option would be diffused by environmentalists. It was also clear that green groups would privilege certain life forms over others. Hence the discomfort expressed by

some real Shetlanders at the fascination for wildlife manifested by the "birdie people".

Organic, mechanistic and cybernetic social representations of nature, as they emerged from the empirical analysis in Shetland (rather than as they appeared in Moscovici's abstract account), can be represented graphically as follows:

**Figure 9.1. Organic, mechanistic and cybernetic representations of nature in Shetland**



As the diagram shows, the theoretical perspective according to which human beings are actively involved in the simultaneous construction of both nature and society corresponds neither to the phenomenological experience of Shetlanders nor to that of Sooth-Moothers. The analysis reveals what is probably one of the most powerful instances of objectification as a modality of consciousness: human beings, who in fact jointly create their states of nature and themselves, have a propensity to forget their own authorship. They produce realities - systems which articulate the relationships between Nature and Society - which paradoxically deny their role as producers of these realities (Berger & Luckmann, 1967). This is particularly baffling in the case of mechanistic and cybernetic representations. On the one hand, they institute a radical divide between Society and Nature; on the other, they lead to the

proliferation of entities which belong exclusively to neither of the dichotomised realms which these representations create. By contrast, real Shetlanders, who are otherwise acutely concerned with the relationships between the natural and social orders, in fact modify their "state of nature" at a much slower pace and in a much less dramatic fashion than other social groups.

What are the theoretical implications of these findings? Moscovici's typology of the three "states of nature" proved immensely useful, once re-formulated in terms of the theory of social representations. It allowed me to re-consider the literature on environmental and ecological psychology as being itself a product of particular representations of nature. It also provided a framework to capture the different representations of nature which were circulating in Shetland in the aftermath of the *Braer* oil spill. Moscovici's account of the socio-genetic processes which bring about and shape each representation of nature also provided depth to my research by tracing the origins, in Western history, of some of the representations I identified in Shetland.

Yet, as the analysis progressed, it became clear that both the theory on the human history of nature and the typology needed to be refined. First, states of nature, or social representations of nature, do not supersede each other in any simple sense. The assumption of linearity in Moscovici's work must be challenged: heterogeneous representations of nature can and do coexist - in rival or complementary ways - in contemporary societies. We do not live in an exclusively cybernetic nature. Indeed, I have argued that the crisis in Shetland stemmed partly from a contest between various social representations of nature. Second, the empirical differences between mechanistic and cybernetic representations were sometimes minute. The overlap between them was perhaps their most notable feature. Thus, whatever the radical novelty of cybernetic representations that Moscovici identified, this remains mainly *in potentia*. Other social scientists (e.g. Descola, 1992; Ingold, 1993; Pálsson, 1996) have also found the dualism inherent in modern, mechanistic representations of nature to characterise the discourse of environmentalists, in spite of the latter's explicit rejection of this very dualism. Third, the present study investigated the *content* of organic representations of nature. This could not be achieved in general terms; by definition, these representations are local and particular, rather than global and universal. Their genesis, structure and content are linked to Shetland's geographic and

climatic conditions, to the indigenous way of life and traditions, to the modes of knowledge which prevail on the islands, to the forms of communications which link them to the outside world, etc. Only detailed ethnographic work could uncover the content of organic representations and demonstrate their intimate connection with the local culture, history, mode of knowledge, sense of identity and natural practices. These complex relationships were left untheorised by Moscovici.

The issues singled out above also have implications for the theory of social representations. They raise new questions. Why do older representations survive nowadays? What happens when diverse representations are found together? How do social subjects position themselves in a heterogeneous representational field? What are the consequences of this plurality for the social representations themselves, for those who hold them, for social life in general, and for the object to which they refer and which they construct? What are the relationships between social representations, modes of knowledge and identities? These questions have emerged from the analysis. They will be addressed briefly below, but more research is needed to answer them satisfactorily.

### **9.3. Heterogeneous representational fields and the dynamics of social life**

Social representations correspond to the particular institutions and forms of social organisations of the cultures in which they are rooted. But what happens when different representations are found together, co-existing for a while in a discrete social situation, thereby constituting a heterogeneous representational field? In most theoretical and empirical studies on social representations, when a plurality of representations are indeed identified, researchers tend to satisfy themselves either with making an inter-group comparison, or with establishing a mere typology (notable exceptions include Jodelet, 1989/1991; Jovchelovitch, 1995; Moscovici, 1961/1976). One is left with a sense that each representation exists almost independently of the others; the cross-fertilisation, the dynamic relationships between them seem lost, and so are the struggles of individuals and groups to position themselves in, and to make sense of, a complex and rapidly changing reality. Yet, empirical situations prevent such easy simplifications. Certainly, in Shetland, social representations created in

markedly different contexts, by different social groups and with different objectives began to circulate, to extend beyond the boundaries of the societies in which they had first emerged, and to permeate the lives of groups to which, at first, they seemed most alien. In the wake of the oil spill, organic, mechanistic and cybernetic representations *could not* exist independently of each other: no one could ignore the simultaneous presence of these diverse representations. Individuals and groups had to position themselves in a highly contested representational field. Moreover, all representations were not equally endowed with authority and legitimacy: some enjoyed the support of powerful institutions - Science, the Law, the Market - which transcended the immediate social context; others were rooted exclusively in the social fabric of the local community and were efficacious strictly within the confines of the latter.

The three representations described above rarely existed in a "pure" form. Hyphenated representations (organic-mechanistic, mechanistic-cybernetic, organic-cybernetic) were the norm rather than the exception, as communications and interactions among various groups were dense and intense. Listening to polyphonic discourses, faced by polysemic natures, social actors had to become "cognitively polyphasic"<sup>4</sup>. There is nothing surprising in the syncretic character of this social and cognitive practice. After all, social representations are a practical form of knowledge. However, the anchoring of particular aspects of social representations was not a random process. It was highly structured and, I would tentatively suggest, seemed to be governed by two principles. On the one hand, the practical imperatives facing the community ensured that different representations (or aspects of representations) were mobilised to achieve the specific ends to which they are best suited. In other words, representations were activated in terms of their functional potential, which seems to support the hypothesis of cognitive polyphasia. On the other hand, an intrinsic connection between representations, identities, modes of knowledge and modes of relations constrained the possible combinations of elements from different representations. Let me explore these hypotheses after having reiterated, through some

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<sup>4</sup>Moscovici (1961/1976) once hypothesized that in modern societies, in order to resolve ever more complex natural and social problems, people would have not only to learn new languages but also to develop varied mental apparatuses. He thought that a particular mode of knowledge might be more apt to meet the demands of propaganda, another those of economic decisions, a third those of science, and so on. Moscovici speculated that the "dynamic co-existence... of distinct modalities of knowledge, corresponding to defined relationships between human beings and their surroundings, [would] *engender a state of cognitive polyphasia*" (Moscovici, 1961/1976; p.186; italics in original, personal translation).

empirical examples, how aspects of apparently incommensurable representations were integrated and modified, thereby blurring the boundaries between the three types of representations.

### **9.3.1. Hybrid representations**

The oil boom of the seventies, the influx of oil workers, the generalised use of money as a medium of exchange, the imposition of internationally-agreed fishing quotas, the large-scale changes in fishing technology, the creation of "environmentally sensitive areas" in Shetland by British conservationist agencies (which bring thousands of nature holiday makers annually), together with every household's daily exposure to national and international information, all contributed to ensuring that Shetlanders would, in the space of a few generations, become "modern" and, somehow, also partake in the environmental movement. Although traditional Shetlanders still resist notions of domination, conquest, mastery or protection with respect to nature, they now share elements of other representations of nature. Even real Shetlanders now begin to evaluate the social honour of skippers by the value of the catch they land rather than by its size. The older fishermen's extensive knowledge of the ecosystem within which they operate, which is traditionally the product of arduous collective apprenticeship and of years of practical enskilment at sea, is now juxtaposed with - and will probably be replaced by - hi-tech devices providing instant information. Crofting itself is sometimes engaged in for the governmental subsidies to which it entitles Shetlanders. Salmon farmers spend their working lives attempting to domesticate nature and to exploit its resources through rational management. More and more Shetlanders develop a reflexive awareness of their Environment and of the need to protect it.

The widespread use of the substantive Environment is a prime example of the diffusion of cybernetic representations; it is indicative of the diffusion of what began as an essentially urban, reflexive, detached perspective on a problematised Nature within a society to which it would seem alien. During the crisis, even real Shetlanders discussed the problem of pollution. Not only the black tides their eyes could see, the oily grass their hands could feel or the nauseating fumes their nostrils could sniff, but

also the intangible pollution of the sea bed and the air which environmentalists have rendered just as visible and palpable to all. Ironically, scientists, environmentalists and the media have so triumphed over the years at objectifying "pollution" that, when some of them tried to convince Shetlanders that they incurred no risk in going out, working the fields, or drinking water, they were incredulous. Shetlanders knew all about pollution and, in another twist, they could now summon back their senses to prove that it truly existed! Whilst scientists were busy measuring the density of oil particles in the water column, Shetlanders already knew that the pollution was severe. One does not get watery eyes, itchy skin, breathing difficulties and redness in the face for no reason after all!

In a different way, the spontaneous creation of the movement *Save our Shetland* also illustrates how elements of cybernetic representations were integrated within organic ones. Saving Shetland, the meaningful place, could not be achieved locally. Born and bred Shetlanders literally had to step outside their known world, often for the very first time, and go to Westminster to present the Prime Minister with a petition. The movement aimed at the implementation of oil tanker exclusion zones around Shetland's "vulnerable" areas, of a "global strategy for their safe management", and of a full public inquiry into the disaster. The objectives of the petition could hardly have been different because of the necessity of engaging with outsiders. Shetlanders had to establish a dialogue and to engage with alien representations, if not to make them their own. Significantly though, the organisers insisted that the inquiry draw on local knowledge as well as scientific expertise. Significantly too, the launch of the petition was attended mainly by journalists and television crews: Shetlanders stayed away (as they had during the public debate set up by BBC Radio Scotland, and as they would for the diffusion of the report of the Donaldson Inquiry).

The desired re-conceptualisation of both Nature and Society, as well as of the relationships between them, which is at the root of the environmental movement, seemed to trickle down and to get appropriated, at least in part, by most. The attempts to restore the human, moral and relational dimensions which characterise organic representations and are negated by mechanistic ones, resonated among some factions of the indigenous population and slowly transformed existing representations. Yet, in this process of appropriation, the radical promise of cybernetic representations could

not be kept; they themselves became anchored within the more dominant, modern, mechanistic representations. To gain legitimacy, those who hold cybernetic representations draw upon institutions which belong to the very social order which they initially attempted to overthrow. Thus, the diffusion and propagation of cybernetic representations, mainly through environmentalism, may have succeeded to some extent in changing older representations of nature, but these processes changed their very essence, too, and partly rid the notion of Environment of its radical potential.

The inter-penetration of social representations, however, is clearly *asymmetrical*. Organic representations are rarely integrated into newer ones. Real Shetlanders have limited means of asserting their representation of nature; the local perspective is valid exclusively in the context of its production and use. It is not supported by disembedded, powerful institutions. In the aftermath of the *Braer* oil spill, perhaps the only instance where organic representations have been recognised - if not appropriated - by someone belonging to a different symbolic universe is when an Alaskan expert described how he had learned to appreciate the meaning of the sea for fishermen in Prince Williams Sound following the *Exxon Valdez*. In ways that have yet to be researched systematically, social representations are permeated by power relations: they express and reveal the struggles of social groups to create a dominant reality. The reality status of Nature as a given, fixed, once-and-for-all object which characterises mechanistic representations has had, and continues to have, great socio-historical potency. It is now challenged by cybernetic representations which, in their turn, impose new realities upon a collective humanity. A new nature is being created.

### **9.3.2 Social representations, identities, knowledge and modes of relation**

I have described three social representations of nature in Shetland. I have also given empirical examples of hybrid representations which betray the anchoring processes which occurred in the context of the *Braer* oil spill. It became evident that there were, in practice, many more similarities between mechanistic and cybernetic representations than a review of the literature would lead one to expect. These

similarities and differences, and the possible anchoring of certain aspects of a representation within another, are far from random. These are structured contents and processes which, I contend, are related at once to people's sense of identity, to their modes of knowledge and to certain modes of relations which are associated with each representation.

Real Shetlanders, for instance, differ sharply from others in how they think of themselves in relation to nature. They apprehend themselves as part of their nature and of their society. Their shared history and culture are objectified in a landscape which they alone know how to read. Their movements and senses are attuned to a nature in which they partake, whose cycles shape their everyday activities, and over which they will not claim mastery. The sense of identity of traditional Shetlanders is in large part derived from a landscape upon which it has already been projected, and within which it is already inscribed by the labours of earlier generations.

But, if nature can act as a vast mnemonic device for real Shetlanders, it is also because they *know* it differently. Indeed, for those traditional Shetlanders who hold organic representations of nature, knowledge is to be attained through involvement and participation in one's world. It is a matter of sensory attunement, of active perceptual engagement with one's surroundings, of familiarity with the history of the community. Knowledge is achieved slowly, through experience, as one looks at others working, listens to their stories, tries to emulate their techniques and movements. Because it is fundamentally dependent upon "custom and example", as Descartes would say, this mode of knowledge - and the organic representations of nature to which it gives rise - sustains the identity of real Shetlanders. This experiential, sensory, traditional knowledge, Shetlanders themselves call "local knowledge" (see also Geertz (1983) on local knowledge). Indeed, it is both produced and validated locally. It is tied to a place, an identity, a culture. The rules of inquiry ensure the confirmation of previous representations and identities. Attempts at debunking the prescribed knowledge are not open to all; only real Shetlanders, by virtue of their status in the community, can act as privileged producers and validators of local knowledge. They alone can invalidate it since this would entail a redefinition of collective values. Local knowledge also protects the entire community because it is an essential part of social control and of group identity, and because, by definition, it is not available to Sooth-Moothers.

Having recourse to another mode of knowledge immediately betrays a person's status as an outsider, thereby reinforcing the boundaries between real Shetlanders and Sooth-Mootherers and securing the local sense of identity.

Finally, because they are tied to a place, a people, a mode of knowledge, organic representations also foster a very specific mode of relation with respect to nature. By mode of relation I mean schemes of praxis through which social representations become objectified and acquire a concrete reality. In the most traditional factions of Shetland society, this mode of relation is one of identification and participation: the interrelation with nature is so intensive and thorough that real Shetlanders cannot look at it from the outside. They are inside nature, as it were. This mode of relation involves the rejection of any radical distinction between Nature and Society, between science and practical knowledge.

A fundamentally different sense of identity and mode of knowledge underlies both mechanistic and cybernetic representations. Those who hold them apprehend themselves as being positioned well outside both Nature (or the Environment) and Society. They apprehend themselves as truly universal subjects, freed from local knowledge and tradition, and endowed instead with intemporal reason. They look at the alleged sameness or unity of a world which they can either exploit, in the case of mechanistic representations, or protect, in the case of cybernetic representations. Exploitation and protection are two very different modes of relating to Nature but both rest upon the possibility of *mastering* it through rational, detached, instrumental knowledge. Indeed, intrinsically linked to these representations is a mode of knowledge which claims to be objective, value-free, open to the scrutiny of all - that is of all who share the same representation. It is the knowledge of "experts with their book learning" which Shetlanders contrast with the superior local knowledge of "the people with experience".

This is where, subtly, identities tie in with modes of knowledge. Indeed, such a sense of identity - detached, free-floating, decontextualised - is rendered possible by the rationalism upon which modern societies are predicated. The relationship between "rational" knowledge and modern identity was already contained and perfectly expressed by Descartes' famous "Cogito ergo sum". The Cartesian Ego used Reason to constitute itself. There is a structural correspondence between modes of knowledge,

identity and social conditions. Thus, although this is systematically disguised, instrumental rationality and scientific knowledge are, too, fundamentally dependent upon "custom and example". Only the customs, examples, traditions, practices and "natural symbols" (Douglas, 1970/1996) have changed. It is the *tour de force* of the moderns that they should have made the separation between a world of things-in-themselves out there and an all-powerful rational subject endowed with pure, "abstracted" knowledge look so natural. Nature is represented *as if* it were unattached to any particular culture, *as if* it were untied to the specific mode of knowing which in fact engendered it. Because experts operate at a level of considerable abstraction which rules out the intuitive and breaks away from the familiar, both they themselves and others assume that their theories are (or will eventually be) universally valid, ahistorical and asocial. This wishful illusion is tremendously powerful.

**Table 9.1. Structural relationships between social representations, identities, modes of knowledge, and modes of relations in Shetland**

Representation	Identity	Mode of knowledge	Mode of relations
Organic Representation	real Shetlander	local knowledge: experiential intuitive concrete traditional sensory	adaptation identification participation
Mechanistic Representation	universal	instrumental rationality: modern abstract disembedded disengaged	mastery exploitation
Cybernetic Representation	universal	instrumental rationality: modern abstract disembedded disengaged	mastery protection

This table highlights the structural relationship between what people know (the content of social representations), who knows (the subjects' identity), how people know (the mode of knowledge possessed), and how particular representations become objectified (through modes of relations). As the case study has shown, these aspects of representational activity must be understood simultaneously. Their inextricable connection favours the stability of social representations and allows social subjects to resist, to some extent, alternative representations.

### **9.3.3. The multiple functions of social representations and cognitive polyphasia**

If a given social representation is intrinsically linked to a sense of identity, a mode of knowledge and a mode of relations, how can people sustain hybrid representations? How can they, at the same time, think in different ways and apprehend themselves through different senses of identity? If, moreover, each social representation is fundamentally dependent upon a particular state of social life, to which it corresponds and which it partly creates, how can older representations survive in today's society or new representations permeate different societies?

The survival of older social representations alongside, or even within, novel ones must be explained by the functions they serve. I do not mean to underestimate the richness and complexity of social representations as proper objects of analysis in their own right by explaining them away through some reductionist functionalism. However, it seems that, as long as social representations can be functional for at least some subjects in some contexts, they will be maintained as real. The diverse functions of social representations must be understood in terms of the dialectical relationships between *social representations* as continuously produced objective realities, and *social representation* as apprehension of those realities<sup>5</sup>.

In Shetland, I have found, that for those whose way of life is still linked with the land and the seas, who witness the transformation of their society and seek to resist it, holding on to an organic representation of nature is a means of sustaining

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<sup>5</sup>In other words, as social representations accomplish their functions, they themselves become transformed in the process, along with the realities to which they refer. The social actors who hold them do not remain unchanged either. To adopt a functionalist perspective, in this sense, could not be further removed from endorsing a homeostatic view of social systems.

their identity. By contrast, for those whose livelihood depends on the exploitation of natural resources for commercial purposes, who must rationalise production and foresee consumption, who need to establish trade links with the outside world, or to manage Shetland's economic and political life within the broader context of British and international institutions, a mechanistic representation of nature is more functional. Finally, for those concerned with the "environmental" sustainability of current economic practices, with the protection of eco-systems, with such global issues as world pollution or the widening of the "hole" in the ozone layer, a cybernetic representation of nature constitutes a better guide for action, and enables a better mastery of the very issues which are privileged by this representation. Depending on the circumstances, a different representation, or different elements of a representation, may be activated. Of course, these functions may be served, first and foremost, *because each social representation of nature, and the corresponding state of nature which it partially represents, already defines them as being of paramount importance.* Therefore, it is because environmentalists tend to share a cybernetic representation of nature that they emphasize only certain abstract properties of material systems and insist on the need to protect local eco-systems. Similarly, it is because Nature is already represented as a set of forces and resources to be dominated and exploited by men that salmon farmers and local politicians tend to hold a mechanistic representation of nature. And it is because real Shetlanders are agreed upon the social meanings and collective memories which they read in materiality that they mobilise the latter at times of crisis to sustain their identities. This is a matter of dialectics, not of tautology.

Different social representations can co-exist also because the various spheres of life are not all equally permeated by instrumental rationality. The sphere of economic production, for instance, is highly rationalised and systematised, but not that of consumption. Political life seems to oscillate between traditional, charismatic and bureaucratic authority and rationality. Cultural life, more generally, is heterogeneous and can hardly be said to be subjected to the canons of instrumental rationality. Thus, because economic, political and cultural life are themselves fraught with contradictions and liable to incompatible demands, they must also sustain different social representations (and therefore, different modes of knowledge, different senses of

identity and different modes of relations) which enable social actors to master the multiple dimensions of their world.

This perspective brings us back to Moscovici's hypothesis of "cognitive polyphasia". My research substantiates this hypothesis. However, the modes of knowledge used and invoked do not seem to be nearly as diverse as Moscovici (1961/1976) had envisaged. There is no one-to-one correspondence either between a social representation and a mode of knowledge, or between a practical imperative (be it communicational, economic, scientific or religious) and a mode of knowledge. Indeed, two distinct social representations can be rooted in the same mode of knowledge. Such was the case for mechanistic and cybernetic representations of nature which, despite the claims of environmentalists, both relied on the same kind of rationality. Only two distinct modes of knowledge were identified: "local", experiential, traditional and sensory *versus* instrumental, rational, objective, detached and universal. The limits upon the potential diversity of modes of knowledge, I have suggested, are related to the sense of identity associated with each mode of knowledge.

#### **9.4. Permanence and change: some reflections on the consequences of the *Braer* for Shetlanders**

As I bring this thesis to a close, it seems important to reflect on the potential consequences of the *Braer* for Shetlanders. In particular, I should like to discuss the dynamics of permanence and change, or of "de-traditionalisation". What follows are only thoughts and speculations which raise more questions than they offer answers. More definitive statements about the actual consequences of the crisis would require going back to the archipelago (something which I hope to do in the near future).

In some important ways, and for centuries, Shetlanders have occupied the concrete space of the margins. Geographical peripherality has functioned to marginalise Shetland, allowing a distinct culture to flourish there. Although this culture has been slowly eroding, Shetland is still a community where homogeneity is sought, if not always realised; people think of themselves as fundamentally different from non-Shetlanders; everyone "ken" just about everyone else; traditions are

remembered. This physical and symbolic location in the world has always opened up the possibility of resisting, and even at times of subverting, foreign representations. Recall the example of the tea towel, where hegemonic geographical facts were distorted to locate Shetland at the centre of the (framed) world. This potential was dependent upon the strength of local representations which were not expressed just in words but in modes of being and in ways of living.

What happens when such a community faces an oil spill which projects it onto the screen of every household? What happens when such a community sees itself through the eyes of the other? Does it still recognise itself? The tanker *Braer* did not only bring oil. It also brought home the realisation that the mythical, homogeneous image of themselves Shetlanders so desperately wanted to believe in and live by, was more fragmented than was easy to acknowledge. Shetlanders had to come to terms with this fact about themselves. At the same time, they had to try to reconcile the very real *differences* which existed in their representations, identities, modes of knowledge and modes of relating to nature between themselves and Sooth-Moothers. Furthermore, they also had to resist whatever *similarities* there were between them so as to protect their identity and way of life. These almost incompatible demands had to be met in the midst of an ecological crisis, with its own complex logistical, economic, political, legal, scientific and social problems.

The *Braer* made it plain that, this time, Sooth-Moothers could not be blamed entirely for creating the social unrest: some fishermen, those pillars of the Shetland way of life, were challenging the fundamental rules of social life by demanding financial compensation. Local folk were exploiting foreign journalists. The population's elected representatives were representing other interests. Many were claiming, against their own experience, that the oil spill was "not a disaster". The threat to the community, the split which, for so long, was feared and resisted, was visible. In the flow of social representations, of divergent opinions and advice, Shetlanders had to choose whom to trust. They often elected outside agencies (such as Greenpeace representatives or scientists from Alaskan or Aberdonian universities) as their privileged source of information instead of the representatives of the Shetland Islands Council or the local doctors. This choice was profoundly against the ethos of self-sufficiency: suddenly Shetlanders could no longer rely exclusively upon

themselves because endemic distrust was corrupting community relations, because organic representations could not be communicated easily, and because these local representations were ill-suited to address more global and often technical issues. There was no scientific expertise at hand, on the islands.

Which strategies did Shetlanders adopt to resist the imposition of dominant meanings and to restore a sense of agency? First and foremost, they resorted to what can be described as "strategic essentialism". They put forward a consensual image of the "real Shetlander" derived from myths, traditions, and reconstructed history. I do not mean to suggest that Shetlanders do not generally think of themselves as having particular moral qualities; only that the critical context of the *Braer* led to a closure of the potential meanings associated with being a Shetlander. This image, or identity, became narrowly organised around a series of binary oppositions: born and bred Shetlanders are "resilient", "honest", generous, "resourceful" and "reserved"; Sooth-Moothers are weak, immoral, selfish, "handless", and "loud-mouthed"<sup>6</sup>.

The long-term consequence of this strategic essentialism - which in the short-term may be necessary to protect the community - is that it leads to the exclusion of significant numbers from the collective definition of "being a Shetlander". We have witnessed how, when an individual or a group (such as oil workers or SIC councillors)

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<sup>6</sup>The construction of such a sense of identity can only be understood in terms of the islanders' particular history and culture, as well as in terms of the functions which it serves. "Resilience", for instance, is a core element because resistance to outside powers - whether those of the lairds, of the current Government or of the oil industry - was, and still is, deemed essential for the survival of the community. "Resourcefulness" is also a central feature because physical isolation and life under harsh climatic conditions render self-sufficiency and inventiveness necessary to cope with very limited resources. "Reserve", or the lack of assertiveness in public behaviour, also stems from the pragmatic imperative of avoiding conflict in a tight-knit community which could not easily withstand open dissent for any length of time. Similarly, "honesty" has specific semantic ramifications in Shetland: it has to do more with the sharing of the group's ethos of egalitarianism, and with the observance of the latter in practice, than with some abstract moral principle. Being "honest", therefore, can be expressed by working hard for a meagre salary, by providing free help to family and friends with everyday chores on the croft, or by making no gain at the expense of the next door neighbour. In this sense, the group uses its history and projects its ethos in the construction of its identity.

Clearly, although the construction of identities engages, in some fundamental ways, the affects and the cognitive efforts of individual subjects, it is no private business. It draws upon cultural forms and social norms, and uses alterity to define selfhood. Social identity and social categorisation theories may contribute to explaining the *processes* of categorisation which are undoubtedly involved here, but they simply cannot account for either the specific *contents* of what is represented as essentially "Shetland" or essentially "Sooth-Mooth" or for the social processes which, over time, result in the creation of such groups. Indeed, for Tajfel and his colleagues, the specific content of identities is irrelevant. Under experimental conditions, subjects are arbitrarily allocated to groups - the Klees and the Kandinskys, for instance. On that random basis, they come to favour their in-group in order to sustain their need for positive self-identity, which remains a black box. Outside the laboratory, however, people are usually not simply assigned to social groups; they create them. This entails defining the attributes of each group. Social identity and social categorisation theorists also fail to address what happens at an explicitly societal (rather than inter-personal) level since they focus on individual needs and motivations as a means of explaining inter-personal and intergroup dynamics. For this, we must invoke the theory of social representations.

failed to maintain the integrity of the group, and thus threatened to weaken the boundaries between real Shetlanders and Sooth-Moothers, it was *the whole community* which was summoned to restore the boundary by excluding them. As Jodelet noticed in Ainay-le-Château, when a community is threatened from within, "the deviant suffers the same fate as the impure stranger. He is relegated to the margins of the acknowledged social sphere. This ability to displace the partition within the group preserves its order" (Jodelet, 1989/1991; p.277).

Already, as has been amply demonstrated, the partition has been displaced often. Indeed, Shetland today is not solely, and unreflexively, peopled with Shetlanders. There are "real Shetlanders", born and bred Shetlanders, ordinary Shetland folk, some rare Sooth-Moothers who are more or less accepted, and other excluded Sooth-Moothers (with English people being further removed still than Scots). These fine distinctions are the marks of past struggles, of previous contacts with otherness. With every significant or prolonged exposure to the outside world, the process of displacement of the boundaries (of narrowing of the in-group) and of their "rigidification" is repeated. With the consequence that, over time, the group of traditional, "real Shetlanders" becomes ever smaller and ever more reflexive about their specificity. The "taken-for-grantedness" characteristic of traditional societies slowly erodes as the fight to prevent the local ethos from disappearing altogether and the battle to restore a sense of pride, of historical and cultural continuity, become part of everyday life. As they are now, the fine distinctions between social groups point to an acute awareness of, and resistance to, some alterity within.

Thus, in the short-term, the consequences of the oil spill paradoxically may be somewhat positive. The uneven exchange which took place during the crisis has strengthened some Shetlanders because they have reasserted their identity and proclaimed loud and clear the superiority of local knowledge. But, as the boundaries become much more rigid between real Shetlanders and others, the former group also shrinks in importance and loses legitimacy. It sees itself as an ethnic group on the verge of extinction, as Shetlanders themselves would joke bitterly about. Indeed, perhaps the most important consequence of events like the *Braer* is that, caught in an asymmetrical flux of representations, local communities, with their own distinct traditions and ways of being and of living, themselves become "endangered species".

## BIBLIOGRAPHY

- ABRIC, J.-C. (1989). L'Etude expérimentale des représentations sociales. In D. Jodelet (ed) **Les Représentations Sociales**, Paris: Presses Universitaires de France, 187-203.
- ABRIC, J.-C., & Kahan, J.-P. (1982). The effects of representations and behaviour in experimental games. **European Journal of Social Psychology**, 2 (2), 129-144.
- ADORNO, T.W., Frenkel-Brunswik, E., Levinson, D.I.C., & Sanford, R.N. (1950/1969). **The Authoritarian Personality**, New York: Norton.
- AGAR, M.H. (1980). **The Professional Stranger**, New York: Academic Press.
- ALLANSODOTTIR, A., Jovchelovitch, S. & Stathopoulou, A. (1993). Social representations: The versatility of a concept. **Papers on Social Representations**, 2 (1), 3-10.
- ALLPORT, G. (1937). **Personality: A psychological interpretation**, New York: Holt.
- ALTMAN, I. (1976). Environmental psychology and social psychology. **Personality and Social Psychology Bulletin**, 2, 96-113.
- ALTMAN, I. & Low, S.M. (eds) (1992). **Place Attachment. Human Behaviour and Environment: Advances in theory and research**, 12, New York: Plenum.
- ALTMAN, I. & Rogoff, B. (1987). World views in psychology: Trait, interactional, organismic, and transactional perspectives. In D. Stokols & I. Altman (eds) **Handbook of Environmental Psychology**, New York: Wiley, 7-40.
- ALTMAN, I. & Wohlwill, J. (eds) (1976). **Human Behaviour and the Environment: Advances in theory and research**, 1, New York: Plenum.
- ALTMAN, I. & Wohlwill, J. (eds) (1977). **Human Behaviour and the Environment: Advances in theory and research**, 2, New York: Plenum.
- ALTMAN, I. & Wohlwill, J. (eds) (1978). **Human Behaviour and the Environment: Children and the environment**, 3, New York: Plenum.
- ALTMAN, I. & Wohlwill, J. (eds) (1980). **Human Behaviour and the Environment: Environment and culture**, 4, New York: Plenum.
- BANDURA, A. (1969). **Principles of Behaviour Modifications**, New York: Holt, Rinehart & Winston.
- BARKER, R.G. (1963). On the nature of the environment. **Journal of Social Issues**, 19, 17-38.

- BARKER, R.G. (1968). **Ecological Psychology: Concepts and methods for studying the environment of human behaviour**, Stanford: Stanford University Press.
- BAUM, A. & Davies G.E. (1976). Spatial and social aspects of crowding behaviour. **Environment and Behaviour**, 8, 527-544.
- BECK, U. (1992). **Risk Society. Towards a new modernity**. London: Sage.
- BECKER, H.S. (1970). **Sociological Work**, Chicago: Aldine
- BECKER, H.S. & Geer, B. (1957). Participant observation and interviewing: A comparison. **Human Organization**, 16, 3, 28-32.
- BECKER, H.S. & Geer, B. (1958). Participant observation and interviewing: A rejoinder. **Human Organization**, 17, 2, 39-40.
- BENTON, T. (1993). **Natural Relations: Ecology, animal rights and social justice**, London: Verso.
- BERGER, P. L. & Luckmann, T. (1967). **The Social Construction of Reality: A treatise in the sociology of knowledge**, Garden City, NY: Doubleday (Harmondsworth: Penguin)
- BEST, J. (1993). But seriously folks: The limitations of the strict constructionist interpretations of social problems. In J.A. Holstein & G. Miller (eds) **Reconsidering Social Constructionism: Debates in social problems theory**, Hawthorne, NY: Aldine de Gruyter.
- BILLIG, M. (1987). **Arguing and Thinking: A rhetorical approach to social psychology**, Cambridge: Cambridge University Press.
- BILLIG, M. (1988). Social representation, objectification and anchoring: A rhetorical analysis. **Journal for the Theory of Social Behaviour**, 3, 1-16.
- BILLIG, M. (1993). Studying the thinking society: Social representations, rhetoric and attitudes. In G. Breakwell and D. Canter (eds) **Empirical Approaches to Social Representations**, Oxford: Clarendon Press. 39-62.
- BORING, E.G. (1954). The nature and the history of experimental control. **American Journal of Psychology**, 67, 573-589.
- BOURDIEU, P. (1970). The Berber house or the world reversed. **Social Sciences Information**, 9 (2), 151-170.
- BOURDIEU, P., Passeron, J.-C. & Chamboredon, J.-C. (1968/1991). **The Craft of Sociology: Epistemological preliminaries**, Berlin: Walter de Gruyter.

- BRONFENBRENNER, U. (1979). **The Ecology of Human Development: Experiments by nature and designs**, Cambridge, Mass: Harvard University Press.
- BROWN, B.B. (1987). Territoriality. In D. Stokols & I. Altman (eds) **Handbook of Environmental Psychology**, New York: Wiley.
- BROWN, B.B. & Perkins, D.D. (1992). Disruptions in place attachment. In I. Altman & S. Low (eds) **Place Attachment**, London: Plenum. 279-304.
- BURGESS, J. (1979). Place making: The contribution of environmental perception studies in planning. **Geography**, 64, 317-326.
- BURGESS, J., Harrison, C.M. & Maiteny, P. (1991). Contested meanings: The consumption of news about nature conservation. **Media, Culture & Society**, 13, 4, 499-519.
- BURGESS, J., Limb, M. & Harrison, C.M. (1988a). Exploring environmental values through the medium of small groups: Theory and practice. **Environment and Planning A**, 20, 309-326.
- BURGESS, J., Limb, M. & Harrison, C.M. (1988b). Exploring environmental values through the medium of small groups: Illustration of a group at work. **Environment and Planning A**, 20, 457-476.
- BURGESS, R.G. (1984). **In the Field: An introduction to field research**, London: Allen & Unwin.
- BYRON, R.J. (1986). **Sea Change: A Shetland society, 1970-1979**, St.John's: ISER.
- CAMPBELL, D.T. (1961). The mutual methodological relevance of anthropology and psychology. In F.L.K. Hsu (ed) **Psychological Anthropology: Approaches to culture and personality**, Homewood: Dorsey. 333-352.
- CAMPBELL, D.T. (1975). Degrees of freedom and the case study. **Comparative Political Studies**, 8, 178-193.
- CAMPBELL, D.T. & Stanley, J.C. (1966). **Experimental and Quasi-Experimental Design for Research**, Chicago: Rand McNally.
- CANTER, D. & Donald, I. (1987). Environmental psychology in the United Kingdom. In D. Stokols & I. Altman (eds) **Handbook of Environmental Psychology**, New York: Wiley, 1281-1310.
- CANTER, D. & Stringer, P. (eds) (1975). **Environmental Interaction**, New York: International Universities Press.
- CENSUS 1991. Preliminary Report, Scotland Registrar General, Copyright 1992.

- CHOMBART DE LAUWE, M.-J. (1971). **Un Monde Autre: L'enfance. De ses représentations a son mythe**, Paris: Payot.
- CHOMBART DE LAUWE, M.-J. (1979). Espaces d'enfants. *Futuribles*, 25, 72-87.
- COHEN, A.P. (1978). "The same - but different!": The allocation of identity in Whalsay, Shetland. *Sociological Review*, XXVI, 3, 440-469.
- COHEN, A.P. (1980). Oil and the cultural account: Reflections on a Shetland community. In R. Parsler & D. Shapiro (eds), **The Social Impact of Oil in Scotland. A Contribution to the sociology of oil**, Farnborough: Gower, 164-176.
- COHEN, A.P. (ed) (1982). **Belonging: Identity and social organisation in British rural cultures**, Manchester: Manchester University Press.
- COHEN, A.P. (1982a). A sense of time, a sense of place: The meaning of close association in Whalsay, Shetland. In A.P. Cohen (ed) **Belonging: Identity and social organisation in British rural cultures**, Manchester: Manchester University Press, 21-49.
- COHEN, A.P. (1982b). Belonging: The experience of culture. In A.P. Cohen (ed) **Belonging: Identity and social organisation in British rural cultures**, Manchester: Manchester University Press, 1-17.
- COHEN, A.P. (1982c). Blockade: A case study of local consciousness in an extra-local event. In A.P. Cohen (ed) **Belonging: Identity and social organisation in British rural cultures**, Manchester: Manchester University Press, 292-321.
- COHEN, A.P. (ed) (1986). **Symbolising Boundaries: Identity and diversity in British cultures**, Manchester: Manchester University Press.
- COHEN, A.P. (1987). **Whalsay: Symbol, segment and boundary in a Shetland island community**, Manchester: Manchester University Press.
- COLLINGWOOD, R.G. (1945). **The Idea of Nature**, London: Open University Press.
- CONE, J.D. & Hayes, S.C. (1980). **Environmental Problems/Behavioural Solutions**, New York: Cambridge University Press.
- CONNERTON, P. (1989). **How Societies Remember**, Cambridge: Cambridge University Press.

- COOK, T.D. & Campbell, D.T. (1976). The design and conduct of quasi-experiments and true experiments in field settings. In M. Dunette (ed) **Handbook of Industrial and Organizational Psychology**, Chicago: Rand McNally, 223-326.
- CORNER, J., Richardson, K. & Fenton, N. (1990). Textualising risk: TV discourse and the issue of nuclear energy. In **Media, Culture & Society**, 12, 105-124.
- CRAIK, K.H. (1972). Psychological factors in landscape appraisal. **Environment and Behaviour**, 4, 255-266.
- CRAIK, K.H. (1973). Environmental psychology. **Annual Review of Psychology**, 24, 403-422.
- CROMBIE, A.C. (1948). Some reflections on the history of science and its conception of nature. **Annals of Science**, 6.
- DENZIN, N.K. (1970/1978). **The Research Act in Sociology**, London: Butterworth.
- DEPARTMENT OF TRANSPORT (1994a). **Report of the Chief Inspector of Marine Accidents into the Engine Failure and Subsequent Grounding of the Motor Tanker Braer at Garths Ness, Shetland on 5 January 1993**, London: HMSO.
- DEPARTMENT OF TRANSPORT (1994b). **Safer Ships, Cleaner Seas: Report of Lord Donaldson's Inquiry into the Prevention of Pollution from Merchant Shipping**, London: HMSO.
- DEPARTMENT OF TRANSPORT (1994c). **The Braer Incident: Shetland Islands, January 1993**, London: HMSO.
- DE ROSA, A.S. (1987). The social representations of mental illness in children and adults. In W. Doise & S. Moscovici (eds) **Current Issues in European Social Psychology**, 2, Cambridge: Cambridge University Press. 47-138.
- DESCOLA, P. (1992). Societies of nature and the nature of society. In A. Kuper (ed) **Conceptualizing Society**, London: Routledge, 107-126.
- DESCOLA, P. (1986/1994). **In the Society of Nature: Native cosmology in Amazonia**, Cambridge: Cambridge University Press.
- DESCOLA, P. (1996). Constructing natures: Symbolic ecology and social practice. In P. Descola & G. Pálsson (eds) **Nature and Society: Anthropological perspectives**, London: Routledge.
- DESOR, J.A. (1972). Towards a psychological theory of crowding. **Psychological Review**, 21, 79-83.

- DICKENS, P. (1996). **Reconstructing Nature: Alienation, emancipation and the division of labour**, London: Routledge.
- DI GIACOMO, J.-P. (1980). Inter-group alliances and rejections within a protest movement. **European Journal of Social Psychology**, 10, 331-341.
- DITTMAR, H. (1992). **The Social Psychology of Material Possessions**, Hemel Hempstead: Harvester.
- DOISE, W. (1993). Debating social representations. In G. Breakwell & D. Canter (eds) **Empirical Approaches to Social Representations**, Oxford: Oxford University Press.
- DOISE, W. (1996). Social representations and history. (oral communication). Aix-en-Provence: Third International Conference on Social Representations.
- DOUGLAS, M. (1966/1991). **Purity and Danger: An analysis of concepts of pollution and taboo**, London: Routledge.
- DOUGLAS, M. (1970/1996). **Natural Symbols. Explorations in cosmology**, London: Routledge.
- DOUGLAS, M. (1987). **How Institutions Think**, London: Routledge & Kegan Paul.
- DOWNS, R.M. & Stea, D. (eds) (1973). **Image and Environment: Cognitive mapping and spatial behaviour**, Chicago: Aldine.
- DOWNS, R.M. & Stea, D. (1977). **Maps in Minds: Reflections on cognitive mapping**, New York: Harper & Row.
- DUKES, W.F. (1965). N=1. **Psychological Bulletin**, 64, 1, 74-79.
- DUNLAP, R. & Catton, W. (1994). Struggling with human exemptionalism: The rise, decline and revitalization of environmental sociology. **The American Sociologist**, 25, 5-30.
- DUNN, M.C. (1976). Landscape with photographs: Testing the preference approach to landscape evaluation. **Journal of Environmental Management**, 4, 15-26.
- DURKHEIM, E. (1898). Représentations individuelles et représentations collectives. **Revue de Métaphysique et de Morale**, 6, 273-302.
- DURKHEIM, E. (1901/1958). **The Rules of Sociological Method**, New York: Free Press.
- DURKHEIM, E. (1912/1995). **The Elementary Forms of Religious Life**, New York: Free Press.

- DUVEEN, G. (1993). The development of representations of gender. **Papers on Social Representations**, 2 (3), 171-178.
- DUVEEN, G. (1994). Unanalysed residues: Representations and behaviours. A comment on W. Wagner. **Papers on Social Representations**, 3 (2), 207-212.
- DUVEEN, G. & De Rosa, A.S. (1992). Social representations and the genesis of social knowledge. **On-Going Productions on Social Representations**, 1 (2-3), 94-108.
- DUVEEN, G. & Lloyd, B. (eds) (1990). **Social Representations and the Development of Knowledge**, Cambridge: Cambridge University Press.
- EDER, K. (1988/1996). **The Social Construction of Nature: A sociology of ecological enlightenment**, London: Sage.
- EDNEY, J.J. (1974). Human territoriality. **Psychological Bulletin**, 81 (12), 959-975.
- EPSTEIN, Y.M. (1976). Comment on environmental psychology and social psychology. **Personality and Social Psychology Bulletin**, 2, 346-349.
- EPSTEIN, Y.M. & Baum, A. (eds)(1978). **Human Response to Crowding**, Hillsdale, NY: Erlbaum.
- FARR, R.M. (1987). Social representations: A French tradition of research. **Journal for the Theory of Social Behaviour**, 17 (4), 343-370.
- FARR, R.M. (1993). Theory and method in the study of social representations. In G. Breakwell & D. Canter (eds) **Empirical Approaches to Social Representations**, Oxford: Clarendon Press. 15-38.
- FARR, R.M. (1996). **The Roots of Modern Social Psychology, 1872-1954**, Oxford: Blackwell.
- FARR, R.M. & Moscovici, S. (eds) (1984). **Social Representations**, Cambridge: Cambridge University Press.
- FERGUSON, M. (1983). **For Ever Feminine: Women's magazines and the cult of femininity**, London: Heinemann.
- FESTINGER, L, Riecken, H. & Schachter, S. (1956). **When Prophecy Fails**, Minneapolis: University of Minnesota Press.
- FLAMENT, C. (1987). Pratiques et représentations sociales. In J.L. Beauvois, R.V. Joule & J.M. Monteuil (eds) **Perspectives Cognitives et Conduites Sociales**, Vol 1. Cousset: Del Val. 143-150.

- FLICK, U. (1992a). Triangulation revisited: Strategy of validation or alternative? **Journal for the Theory of Social Behaviour**, 22, 2, 175-197.
- FLICK, U. (1992b). Combining methods - lack of methodology: Discussion of Sotirakopoulou & Breakwell. **Ongoing Productions on Social Representations**, 1, 1, 43-48.
- FLICK, U. (1994). Social representations and the social construction of everyday knowledge: Theoretical and methodological queries. **Social Science Information**, 33 (2), 179-197.
- FLUCKIGER, M. & Klaue, K. (eds) (1991). **La Perception de l'Environnement**, Paris: Delachaux & Niestlé.
- FORGAS, J.P. & Brown, L.B. (1977). Environmental and behavioural cues in the perception of social encounters: An exploratory study. **American Journal of Psychology**, 90, 635-644.
- FREUD, S. (1904/1938). The psychopathology of everyday life. In **The Basic Writings of Sigmund Freud**, New York: Random House.
- GAMSON, W.A. & Modigliani, A. (1989). Media discourse and public opinion on nuclear power: A constructionist approach. **American Journal of Sociology**, 95(1), 1-37.
- GARFINKEL, H. (1967). **Studies in Ethnomethodology**, Englewood Cliffs, NJ: Prentice-Hall.
- GEERTZ, C. (1983). **Local Knowledge: Further essays in interpretive anthropology**, USA: Basic Books.
- GELLER, E.S., Winett, R.A. & Everett, P.B. (1982). **Preserving the Environment: New strategies for behavioural change**, Elmsford, NY: Pergamon.
- GELLNER, E. (1992). **Reason and Culture: The historic role of rationality and rationalism**, Oxford: Blackwell.
- GERGEN, K. (1973). Social psychology as history. **Journal of Personality and Social Psychology**, 26, 2, 309-320.
- GERGEN, K. (1985). The social constructionist movement in social psychology. **American Psychologist**, 40 (3), 266-275.
- GIBSON, J.J. (1950). **The Perception of the Visual World**, Boston: Houghton Mifflin.

- GIBSON, J.J. (1979/1986). **The Ecological Approach to Visual Perception**, Boston: Houghton Mifflin.
- GIDDENS, A. (1990). **The Consequences of Modernity**. Cambridge: Polity Press.
- GIDDENS, A. (1991). **Modernity and Self-Identity: Self and society in the late modern age**. Cambridge: Polity Press.
- GIULIANI, M.V. & Feldman, R. (1993). Place-attachment in a developmental and cultural context. **Journal of Environmental Psychology**, 13, 267-274.
- GLASER, B. & Strauss, A. (1967). **The Discovery of Grounded Theory**, Chicago: Aldine.
- GODELIER, M. (1984). **L'Idéal et le Matériel: Pensée, économies, sociétés**, Paris: Fayard.
- GOFFMAN, E. (1953). **Communication Conduct in an Island Community**, Ph.D. Thesis. University of Chicago: Department of Sociology.
- GOFFMAN, E. (1959/1971). **The Presentation of Self in Everyday Life**, Harmondsworth: Penguin.
- GOFFMAN, E. (1961/1968). **Asylums**, Harmondsworth, Penguin
- GRIZE, J.B. (1989). Logique naturelle et représentations sociales. In D. Jodelet (ed) **Les Représentations Sociales**, Paris: Presses Universitaires de France, 152-168.
- GROVE-WHITE, R. (1993). Environmentalism: A new moral discourse for technological society? In K. Milton (ed) **Environmentalism: The view from anthropology**, London: Routledge.18-30.
- GUIMELLI, C. (1989). Pratiques nouvelles et transformation sans rupture d'une représentation sociale. In J.L. Beauvois, R.V. Joule & J.M. Monteil (eds) **Perspectives Cognitives et Conduites Sociales**, Vol.2. Cousset: Del Val.117-138.
- HALBWACHS, M. (1950). **La Mémoire Collective**, Paris: Presses Universitaires de France.
- HALL, E. (1966). **The Hidden Dimension**, New York: Doubleday.
- HANSEN, A. (1991). The media and the social construction of the environment. **Media, Culture & Society**, 13, 4, 443-458.

- HARAWAY, D.J. (1989). **Primate visions: Gender, race and nature in the world of modern science**, London: Routledge.
- HARAWAY, D. (1991). **Simians, Cyborgs and Women: The reinvention of nature**, London: Free Association.
- HARRÉ, R. (1981). Rituals, rhetoric and social cognition. In J.P. Forgas (ed) **Social Cognition: Perspectives on everyday understanding**, London: Academic Press, 211-224.
- HARRÉ, R. (1984a). Review of social representations. **British Journal of Psychology**, 76, 1, 138-140.
- HARRÉ, R. (1984b). Some reflections on the concept of social representations. **Social Research**, 51, 4, 927-938.
- HASTRUP, K. (ed) (1992). **Other Histories**, London: Routledge.
- HERZLICH, C. (1969/1973). **Health and Illness: A social psychological analysis**, London: Academic Press.
- HMSO (1996). **The Scottish Environment Statistics**.
- VAN DEN HOONARD, W. (1977). **Social Context and the Evaluation of an Occupational Culture: A study of the shrimpers of Isafjordur, Iceland**. Unpublished Ph.D. thesis, University of Manchester.
- HORIGAN, S. (1988). **Nature and Culture in Western Discourses**, London: Routledge.
- INGOLD, T. (1993). Globes and spheres: The topology of environmentalism. In K. Milton (ed) **Environmentalism: The view from anthropology**, London: Routledge.
- ITTELSON, W.H. (1973). **Environment and Cognition**, New York: Seminar Press.
- ITTELSON, W.H. & Kilpatrick, F.P. (1952). Human behaviour from the transactional point of view. Office of Naval Research (translated by, and reproduced in, M. Fluckiger & K. Klaue (eds) (1991). **La Perception de l'Environnement**, Paris: Delachaux & Niestlé.)
- ITTELSON, W.H., Proshansky, H.M., Rivlin, L.G. & Winkel, G.H. (1974). **An Introduction to Environmental Psychology**, New York: Holt, Rinehart & Winston.
- JODELET, D. (1982). Les représentations socio-spatiales de la ville. In P.H. Derycke (ed) **Conception de l'Espace**, Nanterre: Université Paris X - Nanterre.

- JODELET, D. (1984a). Réflexions sur le traitement de la notion de représentation sociale en psychologie sociale. In B. Schiele & C. Bélisle (eds) **Représentations: Communication Information**, 6, 2-3, 15-41.
- JODELET, D. (1984b). The representation of the body and its transformation. In R.M. Farr & S. Moscovici (eds) **Social Representations**, Cambridge: Cambridge University Press, 211-237.
- JODELET, D. (1984c). Représentation sociale: Phénomènes, concept et théorie. In S. Moscovici (ed) **Psychologie Sociale**, Paris: Presses Universitaires de France. 357-378.
- JODELET, D. (1986). Fou et folie dans un milieu rural français: Une approche monographique. In W. Doise & A. Palmonari (eds) **L'Etude des Représentations Sociales**, Paris: Delachaux & Niestlé, 171-192.
- JODELET, D. (1989a). Représentations sociales: Un domaine en expansion. In D. Jodelet (ed) **Les Représentations Sociales**, Paris: Presses Universitaires de France, 31-61.
- JODELET, D. (1989b). Les représentations sociales de l'environnement. Communication au Colloque sur la psychologie de l'environnement, Université de Barcelone, 1-50.
- JODELET, D. (1989/1991). **Madness and Social Representations**, London: Harvester/Wheatsheaf.
- JOFFE, H. (1995). Social representations of AIDS: Towards encompassing issues of power. In **Papers on Social Representations**, 4, 1, 29-40.
- JORGENSEN, D. (1989). **Participant Observation**, London: Sage.
- JOVCHELOVITCH, S. (1995). **Social Representations and Public Life: A study on the symbolic construction of public spaces in Brazil**, Unpublished Ph.D. Thesis. London School of Economics: Department of Social Psychology.
- KAMINSKI, G. (1989). The relevance of ecologically oriented theory building in environment and behaviour research. In E.H. Zube & G.T. Moore (eds) **Advances in Environment, Behaviour, and Design**, Vol.2, New York: Plenum, 3-36.
- KAMINSKI, G. (1992). Ecological psychology's trouble with knowledge: One terrible example. In M. Von Cranach, W. Doise & G. Mugny (eds) **Social Representations and the Social Bases of Knowledge**, New York: Hografe, 96-103.

- KAPLAN, R. & Kaplan S. (1989). **The Experience of Nature: A psychological perspective**, Cambridge: Cambridge University Press.
- KAPLAN, S. (1973). Cognitive maps in perception and thought. In R.M. Downs & D. Stea (eds) **Image and Environment: Cognitive mapping and spatial behaviour**, Chicago: Aldine, 63-78.
- KITCHIN, R.M. (1994). Cognitive maps: What are they and why study them? **Journal of Environmental Psychology**, 14, 1-19.
- KNOX, S.A. (1985). **The Making of the Shetland Landscape**, Edinburgh: John Donald.
- KOFFKA, K. (1935). **Principles of Gestalt Psychology**, New York: Harcourt & Brace.
- KORPELA, K.M. (1989). Place-identity as a product of environmental self-regulation. **Journal of Environmental Psychology**, 9, 241-256.
- KRYTER, K.D. (1970). **The Effects of Noise on Man**, New York: Academic Press.
- LAKOFF, G. & Johnson, M. (1980). **Metaphors We Live By**, Chicago: University of Chicago Press.
- LATOUR, B. (1987). **Science in Action**, Milton Keynes: Open University Press.
- LATOUR, B. (1991/1993). **We Have Never Been Modern**, London: Harvester/Wheatsheaf.
- LATOUR, B. & Woolgar, S. (1979). **Laboratory Life: The construction of scientific facts**, Princeton, NJ: Princeton University Press.
- LAWRENCE, D.L. (1992). Transcendence of place: The role of *La Placeta* in Valencia's *Las Fallas*. In I. Altman & S.M. Low (eds) **Place Attachment. Human Behaviour and Environment: Advances in theory and research**, Vol.12, New York: Plenum, 211-230.
- LÉCUYER, H. (1975). Psychosociologie de l'espace. **Année Psychologique**, 75, 563-596.
- LÉCUYER, H. (1976). Adaptation de l'homme à l'espace, adaptation de l'espace à l'homme. **Le Travail Humain**, 39 (2), 195-206.
- LÉVI-STRAUSS, C. (1955). **Tristes Tropiques**, Paris: Plon (English Translation: **A World on the Wane**, London: Hutchison, 1961).

- LÉVY-BRÜHL, L. (1949/1975). **The Notebooks on Primitive Mentality**, Oxford: Basil Blackwell.
- LÉVY-LEBOYER, C. (1980). **Psychologie et Environnement**, Paris: Presses Universitaires de France.
- LEWIN, K. (1936). **Principles of Topological Psychology**, New York: McGraw-Hill.
- LEWIN, K. (1951). **Field Theory in Social Sciences**, New York: Harper.
- LIPHART, A. (1971). Comparative politics and the comparative method. **American Political Science Review**, 65, 682-693.
- LINCOLN, Y.S. & Guba, E.G. (1985). **Naturalistic Inquiry**, London: Sage.
- LIVINGSTONE, S.M. (1996). Television discussions and the public sphere: Conflicting discourses of Yugoslavia. **Political Communication**, 6.
- LIVINGSTONE, S.M. & Lunt, P.K. (1992). Expert and lay participant in television debates: An analysis of audience discussion programmes. **European Journal of Communication**, 7, 1, 9-35.
- LLOYD, B. & Duveen, G. (1990). A semiotic analysis of the development of social representations of gender. In G. Duveen & B. Lloyd (eds) **Social Representations and the Development of Knowledge**, Cambridge: Cambridge University Press, 27-46.
- LOFLAND, J. (1971/1984). **Analyzing Social Settings: A guide to qualitative observation and analysis**, Belmont, CA: Wadsworth.
- LOW, S.M. (1992). Symbolic ties that bind: Place attachment in the plaza. In I. Altman & S.M. Low (eds) **Place Attachment. Human Behaviour and Environment: Advances in theory and research**, 12, New York: Plenum, 165-186.
- LOWE, P.D. & Rüdiger, W. (1986). Review article: Political ecology and the social sciences - the state of the art. **British Journal of Sociology**, 16, 513-550.
- LYNCH, K. (1960). **The Image of the City**, Cambridge, Mass.: MIT Press.
- MARKOVÁ, I. (1982). **Paradigm, Thought and Language**, Chichester: Wiley.
- MARKOVÁ, I. (1992). A comment on the paper by J.T. Jost. **Ongoing Productions on Social Representations**, 1 (2-3), 125-129.
- MCCALL, G.J. & Simmons, J.L. (1969). **Issues in Participant Observation: A text and a reader**, Reading, MA: Addison-Wesley.

- MCKECHNIE, R. (1996). Insiders and Outsiders: Identifying experts on home ground. In A. Irwin & B. Wynne (eds) **Misunderstanding Science? The public reconstruction of science and technology**, Cambridge: Cambridge University Press. 126-151.
- MCKINLAY, A. & Potter, J. (1987). Social representations: A conceptual critique. **Journal for the Theory of Social Behaviour**, 17, 471-488.
- MEAD, G.H. (1934). **Mind, Self and Society: From the standpoint of a social behaviourist**, Chicago: University of Chicago Press.
- MILES, M.B. (1979). Qualitative data as an attractive nuisance: The problem of analysis. **Administrative Science Quarterly**, 24, 590-601.
- MILGRAM, S. (1984). Cities as social representations. In R.M. Farr & S. Moscovici (eds) **Social Representations**, Cambridge: Cambridge University Press, 289-309.
- MILGRAM, S. & Jodelet, D. (1976). Psychological maps of Paris. In H.M. Proshansky, W.H. Ittelson & L.G. Rivlin (eds) **Environmental Psychology: People and their physical settings**, New York: Holt, Rinehart & Winston.
- MISCHEL, W. (1968). **Personality and Assessment**, New York: Wiley.
- MISCHEL, W. (1973). Towards a cognitive social learning reconceptualization of personality. **Psychological Review**, 80, 252-283.
- MITCHELL, J.C. (1983). Case and situation analysis. **Sociological Review**, 31, 187-211.
- MOORE, G.T. & Golledge, R. (1976). Environmental knowing: Concepts and theories. In G.T. Moore & R. Golledge (eds) **Environmental Knowing**, Stroudsburg, PA: Dowden, Hutchison & Ross, 138-164.
- MORGAN, D.L. (1988). **Focus Groups as Qualitative Research**, Newbury Park, CA: Sage.
- MORGAN D.L. (ed)(1993). **Successful Focus Groups: Advancing the state of the art**, London: Sage.
- MORIN, E. (1969). **La Rumeur d'Orléans**, Paris: Seuil.
- MOSCOVICI, S. (1961/1976). **La Psychanalyse, son image et son public**, Paris: Presses Universitaires de France.
- MOSCOVICI, S. (1963). Attitudes and opinions. **Annual Review of Psychology**, 231-260.

- MOSCOVICI, S. (1968/1977). **Essai sur l'Histoire Humaine de la Nature**, Paris: Flammarion.
- MOSCOVICI, S. (1972/1994). **La Société contre Nature**, Paris: Seuil (Second Edition).
- MOSCOVICI, S. (1973). Foreword. In C. Herzlich, **Health and Illness: A social psychological analysis**, London: Academic Press.
- MOSCOVICI, S. (1976). Psychologie des représentations sociales. **Cahiers Vilfredo Pareto**, 14, 409-416.
- MOSCOVICI, S. (1981). On social representations. In J.P. Forgas (ed) **Social Cognition: Perspectives on everyday understanding**, London: Academic Press, 181-209.
- MOSCOVICI, S. (1982). The coming era of social representations. In J.P. Codol & J.P. Leyens (eds) **Cognitive Approaches to Social Behaviour**, The Hague: Nijhoff. 115-150.
- MOSCOVICI, S. (1984a). The phenomenon of social representations. In R.M. Farr & S. Moscovici (eds) **Social Representations**, Cambridge: Cambridge University Press, 3-69.
- MOSCOVICI, S. (1984b). The myth of the lonely paradigm: A rejoinder. **Social Research**, 51, 4, 939-967.
- MOSCOVICI, S. (1987). Answers and questions. **Journal for the Theory of Social Behaviour**, 17, 513-529.
- MOSCOVICI, S. (1988). Notes towards the description of social representations. **European Journal of Social Psychology**, 18, 211-250.
- MOSCOVICI, S. (1989a). Des représentations collectives aux représentations sociales: Eléments pour une histoire. In D. Jodelet (ed) **Les Représentations Sociales**, Paris: Presses Universitaires de France, 62-86.
- MOSCOVICI, S. (1989b). Préface. In D. Jodelet, **Folies et Représentations Sociales**, Paris: Presses Universitaires de France.
- MOSCOVICI, S. (1990). Social psychology and developmental psychology: Extending the conversation. In G. Duveen & B. Lloyd (eds) **Social Representations and the Development of Knowledge**, Cambridge: Cambridge University Press.
- MOSCOVICI, S. (1993). Introductory address. **Papers on Social Representations**, 2 (3), 160-170.

- MOSCOVICI, S. (1994a). The proof of the pudding is still in the eating. Oral communication. Second International Conference on Social Representations: Rio de Janeiro.
- MOSCOVICI, S. (1994b). La mentalité prélogique des primitifs et la mentalité prélogique des civilisés. In S. Moscovici (ed) **Psychologie Sociale des Relations à Autrui**, Paris: Nathan.
- MUGNY, G. & Carugati, F. (1989). **Social Representations of Intelligence**, Cambridge: Cambridge University Press.
- NOTHNAGEL, D. (1996). The reproduction of nature in contemporary high-energy physics. In P. Descola & G. Pálsson (eds) **Nature and Society: Anthropological Perspectives**, London: Routledge. 256-274.
- PAILHOUS, J. (1970). **La Représentation de l'Espace Urbain: L'Exemple du chauffeur de taxi**, Paris: Presses Universitaires de France.
- PÁLSSON, G. (1996). Human-environment relations: Orientalism, paternalism and communalism. In P. Descola & G. Pálsson (eds) **Nature and Society: Anthropological perspectives**, London: Routledge. 63-81.
- PATTON, M.Q. (1980). **Qualitative Evaluation Methods**, Beverly Hills, CA: Sage.
- PETERSON, J. (1959). The Shetlands - Do they exist? **The New Shetlander**, 50, April-June.
- PROSHANSKY, H.M. (1976). Comment on environmental and social psychology. **Personality and Social Psychology Bulletin**, 2 (4), 359-363.
- PROSHANSKY, H.M. (1978). The city and self-identity. **Environment and Behaviour**, 10 (2), 147-169.
- PROSHANSKY, H.M. (1987). The field of environmental psychology: Securing its future. In D. Stokols & I. Altman (eds) **Handbook of Environmental Psychology**, 2, New York: Wiley, 1467-1488.
- PROSHANSKY, H.M. (1990). The pursuit of understanding: An intellectual history. In I. Altman & K. Christensen (eds) **Environment and Behaviour Studies**, London: Plenum. 9-30.
- PROSHANSKY, H.M., Fabian, A.K. & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self. **Journal of Environmental Psychology**, 3, 57-83.

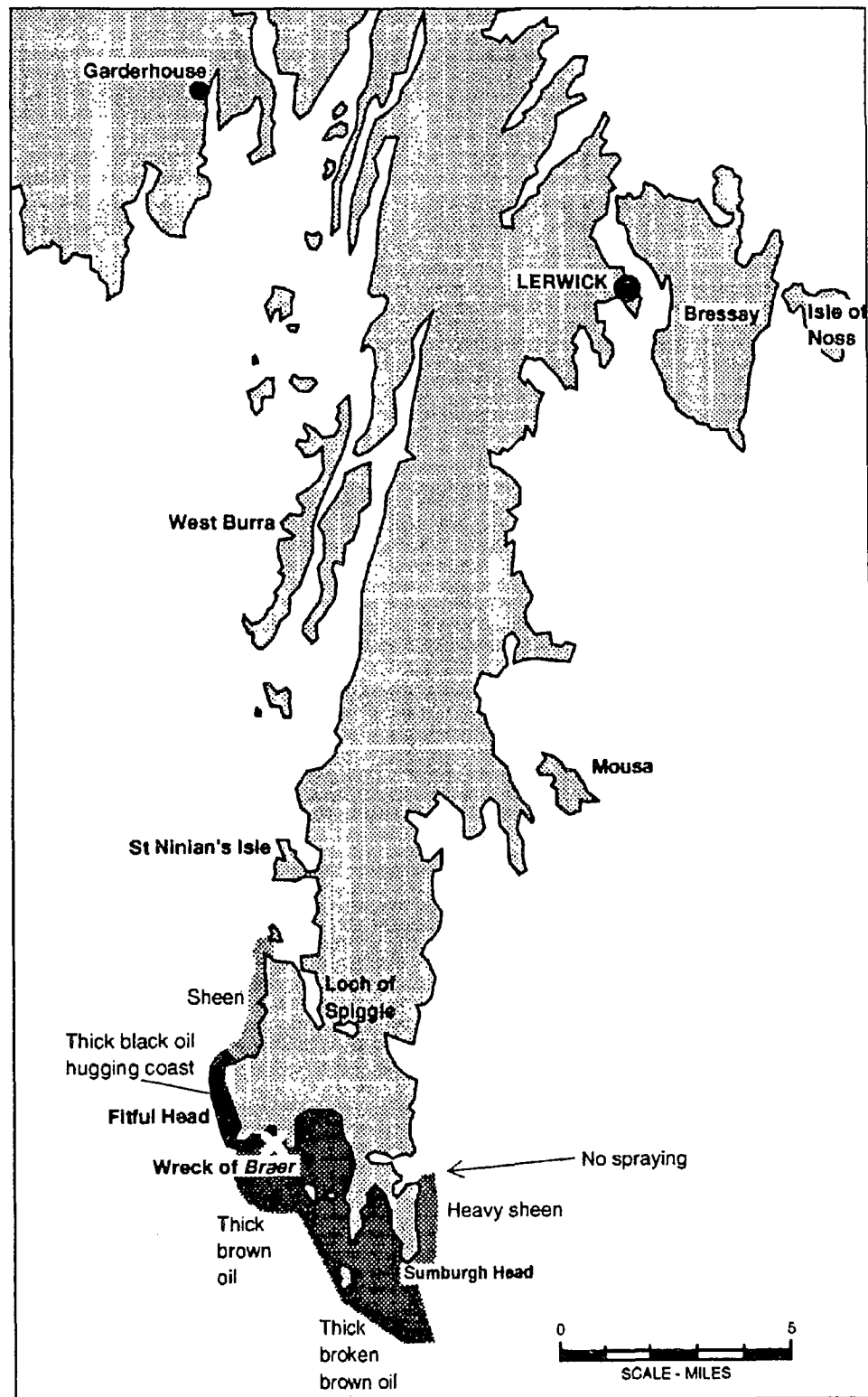
- PROSHANSKY, H.M., Ittelson, W.H. & Rivlin, L.G. (1970/1976). **Environmental Psychology: Man and his physical setting**, New York: Holt, Rinehart & Winston. (Second edition)
- PROSHANSKY, H.M. & O'Hanlon, T. (1977). Environmental psychology: Origins and development. In D. Stokols (ed) **Perspectives on Environment and Behaviour: Theory, research and applications**, New York: Plenum.
- ROSE, D., Efrain, D., Gervais, M.C., Joffe, H., Jovchelovitch, S. & Morant, N. (1995). Questioning consensus in social representations theory. **Papers on Social Representations**, 4 (2), 150-156.
- ROTTER, J.B. (1954). **Social Learning and Clinical Psychology**, Englewood Cliffs, NJ: Prentice-Hall.
- SARBIN, T.R. & Kitsuse, J.I. (eds)(1994). **Constructing the Social**, London: Sage.
- SCHEI, L.K. & Moberg, G. (1988). **The Shetland Story**, London: Batsford.
- SESSIONS, G. (1987). The deep ecology movement: A review. **Environmental Ethics**, 8, 105-125.
- SHOTTER, J. & Gergen, K. (1989). **Texts of Identity**, London: Sage.
- SILVERMAN, D. (1985). **Qualitative Methodology and Sociology: Describing the social world**, Aldershot: Gower.
- SMITH, A.P. (1983). The effects of noise and memory load on a running memory task. **British Journal of Psychology**, 74, 439-445.
- SMITH, H.D. (1984). **Shetland Life and Trade**, Edinburgh: John Donald.
- SOMMER, R. (1969). **Personal Space: The behavioural basis of design**, Englewoods Cliffs, NJ: Prentice-Hall.
- SPENCER, C. & Dixon, J. (1983). Mapping the development of feelings about the city: A longitudinal study of new residents' affective maps. **Transactions of the Institute of British Geography**, New Series 8, 373-383.
- SPENCER, C., Blades, M. & Morsley, K. (1989). **The Child in the Physical Environment**, Chichester: Wiley.
- STOKOLS, D. (1976). Social unit analysis as a framework for research in environmental and social psychology. **Personality and Social Psychology Bulletin**, 2, 350-358.

- STOKOLS, D. (1977). Origins and directions of environment-behavioural research. In D. Stokols (ed) **Perspectives on Environment and Behaviour: Theory, research and applications**, New York and London: Plenum, 5-36.
- STOKOLS, D. (ed) (1977). **Perspectives on Environment and Behaviour: Theory, research and applications**, New York and London: Plenum.
- TAYLOR, R.B. (1987). Toward an environmental psychology of disorder: Delinquency, crime, and fear of crime. In D. Stokols & I. Altman (eds) **Handbook of Environmental Psychology**, New York: Wiley.
- TESTER, D. (1991). **Animals and Society: The humanity of animal rights**, London: Routledge.
- THOMAS, K. (1983). **Man and the Natural World: A history of the modern sensibility**, New York, NY: Pantheon Books.
- THOMPSON, M. (1991). Plural rationalities: The rudiments of a practical science of the inchoate. In J.A. Hansen (ed) **Environmental Concerns: An interdisciplinary exercise**, London: Elsevier Applied Science. 243-256.
- TUNSTALL, J. (1962). **The Fishermen: The sociology of an extreme occupation**, London: McGibbon & Kee.
- VERGÈS, P. (1989). Représentations sociales de l'économie: Une forme de connaissance. In D. Jodelet (ed) **Les Représentations Sociales**, Paris: Presses Universitaires de France. 387-432.
- VYGOTSKY, L. (1929/1978). **Mind in Society**, Cambridge, Mass: Harvard University Press.
- WARNER, W.W. (1984). **Distant Water: The fate of the North Atlantic fisherman**, Harmondsworth: Penguin.
- WATSON, J.B. (1913). Psychology as the behaviourist views it. **Psychological Review**, 20, 159-177.
- WEBB, E.J., Campbell, D.T., Schwartz, R.D. & Sechrest, L. (1966). **Unobtrusive Measures: Nonreactive research in the social sciences**, Chicago: Rand McNally.
- WHITE, G. (ed) (1974). **Natural Hazards: Local, national, global**, New York: Oxford University Press.
- WICKER, A.W. (1979). **An Introduction to Ecological Psychology**, New York: Cambridge University Press.

- WILLEMS, E.P. (1977). Behavioral ecology. In D. Stokols (ed) **Perspectives on Environment and Behaviour: Theory, research and applications**, New York and London: Plenum, 39-68.
- WILLS. J.W.G. (1991). **A Place in the Sun: Shetland and the oil - myths and realities**, St.John's, Newfoundland: Institute of Social and Economic Research.
- WYNNE, B. (1987). **Risk Management and Hazardous Waste: The dialectics of credibility**, London: Springer-Verlag.
- WYNNE, B. (1989). Sheepfarming after Chernobyl: A case study in communicating scientific information. **Environment**, 31 (2), 10-15, 33-39 (Reprinted in H. Bradby (ed) (1991) **Dirty Words: Writings on the history and culture of pollution**, London: Earthscan, 139-160).
- WYNNE, B. (1996). Misunderstood misunderstandings: Social identities and public uptake of science. In A. Irwin & B. Wynne (eds) **Misunderstanding Science? The public reconstruction of science and technology**, Cambridge: Cambridge University Press, 19-46.
- YEARLEY, S. (1992). **The Green Case: A sociology of environmental arguments, issues and politics**, London: Routledge.
- YIN, R.K. (1981). The case study crisis: Some answers. **Administrative Science Quarterly**, 26, 58-65.
- YIN, R.K. (1989). **Case Study Research: Design and methods**, Beverly Hills, Sage Publications (Second edition).

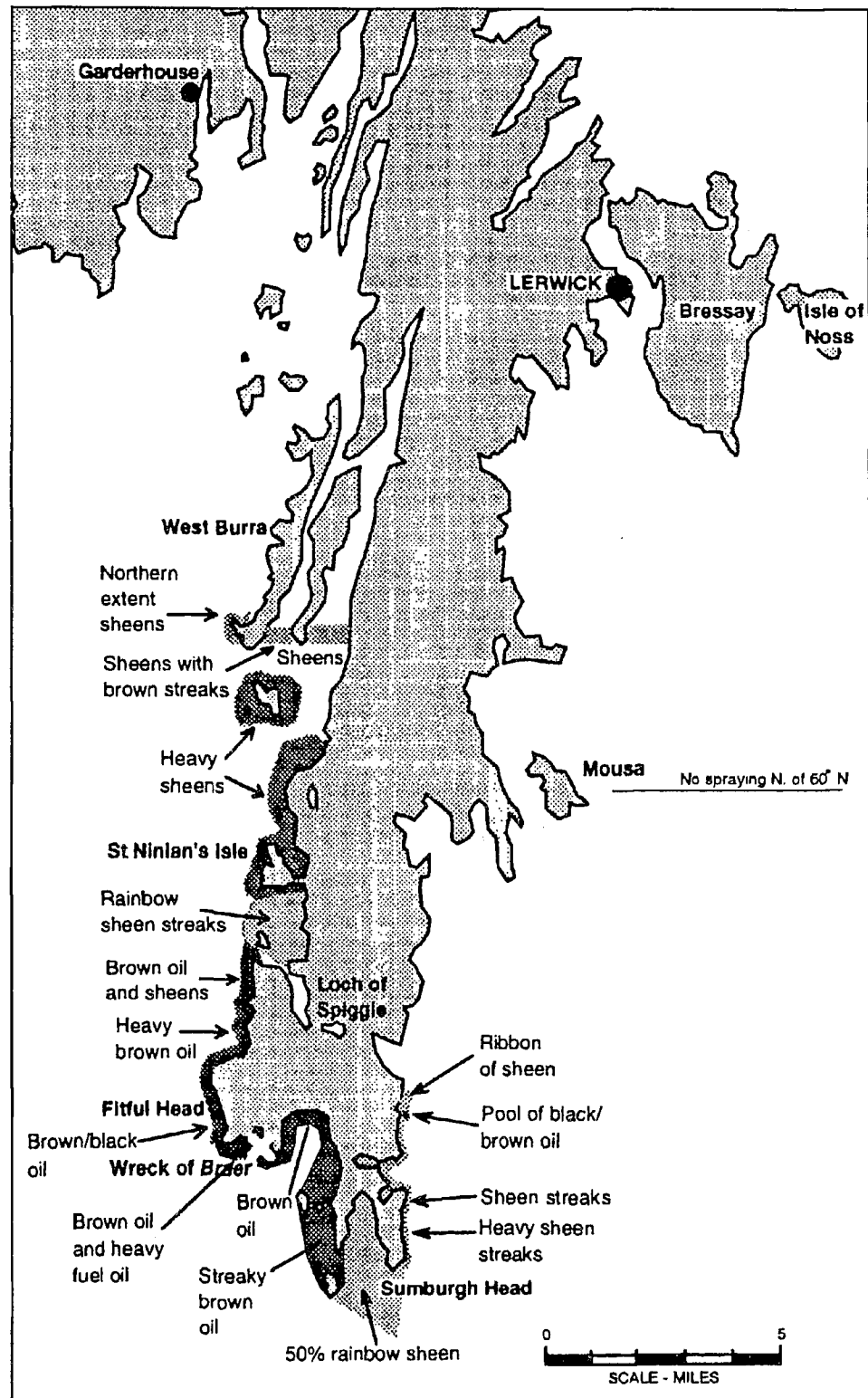
## **ANNEXE 1**

Extent of pollution on Wednesday 6 January 1993



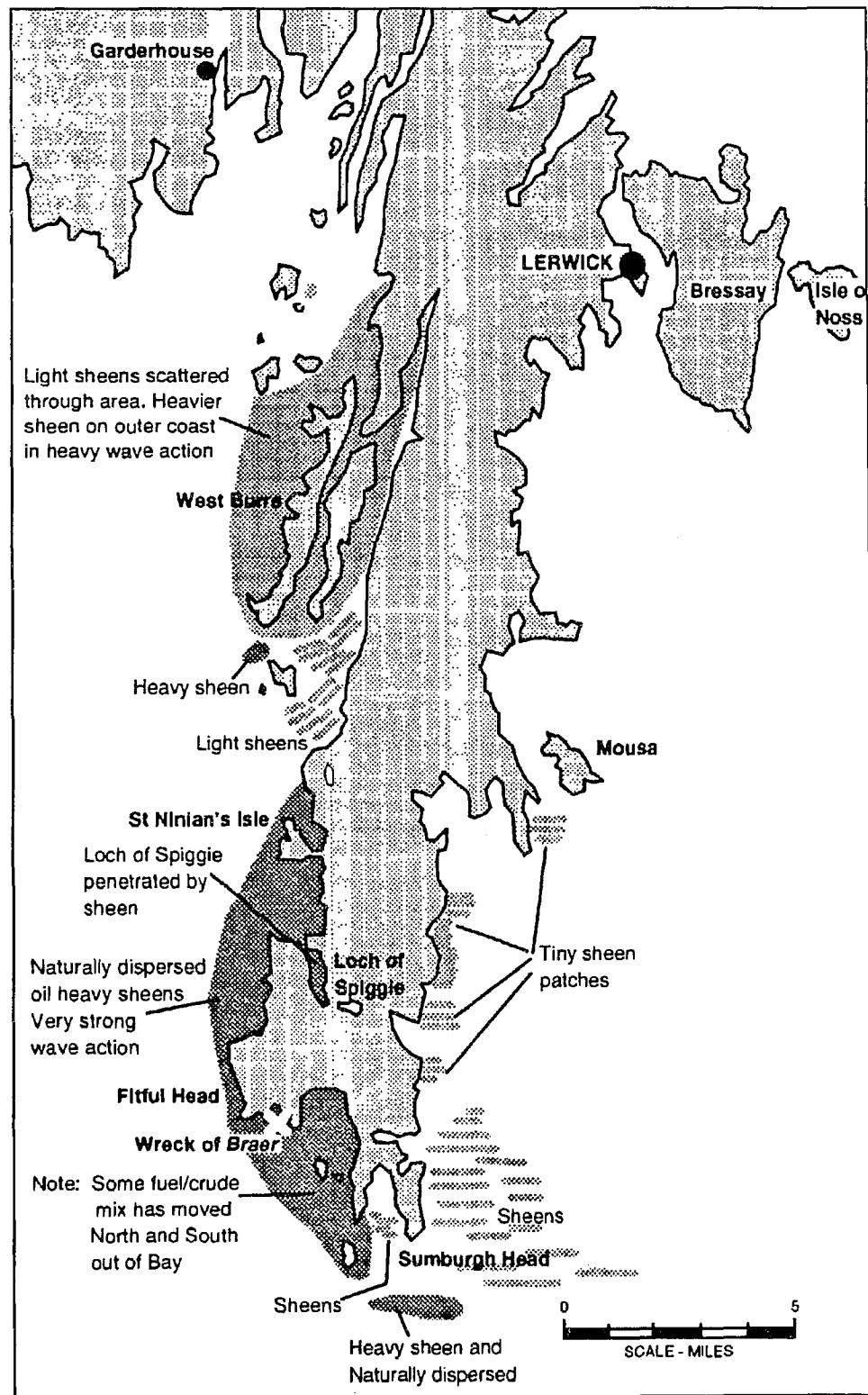
Source: The Braer Incident. Shetland Islands, January 1993.,  
Marine Pollution Control Unit, Department of Transport,  
HMSO, 1994.

Extent of pollution on Thursday 7 January 1993



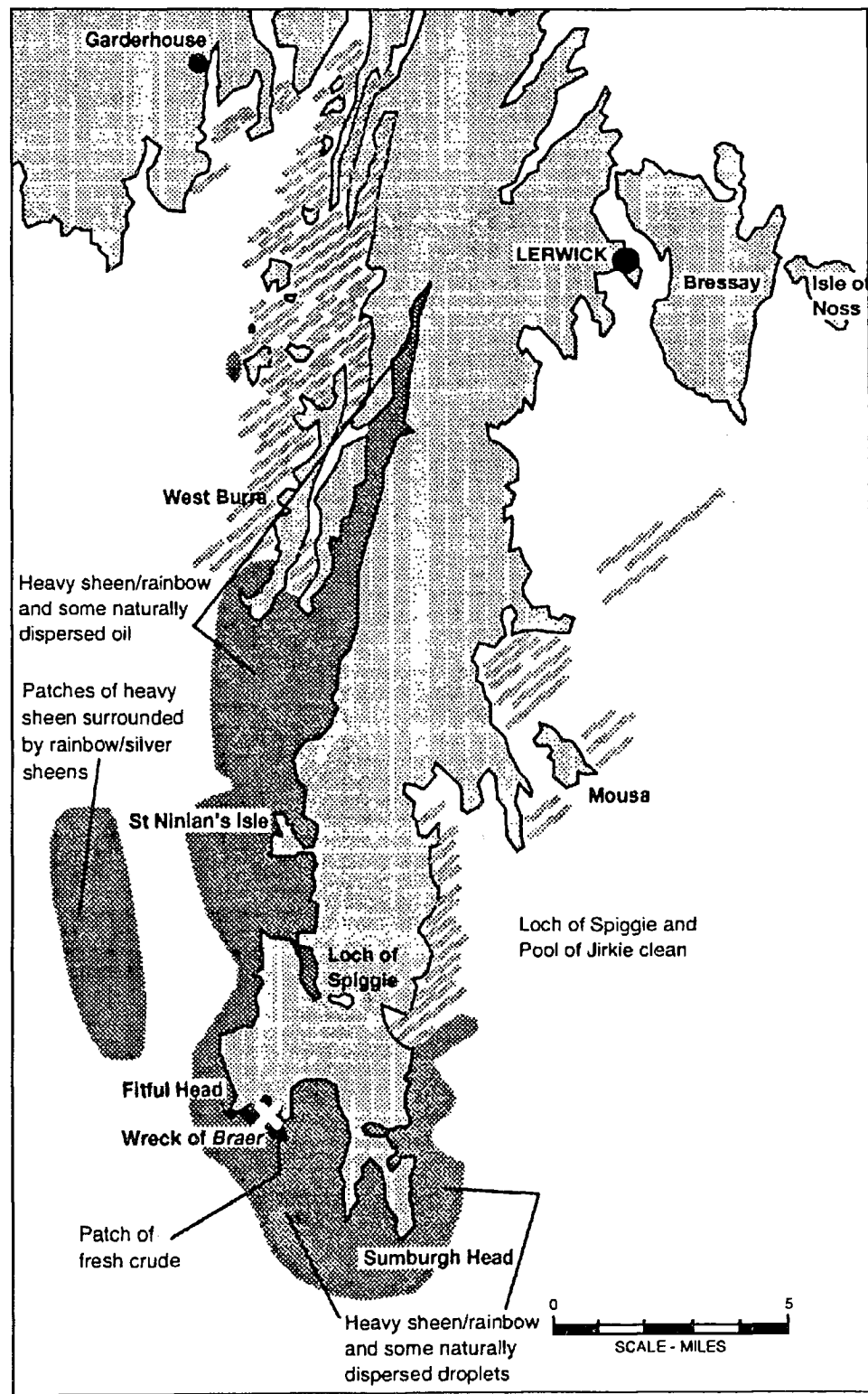
Source: The Braer Incident. Shetland Islands, January 1993.,  
Marine Pollution Control Unit, Department of Transport,  
HMSO, 1994.

# Extent of pollution on Friday 8 January 1993



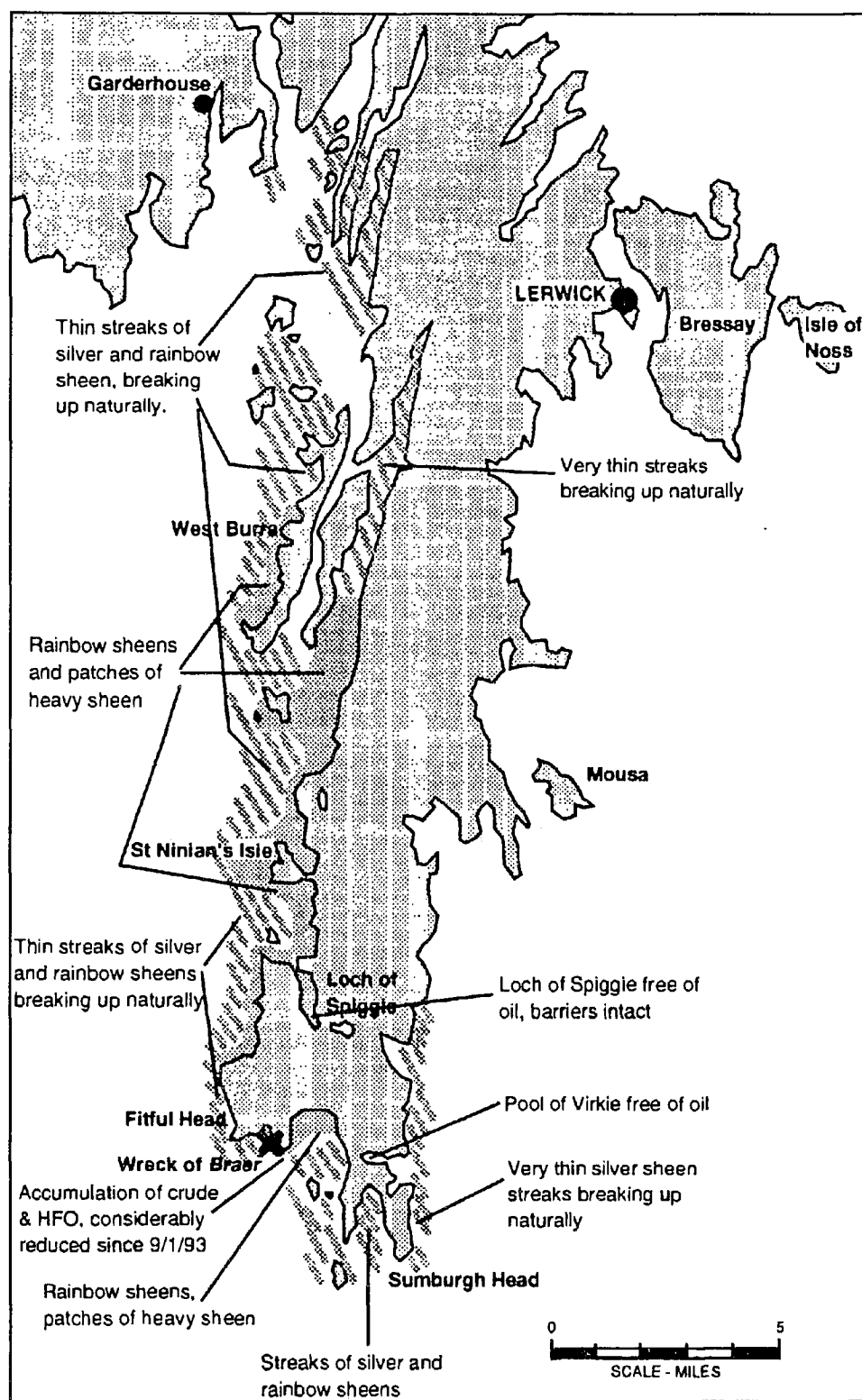
Source: The Braer Incident. Shetland Islands, January 1993., Marine Pollution Control Unit, Department of Transport, HMSO, 1994.

# Extent of pollution on Saturday 9 January 1993



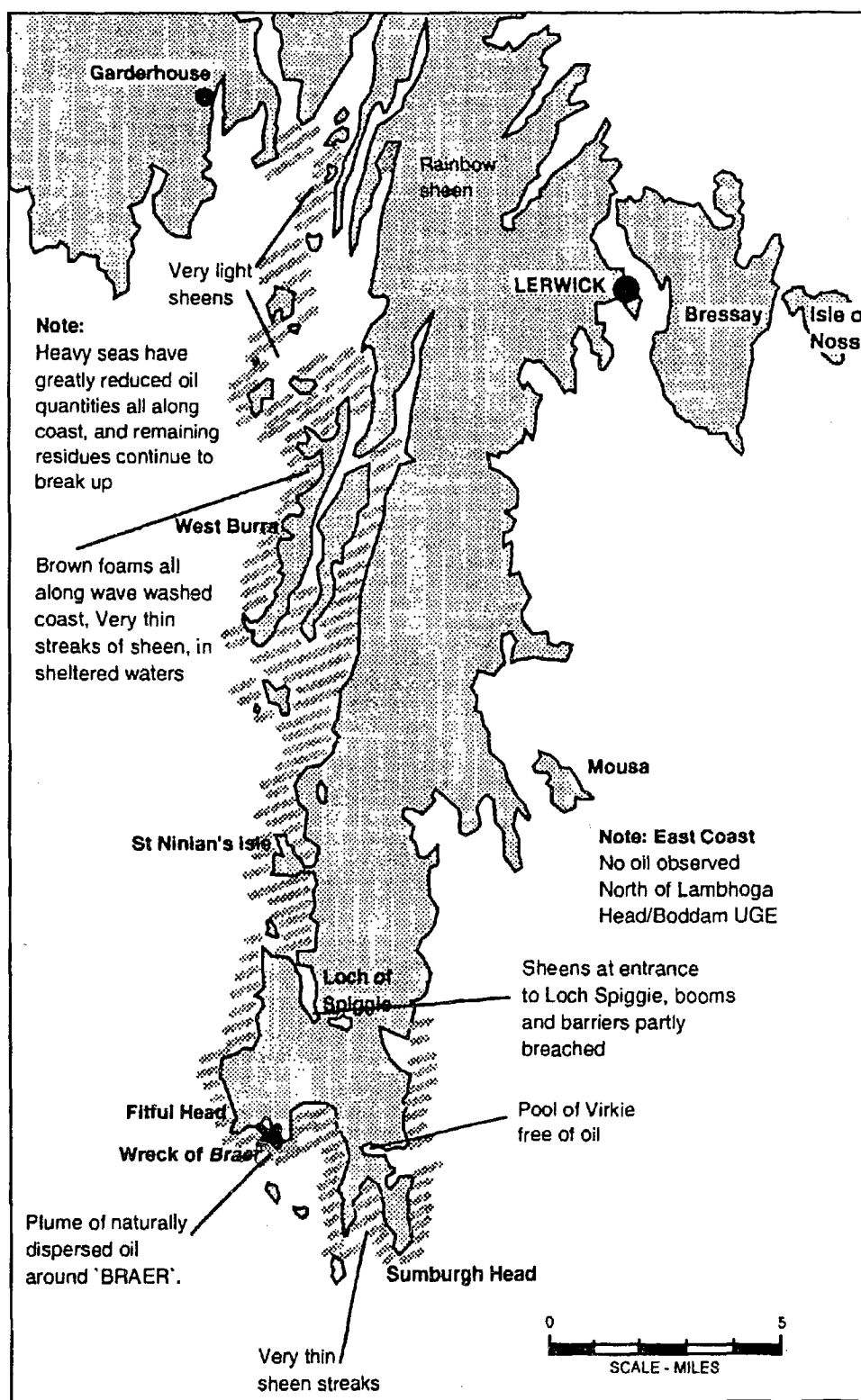
Source: The Braer Incident. Shetland Islands, January 1993., Marine Pollution Control Unit, Department of Transport, HMSO, 1994.

# Extent of pollution on Sunday 10 January 1993



Source: The Braer Incident. Shetland Islands, January 1993., Marine Pollution Control Unit, Department of Transport, HMSO, 1994.

# Extent of pollution on Monday 11 January 1993



Source: The Braer Incident. Shetland Islands, January 1993., Marine Pollution Control Unit, Department of Transport, HMSO, 1994.

## **ANNEXE 2**

**Table 1: Qualitative Synopsis of *The Shetland Times*. Headlines of front page and editorials**

Date (issue)	Front page (F)/"The Old Rock" (editorial) (E)
01/08/93, (01)	<ul style="list-style-type: none"> <li>- "DEADLY CARGO. Worst fears realised as tanker spills" (F)</li> <li>- "Weather is key to evacuation" (F)</li> <li>- "Unheeded warnings" (E)</li> </ul>
01/15/93, (02)	<ul style="list-style-type: none"> <li>- "Cruel sea cleans it up" (F)</li> <li>- "New claims over tanker master's role" (F)</li> <li>- "Hard to quell health fears" (F)</li> <li>- "A mood of optimism" (E)</li> </ul>
01/22/93, (03)	<ul style="list-style-type: none"> <li>- "Storm chaos as records shatter" (F)</li> <li>- "Rights of passage" (E)</li> </ul>
01/29/93, (04)	<ul style="list-style-type: none"> <li>- "Labour's Scottish spokesman hits a 'blanket of silence'. Secrecy on test results comes under attack" (F)</li> <li>- "Self-defeating secrecy" (E)</li> </ul>
02/05/93, (05)	<ul style="list-style-type: none"> <li>- "Salmon farmers face total ruin" (F)</li> <li>- <i>no editorial</i></li> </ul>
02/12/93, (06)	<ul style="list-style-type: none"> <li>- "Salmon slaughter due within weeks" (F)</li> <li>- "Ministers snob SIC conference" (F)</li> <li>- "Heavy vetting" (E)</li> </ul>
02/19/93, (07)	<ul style="list-style-type: none"> <li>- "Caithness might come after all" (F)</li> <li>- "Descending into farce" (E)</li> <li>- "Little local difficulty" (E)</li> </ul>
02/26/93, (08)	<ul style="list-style-type: none"> <li>- "Accusations fly high in compensation row" (F)</li> <li>- "No surprise" (E)</li> </ul>
03/05/93, (09)	<ul style="list-style-type: none"> <li>- "Compensation deal agreed" (F)</li> <li>- <i>no editorial</i></li> </ul>
03/12/93, (10)	<ul style="list-style-type: none"> <li>- "Mystery oil came from <i>Braer</i>" (F)</li> <li>- <i>no editorial on the Braer</i></li> </ul>
03/19/93, (11)	<ul style="list-style-type: none"> <li>- "Cool treatment angers petition delegation" (F)</li> <li>- "No surprises" (E)</li> </ul>
03/26/93, (12)	<ul style="list-style-type: none"> <li>- <i>no front page report on the Braer</i></li> <li>- <i>no editorial on the Braer</i></li> </ul>
04/02/93, (13)	<ul style="list-style-type: none"> <li>- "Global audience plans action for the future" (F)</li> <li>- "Not cutting any ice" (E)</li> </ul>
04/09/93, (14)	<ul style="list-style-type: none"> <li>- "Boost for farmers as smolts arrive" (F)</li> <li>- "Prince is all set to return" (F)</li> <li>- "A letter to Santa" (E)</li> </ul>
04/16/93, (15)	<ul style="list-style-type: none"> <li>- <i>no front page report on the Braer</i></li> <li>- <i>no editorial on the Braer</i></li> </ul>

**Table 1:** Qualitative Synopsis of *The Shetland Times*. Headlines of front page and editorials (continued)

Date (issue)	Front page (F)/ "The Old Rock" (editorial) (E)
04/23/93, (16)	- "Inquiry hears scheme criticised" (F) - <i>no editorial</i>
04/30/93, (17)	- "Sheep should be kept off land" (F) - <i>no editorial</i>
05/07/93, (18)	- <i>no front page report on the Braer</i> - <i>no editorial</i>
05/14/93, (19)	- <i>no front page report on the Braer</i> - <i>no editorial on the Braer</i>
05/21/93, (20)	- "Labour throws down radar gauntlet" (F) - "Grazing land released" (F) - "Paying for pollution" (E) - "So who cares?" (E)
05/28/93, (21)	- "Huge loss hits salmon companies after spill" (F) - <i>no editorial on the Braer</i>
06/04/93, (22)	- "Donaldson rejects calls for radar in the interim" (F) - "Second round of health tests" (F) - <i>no editorial on the Braer</i>
06/11/93, (23)	- "Compensation breakthrough. Victory for seafood associations" (F) - " <i>Braer</i> firm faces action" (F) - "We need to know more" (E)
06/18/93, (24)	- <i>no front page report on the Braer</i> - <i>no editorial</i>
06/25/93, (25)	- "Clean-up plan was inadequate" (F) - "Still no comment" (F) - <i>no editorial on the Braer</i>
07/02/93, (26)	- <i>no front page report on the Braer</i> - "Good news after bad" (E)

**Table 2: Qualitative Synopsis of *The Shetland Times*. "The tanker *Braer* disaster"**

Date (issue)	"The tanker <i>Braer</i> disaster" (page number)
01/08/93, (01)	<ul style="list-style-type: none"> <li>- "Countdown to major oil spill" (2)</li> <li>- "As we watched we felt pathetic" (2-3; <i>continued from front page</i>)</li> <li>- "Last ditch bid to save ship from the rocks" (3)</li> <li>- "Questions on anchors" (3)</li> <li>- "'Stay away' warning" (3)</li> <li>- "Costs quiz for the PM" (3)</li> <li>- "Scale of problems widens day by day as oil spreads" (4)</li> <li>- "Convener praises emergency team" (4)</li> <li>- "Crew members tell of escape in 65 mph winds" (4)</li> <li>- "Greek master claims help came too late" (5)</li> <li>- "Plea for tanker ban in channel" (5)</li> <li>- "Contingency plans swiftly in operation" (5)</li> <li>- "Supply boat captain frustrated by events" (5)</li> <li>- "Cancelled orders rumour denied" (6)</li> <li>- "Ewing demands action on tankers" (6)</li> <li>- "Oil in Loch of Spiggie bird reserve" (6)</li> <li>- "<i>Braer</i> US-owned" (6)</li> <li>- "Full effects on wildlife not yet clear" (7)</li> <li>- "Council launches scheme to compensate Ness crofters" (7)</li> <li>- "Litigation lawyers urge 'don't rush'" (8)</li> <li>- "Ministers visit scene" (8)</li> <li>- "Rules of road" (8)</li> <li>- "Firm faces ruin following storms" (8)</li> <li>- "Air attack on oil" (8)</li> <li>- "Tourism fears" (8)</li> <li>- "Sanctuary ready" (8)</li> </ul>
01/15/93, (02)	<ul style="list-style-type: none"> <li>- "Ten days on and now is the time to look ahead" (2)</li> <li>- "SIC to move to Ness to show their support" (2)</li> <li>- "Pilot says he made the right decision" (2; <i>continued from front page</i>)</li> <li>- "Warning that bunker oil may still pose threat" (3; <i>continued from front page</i>)</li> <li>- "Informal protest" (3)</li> <li>- "Interest in telling the truth" (3; <i>continued from front page</i>)</li> <li>- "Fish chiefs move to keep industry's image clean" (4)</li> <li>- "Anger turns on store as Marks and Spencer call a halt" (4)</li> <li>- "Fish tested and used to feed the national media" (5)</li> <li>- "Tourism campaign launched to 'keep Shetland on the map'" (5)</li> <li>- "Fishermen astonished at decision to abandon early" (5)</li> <li>- "Master praised by coastguard" (6)</li> <li>- "Coastguard releases time table of the disaster" (6)</li> <li>- "Position doubt" (6)</li> <li>- "Ship's failure raises more questions than answers" (7)</li> <li>- "Speculation dangerous says ferry captain" (7)</li> <li>- "'Warnings unheeded'" (7)</li> <li>- "Labour's prevention plan" (8)</li> <li>- "Calls for radar watch round coast" (8)</li> <li>- "Tanker off Skye claim!" (8)</li> </ul>

Table 2: Qualitative Synopsis of *The Shetland Times*. "The tanker *Braer* disaster" (continued)

Date (issue)	"The tanker <i>Braer</i> disaster" (page number)
01/15/93, (02) (...continued)	<ul style="list-style-type: none"> <li>- "Concerts planned" (8)</li> <li>- "Council gives congratulations" (8)</li> <li>- "About turn in wake of <i>Braer</i> accident" (8)</li> <li>- "Concerns over ships seen off Fair Isle" (8)</li> <li>- "Inquiry into wider issues announced in Commons" (9)</li> <li>- "Wallace backs union call" (9)</li> <li>- "MacGregor makes visit to "appaling tragedy"" (9)</li> <li>- "MP warned Government of dangers" (9)</li> <li>- "Advert in "extreme bad taste"" (9)</li> <li>- "SIC chief moves to quell fear on spray" (10)</li> <li>- "Dispersant use is questioned" (10)</li> <li>- "How to use masks" (10)</li> <li>- "Spray contents remain secret" (11)</li> <li>- "Health tests take place in the Ness" (11)</li> <li>- "Royal visit to wrecked ship" (12)</li> <li>- "Farmers and crofters get "sympathetic response". Agriculture gets organized to look towards the long term" (12)</li> <li>- "Wildlife death toll continues to rise as oil comes ashore" (13)</li> <li>- "Expert arrives from States" (13)</li> <li>- "Co-op donates washing-up liquid to sanctuary" (13)</li> <li>- "Society launch appeal" (13)</li> <li>- "Isles as wild as ever" (13)</li> <li>- "Checks on water supply increased" (14)</li> <li>- "Society sends a sympathy message to Isles" (14)</li> <li>- "MP asks "was it a disaster?"" (14)</li> <li>- "Millions available for compensation claims" (14)</li> <li>- "Scientists to assess effects on plant life" (14)</li> <li>- "Threat to airport from media's style of parking" (14)</li> <li>- "Fish worry closes market" (14)</li> <li>- "Claims men visit" (15)</li> <li>- "Speak out on radio" (15)</li> <li>- "Councillors describe how community coped" (15)</li> <li>- "Will it affect the isles roofs?" (15)</li> <li>- "Dutch link renewed" (15)</li> <li>- "Fertiliser will help" (15)</li> <li>- "Spill prediction" (15)</li> <li>- "Bairns will be on radio" (15)</li> <li>- "Calamity shakes Norwegian oil community" (16)</li> <li>- "Weather hampers salvage attempts" (16)</li> <li>- "Previous incident recalled" (16)</li> <li>- "Young people voice concern" (16)</li> <li>- "Emergency chain of command" (16)</li> <li>- "Alaskan key to clean-up" (17)</li> <li>- "Fears fuelled by speculation" (17)</li> <li>- "Advice on how to cope with feeding changes" (18)</li> <li>- "Extent of land pollution" (18)</li> <li>- "What to do if you have oil on your farmland" (18)</li> <li>- "HLCA forms out" (18)</li> </ul>

Table 2: Qualitative Synopsis of *The Shetland Times*. "The tanker *Braer* disaster" (continued)

Date (issue)	"The tanker <i>Braer</i> disaster" (page number)
01/15/93, (02) (...continued)	<ul style="list-style-type: none"> <li>- "Crofters want things to be kept in proportion" (19)</li> <li>- "British Sugar among first to offer help" (19)</li> <li>- "Sheep clear so far" (19)</li> <li>- "Director tours scene" (19)</li> <li>- "Stock monitoring will start soon" (19)</li> <li>- "Fodder available" (19)</li> </ul>
01/22/93, (03)	<ul style="list-style-type: none"> <li>- "Blood samples all clear so far" (6)</li> <li>- "Burra bears the brownish brunt" (6)</li> <li>- "Water test results may be published" (6)</li> <li>- "Vet takes a spin" (6)</li> <li>- "Time to unwind" (6)</li> <li>- "Avoid oily bruck says isles' top doctor" (7)</li> <li>- "Dispersant chemical fails toxicity tests" (7)</li> <li>- "'Dirty money' is in the post" (7)</li> <li>- "The hazards of neat acid" (7)</li> <li>- "Wallace writes to PM" (7)</li> <li>- "Greenpeace leaflet" (7)</li> <li>- "Call for inquiry to be held public in Shetland" (8)</li> <li>- "Alaskan city sends sympathy" (8)</li> <li>- "Oiled birds mystery" (8)</li> <li>- "Essex people and wildlife centre" (8)</li> <li>- "Salmon on MP's menu?" (8)</li> <li>- Concern was "sadly prophetic" (8)</li> <li>- "Sounding off. An occasional commentary. <i>Shetland Times</i> chief reporter Rob Fogg considers some aspects of the aftermath of the tanker disaster" (8)</li> <li>- "Labour unhappy about dispersant secrecy" (8)</li> <li>- "Hundreds signing up" (9)</li> <li>- "Ship traffic system call gets backing of council" (9)</li> <li>- "Help from Edinburgh" (9)</li> <li>- "Labour warns on compensation" (9)</li> <li>- "Superb response - Tories" (9)</li> <li>- "Chamber issues guidance" (10)</li> <li>- "Many complexities in disaster compensation" (10)</li> <li>- "Group set up" (10)</li> <li>- "Officials to meet over monitoring" (10)</li> <li>- "Divers sample the sea" (11)</li> <li>- "Questions arise over the peculiar brown grass" (11)</li> <li>- "Consultants will assess the impact" (11)</li> <li>- "Council means to recover everything it had to spend" (11)</li> <li>- "Chainstore has to eat its words over salmon" (11)</li> <li>- "seaway closed to tankers" (12)</li> <li>- "Board hears of difficulty in bid to reassure people" (12)</li> <li>- "Don't spread fertiliser" (12)</li> <li>- "Fears over mental health" (12)</li> <li>- "Stored crops are safe" (12)</li> <li>- "Youngsters have their say" (12)</li> </ul>

Table 2: Qualitative Synopsis of *The Shetland Times*. "The tanker *Braer* disaster" (continued)

<i>Date (issue)</i>	"The tanker <i>Braer</i> disaster" (page number)
01/22/93, (03) (...continued)	<ul style="list-style-type: none"> <li>- "Overwhelming response to plan to save industry" (13)</li> <li>- "Coastguard did the right thing claims mmariner" (13)</li> <li>- "Hundreds offer to help" (13)</li> <li>- "Vagsoy concerned" (13)</li> <li>- "SNP calls for safeguards" (13)</li> <li>- "Results given to SFA in confidence. Exclusion zone tests are carried out" (14)</li> <li>- "Puffins under threat" (14)</li> <li>- "Call for more volunteers" (14)</li> <li>- "Mousa clean" (14)</li> <li>- "Advert plays "annoying"" (14)</li> </ul>
01/29/93, (04)	<ul style="list-style-type: none"> <li>- "Move may mean a revision of boats' claims" (6; <i>continued from front page</i>)</li> <li>- "Dispersant alert as drums spring leak" (6)</li> <li>- "£1m grant for fund" (6)</li> <li>- "Computer model may be simply a dotty prediction" (6)</li> <li>- "Lang sets up group" (6)</li> <li>- "SIC appoints legal firm" (6)</li> <li>- "Water in fuel tanks to blame, say owners. B&amp;H explain power failure" (7)</li> <li>- "Bulk of inquiry to be held in London" (7)</li> <li>- "Master mariners query statement" (7)</li> <li>- "Few claim forms returned so far" (7)</li> <li>- "Petition success" (8)</li> <li>- "Wrong George" (8)</li> <li>- "Group formed" (8)</li> <li>- "Staff praised" (8)</li> <li>- "Anchor report" (8)</li> <li>- "Stay off beaches, signs warn" (8)</li> <li>- "Tanker completely broken up" (8)</li> <li>- ""Hold inquiry in public"" (8)</li> <li>- "EC calls for wide ranging review of sea regulations" (8)</li> <li>- "Two names as assessors in Donaldson inquiry" (8)</li> <li>- "PM warned of economy fear" (8)</li> <li>- "Co-ordinator now at work" (8)</li> <li>- "Plea for probe by sheriff" (8)</li> </ul>
02/05/93, (05)	<ul style="list-style-type: none"> <li>- "Tissue tests show sheep are clean" (9)</li> <li>- "Salmon firm quits" (9)</li> <li>- "Accusations fly over cash" (9)</li> <li>- "Group appointed" (9)</li> <li>- "Health survey funding" (9)</li> <li>- "All salmon inside zone tainted" (9)</li> <li>- "Debate declined by tanker firm" (10)</li> <li>- "Damage "minimal" - tourist chief" (10)</li> <li>- "Animal feed scheme changes tomorrow" (10)</li> <li>- "Solicitors warn of claims office "conflict of interest"" (11)</li> <li>- "The black rain in Spain..." (11)</li> </ul>

**Table 2:** Qualitative Synopsis of *The Shetland Times*. "The tanker *Braer* disaster" (continued)

Date (issue)	"The tanker <i>Braer</i> disaster" (page number)
02/05/93, (05) (...continued)	<ul style="list-style-type: none"> <li>- "Disaster evidence for US Congress" (11)</li> <li>- "Results of tests in library" (11)</li> <li>- "Chairman visits lab" (11)</li> <li>- "<i>Braer</i> claims meeting" (11)</li> <li>- "One in five signs" (11)</li> </ul>
02/12/93, (06)	<ul style="list-style-type: none"> <li>- "Fish farmers face cash crisis" (8)</li> <li>- "Action group formed at Ness meeting" (8)</li> <li>- "At last - the Scottish Office gives results" (8)</li> <li>- "Clean up of beaches will be left to nature" (8)</li> <li>- "IMO boss concerned at lack of progress on safety" (9)</li> <li>- "Squabble warning" (9)</li> <li>- "Petition will be taken to the Prime minister" (9)</li> <li>- "Children rally round for isles" (9)</li> <li>- "Waters out of bounds around <i>Braer</i> wreck" (9)</li> <li>- "Inquiry in isles plea" (9)</li> <li>- "Crofting committee now in operation" (9)</li> <li>- "Alaska spill hit health" (10)</li> <li>- "Heated exchanges on monitoring of the land" (10)</li> <li>- "SNP angered by snub" (10)</li> <li>- "Voluntary ban" (10)</li> <li>- "Contamination is denied" (10)</li> </ul>
02/19/93, (07)	<ul style="list-style-type: none"> <li>- "Hay fever hits as big bales arrive" (6)</li> <li>- "New monitor unit is set up" (6)</li> <li>- "Mullay sends personal letters" (6)</li> <li>- "Agreement reached to continue watching sheep" (6)</li> <li>- "Blow to anglers" (6)</li> <li>- "Doubt over legal fees" (6)</li> <li>- "Warning sign is up at Ireland" (6)</li> <li>- "Meeting will hear health results" (6)</li> <li>- "Compensation delay a threat to livelihoods" (7)</li> <li>- "Growers may need letter" (7)</li> <li>- "Inquiry call" (7)</li> <li>- "Bigton meeting" (7)</li> <li>- "EC chief visits" (7)</li> <li>- "£1000 for wildlife" (7)</li> <li>- "Hay or pulp?" (7)</li> <li>- "Ecological steering group members named" (7)</li> <li>- "Negligence" not to put radar" (7)</li> <li>- "Publishers to donate cash from book's sales" (7)</li> </ul>
02/26/93, (08)	<ul style="list-style-type: none"> <li>- "Ecological group meet next week" (6)</li> <li>- "Payment problems for salmon farmers" (6)</li> <li>- "Submissions to inquiry" (6)</li> <li>- "Feed available for crofters" (6)</li> <li>- "Promise on results" (6)</li> <li>- "Donaldson inquiry to hear evidence on isles" (6)</li> <li>- "Scientists 'let down' by Skuld" (7)</li> <li>- "Bid for fishing aid" (7)</li> </ul>

**Table 2:** Qualitative Synopsis of *The Shetland Times*. "The tanker *Braer* disaster" (continued)

Date (issue)	"The tanker <i>Braer</i> disaster" (page number)
02/26/93, (08) (... continued)	<ul style="list-style-type: none"> <li>- "Beaches not being analysed" (7)</li> <li>- "Report claims no cause for concern" (7)</li> <li>- "Contamination levels in exclusion zone fall" (8)</li> <li>- "No intention to dupe anybody" (8; <i>continued from front page</i>)</li> <li>- "Scientists probe oil's origin" (8)</li> <li>- "Agenda changed" (8)</li> <li>- "Land treatment confusion" (8)</li> <li>- "Revelation fuels campaign" (8)</li> <li>- "Fishing ban may be lifted" (9)</li> <li>- "Health study result "reassuring"" (9)</li> </ul>
03/05/93, (09)	<ul style="list-style-type: none"> <li>- "Back to sea for Hillswick seals" (12)</li> <li>- "Italian eye on the isles" (12)</li> <li>- "Public to have a say on study" (12)</li> <li>- "Movement seeks regulation" (12)</li> <li>- "Dispersants objection" (12)</li> <li>- "Lloyd's pay out share of insurance" (13)</li> <li>- "Moves to allay health fears in the Ness" (13)</li> <li>- "Tanker masters could be reported" (13)</li> <li>- "Format agreed" (13)</li> <li>- "Labour ire over inquiry" (13)</li> <li>- "Hazard cargoes on agenda" (13)</li> <li>- "Political discussions" (13)</li> <li>- "Jarlshof samples taken for analysis" (14)</li> <li>- "Fishing still improving" (14)</li> <li>- "Divers in SNH survey" (14)</li> <li>- "Full backing for petition" (14)</li> <li>- "Moves to protect the coast" (14)</li> <li>- "Salmon to be fed to farmed mink" (14)</li> <li>- "Call for clear-up of beach storm debris" (14)</li> </ul>
03/12/93, (10)	<ul style="list-style-type: none"> <li>- "Traffic scheme urged" (14)</li> <li>- "Social workers do their bit" (14)</li> <li>- "More problems for salmon farms" (14)</li> <li>- "Friends of the Earth gives evidence" (14)</li> <li>- "Conference debate" (14)</li> <li>- "Political parties unite over <i>Braer</i>" (14)</li> <li>- "Trout samples given clean bill of health" (14)</li> <li>- "Collect cheques" (14)</li> <li>- "Seals freed" (14)</li> <li>- "Disappointment at Ness meeting" (15)</li> <li>- "Burra and Trondra will bide their time" (15)</li> <li>- "Sailor's chaplain expresses thanks" (15)</li> <li>- "Ecological funding" (15)</li> <li>- "Resolution" (15)</li> </ul>
03/19/93, (11)	<ul style="list-style-type: none"> <li>- "Exclusion zone future unclear" (10)</li> <li>- "Openness pledge" (10)</li> <li>- "Union evidence" (10)</li> <li>- "Meeting moved" (10)</li> </ul>

**Table 2:** Qualitative Synopsis of *The Shetland Times*. "The tanker *Braer* disaster" (continued)

Date (issue)	"The tanker <i>Braer</i> disaster" (page number)
03/26/93, (12)	<ul style="list-style-type: none"> <li>- "Salmon slaughter delayed" (8)</li> <li>- "More oil appears off Burra" (8)</li> <li>- "Cross-party forum make demands" (8)</li> <li>- "Compensation payments pass the £3.5m mark" (8)</li> <li>- "Route code welcomed" (8)</li> <li>- "Fisheries groups amalgamate" (8)</li> <li>- "Action plea by trust" (8)</li> <li>- "Shop appeal cheque presented" (8)</li> </ul>
04/02/93, (13)	<p>See Table 2.1.</p> <ul style="list-style-type: none"> <li>- "It's symbolic, don't you know" (15)</li> <li>- "Nature group's pollution plan" (15)</li> <li>- "Minister accused" (15)</li> <li>- "Interim report on seawater monitoring" (15)</li> </ul>
04/09/93, (14)	See Table 2.1.
04/16/93, (15)	<ul style="list-style-type: none"> <li>- "Tests yield cheer" (6)</li> <li>- "Compensation claim by community discussed" (6)</li> <li>- "Warning sigh to come down as all-clear given" (6)</li> <li>- "Inquiry to begin" (6)</li> <li>- "No zone change due as tests continue" (6)</li> </ul>
04/23/93, (16)	<ul style="list-style-type: none"> <li>- "As inquiry gets under way Labour fears a prejudiced view" (13)</li> <li>- "Birds casualties might be worse" (13)</li> <li>- "Close watch to be kept on oil" (13)</li> <li>- "Opposition expressed" (13)</li> <li>- "Bigton group awaits community council's meeting" (13)</li> <li>- "Land quality results have still not arrived" (13)</li> <li>- "Study well under way" (13)</li> <li>- "£5.26m handed out" (13)</li> </ul>
04/30/93, (17)	- no report under "The tanker <i>Braer</i> disaster" heading
05/07/93, (18)	- no report under "The tanker <i>Braer</i> disaster" heading
05/14/93, (19)	<ul style="list-style-type: none"> <li>- Meeting to hear MPs" (7)</li> <li>- "Effectiveness of double hulls queried" (7)</li> <li>- "Claims dismissed as "pure speculation" (7)</li> <li>- "Cash used to fund new wildlife trust" (7)</li> <li>- "Donaldson Inquiry arrives next week" (7)</li> <li>- "Study to be carried out on otter population" (7)</li> </ul>
05/21/93, (20)	See Table 2.2.

The section on the tanker disaster ceased to exist after May, 14, 1993. Articles on the *Braer* were scattered across the newspaper.

**Table 2.1: Qualitative Synopsis of *The Shetland Times*. Special section: "Managing the Marine Environment: Conference Reports"**

Date (issue)	"Managing the Marine Environment: Conference Reports" (page number)
04/02/93, (13)	<ul style="list-style-type: none"> <li>- "A "chance to help change things"" (11)</li> <li>- "Caithness opens conference" (11)</li> <li>- "Shellfish worst affected" (12)</li> <li>- "Full effects of pollution on birds may never be known" (12)</li> <li>- "Elements saved situation" (12)</li> <li>- "Missing <i>Braer</i> oil may be in sediment" (12)</li> <li>- "Chemical companies condemned" (12)</li> <li>- "Minister tells audience action is being taken" (12; <i>continued from page 11</i>)</li> <li>- "Pollution of sea debated" (13)</li> <li>- "Seaborne litter problem" (13)</li> <li>- "Funding call" (13)</li> <li>- "Sutherland calls for radical action now" (13)</li> <li>- "IMO representative outlines their position" (13)</li> <li>- "Insurers will not pay on damage to the environment" (14)</li> <li>- "Transferable quotas explained" (14)</li> <li>- "Worst problems caused by myriad of small emissions" (14)</li> </ul>
04/09/93, (14)	<ul style="list-style-type: none"> <li>- "Agenda for Action draft is presented" (12)</li> <li>- "International views on fishing quotas compared" (13)</li> <li>- "A potential role for the EC inmarine protection" (14)</li> <li>- "Lessons learned from the <i>Exxon Valdez</i> spill" (14)</li> <li>- "<i>Braer</i> played down" (14)</li> <li>- "Harbour's safety role" (14)</li> <li>- "EPA concept defended" (15)</li> <li>- "An Alaskan view of sea pollution" (15)</li> </ul>

Table 2.2: Qualitative Synopsis of *The Shetland Times*. Special section: "The Donaldson Inquiry"

Date (issue)	"The Donaldson Inquiry" (page number)
05/21/93, (20)	<ul style="list-style-type: none"> <li>- "The ideas came forward but the audience stayed away" (6-7)</li> <li>- <i>quotes highlighted in the text:</i> <ul style="list-style-type: none"> <li>- "We could as vulnerable next January as we were this January." (Jim Wallace, MP)</li> <li>- "We would like to know the answer about the <i>Braer</i> as much as the people of Shetland." (Lord Donaldson)</li> <li>- "Another <i>Braer</i> could totally finish off Shetland." (Isobel Mitchell)</li> <li>- "We beseech you to make an interim recommendation for a pilot radar scheme." (Peter Hamilton)</li> <li>- "You are asking for radar coverage without the means of identifying the ship." (Lord Donaldson)</li> <li>- "It's not just a knee-jerk xenophobic petition." (Isobel Mitchell)</li> <li>- "Shetland utterly depends on the sea for its livelihood. It is very vulnerable." (Lawrence Graham)</li> <li>- "Shetland plays a pivotal role in the Government's revenue, yet we are still unprotected." (Isobel Mitchell)</li> <li>- "There may be more than one way of killing a cat or a passing ship." (Lord Donaldson)</li> <li>- "The recommendations which we will make are recommendations which ought to be accepted by any reasonable Government." (Lord Donaldson)</li> <li>- "Radar alone would not prevent every accident." (Lord Donaldson)</li> <li>- "We very much appreciate the feeling of urgency on the part of the Shetland Islanders." (Lord Donaldson)</li> <li>- "We need to safeguard our shores this winter." (Brian Smith)</li> </ul> </li> </ul>

**Table 3: Quantitative Synopsis of *The Shetland Times*: Number of articles per section**

Date (issue)	Number of articles on front page and editorials	Number of articles on "The tanker <i>Braer</i> disaster"
01/08/93, (01)	3 article(s)	26 article(s)
01/15/93, (02)	4	73
01/22/93, (03)	2	48
01/29/93, (04)	2	23
02/05/93, (05)	1	16
02/12/93, (06)	3	16
02/19/93, (07)	3	18
02/26/93, (08)	2	18
03/05/93, (09)	1	19
03/12/93, (10)	1	14
03/19/93, (11)	2	4
03/26/93, (12)	0	8
04/02/93, (13)	2	20
04/09/93, (14)	3	8
04/16/93, (15)	0	5
04/23/93, (16)	1	8
04/30/93, (17)	1	0
05/07/93, (18)	0	0
05/14/93, (19)	0	6
05/21/93, (20)	4	1
05/28/93, (21)	1	0
06/04/93, (22)	2	0
06/11/93, (23)	3	0
06/18/93, (24)	0	0
06/25/93, (25)	2	0
07/02/93, (26)	1	0
<b>TOTAL</b>	<b>44</b>	<b>331</b>

## **ANNEXE 3**

**Table 4:** Characteristics of participants in individual interviews

CODE	SEX	AGE	OCCUPATION	AREA	ORIGINS
01	F	47	crofter/housewife/B&B	Lerwick	Shetlander
02	M	46	farmer	*Bigton	Shetlander
03	M	50	crofter	*Hillwell/Quendale	Shetlander
04	M	45	deep sea fisherman	*Papil	Shetlander
05	F	36	school teacher	Cunningsburgh	Non Shetlander
06	M	61	crofter	*Hillwell/Quendale	Shetlander
07	M	21	oil worker	*Sandwick	Shetlander
08	M	34	oil worker	Lerwick	Shetlander
09	M	23	oil worker	Lerwick	Shetlander
10	M	51	marine engineer/counsellor	*Sandwick	Shetlander
11	F	69	retired medical doctor	Lerwick	Non Shetlander
12	M	30	energy conservationist	Lerwick	Non Shetlander
13	F	47	crofter	*Hillwell/Quendale	Shetlander
14	M	36	inshore fisherman	*Levenwick	Shetlander
15	M	42	deep sea fisherman	Lerwick	Shetlander
16	F	27	housewife	Tingwall House	Non Shetlander
17	M	42	salmon farmer	*Papil	Shetlander

**NOTE:** The asterisk (\*) indicates that the place of residence is inside the Exclusion Zone (for fishing) or within a badly affected area.

Table 5: Characteristics of participants in small group discussions

Group discussion	Number of participants	Sex of participants				Nature of the group/activity	Direct impact of the oil spill on the group members
G1	4	M	M	M	M	Salmon farmers working on the same farm	The farm is outside the Exclusion Zone. But salmon reputation is jeopardised
G2	3	*M	F	F		A family: husband, wife and daughter	Live in Lerwick; run a B&B which is dependent on the tourist industry
G3	4	*M	M	M	F	Members of an <i>ad hoc</i> organization called the "Action Group"	All live and work in the immediate vicinity of the oil spill (Hillwell/Quendale)
G4	3	*M	F	F		Members of an <i>ad hoc</i> organization called the "Action Group"	All live and work relatively near the site of the oil spill (Turnibrae)
G5	4	M	M	M	F	A deep sea fishing crew and the aunt of the skipper	Live in "unaffected" area (Lerwick and Whalsay) but fish inside the Exclusion Zone

**NOTE:** All participants are "born and bred" or "real" Shetlanders except for three men, respectively members of groups 2, 3 and 4. They are identified by an asterisk (\*).

## **ANNEXE 4**

**Table 6:** Synopsis of the public debate "The Cost of the *Braer* for Shetland". Length of utterances (% of total debate) by participants

Sections of <i>Speaking Out</i>	Role of participants	Identification of participants	Length of utterances (% of debate)
Introduction	BBC host	Leslie Riddoch	36 (5.2)
	BBC interviewer	Hughan MacKelreiss	10 (1.4)
	Shetland farmer	Davy Nicholson	39 (5.7)
Live debate	BBC host	Leslie Riddoch	172 (25.0)
	Panel	Chief executive of SIC	92 (13.4)
		Convener of SIC	30 (4.4)
		SIC Director of public health	19 (2.7)
	Members of the audience	SIC Director of marine operations	10 (1.4)
	Experts	SIC Director of environmental services	17 (2.5)
		Norwegian Insurance Association	43 (6.3)
		Greenpeace spokesman	7 (1.0)
		Natural scientist (American)	9 (1.3)
		Natural scientist (British)	15 (2.2)
	Shetland residents (lay people)	<i>Sooth-Moothers:</i> a) petition organiser	(60) 31 (4.5)
		b) journalist	29 (4.2)
		<i>Born and bred Shetlanders:</i> a) South Mainland residents	(120) 43 (6.3) 14 (2.0)
		b) two adolescents	17 (2.5) 9 (1.3)
		c) two SIC councillors	11 (1.6)
		d) two social workers	26 (3.7)
		e) Davy Nicholson (NFU)	
		f) general	
	Others	Unidentified	9 (1.3)