

East Kimberley Impact Assessment Project

THE DEVELOPMENT OF SOCIAL IMPACT
ASSESSMENT IN AUSTRALIA AND
OVERSEAS AND THE ROLE OF
INDIGENOUS PEOPLES

Donna Craig*

May 1989

East Kimberley Working Paper No.31
ISBN 0 86740 359 4
ISSN 0816-6323

A Joint Project Of The:

Centre for Resource and Environmental Studies
Australian National University

Australian Institute of Aboriginal Studies

Anthropology Department
University of Western Australia

Academy of the Social Sciences in Australia

The aims of the project are as follows:

1. To compile a comprehensive profile of the contemporary social environment of the East Kimberley region utilising both existing information sources and limited fieldwork.
2. Develop and utilise appropriate methodological approaches to social impact assessment within a multi-disciplinary framework.
3. Assess the social impact of major public and private developments of the East Kimberley region's resources (physical, mineral and environmental) on resident Aboriginal communities. Attempt to identify problems/issues which, while possibly dormant at present, are likely to have implications that will affect communities at some stage in the future.
4. Establish a framework to allow the dissemination of research results to Aboriginal communities so as to enable them to develop their own strategies for dealing with social impact issues.
5. To identify in consultation with Governments and regional interests issues and problems which may be susceptible to further research.

Views expressed in the Project's publications are the views of the authors, and are not necessarily shared by the sponsoring organisations.

Address correspondence to:

The Executive Officer
East Kimberley Project
CRES, ANU
GPO Box 4
Canberra City, ACT 2601

THE DEVELOPMENT OF SOCIAL IMPACT
ASSESSMENT IN AUSTRALIA AND
OVERSEAS AND THE ROLE OF
INDIGENOUS PEOPLES

Donna Craig*

May 1989

East Kimberley Working Paper No.31
ISBN 0 86740 359 4
ISSN 0816-6323

* School of Law, Macquarie University, Sydney, Australia.

TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGEMENT	iii
INTRODUCTION	1
ORIGINS OF SIA	3
Industrialisation and Growth of Policy Sciences	3
Technology Assessment, Environmental Impact Assessment and Social Impact Assessment as Forms of Policy Science	8
The Relationship between SIA and Other Social Research	10
DEFINITIONS OF SIA	11
CONCEPTUAL ORIENTATIONS AND SIA METHODOLOGIES	12
The Mackenzie Valley Pipeline Inquiry - An Example of Politically-Oriented SIA	14
Some Characteristics of Politically-Oriented SIA	16
DEVELOPING SOCIOCULTURAL FORMS OF SIA	17
Theoretical Contexts	17
INDIGENOUS PEOPLES AND THE PRACTICE OF SOCIOCULTURAL FORMS OF SIA	22
THE NORTH AMERICAN EXPERIENCE - SIA AND NATIVE PEOPLES	23
The United States	23
SIA on the Alaska Native Claims Settlement Act, 1971	24
Canada	26
The Socio-Economic Impact Model for Northern Development	28
THE AUSTRALIAN EXPERIENCE - SIA AND ABORIGINAL PEOPLE	30
Ranger Uranium Environmental Inquiry	33
Scope of Inquiry	33
Procedures and Approach	34
Treatment of Aboriginal Concerns	35
Evaluation	36
Social Impact of Uranium Study	38
Background	38
Orientation and Methodologies	40
Treatment of Aboriginal Concerns	41
Evaluation	44
The Western Australian Aboriginal Land Inquiry	44
Procedures and Approach	45
Treatment of Aboriginal Concerns	47
Policy Recommendations	48
Evaluation	51

Community Impact Assessment At Turkey Creek	51
Background	51
Turkey Creek Communities	51
Orientation of Study and Choice of Approach	52
Terms of Reference	53
Study Process	53
Treatment of Aboriginal Concerns	55
Aboriginal Strategies	59
Evaluation	60
THE NEW ZEALAND EXPERIENCE - SIA AND MAORI PEOPLE	61
Background	61
The Waitangi Tribunal and Social Impact Assessment	63
CONCLUSIONS	68
Improving Political Approaches to SIA	68
REFERENCES	73

ABSTRACT

The East Kimberley Impact Assessment Project (EKIAP) drew on aspects of interdisciplinary research and impact assessment associated with the policy sciences. This was applied research done on behalf of Aboriginal people in the East Kimberley region of Western Australia who were concerned about the social impacts of a range of developments affecting the resources of their region. EKIAP particularly involved an area of policy sciences known as social impact assessment (SIA). A specific community SIA was undertaken with Turkey Creek Aboriginal communities as part of EKIAP. This paper is an attempt to improve our understanding of SIA and develop approaches that are more likely to meet the aspirations of indigenous peoples involved in it. The Turkey Creek Community SIA is reviewed in the context of a politically oriented approach to SIA. This approach is discussed by reference to the history and theories behind SIA and the practice of SIA, involving indigenous peoples, in Australia, Canada, United States and New Zealand. It is argued that developing the theories and approaches behind politically oriented SIA are very important. This aspect is emphasised in the paper. However, it is recognised that some readers will want more of a description of SIA, as practiced in indigenous communities. The parts of the paper dealing with SIA in Australia, Canada, United States and New Zealand can be read separately for this purpose.

ACKNOWLEDGEMENTS

This working paper comes at the end of an interdisciplinary research project which gave many opportunities to draw on the knowledge of other researchers and the Aboriginal people of the East Kimberley region of Western Australia. Particular thanks go to the Turkey Creek communities for their warm hospitality and helping to 'make me understand' during my visits there.

I have worked closely with two colleagues, on this project-Helen Ross and Ben Boer. The final working paper is my own opinion and work. However, the opportunity to learn and exchange ideas with Helen and Ben has been invaluable. It has operated in the best of academic and interdisciplinary traditions.

My thanks go to Helen Ross, Ben Boer and Nigel Vertigan for their comments on my draft working paper. I also thank Helen Ross for her intellectual contribution to EKIAP. Her Turkey Creek Community SIA provided an essential dimension to the project, along with her other contributions to EKIAP as a whole. Dr H C Coombs is well recognised for his role in Australian Society. My thanks to him for initiating EKIAP and for his dedication shown through many years of hard work on the project.

Special appreciation is due to Maggie Liston, Carolyn Powell and Joan Rattray for their careful typing under difficult conditions.

Macquarie University has supported this project with research grants, which have been essential to undertake research in a remote area of Australia. It was also partly supported by an Australian Research Council Grant.

INTRODUCTION

This working paper is part of a wider interdisciplinary research project known as the East Kimberley Impact Assessment Project (EKIAP). EKIAP was initiated in response to a request from Aboriginal organisations in the East Kimberley region of Western Australia for a social impact assessment on Argyle diamond mine. Aboriginal approaches to government departments on this issue had failed, and the mine was developed on traditional Aboriginal land, with little involvement by Aboriginal people. Other significant changes were occurring in the region such as accelerating land degradation, the decline of the pastoral industry, the promotion of tourism and the formation of Purnululu (Bungle Bungle) National Park (also on traditional Aboriginal land). These developments had separate and cumulative impacts on Aboriginal people who were seeking strategies to influence decisions about them and to deal with environmental (including social) impacts.

EKIAP was an unusual research project, in the Australian context, because it was an independent interdisciplinary study which reported to the Aboriginal communities in the East Kimberley region. Few studies of this type have been carried out with a regional and Aboriginal focus and which were independent of Government and developers. This enabled greater flexibility in fixing terms of reference and developing baseline data. The other important characteristic of EKIAP was that it was an action-oriented policy study. It was meant to provide a resource to begin a process whereby Aboriginal people influenced plans and decisions that affected them. A more detailed description of EKIAP can be found in the report of the Project, called The Land of Promises (Coombs, et al 1989: Appendix A).

The major area of 'action' research in industrialised Western nations is known as applied policy research or the policy sciences. EKIAP particularly involved an area of the policy sciences known as social impact assessment (SIA). Bowles defines

SIA as an 'application of social science methodology to assist in social planning' (1981:5). Aboriginal people in the East Kimberley are greatly concerned about the social impacts of resource developments on their culture and living conditions. SIA is most commonly practiced as part of the environmental impact assessment of specific projects. SIAs are rarely controlled by Aboriginal people and emphasise 'expert' analysis of quantifiable social impacts of projects such as the provision of services. This can be identified as the technical approach to SIA which predominates in the dominant industrialised culture of Australia.

Aboriginal people are faced with a conflict between a desire to maintain their own unique culture and the need to influence the research and decision processes of the dominant culture which are insensitive to their needs and concerns. SIAs involving Aboriginal people raise cultural interface issues and deep seated institutional and political problems relating to their positions as Australia's indigenous minority. This working paper will examine the intellectual and political origins of SIA to see whether any approaches hold potential for indigenous people such as Australian Aborigines.

The paper will particularly examine politically oriented approaches to SIA which focus on sociocultural impacts. The political orientation does not locate SIA within any specific political ideology or party organisation. It simply recognises that SIA is part of the formation of public policy. This is a process of social change and the politically oriented approach promotes values such as social equity, citizen participation, community development and access to information which seek to influence the direction of that change in a more enlightened and democratic way.

These values cannot be uncritically applied and utilised by Aboriginal people. The Social Impact of Uranium Study Report (1985) argues that Aboriginal people are asserting a contemporary Aboriginal culture, which attempts to deal with industrialisation

yet still retain a unique world view about the relationship between people and the social and physical environment. Some of the researchers in EKIAP (Ross, Craig and Boer) sought a vehicle for developing methods of SIA suitable for Aboriginal people, within the promising but underdeveloped 'political' set of approaches to SIA (CEARC 1985:5). This led to a proposal for a community SIA at Turkey Creek with Aboriginal control over terms of reference and approaches. This study (Ross, 1989) which will be described later in this paper, also drew on and contributed to other EKIAP studies.

This working paper is intended as a theoretical counterpart to the Community SIA Study. It will give an historical theoretical and practical background to the development of SIA in Australia and overseas. Some significant SIA models and studies will be examined to suggest orientations and approaches which would be most useful to Aborigines and other indigenous people in their struggle to have their sociocultural concerns reflected in decisions affecting them.

It is recognised that SIA is linked to the policy decision-making process of the dominant culture. Therefore, the working paper will discuss the practice of SIA involving indigenous peoples and how their wider aspirations for land, self-determination and an economic base for their communities can be reflected in the decisions of the dominant culture.

ORIGINS OF SIA

Industrialisation and The Growth of Policy Sciences

SIA is a form of policy science which developed with industrialisation. The history of industrialisation therefore provides important background to SIA. During this period, we have expanded our technical capacity to alter the natural world and exploit natural resources. In the 19th century this required the mobilisation of a huge labour force as well as scientific

advances and technical innovation. Liberal philosophy provided a powerful justification for the social transformations required, with an emphasis on the individual, and the role of markets as the most neutral and efficient way of allocating goods in society. Consequently, the role of the State was considered to be to let free market forces operate and only to intervene in rare cases (for example, when market forces were themselves threatened). Liberalism was a political ideology which went beyond economics. Using Hobbes' concept of social utility, classical liberals argued that free markets operated for the ultimate common good because they were the best way of satisfying the wants of the greatest number of individuals (Hunt 1978:38).

Some theorists characterised the resulting social system as an industrial market society (Macpherson, 1973:27). The purposes of this society, and the role of the individual in it, became narrowly defined:

The consumer concept depicts humans as insatiable desirers and appropriators. It suggests that humans are moved by their essential nature to consume and acquire and that these consumptive and acquisitive urges can never be fully satisfied. Consequently, this concept implies that human activities and means of social organisation ought to be primarily concerned with the ever increasing production of commodities and services (Gibson in Elder 1975:11).

This view of humans as being devoid of ethics and socially meaningful action (beyond self-interest) is relatively new. Macpherson argued that 'from Aristotle until the seventeenth century it was more usual to see the essence of man as purposeful activity, as exercise of one's energies in accordance with some rational purposes, than as the consumption of satisfactions' (quoted by Gibson in Elder 1975:13). The consumer concept can be contrasted with the Christian paternalist ethic which promoted ideas of reciprocity and distribution during the feudal era (Hunt 1978:9). Historically, humans have been capable of acting in a public realm with non-materialist and communal values about the common good (see Arendt 1958:22-28).

It is clear that the economic and ideological imperatives of the industrial market society have stressed growth at almost any cost to the environment (Torgerson 1980:71). Industrialization also affected the human and physical environment in non-industrialized countries, in the quest for cheap labour and resources. Overseas colonialism developed in parallel with the industrialized metropolis. Internal colonialism which exploited indigenous people and their land has had serious consequences for those people. A colonial relationship often endures long after its formal institutional arrangements disappear. These issues have not been readily addressed, though attention has been given to the more obvious environmental problems which emerged in the industrialized metropolis. In this context, there have been significant adaptations necessitated by growing evidence of environmental 'externalities' and the increasingly interventionist role of the state in market regulation and participation. One response has been systematic attempts to 'scientise' the decision-making process.

The basic momentum of industrialisation (oriented to economic growth) has not halted but the policy sciences have been developed to make complex policy choices appear more rational and to manage undesirable outcomes (Tribe 1973:618, Torgerson, 1980:7). There has been increased emphasis on efficiency and 'scientific' determination of policy issues. After World War II, the application of social science to policy issues was characterised as policy science (or applied policy analysis). Early forms such as cost benefit analysis, emerged in the 1920's, but primarily developed after the 1950s.

The policy sciences drew on variants of positivism (particularly empiricism and functionalism) which emphasized quantification, scientific method (derived from the physical sciences) and objectivity (see Torgerson 1980:142). This provided a powerful source of authority, based on 'scientism':

the conviction that we can no longer understand science as one form of possible knowledge, but rather to identify knowledge with science (Habermas 1971:74).

Positivism emerged with the growth of industrialisation and it was far from being objective and neutral. It was strongly associated with liberal ideology (Torgerson 1980:67). This new form of 'scientific' authority was a replacement for more participatory, democratic traditions in the social sciences. People had little chance to exert any ethical relationship to the physical environment or other people in the positivist approach to social sciences. Fundamental questions about industrialisation were not on the agenda. Additionally, the reductionist view of knowledge which positivism projected seriously limited our intellectual capacity to understand and resolve environmental problems:

... the users of policy-analytic techniques are under constant pressure to reduce the many dimensions of each problem to some common measure in terms of which 'objective' comparison seems possible - even when this means squeezing out 'soft' but crucial information merely because it seems difficult to quantify or otherwise render commensurable with the 'hard' data in the problem. Thus, because policy-analytic techniques prove most powerful when the various dimensions of a question are reduced to a common denominator, or at least to smoothly exchangeable attributes, the continuing tendency that accompanies analytic techniques is to engage in such reduction whenever possible, with the result not only that 'soft' variables tend to be ignored or understated but also that entire problems tend to be reduced to terms that misstate their underlying structure and ignore the 'global' features that give them their character (Tribe 1973:627).

Therefore, positivist approaches to policy science could not, by themselves, address the most serious problems caused by industrialisation.

Proposals for new approaches focused on social values and the relationships between humans and the environment. Tribe questioned the values inherent in contemporary decision-making

and argued that we will never be able to resolve environmental problems so long as the satisfaction of human wants is the determinant of social policy (1974:1333). Social ecologists connected our current inability to stop exploiting the natural world (in spite of the ominous warnings of groups such as the Club of Rome - see Meadows et al, 1972) with the crisis in the relationships between human beings. We are unlikely to stop attempts to dominate nature while we continue to dominate other human beings (Bookchin 1982:22). Our environmental crisis is intrinsically related to our social crisis.

Many environmental problems (such as population growth and resource depletion) are incapable of technical solution (Hardin 1968:1243) and any strategy dealing with contemporary environmental problems must address technical and social issues. Habermas has made a convincing argument that the greatest crisis facing industrialized society is how to give technology enlightened and democratic direction (1971:79-80). He stated that scientism was a new form of social domination and suggested that we must find new ways to understand and use scientific knowledge which facilitates the free communication necessary for a democratic society (1971:64-80).

Growth of the policy sciences in the 1960's was accompanied by the growth of the environmental movement and demands for more participation in policy making. At a broad level, there were demands for participatory democracy (see Pateman 1970). The technocratic tendency of the policy sciences was in contrast to the demands of these social movements. However, there were some adept attempts to incorporate some elements of these movements (such as participation) into policy sciences. In some cases, it meant 'business as usual' and participation was reactive to a limited technocratic agenda or involved information giving. Sometimes these movements could not be contained; this led to divergent trends in the policy sciences (Torgerson 1980:39). Torgerson argues that technical forms of policy science are predominant, but that more humanistic forms have emerged which emphasise historical and social contexts (Torgerson 1980:36-38).

Technology Assessment, Environmental Impact Assessment and Social Impact Assessment as Forms of Policy Science

It was in the complex period of the 1960's and 1970's that Technology Assessment (TA), EIA and SIA developed as policy sciences. The Office of Technology Assessment was established in the United States in 1970. TA began as a response to concern about controlling technological innovations such as nuclear fission and genetic manipulation. TA is a comprehensive study of the prospective impacts on society resulting from the introduction or modification of a particular technology, emphasising the unintended, indirect and delayed impacts (Coates, quoted in Porter and Rossini 1983:3). The purpose is to provide useful information in policy formulation and the focus is a macro level study. EIA and SIA are closely related to TA, but usually involve more specific study of the application of technology or extraction of resources.

It is appropriate to identify a branch of the policy sciences known generally as impact assessment which incorporates numerous sub-varieties (such as community impact assessment, cumulative impact assessment, regional impact assessment and urban impact assessment) sharing many common features. Rossini and Porter conclude that the common features of impact assessment variants are:

- * focus on effects
 - * have a future orientation
 - * address technological developments
 - * are systematic, comprehensive and interdisciplinary in principle
 - * are comparative and policy-oriented
- (1983:5)

Impact assessments may be predictive or take the form of monitoring studies or management plans (Corbett 1986:13). They can also provide a basis for negotiation and mediation, given

that knowledge and control of information are sources of power in decision-making (Corbett 1986: 90-92).

SIA and EIA have important origins in the requirements under the United States National Environmental Policy Act 1969 (NEPA). This Act required that all federal agencies 'utilize a systematic interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man's environment' (section 102(a)). Further, a detailed environmental impact statement (EIS) was required when a proposal for legislation, and other major federal actions, 'significantly affect the environment' (section 102(C)).

The legal requirement for SIAs was further strengthened by the NEPA Regulations, which stated:

Human environment shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment ... This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment (Regulation 1508.4).

The importance of unquantifiable environmental factors is also stressed, and environmental impact statements using cost-benefit analysis must 'discuss the relationship between that analysis and any analyses of unquantified environmental impacts, values and amenities' (Regulation 1502:23).

During the 1970's, EIA legislation spread throughout industrialised countries. However, EIA legislative frameworks often promoted project oriented EIA which focused on physical environmental impacts. EIA and SIA tended to perpetuate positivist approaches, even though they were inappropriate for many human-related aspects that were inherent in the assessments

(Torgerson, 1980:102). The strains and inadequacy of positivist approaches emerge most clearly in SIA, which has explicit objective and subjective dimensions, and often involves issues such as social equity (see Melser 1983:2). For this reason, it is appropriate to further investigate subjective dimensions of SIA in this paper. They are also likely to be significant for SIAs involving indigenous peoples.

The Relationship between SIA and Other Social Research

SIA is connected to other social research, although SIA appeared to have been discovered in the mid-1970s. The study of the impact of externally controlled events has a long history in anthropology and sociology (Bowles 1981:35). It can be seen as a localised study of social change which has much in common with community studies research (Bowles, 1981:8, Bell and Newby, 1972). It also draws on history and political science. Bowles sees a local community as a 'concrete context in which broad historical trends and forces operating during the epoch are expressed in the institutional patterns which individuals encounter in their everyday lives' (1981:9). Therefore, a localised study of social change must be grounded in historical context and take account of more general processes of social change occurring in society at a particular time (Bowles, 1981:9).

The main distinction between SIA and other social research is the emphasis on interdisciplinary study and its application to a precise policy making context. In this sense, SIA has an 'action' focus which is not typical of pure academic research. At the same time SIA must draw on knowledge and approaches contained in pure research. One of the problems with SIA is the frequent absence of good baseline research and the lack of a strong intellectual and theoretical tradition in applied research (see Dietz 1987, for a discussion about inadequate theoretical and conceptual bases for conducting SIA).

DEFINITIONS OF SIA

Much has been said about SIA as a specific version of policy science. No single definition can adequately describe an evolving and diverse field like SIA. Carley and Bustelo take a broad approach and describe SIA as 'an interdisciplinary approach to applied policy analysis and planning activity' (1984:16). Other definitions are more limited and stress the importance of predicting future social impacts and the application of SIA to proposals for specific resource projects. There is also a tendency for SIA definitions to treat community as an 'object' to be dissected for study, rather than as a cultural entity.

SIA is an essential aspect of EIA and project planning. However, the crucial social choices are usually made at a higher level in the planning process and the role of SIA in an integrated planning framework needs to be considered. Bowles identifies three activities for SIA as part of integrated planning:

- * Research should be conducted to establish propositions about processes by which impacting events affect those social phenomena considered important in the overall planning process.
- * Research must be designed to predict consequences of impacting projects being considered or planned (or to monitor existing projects).
- * Strategies must be formulated to ameliorate unwanted consequences.
(summarized, Bowles 1981:9).

The final activity is not research, but decision-making (Bowles 1981:9).

Four types of social change are usually investigated as part of SIA:

- * demographically related changes;

- * economically related changes;
- * resource related changes;
- * culturally related changes.

(Canadian Environmental Assessment Research Council 1985:2).

Many SIAs are undertaken to predict or monitor social impacts of constructions and resource developments. Other SIAs involving broader planning issues, have been undertaken on urban development, transmission line corridors and new communities (Carley and Bustelo 1984:2). There have also been SIAs on human services planning and programs, industrial closures (Melser 1982, Grady et al 1987) and legislation (the Alaska Land Claims Settlement Act, 1971, Berger 1985).

CONCEPTUAL ORIENTATIONS AND SIA METHODOLOGIES

Definitions of SIA do not reveal a great deal about the different approaches to SIA. Decisions about methodology will vary from study to study. They will be influenced by factors such as the nature of the decision process (eg stage in the planning process), the type/magnitude of proposal, the nature of community impacted, the level of funding and the political context. Methodology will also be influenced by the conceptual orientation of the researcher and who is undertaking the study (for example, it could be the proponent, the government or community).

The divergent traditions in policy sciences discussed earlier suggest that there are two main conceptual orientations- the technical and political approaches to SIA. It is useful to present the clearest dichotomy. Many SIAs show characteristics of both models, but will be substantially oriented towards the political or technical approach. The Canadian Environmental Assessment Research Council (CEARC) describes a technical model which is heavily influenced by positivism, with an elitist technocratic decision-making process. They characterise the political model as being influenced by critical social theory (which emphasises humanist approaches), participation, community development and the concept of SIA as part of a social process,

rather than a product (i.e. a social impact statement) (CEARC 1985:5).

The dichotomy developed below draws on these characteristics but links them more specifically to the industrial market society and historical context.

TABLE 1 : COMPARISON OF TECHNICAL AND POLITICAL APPROACHES TO SIA

Technical Approach

(i) Emphasis is placed on the product rather than the process of SIA.

(ii) It is influenced by the positivist approach to social theory and theory of democracy.

(iii) The decision-making process is portrayed as being objective.

(iv) Experts have a predominant role in decision-making and citizens are seen as 'consumers' who are incapable of exerting ethical concerns about the environment.

(v) It adopts the rationale of the industrial market society with an emphasis on maximising the quantity of commodities and efficiency in the production process.

(vi) There is a faith in technology as a means of curing environmental problems.

(vii) Scientific evidence is seen as being 'objective' and determinative.

(viii) Issues in the decision-making process are primarily identified as project specific (low level) and often relate to design and mitigation of environmental effects.

(ix) The primary focus is on SIA methods rather than the 'ends' or broader social policy issues.

Political Approach

(i) Emphasis is placed on community development and the decision-making process rather than product.

(ii) It is influenced by critical social theories and the developmental theories of democracy.

(iii) The decision-making process is portrayed as being value-laden and political in character.

(iv) Experts and scientific evidence are perceived to have some importance but the ultimate determinant of policy is seen as value choice.

(v) It adopts a critical view of industrial market society with its growth imperatives and focuses on alternative economic and social strategies which may evolve less exploitative values towards the environment.

(vi) There is an emphasis on socially useful and socially directed technology.

(vii) Issues in the decision-making process tend to be identified as higher level planning issues such as project need and alternatives as well as broad social strategies.

(viii) Conflict over social values is perceived as the reality in environmental controversies, and demands are made for them to be debated and determined in a democratic manner.

(ix) Attention is given to the historical and cultural context of the SIA.

Most guides to SIA methodologies stress the technical approach (Finsterbusch et al. 1983, Finsterbusch and Wolf 1977, Branch et al. 1984). There are few detailed expositions of the political approach. It is logical that there would be fewer 'standardised' or well-established methodologies in the political approach to SIA. SIA 's using this approach are meant to be grounded in the historical and political context and reflexive in nature. This reflexivity is required because the political approach makes it explicit that the study of social phenomena is problematic and the conduct of the SIA itself creates social impacts.

The technical dimensions of policy proposals are inescapable. Most commentators agree that SIA should combine technical and political elements (Lang and Armour 1980, Carley and Bustelo 1984). Conceptual orientations remain important because the degree of emphasis on each approach is significant. An example of synthesis of a technical approach with a very political orientation is the Mackenzie Valley Pipeline Inquiry (Berger 1977). A description of this inquiry is a good introduction to politically-oriented SIA.

The Mackenzie Valley Pipeline Inquiry - an example of politically-oriented SIA

The inquiry was conducted in two forums. Formal hearings were used for expert evidence on the proposed gas pipeline through Canada's North-West and Yukon territories. Cross examination was allowed and funding was provided to numerous native and regional organisations to gain independent expert evidence and to cover costs of participation. Free exchange of information was required and every participant (including government) had to list and exchange all relevant information. This approach was consistent with the technical approach to SIA, but also emphasised citizen participation and a right to information.

At the same time, Berger organised community hearings which showed a strong orientation towards the political approach. He

decided to make the inquiry more accessible to affected people by holding hearings in each city and town, settlement and village in the Mackenzie Valley and the Western Arctic. Procedures were informal and evidence could be given by people using their own language. Cross-examination was not allowed, but the 'right of reply' enabled other participants to 'correct' statements made or evidence presented.

The majority of residents in the region were native peoples living in remote areas. Berger went to these communities to hear about the impact of the proposals on the lives of local people. Communication was skilfully developed by the use of the Canadian Broadcasting Commission (CBC). Summaries of the inquiry were broadcast after each session in English and in native languages. These hearings recognised and valued the subjective and emotional aspects of social and economic impacts of the proposal which would bear especially on native people.

The inquiry specifically addressed the different perceptions of the northern Arctic - as frontier (for Europeans) and homeland (for native peoples). A critical view of industrialisation and the implications of its advance into this region was presented (Berger 1977:1-2). Industrialisation was not rejected as an option for northern development, but it was evaluated in the context of the aspirations of native people (particularly for land, self-determination and a sustainable indigenous economy), the needs for energy in the wider community and the protection of the northern environment (Berger, 1982:13). These issues had a broad moral and ethical dimension, and the inquiry contributed to a debate in Canadian society which has endured beyond the life of the inquiry.

In the conduct of the inquiry, the views presented in community hearings on these issues sometimes outweighed technical evidence:

Their testimony was often detailed and personal, illustrated with tragic and humorous anecdotes. The transcripts of this evidence are in themselves a major

contribution to Canadian history and culture. It was this testimony which drove home the essence of the claims issues.

The Inquiry linked together the many aspects of a particular issue. It became increasingly obvious that the whole issue of impact assessment was much greater than the sum of its constituent parts. Only in this way could the whole picture be put together, and only in this way could a rational impact assessment be made (Gamble 1978:951).

Gamble concluded that a unique blending of expert evidence and the thoughts of citizens in the Mackenzie Valley Pipeline Inquiry provided this linkage (1978:951).

Some Characteristics of Politically-Oriented SIA

There is some difficulty in characterizing every SIA as being technically or politically oriented. Procedures such as inquiries can be used in both technical and political SIA. Political approaches usually depart from formal adversarial inquiries and stress participation. Politically oriented SIA may also stress linkages between SIA and regional planning, cumulative impact assessment and decision-making processes. This is consistent with SIA as a 'process', which incorporates social change. The Community SIA undertaken as part of EKIAP (Ross 1989) clearly adopted the political orientation, with an initial emphasis of participatory and control strategies.

Research which primarily emphasizes the technical approach to SIA (as is common within EIA) frequently focuses on 'socio-economic' impacts. The truly social part seems to be lost or subsumed by economic impacts. Political approaches to SIA, as demonstrated by Berger in The Mackenzie Valley Pipeline Inquiry, try to recapture the integrity of a participatory public realm, which recognises diverse values and cultures. It is probably better to identify this kind of approach with the study of sociocultural impacts (see Little and Krannich 1989:25).

DEVELOPING SOCIOCULTURAL FORMS OF SIA

There is much more research and analysis needed to further develop sociocultural forms of SIA, utilising the political approach.

Theoretical Contexts

More needs to be said about the intellectual traditions which inform this type of SIA. Torgerson looks at SIA from the perspective of the sociology of knowledge and examines it as a social phenomenon, entwined with the broader processes of social life (1980:2). The humanistic perspective of sociology is aimed at understanding social meaning for the purpose of advancing social knowledge. Berger and Luckman have made significant contributions to the sociology of knowledge with their treatise on the social construction of reality (1966).

They advocate study of the socially constructed reality that forms the everyday world of human beings:

The method we consider best suited to clarify the foundations of knowledge in everyday life is that of a phenomenological analysis, a purely descriptive method and, as such 'empirical' but not 'scientific' as we understand the nature of the empirical sciences.

The phenomenological analysis of everyday life, or rather of the subjective experience of everyday life, refrains from any causal or genetic hypotheses, as well as from assertions about the ontological status of the phenomena analysed (Berger and Luckman 1966:34).

Some areas of psychology focus on the way individuals construct reality. Personal construct theory, for example, 'describes the way in which people construe or interpret their surroundings and events, and how these constructs or interpretations guide their actions' (Ross 1987:7). Ross extended this theory to the study of Aboriginal groups, and their perceptions of housing. She explores how personal constructs are linked and related to the study of culture:

Individuals communicate effectively through similarities of viewpoints. When one lives in a community in which there is a great deal of sharing of personal constructs, one finds people behaving similarly because they tend to expect the same things. Culture may thus be understood in terms of similarity of expectations (Kelly 1955). In this sense a group's common expectations may act as the standards against which individuals tend to verify their own constructs. As individual and group construing and behaviour are modified in accordance with the successive reinterpretation of experience, social change is likely to occur (1987:8).

There are difficulties in drawing on these theories and applying them to the policy sciences. Early attempts were made by Harold Lasswell after World War II (Lasswell and Lerner 1951). Lasswell had some difficulty in transcending positivism and his position on the role of citizen participation, and elites, in decision-making is complex (see Torgerson 1980:12,126-127). However, some of Lasswell's work is useful in developing political approaches to the policy sciences. His idea of configurative analysis stresses the relationship between part and whole (Lasswell 1935:16). Attention is given to detail but attempts are also made to draw connections between details and the broad structure of social life (Lasswell 1935:17). This requires an active posture for the analyst, who ought to undertake the task of 'self orientation' (Torgerson 1980:13). It also involves promoting 'contextuality' in policy oriented research:

'Contextuality' refers to the elaboration of a cognitive map by which the individual actor orients himself in the field of social action. The sense of 'contextuality', in other words, is the individual's 'picture of self-in-context', his sense of identity and location as it develops and transforms in a conscious effort which he makes to orient himself to his world. The social actor orients himself to his context along three main dimensions: space, time and meaning (Torgerson 1980:13).

This approach, when viewed from an historical perspective, is a developmental construct. Lasswell stresses that a

developmental construct is not predictive, but it is anticipatory in that it provides a 'speculative model' to order and comprehend apparent historical trends (Torgerson 1980:14). Lasswell insists that historical perspective is essential to identify the significant features of present social life and to understand them within the context of a meaningful totality. The person who studies 'social relationships', Lasswell argued, should allow their 'attention' to play back and forth continually 'from past events to a tentatively projected future' (Lasswell quoted in part by Torgerson 1980:15).

The developmental construct is an essential component of configurative analysis and 'contextuality'. Torgerson argues that the developmental constructs go beyond serving as a guide for policy analysis and action:

As a way of understanding the past and structuring future expectations, the developmental construct becomes a sort of prophecy which affects the conditions of its own fulfillment (Torgerson 1980:15).

Citizen participation strategies and demands for participatory democracy have become associated with individual and community development concepts (Pateman 1970:22-67). Participation is believed to be essential to the development of ethical values which do not exploit the environment (see Gibson in Elder, 1975). The learning of new values is seen as being intrinsically related to socially meaningful action. Theories of participatory democracy are directed to re-establishing a public realm which has been fragmented by industrialisation and its 'commodification' of life.

Many of the theories reviewed above are oriented to macro level analysis (with the possible exception of personal construct theory and some participatory strategies). Few of them give detailed guidance in developing a more interconnected and holistic social analysis. A more subjective view of the world requires a degree of 'immersion' in the community being studied so that its inner workings can be appreciated.

Anthropology provides some insight into how this might be done particularly through ethnography. Spradley describes ethnography in the following way:

Ethnography is the work of describing a culture. The essential core of this activity aims to understand another way of life from the native point of view. The goal of ethnography, as Malinowski put it, is 'to grasp the native's point of view, his relation to life, to realize his vision of his world'... Field work, then, involves the disciplined study of what the world is like to people who have learned to see, hear, speak, think, and act in ways that are different. Rather than studying people, ethnography means learning from people. (Spradley 1979:3)

Field work is a crucial part of cultural anthropology, which is concerned with the similarities and differences in human behaviour across all societies (Spradley 1972:6). The role of cultural anthropologists is to classify, compare and explain similarities and differences (Spradley 1972:6). Within this tradition of cultural anthropology, the primary role of the ethnographer is the description of specific cultures. This usually involves participant observation and sequenced tasks leading to an ethnographic description. Ethnology is concerned with explanation, comparison and classification of cultures.

Spradley defines culture as 'the knowledge people use to generate and interpret social behaviour', which is learned and, to a certain degree, shared (1972:8). This definition of culture as knowledge 'shifts the focus of research from the perspective of the ethnographer as an outsider to a discovery of the insider's point of view' (Spradley 1972:9). A well known ethnography was undertaken by Gearing with a Fox Indian community in the United States (1970). This study identifies an estrangement between white people and Indians, partly based on ignorance of Indian culture. The 'Face of the Fox' ethnography attempts to tackle that ignorance, by making the life of Fox Indians vivid and believable (Gearing 1970:5).

There have been serious critiques of modern anthropology which argue that cultural bias remains and that participant observation contains contradictory objective and subjective elements which impede 'immersion' (Cowlshaw 1986). Description of culture involves a recognition of social change but ethnography falls short of providing a good explanation of the process of social change (Rohe 1982, Ross 1989). 'Description' can be an excuse for the anthropologist not having an ethical obligation to the community being studied, and participating in the process of social change (when requested by the community). Another problem has been the elevation of past and traditional cultures by anthropologists, which devalued contemporary culture (see Cowlshaw 1986:2-23, Vertigan 1989: 36-37).

This should not be seen as a criticism of all contemporary anthropologists. Many of them are aware of these issues and assist communities in their attempts to deal with social change. For example, some anthropologists understand that 'immersion' in a community, required for ethnography, involves moral obligations which should be reflected in the study and transcend the study. Colishaw has called for a re-orientation of anthropology to include active 'self' definitions of culture and a study of contemporary and distinct Aboriginal culture (Colishaw 1986: 9-10). Another concern that has recently emerged is the need to monitor and evaluate the social impact of the research process on the community and for the researchers to find ways of doing that.

Another source of knowledge and "immersion" in the viewpoints of a community is oral history. This can be seen as a source of power and control for individuals and communities as they define their past and relate it to the future. The value of this work is illustrated by Goodall in her study of the New South Wales' land rights movement (1988). Oral history has particular relevance to studies involving indigenous communities.

INDIGENOUS PEOPLES AND THE PRACTICE OF SOCIOCULTURAL FORMS OF SIA

Indigenous peoples have suffered greatly during the expansion of industrialisation. Their lives are interwoven with the land, which is perceived as a 'resource' by dominant cultures. Often they are poor consumers who see little point in participating in the industrial market society. The culture of indigenous peoples is degraded and misunderstood in the wider community. Many indigenous people have a strong sense of 'history' and value traditional knowledge. At the same time, change has had inevitable impacts. Indigenous people, struggling to maintain their culture and achieve an acceptable lifestyle, are forced to interact with the dominant culture. Indigenous rights can be characterised as an 'interest', weighed equally with other interests in a pluralist society. Berger argues for a more distinct legal recognition of indigenous rights:

Many Americans believe that to claim rights for tribes or classes, groups or collectivities, runs against the American individualist tradition. They consider that the protection of individual rights is the most effective way to secure such interests. Legal and constitutional means to protect these rights for minorities in the United States are expressed in laws to prevent discrimination on the basis of race, nationality, or color, and in laws to protect the free exercise of religion. Although Native Americans from time to time claim the benefit of these laws, their central concerns do not fall within these categories.

Native rights rest on a fundamentally different footing from the claims of Black Americans and immigrant minorities. Their attempts to preserve, on their own terms and for their own purposes, a land-based culture and way of life mark Native Americans off from other minorities. No other minority can assert a right to a land base and to distinct political institutions founded on the recognition of Native sovereignty (Berger 1985:157-158).

The aspirations of indigenous peoples are expressed in the related issues of land claims, self-determination and the establishment of an economic base for their communities. SIA has emerged as a strategy used by some indigenous communities in support of these aspirations. This is most often the case when

indigenous people control research and undertake the SIA themselves. Other SIAs by governments and project proponents are an attempt to grapple with cultural conflicts which other policy approaches cannot accommodate. In this context, there are tensions caused by the technical orientation of the policy sciences and the inability of liberal democracies to incorporate indigenous peoples in the political process.

Politically oriented SIAs have some potential in furthering indigenous rights and educating the dominant culture. The second part of this paper will examine the practice of politically oriented SIA, involving indigenous peoples, and how it relates to their wider aspirations. Examples will be drawn from Australia, Canada, the United States and New Zealand. Particularly emphasis will be given to the Community SIA at Turkey Creek (undertaken as part of EKIAP) as part of the development of Aboriginal SIA in Australia.

THE NORTH AMERICAN EXPERIENCE - SIA AND NATIVE PEOPLES

The United States

SIA has been used effectively by some indigenous peoples in the United States. Geisler perceives SIA as one of a number of responses available to Indians in dealing with the impacts of exploitation of their land (1982:41). SIA has been applied to externally imposed developments as well as proposals where a tribe is simultaneously the developer and impacted community (Smith in Geisler 1982:42). A strong view has emerged that SIA with indigenous people can only adequately address sociocultural impacts if the impacted community conducts its own study (Boggs in Geisler 1982:75). It would be appropriate to have it funded by the proponent, in the case of specific development proposals (Boggs in Geisler 1982:75)..

Ethnographic and historical approaches have been used in a number of Indian SIAs involving Southern Paiute peoples (Stoffle in Geisler, 1982:107) and the Northern Cheyenne Tribe (Fenney et

al, 1986). There are few well documented examples of how these approaches have been applied in the United States. This makes it difficult to evaluate whether SIA involving indigenous peoples has developed a political orientation.

As indicated previously, the legislative and administrative framework of NEPA would seem to create a mandate for SIA. However, the quality and amount of SIA under NEPA has been poor compared to the assessment of physical impacts (Boggs 1978, Freudenberg 1986). NEPA locks into existing, technically-oriented policy processes. A detailed regulatory system like NEPA can prompt formal compliance with environmental standards (when enforced by agencies, public and courts) but it is inadequate to evaluate cultural impacts and protect social concerns. There are few standards of adequacy which can be readily defined or enforced. In the context of this highly legalised environment of NEPA, politically oriented SIAs have not flourished among indigenous peoples. However, a number of tribes such as the Northern Cheyenne have taken steps to develop research capacities and exercise control over studies. One significant and politically oriented SIA was commissioned by the indigenous people of Alaska (The Village Journey - Report of the Alaska Native Review Commission 1985 conducted by Berger, a Canadian). Notably, this study was undertaken outside the ambit of NEPA.

SIA on the Alaska Native Claims Settlement Act, 1971

This is the most substantial SIA ever undertaken with respect to the impacts of legislation. The legislation was intended to be a fair settlement of Alaskan native land claims. Unfortunately it contained many assimilationist ideas and strategies that have not enhanced native peoples aspirations for self determination (Berger 1985:30-31). The study was commissioned by the Inuit Circumpolar Conference and conducted by Berger. Berger adopted an approach similar to the Mackenzie Valley Pipeline Inquiry (over which he presided) to study the impact of the Alaska Native Claims Settlement Act, 1979, (ANCSA). The report (the Village

Journey - The Report of the Alaska Native Review Commission 1985) presented the perspectives of indigenous Alaskans who gave evidence to the Commission at meetings in sixty-two villages and towns.

ANCSA was meant to resolve Aboriginal land claims in Alaska and incorporate Alaskan native people into dominant American institutions (Berger 1985:20). Alaskan natives were to receive forty four million acres of land and \$962.5 million dollars in compensation. In exchange, Aboriginal title was extinguished and title to the portion of Alaskan land (settled on the native people) was vested in twelve regional and more than two hundred village corporations. Villagers had shares in both forms of corporation. However, the corporations were set up on the American commercial model, and bore little relation to native institutions and strategies of self-determination.

These corporations were meant spontaneously to seek out economic opportunities (rather than originating around them) and become profitable. They were complex and expensive to run because they had to conform with United States company law. Many jobs in the regional and local corporations went to non-natives because of the nature of the tasks and skills required. This was a long way from the subsistence life-style preferred by many native Alaskans, which suited the harsh tundra of their environment. Most importantly, this traditional life-style was not dependent on the massive commercial exploitation of resources like forests and minerals, which the corporations tended to promote. Many of the corporations have not been economically viable and as a result native shareholders will lose their land when tax exemptions are lifted in a few years.

Berger tries to capture the depth of concern and urgency felt by the people over the failure of ANCSA and argues the legitimacy of their aspirations:

Alaska Natives now realise that ANCSA has failed them and that its goals are at cross purposes with their

own. Today they are trying to strengthen their subsistence economy and to restore their tribal governments. We must understand the historical legitimacy and the present value of these goals. These aspirations are not anachronistic, they are not absurd, they are not an impediment to progress. They are, quite simply, the only means whereby the future well-being of village Alaska can be protected.

I know that many persons deplore the failure of Alaska Natives to embrace the customs, institutions, and world view of their white fellow citizens. In rejecting them, Alaska Natives are not clinging blindly to the past, nor are they stubbornly unwilling to live up to the expectations of Congress. It is their profound desire to be themselves, to be true to their own values, that has led to the present confrontation. Far from deploring their failure to become what strangers wish them to be, we should regard their determination to be themselves as a triumph of the human spirit (Berger 1985:19).

The Village Journey makes extensive use of indigenous history, as well as the non-native history of the United States. Aspirations of indigenous people in Alaska are specifically linked to the issue of native sovereignty (Berger 1985:137-154) and international laws and conventions which support them (Berger 1985:176-183). Berger combines the power and emotion of people's direct evidence with detailed suggestions about how United States laws and public attitudes need to be changed to accommodate Alaskan natives fairly in the federation. The most urgent requirement is that they should be able to keep their land for themselves and for their descendants.

Canada

The self-conscious development of politically-oriented SIA largely originated in Canada (see Lang and Armour 1980; CEARC 1985). The linkages of SIA with issues of land rights, self-determination and economic strategies of Native peoples have been explicitly pursued.

The policy environment has gradually altered as common law Aboriginal rights have been recognised (Calder v Attorney General

of British Columbia, see Boer 1989:13). The repatriated Constitution Act of 1982 recognised and affirmed existing Aboriginal and treaty rights of the Aboriginal peoples of Canada (note that terminology is changing in Canada; 'Aboriginal people' is now used as a synonym for indigenous or native peoples in many contexts). The implications of the constitutional guarantee are discussed by Boer, in his EKIAP Working Paper (1989:30-31).

This legal and political framework has forced the Canadian Government to conclude a number of agreements with Cree, Inuit and other indigenous nations (James Bay and Northern Quebec Land Claims Agreement, The Western Arctic Land Claim: The Inuvialuit Final Agreement) and adopt a comprehensive land claims process (see Report of the Task Force to Review Comprehensive Claims Policy 1985). The comprehensive land claims process has commenced but it has a long way to go in achieving a fair settlement for Canada's indigenous peoples.

In this type of policy environment, indigenous people have had some positive experiences with politically-oriented SIA. It is likely that it will continue to form part of comprehensive agreements which establish institutions and procedures for land claims, land-use planning and management by indigenous peoples. Another trend in Canada is an emphasis on use of SIA to mediate and negotiate policy issues (Corbett 1986) and in monitoring social impacts (CEARC 1985:7). This policy environment is different from the Australian experience. It is now possible for Canadian indigenous peoples to begin building procedures and institutions which deal with cultural interface issues from less of a disadvantage.

SIA which presents an indigenous world view needs to present a cumulative indigenous cultural perspective and connect it to the policy process of the dominant culture. SIA at the regional level or involving regional issues holds considerable potential for developing this form of SIA by indigenous people. This framework has been explored in Canada. A relevant regional study

is the Socio-Economic Impact Model for Northern Development (Blishen et al, 1979).

The Socio-Economic Impact Model for Northern Development

This study of predominantly indigenous communities in Northern Canada was undertaken by Blishen, Lockhart, Lockhart and Craib (1979) for the Canadian Department of Indian and Northern Affairs. The methodology and conceptual framework of the model described in the first volume of the report drew extensively on community development literature.

Elements of the politically-oriented approach are evident in the model. The study was a significant departure from the conventional social indicator approaches usually associated with technically oriented SIA. The researchers focused on the key characteristics and diversity of northern Canada communities before attempting to build a general model:

... The quest for a valid and reliable interpretive model, capable of informing northern development policy formation must in the first instance focus precisely upon existing and locally unique social, economic and political institutional parameters. This is necessary because they represent a full range of indigenous forms of reactive adaptations, objective and subjective, to past impacts, which have been both positive and negative in character (Blishen et al 1979 Vol 1:5).

This was an attempt to overcome the 'widespread social scientific bias that views the introduction of modern economic activity as necessarily transforming all pre-existing social and economic institutions into a homogeneous commonality' (Blishen et al 1979 Vol 1:5). The purpose of the model proposed was to provide input to social policy decisions about the likely effects of impending impacts on northern Canadian communities, recognising the existing culture and practices which characterise those communities and the features which affect their capacity to adapt to externally induced changes.

The value of a regional model was that it had a wider potential for application than an 'endless accumulation of unique community studies' (Blishen et al 1979 Vol I:5). The focal point was the concept of community process and change 'in which current objective economic, social and political structures of the community exist in a subjective social psychological climate of attitudes and values' (Blishen et al 1979 Vol 1:11, Vol 1:19). The study team combined social indicators with more subjective, process-oriented community variables summarized as follows:

- (1) Economic conditions, to examine the notion that economic behaviour could be analysed in terms of its relation to the community's degree of dependence on, or independence of, the existing regional, provincial or national economy. This is called community economic viability.
- (2) Community patterns of social behaviour to ascertain the extent to which they could be described as 'privatised' or 'communitarian'. This is called community social vitality.
- (3) The extent to which the community's economic viability and social vitality are associated with the mobilisation of political power or process. This is called political efficacy (Blishen et al 1979 Vol 1:10, 35-42).

The model was further developed through a series of pilot studies with communities. Particular attention was given to issues of technological change (Blishen et al 1979 Vol 1:14-18), the 'ethnic gap' when dealing with indigenous communities (Blishen et al 1979 Vol 1:18-21) and the development of community profiles (Blishen et al 1979 Vol 1:Chapter 3). The regional SIA was undertaken by applying this model to study eight communities in north west British Columbia, Canada during 1979. The model was re-evaluated and modified as a result of these experiences.

The Socio-Economic Impact Model for Northern Development can be seen as a compromise between the need to present detailed studies, showing the uniqueness of communities, and the political reality that access to policy processes often requires a regional response. A regional model of SIA will have distortions inherent

in it, but the politically oriented approach of Blishen, Lockhart, Lockhart and Craib at least makes the communities the basis for generality and not the assumptions of industrialised society. For this reason, it has potential for use by indigenous peoples in Canada and elsewhere.

THE AUSTRALIAN EXPERIENCE - SIA AND ABORIGINAL PEOPLE

It is probable that types of SIA have been going on in various forms of social planning activity in Australia for a long time. The terminology of SIA is not widely used in Australia, unlike North America and New Zealand. The Victorian Department of Community Welfare Services engaged in extensive social planning and monitoring of social impacts in the La Trobe Valley, culminating in the setting up of an ongoing monitoring body - The La Trobe Valley Regional Commission (Victorian Department Community Welfare Services 1982, 1983). Wildman and Baker have developed SIA in the context of EIA in Australia (1985). It is arguable that the Commonwealth legislative requirement for EIA, the Environmental Protection (Impact of Proposals) Act, 1974, intends SIA to be included as part of EIA. The legal position in some other states (such as Western Australia) is more obscure.

Many Australian SIAs are located within the technical orientation. A number of SIAs with Aboriginal people have attempted to present Aboriginal perspectives and cultural concerns. However, they use research approaches which are heavily dependent on experts, such as anthropologists, and allow little scope for direct Aboriginal participation. It would be difficult to characterise these studies as having a political orientation. The Ranger Uranium Environment Inquiry, an inquiry under the Environmental Protection (Impact of Proposals) Act, 1974 (Fox 1977), is an example of the limitations of the early approach to Aboriginal SIA in Australia but it also provides important background to later developments in this area. Most of the noteworthy Aboriginal SIAs have occurred outside the legislative framework for EIA.

Some examples are:

- * Social Impact of Uranium Study (Australian Institute of Aboriginal Studies 1984) - a study of the social impact of uranium mining on the Aborigines of the Alligator Rivers Region in the Northern Territory (including the Ranger Uranium Mine).
- * The Aboriginal Land Inquiry (Seaman 1984) - an inquiry into the means of granting Aboriginal Land Rights in Western Australia using SIA approaches.
- * Procedures under the Aboriginal Land Rights (Northern Territory) Act, 1976 - SIA processes are often involved in land claims and agreements for resource developments negotiated by Land Councils under this Act.
- * RAAF Base Tindal EIS - An EIS study (Sutton partners 1983) and Aboriginal Consultative Programme (King and Mackinolty 1983) for a defence air base affecting Aboriginal Communities in Katherine Northern Territory.
- * Coonana Housing Study (Clarke, Ross, Florey and Trahanas 1984) - a study sponsored by the Western Australian Department for Community Welfare to assist Cundeelee Aboriginal Community, and an intergovernmental planning committee, in the relocation of the community to a new settlement. It utilized SIA approaches on issues such as desired location (by members of community), predicting the impacts of housing, redesigning the town plan and planning for adaption to the sudden changes involved.
- * Aborigines and Tourism (Northern Land Council, Northern Territory 1984) - a study of the impact of tourism in the area of Kakadu National Park (a national park jointly managed by Aborigines and Australian National Parks and Wildlife Service) on Aborigines in the Alligator River Region. It also dealt with issues relating to the management of social impacts of tourism.
- * Sharing the Park : Anangu Initiatives in Ayers Rock Tourism - A Tourism Impact Study (Central Land Council 1987) - An SIA on the impact of tourism on Aboriginal communities in the Uluru (Ayers Rock) region and strategies for the

management of tourism, and economic benefit from it, by these communities.

- * Community Social Impact Assessment at Turkey Creek (Ross 1989 undertaken as part of EKIAP) - an SIA of an Aboriginal community and their perception of impacts and events (past and present) in the East Kimberley region of West Australia.
- * Action-research with Purnululu Aboriginal Corporation (Williams and Kirkby, forthcoming, undertaken as part of EKIAP) - a process whereby Aborigines are seeking to play a joint role with West Australian Authorities in the development and management of Purnululu (Bungle Bungle) National Park.

Politically oriented approaches which can be used in Aboriginal SIA have been developed in a number of contexts which have not been explicit SIAs in Australia. This can be compared to Canada which has developed a strong practice of politically oriented SIA as part of the legislative requirements for EIA at the provincial level (see Environmental Assessment Act SO, 1975) and administrative requirements for EIA at the federal level (see Environmental Assessment and Review Process, Canadian Cabinet directive, 1974). In Australia, the development of politically-oriented approaches to SIA can draw on evolving approaches in a number of areas such as inquiries into the granting of land rights (Seaman 1984), land claims and resource development negotiations under the Aboriginal Land Rights (Northern Territory) Act, 1976 and improved consultative processes involving Aboriginal people.

Politically oriented approaches to Aboriginal SIA cannot be presented as a clearly defined and separate process in Australia. It is a fairly recent development. Some early studies involving SIA, such as the Ranger Uranium Environmental Inquiry (Fox 1977) and the Social Impact of Uranium Study (Australian Institute of Aboriginal Studies 1984) will be reviewed in this section of the paper to illustrate some of the problems in the way Aboriginal perceptions and cultural concerns have been treated in research and policy processes in Australia. The Aboriginal Land Inquiry

(Seaman 1984) and the Community Social Impact Assessment of Turkey Creek (Ross 1989) will be discussed as examples of more participatory and culturally sensitive approaches which may be useful in the further development of politically oriented Aboriginal SIA.

Ranger Uranium Environmental Inquiry

Scope of Inquiry

The Ranger Uranium Environmental Inquiry (hereafter referred to as the Ranger Inquiry), was set up in 1975 under the Environmental Protection (Impact of Proposals) Act, 1974 (Cth) to inquire into a proposal for Australia's first uranium mine, in the Alligator Rivers region of the Northern Territory. An EIS had been prepared for the proposed mine prior to the inquiry. The term of reference of the inquiry required study of the question whether Australia should mine and export uranium, as well as the environmental and social aspects of the proposed Ranger uranium mine.

These issues, in conjunction with a broad definition of 'environment' as including 'all aspects of the surroundings of man, whether affecting him as an individual or in his social groupings' (Section 3 Environmental Protection (Impact of Proposals) Act, 1974 (Cth) as it then was) led the inquiry into the realm of SIA. The first report discussed the Ranger proposal in relation to world energy resources and usage, the status and risks of nuclear power, the supply and demand for uranium and whether Australia ought to export it, problems of storage and waste disposal and international safeguards relating to the threat of 'nuclear' terrorism and sabotage, weaknesses in nuclear non-proliferation treaties and safeguard systems (Fox 1977(a)). The second report dealt with the proposed uranium mine.

Procedures and Approach

The hearings tended to be in a fairly formal mode, but non-Aboriginal public participation was very extensive. Some commentators believe that the focus on social issues promoted participation, unlike other inquiries with narrow technical terms of reference (Carew-Reid 1982). Hearings were held in numerous locations around Australia and there was constant publicity about the inquiry and the issues at stake. In many senses, this part of the Ranger Inquiry was an example of an effective inquiry process in Australia because of its willingness to address wider social and physical impacts affecting Australia and the world.

Study of local sociocultural impacts was contained in the second Report of the Ranger Inquiry which dealt specifically with the mining proposal (Fox 1977). The proposal was for one very large uranium mine, Ranger which would begin operating by about 1980. Three other uranium mines were proposed in the region. A new town was proposed as a regional centre and a major national park (Kakadu National Park) was currently being proposed within this 'uranium province'. The area has a fragile and unique ecology that had not been fully studied. It is an area of rare beauty and contains numerous Aboriginal rock art and sacred sites.

At the time of the inquiry, Aboriginal people were, and always had been, the large majority of permanent residents in the region. They were traditional owners of the land sought to be mined, and were seeking formal land claims under the Aboriginal Land Rights (Northern Territory) Act 1976 (Cth). The second report was delayed because the Ranger inquiry was asked to convene as an Aboriginal Land Commissioner, under this Act, and determine an Aboriginal land claim in the region. Many recommendations in the second report could not have been acted on without this step being taken. Thus 'land' assumed central importance in the inquiry and social impacts relating to Aborigines, environment and national parks were constantly seen in conjunction with land relationships (AIAS 1984:35).

Treatment of Aboriginal concerns

Detailed evidence was given about Aboriginal relationships with land. This included anthropological evidence. The inquiry also attempted a comprehensive survey of the Aboriginal social environment. However, primary emphasis was given to land relationships and most Aboriginal evidence was mediated through Europeans (AIAS 1984:34). The approach taken by the inquiry was understandable, given lack of experience in dealing with broad-ranging social impacts and a desire to draw them together in an 'orderly' way.

In many ways the Ranger Inquiry demonstrated good will towards Aboriginal people, who opposed the proposed mine, but the Commissioners were uncertain about how to evaluate the Aboriginal viewpoint:

There can be no compromise with the Aboriginal position, either it is treated as conclusive, or it is set aside. We are a tribunal of white men and any attempt on our part to state what is a reasonable accommodation of the various claims and interests can be regarded as white men's arrogance, or paternalism ... We hope, and have reason to believe, that the performance of our task will not be seen by Aboriginal people in a racial light at all. That our values are different is not to be denied, but we have nevertheless striven to understand as well as can be done their values and their viewpoint. We have given careful attention to all that has been put before us by them or on their behalf. In the end, we form the conclusion that their opposition should not be allowed to prevail (Fox 1977(b):9).

The inquiry concluded that there is a certain amount of hopelessness in Aboriginal capacity to deal with social change:

(Aboriginal people in the region) are a depressed group whose standards of living are far below those acceptable to the wider Australian society. They are a community whose lives have been, and are still being, disrupted by the intrusions of an alien people. They feel the pressures of the white man's activities in relation to their land. In the face of mining

exploration, and the threat of much further development, they feel helpless and lost. Their culture and their traditional social organisation do not enable them to cope with the many problems and questions to which this development gives rise. They feel harassed by all the people who have descended upon them in recent times in connection with mining proposals. Their custom is to arrive at important decisions after long deliberation among themselves, sometimes over a period of months or even years. In relation to matters outside tribal tradition, they have not delegated authority to make decisions to any one or more persons. They do not consider the proposed developments as being advantageous to them, as their concerns and values are different from those held by the white man (Fox 1977(b):46).

Evaluation

With hindsight, there were some serious deficiencies in the approach of the Ranger Inquiry to social impacts. These were highlighted in the Social Impact of Uranium Study (1984:50-86, discussed below) as follows:

- * The approach to Aboriginality (based on man-land ties defined primarily as a spiritual relationship), provided a fairly static and unrealistic view of Aboriginality as a basis for SIA. It fails to understand people - people relationships as part of the people-land relationship (AIAS 1984:35-36).
- * At the end of the day, the inquiry held distinctly Western notions of Aboriginal 'development' being indicated by factors such as better health, education, housing and employment opportunities.
- * The settled versus conquered colony debate (about the recognition of common law Aboriginal rights), the policy of self-determination and claims of Aboriginal sovereignty were not clearly formulated and debated at the inquiry. Land rights were seen as 'the' solution for Aboriginal concerns rather than part of the solution.
- * There was not a clear conceptualisation of national and local levels/interests and their relationship with each other. National interests tended to predominate and

Aboriginal concerns seemed to be treated as local interests by the inquiry.

- * Aborigines were aligned with the Australian National Parks and Wildlife Service against the mining companies, this ignored potential conflict within aligned forces.
- * Aborigines were in a position to receive money in royalties and other payments from mining agreements. The possible impacts of these moneys were never fully investigated by the Inquiry.
- * The western concept of 'work' was uncritically applied to Aborigines and there was an over-emphasis on the problem of alcohol by the Inquiry.
- * The Inquiry identified the rapid growth of a European community alongside Aboriginal communities as the most significant social impact (Fox 1977:232-233), but appeared to accept Aboriginal cultural breakdown as inevitable.

The Inquiry seemed to believe it could best accommodate social impacts on Aboriginal people by granting the Aboriginal land claim and recommending that Kakadu National Park be declared (excising the sites of the proposed uranium mines). The information presented about Aboriginal people tended to be 'one-dimensional'; and they were 'planned for' rather than portrayed as people capable of cultural adaption and constructive change.

In making a final evaluation of the Ranger inquiry, several matters should be considered. The inquiry took place before SIA was really developed in Australia. The Australian Government had no national policy on uranium mining, nuclear energy and international safeguards relating to nuclear energy and wastes. The Ranger Inquiry eventually catalysed action by the Australian Government on some of these issues. In addition there was a regional planning vacuum in the Alligator Rivers region. SIAs usually have a short life and are meant to contribute to policy/planning frameworks: they can rarely substitute for them.

In relation to Aboriginal people, Australian Government policies, since the conquest of Australia had been a manifest

failure in recognising their legal and human rights. The Aboriginal Land Rights (Northern Territory) Act, 1974 (Cth) was seen by many Australians as the beginning of a new era in recognising rights of Australia's indigenous people and it presented the Ranger inquiry with new possibilities for recommendations and mitigations of social impacts.

Social Impact of Uranium Study

Background

In 1977, the Commonwealth Government approved the Ranger Uranium Mine project subject to most of the conditions laid down in the reports of the Ranger Inquiry. Part of Kakadu National Park was declared soon after. Pursuant to agreements under the Aboriginal Land Rights (Northern Territory) Act, 1976 (Cth) Aboriginal land owners received mining royalty. The town site was located within the National Park but not on Aboriginal land. The likelihood of social impacts on Aboriginal people in the region was addressed by the Commonwealth Minister for Aboriginal Affairs, who proposed a social impact monitoring study in 1977. The Australian Institute of Aboriginal Studies (a government research body-hereinafter referred to as AIAS) undertook the study. The study was directed by a Steering Committee of AIAS, and conducted over a five year period. Staff were mainly based in the region, at Oenpelli. Researchers included anthropologists and Aboriginal research assistants.

The task of the project was formidable. There appeared to be serious and complex social impacts from Ranger Uranium Mine. However, many Aboriginal people had changed their position from opposition to the mine during the Ranger Inquiry, to a more favourable view. There were no prior examples of a social impact monitoring study, before a mining operation started alongside an indigenous traditional community, which could have been useful in the design of this project (AIAS 1984:12).

The initial stage of the Aborigines and Uranium Study established baseline data on the region which included:

- * a history of the region;
- * a census of the region relevant to Aboriginal social domain;
- * A compilation of laws relevant to Aboriginal people from 1900 and a study of their administration;
- * compilation of plant use;
- * film and photographic records;
- * linguistic studies;
- * oral histories;
- * documentation of traditional patterns of life;
- * diaries of day to day events producing a social history of the times (AIAS 1984:13).

Tatz (AIAS 1984:Chapter 1) outlines the next stages in the study:

Secondly, the Project has examined impact factors; the provision, distribution, and use of pre-mining payments and royalty moneys; the employment of Aborigines in the mining industry; the nature and effectiveness of consultations with Aboriginal communities; educational facilities and Aboriginal attitudes thereto; the outstation movement, its growth, and the reasons for it.

Thirdly, the Project examined specific issues arising from mining and its sequelae: the existence of a national park in the region, created ostensibly as a 'buffer zone', on land leased to the nation by the traditional owners; the abiding question of alcohol; the question of permits to enter Aboriginal land; the use of roads in Aboriginal-held land; the existence of a new town in close proximity to Aboriginal communities; the relationship between Aborigines and the physical and health hazards of uranium mining; the changes in the nature of Aboriginal criminal convictions since, or with, the advent of mining.

Finally, and perhaps most importantly, the Project's field work recorded Aboriginal attitudes to most of the actors in this complex relationship (AIAS 1984:14).

Orientation and Methodologies

It was made clear, at the outset, that the Aborigines and Uranium Study would try to avoid the technocratic orientation in SIA:

If anything, this Project has been 'trans-scientific', recognising that there are indeed philosophies of 'frontier', 'industrialisation', and 'progress' - as well as ones of indigenous domain and spiritual attachments thereto. Edmund Burke's dictum about 'the cold neutrality of the impartial judge' is simply not applicable (AIAS 1984:15).

The methods adopted within a general participant observation approach were not made explicit in the final report of the study, nor was the degree of participation and control by Aboriginal people in the region. In fact, Aboriginal people (two residents and two from interstate) were on a Steering Committee which supervised the study and Aboriginal people worked as research assistants (Kestevan 1986, Ross 1989). Some commentators consider that this was ineffective as a form of Aboriginal participation and control (Kestevan 1986). The final report reflected principal reliance on the description and analysis of social impacts by anthropologists in the context of contemporary 'Aboriginality'. The study serves as a valuable critique of the shallowness of anthropological evaluation in the Ranger Inquiry, and in the policy sciences, generally.

The sense of 'hopelessness' and belief that mining impacts would inevitably lead to Aboriginal cultural disintegration suggested by the Ranger Inquiry, was strongly influenced by a particular anthropological tradition. There was a rich and textured literature on 'traditional' Aboriginal societies, which was in stark contrast to 'contact' literature (Von Sturmer's expression) dealing with Aboriginal perceptions and responses since the coming of Europeans (AIAS 1984:81). This inability to comprehend and study contemporary Aboriginality has led to a pervasive generalisation about the 'disintegrative quality of impact' against which Aboriginal people are defenceless (AIAS 1984:82). In the course of the Ranger Inquiry, the value placed

on traditional Aboriginal values led to a 'double game': 'on the one hand, disintegration is not only inevitable but has occurred, and yet, on the other Aboriginal beliefs and values are largely intact' (for the purpose of the land claim) (AIAS 1984:83).

Treatment of Aboriginal Concerns

The Social Impact of Uranium Study introduced a pure research orientation, alongside attempts to identify and recommend mitigations of social impacts, in order to present a more accurate and detailed description of contemporary Aboriginal culture. In a sense, the researchers recognised that SIA would have little validity or impact on policies unless contemporary Aboriginality was recognised and valued.

Von Sturmer undertook an extensive critique of the idealised view of 'Aboriginality' presented in the Ranger Inquiry (AIAS 1984:35-52). He objected to the reduction of Aboriginal interests to interests in land. This has led to a focus on individuals 'divorced from their social relationships' and a concentration on 'beliefs and values rather than practices' (AIAS 1984:37). Von Sturmer proposes an approach which defines 'Aboriginality' 'in terms of what Aboriginal people do (and how they do it) rather than what they believe or think' (AIAS 1984:37). He elaborates:

Clearly beliefs and ideas constrain what people do; and vice-versa. In short, one should not proceed by divorcing one set of phenomena from another, and then declaring that it has definitional or determinate force (AIAS 1984:37-38).

The study concluded that an understanding of contemporary Aboriginal social relationships must come to grips with the use of land for economic, social, political and spiritual purposes. It is suggested that attention should be given to how Aboriginal economic activity has changed, with people no longer so dependent on their site base, the introduction of cash into the economy and

new forms of transportation such as the motor vehicle (AIAS 1984:47).

The Study challenged crude assumptions about the correspondence between Aboriginal and environmental interests (for example, in relation to national parks). Potential conflict of this nature 'is neatly encapsulated in the characterisation of the park as a wilderness, when, from an Aboriginal point of view, it is clearly a human landscape, a domesticated environment' (AIAS 1984:56). Similar conflict with environmental interests emerged as some Aboriginal opposition to mining decreased after royalties became a part of their lives.

The Study dealt with the issue of Aboriginal control over activities on their land, and access to their land, which are as important as formal grants of land in the contemporary context. It is stated that the removal of the town site, for Ranger uranium mine, from Aboriginal land (and a degree of control) failed to give Aboriginal people a significant act of determination (AIAS 1984:60).

The Study argued that Aboriginal 'needs' should be determined more subjectively, and by Aboriginal people (AIAS 1984:76). Most importantly the nature of contemporary Aboriginal politics (in terms of intra-Aboriginal politics and extra-regional politics) is discussed. It is concluded that Aboriginal people have not been 'passive recipients of decisions and administrative actions taken elsewhere' (AIAS 1984:81). However, the study suggested that consultative practices have been seriously inadequate and forms of consultation more acceptable (and useful) to Aboriginal people must be developed (AIAS 1984:24, 225-237). The primary concern of the Study seemed to be to create a more dynamic picture of social-land relationships, as experienced by Aboriginal people. Aboriginal people were presented as active agents of social change who have shown both adaptation and resilience in creating a contemporary Aboriginal culture.

The Social Impact of Uranium Study questioned the policy framework relating to Aboriginal issues more fundamentally than the Ranger Inquiry. Aboriginal concerns were located in a contemporary policy ethos of 'self-determination' and 'self-management' (although paternalistic attitudes and constraints still linger - AIAS 1984:240-241). The study team struggled with the issue of self-determination given that:

- * past discriminatory/paternalistic practices and institutions still had influence;
- * new Aboriginal institutions such as the Gagudju and Kunwinjku Associations and the Northern Land Council were developing but their potential contributions to 'self-determination' were not clear at the time of the study (AIAS 1984:236-284);
- * 'self-determination' can mean abandoning Aboriginal people to the current status quo which leaves them with no real political and economic power or options for change (AIAS, 1984:303);
- * 'self-determination' can mean the abandonment of the provision of social services (eg medical and educational) provided to other Australians;
- * further uranium mines were being proposed, sometimes supported by Aborigines, while the study team believed that monitoring was necessary to deal with existing social impacts and learn more about monitoring future ones (AIAS, 1984:302-303).
- * The Study indicated that the payment of royalties had not increased Aboriginal self-determination in the highly regulated Alligator Rivers Region (AIAS 1984:299-304).

Another policy issue addressed was the characterisation of Aboriginal interests as 'local interests'. In this context, Aboriginal interests will nearly always have to give way to national interests. The Study argued that Aboriginal interests were truly national interests (as well as local ones) and must be conceptualised in this way (AIAS, 1984:303).

Evaluation

The Social Impact of Uranium Study contributed anthropological approaches used in the study of contemporary Aboriginality to social impact assessment. It further developed the policy framework in Australia for this type of Aboriginal SIA. There are elements of the political orientation to SIA in the recognition of Aboriginal perspectives and cultural concerns although the end result appears to be more in the nature of academic research than a participatory, action-oriented SIA. This was understandable given the poor basis for Aboriginal SIA; the study was an important step in providing an anthropological basis for future applied research. However, it would have been useful to have had more first hand evidence of social impact from Aboriginal people, since this was a serious defect in the Ranger Inquiry. An attempt was made to monitor the impact of the SIA process on the communities involved, but the Social Impact of Uranium Study did not seem to give much local control or insight into this issue.

The Western Australian Aboriginal Land Inquiry

The Aboriginal Land Inquiry was conducted by Paul Seaman QC (as he then was) on behalf of the Western Australian Government. It was intended to recommend on the form in which land titles should be granted to Aboriginal people in Western Australia, towards implementation of the incoming Labor government's commitment to land rights, but became a comprehensive examination of Aboriginal claims and aspirations relating to land in Western Australia which incorporated assessment of social impacts. The terms of reference were:

- (1) Specifically the Inquiry shall consider the most appropriate form of title over land reserved for the use and benefit of Aborigines or leased for Aboriginal Communities.
- (2) In addition, the Inquiry shall consider the question of what kinds of Aboriginal relationships to land should be protected and the ways in which to satisfy the

- reasonable aspirations of Aboriginal people to rights in relation to land.
- (3) The Inquiry will make recommendations about the terms and conditions upon which such land should be granted and by which body or bodies the titles should be held.
 - (4) The Inquiry will consider the extent to which waters adjacent to granted lands should be protected for the use of Aboriginal people.
 - (5) The Inquiry will consider the relationship of granted areas to resource development projects and in particular the question of compensation and royalties.
 - (6) The Inquiry will review the operation of the Aboriginal Heritage Act in order to make recommendations about the most appropriate way of protecting sites of significance to Aboriginal people.
 - (7) The Inquiry is to consider the question of resource exploration and development and to make recommendations on ways of accommodating the legitimate concerns of Aboriginal people about land and the social impact of development.
 - (8) The Inquiry is to examine the question of the future implementation of the Environmental Protection Authority's recommendations for Conservation Reserves to ensure that adequate safeguards exist in the consideration of possible conflicting Aboriginal interests (Seaman 1984:iv).

Procedures and Approach

The inquiry began in 1983 and was completed approximately twelve months later. In July, 1983 the Minister with Special Responsibilities for Aboriginal Affairs appointed an Aboriginal Member of Parliament to chair an Aboriginal Liaison Committee to allocate funds enabling disadvantaged groups to make submissions to the inquiry. Aboriginal participation was co-ordinated through regions of the State by this Committee and two anthropologists attached to the inquiry.

The procedures and approach adopted by the Aboriginal Land Inquiry made a significant contribution to Australian SIA practice, although the inquiry itself was not set up as an SIA. Valuable experience had been gained in land claims and negotiations under the Aboriginal Land Rights (Northern Territory) Act, 1976 (Cth), and overseas inquiry processes dealing with indigenous peoples. The inquiry was convened at locations throughout the State, which involved the Commissioner

and Deputy Commissioner travelling more than 70,000 kilometres. Submissions were called for prior to the hearings then deadlines were extended and flexibly applied. Inquiry procedures were published and applied to non-Aboriginal participants and large Aboriginal organisations. Many Aboriginal organisations, communities and people were sent letters and tapes about the work of the inquiry and advertisements were also placed in national and State newspapers. After some hearings, Seaman published a discussion paper as a focus for contributions to the hearing. This was circulated widely and the inquiry announced that it would receive written comment on it from any member of the public.

The inquiry procedures were informal and non-adversarial:

Broadly I sought to ensure that people met with the inquiry in the manner which best enabled them to put their position (Seaman 1984:2).

No person was pressed to answer any question in the course of any hearing but I tried to encourage debate. I took the view that this Inquiry could not be conducted by a continuous formal legal process with counsel for various interest groups in constant attendance. That would have been the wrong setting in which to ascertain the Aboriginal viewpoint. Since I did not have counsel to assist me in the hearings, I often put the views of one party to another not because I shared them but because I wished to know what competing groups wished to say in response to the views of others (Seaman 1984:5).

All Aboriginal hearings were organized and chaired by Aboriginal people and conducted in a way chosen by Aboriginal people (Seaman 1984:5).

Seaman was concerned that the procedure recognise and accommodate the interests of Aboriginal women. Women anthropologists were provided when requested by communities and assisted during hearings. The number of women and men who participated in the inquiry was roughly equal (Seaman 1984:5).

The level and sophistication of Aboriginal participation in the inquiry surprised Seaman:

I began my work in the Inquiry intending to give Aboriginal people every chance to participate. I expected that they would probably be too disorganised or inefficient to make any worthwhile input, and that some of the issues would be beyond them. Like a great many other people I had made the unconscious assessment that they were in some general way inferior to non-Aboriginal people.

The hearings with the Aboriginal people have shown me to be quite wrong. They have organised themselves effectively, and put their case with great clarity. It has not been a case created for them or put for them by other people. At every hearing there was a substantial group of Aboriginal people who showed an acutely intelligent grasp of the issues (Seaman 1984:8).

Treatment of Aboriginal Concerns

The value of the historical context was recognised, and considerable dissonance between white and black perceptions of history identified:

The Aboriginal witnesses have constantly spoken about the past treatment of their race. The non-Aboriginal witnesses have usually put their views on the basis that the past is behind us now and does not matter.

I am not a historian but during the hearings I have gathered a general impression of the spoken history of the Aboriginal people of Western Australia. It is very different from the history relied upon by most of the non-Aboriginal participants in the Inquiry (Seaman 1984:7).

It is plain to me that Aboriginal people do not intend to be turned into models of suburban white people, but that they are desperate that the broader community should understand their position. They think our version of history is a lie, and that when the true history is known our attitudes, of which they are painfully aware, will change (Seaman 1984:8).

Attempts were made to record Aboriginal views in their own words (similar to Berger's approach in the Mackenzie Valley Pipeline Inquiry). This is a powerful strategy adopted by

several politically oriented SIAs. The following statement shows the force of direct quotation:

Barramundi site first ... what for did they cut it? We were sitting down without clothes and in our loin cloths. What for did they cut it and tear him up? For that they found it and cut it up. They flew round with a plane from up in the air and they did skin it. They found the scales from her - the diamonds. The scales Nyili. Further down below, further Smoke Creek way they are tracking her. What for they still digging her? And the yellow mud there is her eggs (Seaman 1984:52).

The Barramundi site was mined by Argyle Diamond Mines in the East Kimberley region.

Policy Recommendations

The basis of Seaman's detailed policy recommendations was explicitly declared:

The scheme which I propose to you is designed to put Aboriginal people in a position to negotiate as equals with public authorities and other interests without the need for the interposition of advisers or large bureaucracies, yet in circumstances where everybody may have confidence that language and literacy problems will not lead to misunderstandings.

The scheme is also designed to enable public authorities and non-Aboriginal interests to find out what Aboriginal interests are involved, whom to deal with, and to create an opportunity for matters to be resolved by discussion. I recommend systems which involve Aboriginal people and planning processes of all sorts, and which build Aboriginal organisations from a grass roots level upwards, rather than in a non-Aboriginal bureaucratic way from the top downwards (Seaman 1984:7).

The inquiry enhanced participatory approaches in Aboriginal SIA, and the linkage of Aboriginal aspirations for land (including access and control) with specific legal and planning frameworks. Traditional Aboriginal relationships with land had been seriously disrupted in Western Australia, and complex new arrangements had been developed by Aboriginal groups who had been

'thrown together' (Seaman 1984:13). Having regard to this, Seaman tried to understand contemporary Aboriginal culture and the need for its survival (1984:9-13). He recommended land rights legislation whereby claims could be made on several bases:

- (a) traditional associations with the land concerned;
or
- (b) long association by residence or use with the land concerned; or
- (c) ability to demonstrate a claim of need (Seaman 1984:42).

The intention was to depart from the Northern Territory process which involved a great deal of anthropological research and evidence (Seaman 1984:42).

New Aboriginal institutions were proposed, since it was recommended that only incorporated Aboriginal bodies could claim land. This involved compromises and cultural adaption by Aboriginal people:

The nature of the incorporation is of great importance. The recommendations endeavour to provide Aboriginal communities and regional organisations with an uncomplicated framework of corporate structures which they can adapt and use in the manner best suited to their local conditions. Aboriginal people at community level are determined to control the structures rather than have the structures control them. It seems to me that unless there is local community involvement in a regional Aboriginal organisation which has boundaries suitable to Aboriginal people, land rights legislation will not work to their satisfaction nor to the satisfaction of non-Aboriginal interests.

The diversities of Aboriginal land laws and lifestyles from one end of the State to the other are such that great flexibility should be afforded to Aboriginal people in the way they use incorporated bodies. Two themes emerge quite strongly from the submissions and the hearings. Most Aboriginal people wish to organise their affairs on the basis that local communities will hold title to and control the land, while wishing to deal with major issues through regional Aboriginal organisations. Aboriginal people at hearings were quite opposed to any centralised control of their land affairs (Seaman 1984:45).

Seaman went beyond a recommendation for Aboriginal land title. He recognised that Aboriginal people had to be involved in controlling activities and research on their land:

The Aboriginal written submissions reflected a strong anxiety to say whether or not granted land should be explored, or be mined or have oil extracted from it. Equally they did not oppose exploration and ultimate mining or oil extraction away from land which was of a great traditional significance to them provided that they could control the impact on their lives and lands should they decide to give permission. Virtually all those written submissions were to the effect that Aboriginal people should be compensated if their use of the land was affected by mining, and benefit if there was mining or oil extraction (Seaman 1984:59).

Several recommendations were made about the protection of Aboriginal sites (p 51-58), the control of resource development on Aboriginal Land and payment of royalties (p 59-69) and environmental matters (p 69-77). Environmental matters included social impact issues for Aboriginal people arising from water resource developments and mineral and oil resource developments, for Aboriginal people. The approaches adopted in the preparation of the EIA on Argyle Diamond Mine in the East Kimberley region, were criticised for the lack of Aboriginal participation in the studies (Seaman 1984:74). Argyle Diamond Mines attempts at social impact management through 'The Good Neighbour Programme', were also criticized because decisions about money allocations and expenditure were predominantly made by the company rather than by Aboriginal people (Seaman 1984:74).

It was proposed that EIA requirements under the West Australian legislation (Environmental Protection Act 1971-1980) should be amended to include the social impact upon Aboriginal people as part of the definition of 'environment' (Seaman 1984:75). Proposals were made to change practices to ensure proper consultations and involvement of affected Aboriginal people in EIAs, SIAs and proposals for national parks and conservation reserves (Seaman 1984:71-75).

Evaluation

The Aboriginal Land Inquiry is a better example of the approaches which are useful in developing politically oriented SIA involving Aboriginal people. The 'success' of the inquiry was partly due to the enormous effort put into it by Aboriginal people. This appeared to have a profound effect on the Commissioner. The policy outcomes remain in 'limbo'. The land rights proposals have not been enacted and a compromise package, for 'excisions' of small areas of land for Aboriginal people and ninety nine year leases for reserves, are being implemented (see Boer 1989:44). In some ways, the inquiry succeeded too well - it raised expectations and expertise of Aboriginal people in Western Australia which were not realised. After the conclusion of the inquiry there was no outlet for these aspirations.

Community Impact Assessment At Turkey Creek

Background

The first section of this paper located this community SIA as part of EKIAP and outlined the background of regional resource developments affecting Aboriginal people. The Community SIA at Turkey Creek is one of two politically oriented SIAs undertaken as part of EKIAP. The Purnululu study (Williams and Kirby forthcoming) was a study process supporting Aboriginal aspirations to play a joint role in the development and management of Purnululu (Bungle Bungle) National Park. The Community SIA was undertaken among members of Warmun communities at Turkey Creek, and it's 'outstation' communities by Ross during 1986 and 1987.

Turkey Creek Communities

In many ways Turkey Creek communities were a good example of the complexity of contemporary Aboriginal culture and living conditions in the East Kimberley. It was directly affected by the major resource development (Argyle Diamond Mine), Purnululu

(Bungle Bungle) National Park and the degradation of surrounding agricultural land as well as structural change. A cumulative and regional view of SIA was necessary to comprehend how impacts affected Warmun and its outstation communities and how they have responded. A regional view was being developed by other EKIAP research (see EKIAP final report - Coombs et al 1989:140-141). The main purpose of the community SIA in relation to EKIAP is outlined by Ross:

Its research has aimed at acquiring sufficient understanding of the impacted communities so that information and advice could be most appropriately given, when requested, to those communities, for example, through the review of legislation relating to development and Aboriginal people (Boer, East Kimberley Working Paper No 30), the study of how public sector agencies operate and how their activity affects Aboriginal people of the East Kimberley (Bolger 1987), and the study of opportunities for participation in local government and services gained from it (Rumley and Rumley 1988, East Kimberley Working Paper No 25) (Coombs et al 1989:144).

. Orientation of Study and Choice of Approach

The fact that this was an independent (non-government/proponent) study enabled a significant departure from SIA approaches associated with EIA on specific projects. It enabled a political orientation, wider identification of issues and focus on cumulative impacts. The magnitude of the task was daunting, partly because an ethical commitment was made by the community SIA project initiators (Ross, Craig and Boer) that terms of reference and study approaches should be decided by the community. It was recognised that researchers were rarely, if ever, passive participants. This was even more evident in politically oriented SIA. However, the important factor was that research ought to be truly 'reflexive' and as facilitative as possible to community suggestions and concerns.

The communities were offered the study, and the opportunity to decide topics and methods, in a letter and follow up

discussions (Ross 1989a). Ross attempted to explain research to the communities, who seized on the idea of telling stories:

The senior people liked the idea of telling their own story about how all of the changes of recent years had affected them, and what they would like to happen in the future, but changed the suggested focus of the study to give greater emphasis on 'early days stories' (Ross 1989a:12-13).

The study provided a vivid description of cumulative and specific impacts as well as a unique history (the 'stories' will be published separately by Ross and Bray; EKIAP working paper No 28). Ross was able to adapt her experience and conduct the research in the mode preferred by the Aboriginal participants.

Difficulties were experienced with the offer of Aboriginal control of the research process. Older members of the communities resisted suggestions of formal reports to meetings or guidance by Warmun Council (Ross 1989a:13). Having accepted the research, and researcher, control was seen to be exercised through personal relationships and trust (Ross 1989a.13). However, more subtle forms of community control emerged during the study:

The direction given by the choice of stories was evident from the beginning, but it took a little time for people to extend the exercise to support their aims of acquiring land leases and starting outstation communities, their concerns about traditional culture and the future of the young, and their race relations motives. People reiterated to me that they wanted the project to 'help kartiya (white people) understand', and also to have their stories recorded and to help teach young people... They achieved the degree of control they sought in their own ways - control which did not need to be demonstrated symbolically through European forms which are, in any case, only as effective as the participants permit. Their approach reflects positive experiences with a succession of previous researchers and contrasts with that of Aboriginal organisations elsewhere which have seen the need for formal means of control in principle and as a necessary safeguard (Ross 1989: a:12-15).

Terms of Reference

The terms of reference for the study emerged through a process of community initiative and response to ideas put forward by Ross:

- * that the people's stories be recorded and compiled into a community social history showing how Aboriginal people have experienced the major changes since white settlement of the area;
- * that people's aspirations be presented as part of this continuing history;
- * that the aims be to 'help kartiya understand', particularly those non-Aborigines in a position to assist or prevent the achievement of community aspirations, and to record the stories for the benefit of children and grandchildren;
- * that story-recording be the principal method of research (Ross 1989a:14).

Study Process

The story-telling approach meant that participation in the study was mainly 'dominated by the generation concerned with community leadership':

These are the people with the right to relate stories, and the responsibility to promote their aspirations. Within this age bracket of mature adults and active elderly, a comprehensive range of women and men, leaders and more reticent people, joined in (Ross 1989a:15).

The story-telling method evolved to 'encompass oral modes ranging from format story telling, to life and event-based histories, interviews and discussions' (Ross 1989a:16). The format was relatively unstructured. Some stories were given spontaneously, others were responses to broad prompts:

... ones such as 'tell me some stories', 'tell me about your parents and grandparents' times', or 'tell me about your life' (cf Read 1979). Following these, I would back track to seek more detail. Some people came ready for a discussion of issues, telling me about impacts they had identified, or about their plans and aspirations, and impediments to these. Bush trips were an important part of the stories, interviews and

discussions. People would take me to see the site of an occurrence, or the site of their hoped-for outstation (Ross 1989 a:16).

Participants were able to speak in English, Kriol or Kija languages (assistance in the study was given by Eileen Bray, an Aboriginal language worker from Warmun community). Story-telling was supplemented by participant observation which included some discussions, interviews and observations of community activities and events. The SIA report was based mainly on the stories, but Ross also drew on participant observation for interpretation, and on an archival survey in Perth by Cathie Clement (Ross, 1989). The tapes and transcripts of the original stories are now held by Turkey Creek School.

The SIA included oral history, but went beyond it as well:

The material recorded included oral history, mythology, history-becoming-myth, conversations, and statements of attitude. The study thus presents the socially-produced memory of this group of people, the 'experience' which informs their beliefs and actions today, rather than being limited to strictly historical contents (Ross 1989a:17).

Complete historical accuracy would have been impossible though there was strong correspondence between the oral histories and archival records. In any case, the primary emphasis in the Community SIA was to present Aboriginal people's perceptions about the past and their aspirations for the future.

Treatment of Aboriginal Concerns

Ross identified three main phases of resource developments and impacts in the region:

- (1) an 'early development' phase, with a gold rush, a road, telegraph line and service settlements, the establishment of pastoral leases over most of the land, and massacres of Aborigines;
- (2) A stable 'pastoral' phase in which Aborigines became incorporated as a cattle industry

- workforce, some also working in non-Aboriginal service activities;
- (3) A renewed phase of intensive development and structural change, beginning with Aborigines being evicted from, or leaving many cattle stations, and characterised by structural change including decline of the pastoral industry, changes in land use, intensive mineral exploration and the establishment of the Argyle Diamond Mine, 'discovery' of the Bungle Bungle, rapidly increasing tourism and growth in the non-Aboriginal population (Ross 1989a:21).

The Community SIA presented the 'impacts experienced by Aboriginal people during each of these phases, Aboriginal responses to the occurrences and impacts and mitigative interventions by government and others' (Ross 1989). As would be expected in this type of politically oriented SIA, the report quotes many extracts from the original stories. I will not cover all aspects of the community SIA report prepared by Ross (1989). Instead, key aspects will be highlighted to give some insight into the value of this type of SIA.

The massacre of Aboriginal people by whites was a very significant 'early days' impact of white settlement in the East Kimberleys (this continued up to the 1920s):

Some fellas laughing. Well, that man getting knocking (hit). They laugh la him 'oh, poor bugger'. They didn't know what. Don't matter they bin laughing, they bin knock the lot. Baby and all, dogs and all. Finish them up there and burn the lot, down the creek there (Jack Britten - Ross 1989 a:28).

The massacres had an enduring effect on Aboriginal people and there was obvious concern that the SIA should document them:

The massacres are remembered with great sorrow though the stories are related dead pan and often with humour. The details are memorised diligently by each generation, and the locations visited with reverence. Yarrunga community (Chinaman's Garden) was specifically located to be near the site of the Panton River massacre (Kenny Bray, personal communication). The stories most often retold emphasise Aboriginal reactions to the massacres, such as the surprise and

confusion of victims who had never seen white people or gunfire, and celebrate the wit and skill of the few who escaped (Ross 1989a:31).

The Aboriginal concern that massacres should never be forgotten was associated with a surprising lack of bitterness and willingness to work with kartiya (white people) in the contemporary context:

'Argument finished now. Aboriginal people and kartiya, doesn't matter what colour [we] all work together (Joe Thomas - Ross 1989a:84).

The much delayed action by the Western Australian Government to try and stop massacres was appreciated by Aboriginal people (Ross 1989a:34).

Aboriginal participation in pastoralism provided the essential workforce and knowledge of 'country', in this remote part of Australia. The SIA documents the exploitation of Aboriginal labour and a complex set of race relations. Some pastoralists were well regarded by Aborigines for providing safe places (from massacres) and more humane working conditions. The 'norms' of a pastoral economy are graphically illustrated by the words of Bob Nyalcas:

... They bin make arrangement, something. They were going to try to shoot some fellas, shoot em la dry gully. And this old man ... my boss, old Jimmy, he bin go up long all abat. He bin tell em, 'Hey, what you fellas talk about? You can't do that' he bin talk. 'None of you fellas bookkeeper or manager, got no right to do that. He's (you're) just a stockman'. He bin tell em all abat, 'you fellas blue-top policeman?' ... 'You fellas got to shoot that young fella', he bin say, 'I'll blow you fellas got em this one'. He bin have a 45 revolver himself, this old man (Ross 1989a:42-43).

Pastoralism involved cultural adaption as Aboriginal people learnt new skills and sources of authority related to work and residency (Ross 1989a:41). It enabled mobility, which continues to be vital to Aboriginal people. The 'wet season' in the East

Kimberleys enabled Aboriginal groups to meet together, attend ceremonies and resolve disputes (Ross 1989a:41). Traditional links with country were also maintained through Aboriginal camps on pastoral properties. The picture presented by the SIA is not an idyllic existence - Aboriginal people were often exploited and coerced. However, cultural survival and adaption was possible.

George Mung Mung expressed his relationship to his country in the following way:

If they smash this turtle (a turtle dreaming site, represented by a rock near Tickalara), we will have nowhere to live (belong). If we find it smashed, we don't know what we'll do. This is the special one. That's his country (hills to the east), Mungarrtapany. Those two small hills over there, there's a cave there. That's his (the turtle's) country, he's looking out (George Mung Mung, translated by Eileen Bray - Ross 1989: a:81).

Land matters such as tenure and access were constantly on the agenda of the community during the SIA (Ross 1989: a:67). The dispossession of Aboriginal people from their 'country' in the East Kimberleys is often associated with the granting of award wages to Aboriginal people. Aboriginal participants in the SIA emphasised this factor in leaving, or being forced off, pastoral properties (Ross 1989 a:48). Ross stressed the value of perceptions, as a 'reality' in their own right, but argued that other views and factors should be considered as well (Ross 1989 a:49,89). For example, structural changes in the pastoral industry and land degradation could have been significant factors.

Leaving the stations was traumatic for many Aboriginal people and it currently makes it impossible (due to the conduct of pastoralists) for people to return to live or take care of their 'country' (see Ross 1989 a:56-57), Boer 1989:48-52). New sources of income had to be found and new communities and political and economic relationships formed. There is a

continuing desire to return to 'country' and create new communities revealed in the SIA (Ross 1989 a:58-60).

Aboriginal Strategies

Response to developments such as Argyle Diamond Mine and Purnululu (Bungle Bungle) National Park, show an enduring concern and sadness about desecration of sacred sites. There is also an element of realism as people have had to deal with the impacts of the mine and tourism. Communities in the Turkey Creek area have been politically adept in securing some concessions (from Argyle Diamond Mine) and participating in the planning of Purnululu (Ross 1989a:61). The SIA also revealed Aboriginal strategies to get pastoral excisions, leases and purchase land.

Education of young people in traditional ways is given a high priority by older people (Ross 1989a:77), although this usually requires access to country. Turkey Creek communities have also been involved in the local school and want to develop more 'two-way' Aboriginal education (Ross 1989 a:78).

Underlying many Aboriginal strategies (for example, establishment of outstations), is the desire to have greater autonomy and to be able to move around again:

Kartiya can't let us (onto land). We can't able to walk over there. We locked up here. Just like a we in jailhouse. That's the way kartiya got we all over, in't it. You can see that. Kartiya town that side, nother town this way, nother town that way, stations, anywhere. They ought to let us walk up there, stations, anywhere, but they can't let us. They only give us here. Don't go nowhere. They don't want we to go la (there), that we bin walking about early days, walk around all over the country. They don't want we to go there (Hector Chunda and Jack Britten - Ross 1989a:68).

Ross makes a number of suggestions about how these strategies for new communities and greater mobility can be resourced (Ross 1989 a: 68-75).

Evaluation

The Turkey Creek Community SIA is a good example of politically oriented SIA which emphasised Aboriginal perceptions and aspirations in the context of 'their' history. Sympathetic methods and terms of reference chosen by Aboriginal people made the development of the study approach an organic learning process for the researcher and other participants. Methods were informed by anthropology, but were adapted to the preferences and participation of the communities involved in the study. Story telling is a research approach which gives Aboriginal people considerable control and power. It is consistent with the humanist approach to sociology and tends to be oriented towards phenomenology. This enables a vivid and textured insight into perceptions of Aboriginal participants.

A corollary of this approach is that SIA prediction is even more difficult than usual. Impacts and events cannot be easily singled out of the cumulative picture - it would destroy its essential character. Ross presented the past, present and future as being linked in Aboriginal perception. In part, she dealt with the problem of prediction by relying on Aboriginal aspirations and strategies, as elaborated in the SIA. Turkey Creek people may not be able to translate this into reality, in the near future, but developing political efficacy and defining goals through this type of SIA may be a step along the way.

All research needs a 'matrix' of interpretation which is subjective as well as technical. The Turkey Creek SIA was an important step in providing this dimension to EKIAP and establishing the legitimacy of subjective research. In an ethical and practical sense, there is a real futility in policies made in ignorance of the culture and workings of a community.

The Turkey Creek Community SIA can give general guidance to this type of study with other Aboriginal communities. In many ways it is an example of an educative process in developing SIA

which is located within the impacted indigenous community, rather than the imperatives of the industrial market society. This causes considerable conflict and institutional problems for the policy making process of the wider society. The Turkey Creek SIA report can be seen as an attempt to begin cross-cultural education about policy issues. It adds to the Social Impact of Uranium Study in establishing the importance and vitality of contemporary Aboriginal culture, which is nonetheless faced with enormous disadvantages in exerting influence on policies which affect them.

THE NEW ZEALAND EXPERIENCE - SIA AND MAORI PEOPLE

Background

New Zealand has a remarkable history in relating social concerns to environmental issues. The first significant attempt to integrate social factors into planning was the Huntley Monitoring Project, based at the University of Waikato, which commenced in 1975. The six-year monitoring study examined the regional and local significance of the construction of a large thermal power station. Several Maori communities were affected, including the home of the Maori Queen. A specific study was undertaken of the socio-economic impacts of the proposal on Waihi Maori community.

Much of the research was technically oriented, but political approaches evolved during the course of the study. This included a proposal for community centred social impact monitoring (rather than monitoring from 'above'), which recognised the political nature of the process (Fookes 1981(b), 1981(c)). Tester explored a 'welfare perspective' on monitoring, and argued that community centred monitoring was justifiable on humanitarian grounds, but it was also 'the only approach capable of producing meaningful information' (Tester 1980:51). Public participation has developed a central role in SIA and social impact monitoring approaches in New Zealand.

Against this background, Maori people insisted on relating their cultural concerns to environmental issues, often in an integrated way. For example, claims to land and fisheries rarely occur in isolation. Maori people have sought to protect fisheries, prevent pollution and develop economic strategies for their community. Maori concerns had some legal basis in the Treaty of Waitangi, an agreement between the Queen of England and most Maori chiefs, signed in 1840. There are some fundamental differences between the English text and the Maori text (signed by 500 Maori chiefs). Both versions of the Treaty recognise the Maori rights to full and undisturbed possession of their lands, forests and fisheries, but a crucial difference between the texts is that the Maori version implies the retention of sovereignty by Maori, while the English version cedes sovereignty.

This treaty was never ratified in a formal legal sense, and its legal status has been subjected to ongoing dispute. A recent Court of Appeal decision (New Zealand Maori Council v Attorney General (1987) 6 NZAR 353) recognised the 'principles' of the Treaty of Waitangi as being incorporated into a New Zealand statute (relating to the sale of government assets to State owned enterprises). Another legal basis for Maori concerns has been section 3(g) of the New Zealand Town and Country Planning Act, 1977, which stated that 'the relationship of the Maori people and their culture and traditions with their ancestral land' was a matter of national importance which should be considered when planning schemes are prepared. However, the Treaty of Waitangi has been the authority relied on by Maori people in their attempts to build a bicultural society reflecting their views about the social and physical environment. The establishment of the Waitangi Tribunal in 1975 to hear their grievances under the Treaty has been a crucial legal and political development. It will be discussed in detail later in this section. Another current event vital to Maori concerns is the review of all New Zealand legislation relating to land, water, mining and coastal issues (Resource Management Law Reform, New Zealand Ministry for Environment 1980).

This background has led to a considerable overlap of legal and policy issues relating to sociocultural impacts on Maori people. The Chairman of the Waitangi Tribunal (Durie CJ) has argued that there are justiciable and non-justiciable elements to most Maori claims:

Particular claims for the recognition of customary hunting and fishing rights, are the sorts of claims that could be readily transmuted to defined rights by statutory enactment (and might be said to have foundation in common law as well). Such rights, if given, would be justiciable. But hunting and fishing claims raise wider issues of whether resource management and development policies should reflect particular cultural preferences. To the extent that a development may impinge upon a prescribed fishing right, an action for damages may well be provided for in the general Courts, but many Maori people are really saying much more, that their particular view of environmental management should be adopted as a matter of national policy (1986:235).

This quote reflects the integrated character of Maori claims in New Zealand.

The Waitangi Tribunal and Social Impact Assessment

The formal legal recognition of the Treaty of Waitangi may have been in dispute, but Maori people saw it as part of the fundamental law of New Zealand. Their protests culminated in the passing of the Treaty of Waitangi Act, 1975. This Act established the Waitangi Tribunal to hear petitions from Maori people 'prejudicially affected' by any proposed Government policies, legislation or practices which were inconsistent with the Treaty of Waitangi occurring after 1975. The Tribunal was given the exclusive right to determine the meaning of the Maori and English texts and to reconcile any differences between them when deciding claims. The Waitangi Tribunal makes recommendations which do not bind the Government. However, they have developed considerable political force. Some reasons for this have been the development of SIA approaches by the Tribunal and its creation of a body of jurisprudence on the Treaty of

Waitangi reflecting Maori views. The Tribunal now has a Maori chairman. The Treaty of Waitangi Act was amended in 1985 so that Maori petitions can extend to grievances since 1840. Although the membership and resources of the Tribunal were increased, there are about one hundred and eighty cases waiting to be heard by the Tribunal.

The advantages of the Tribunal are that whereas SIA inquiries and studies have a short life, raise expectations in indigenous people and then go away again, there is more likely to be political and legal development with an ongoing institution like the Tribunal. The flexibility and informality associated with the Tribunal (rather than a court of law) has advantages for Maori participation. Maori people had reason to be suspicious of paakehaa law and sought to develop new approaches. One vital element in Tribunal hearings is the attention to history, particularly Maori versions of it. Durie tries to explain the reason for this:

I doubt many Maori will be able to seek the road ahead until the road behind has been cleared for we are as a people locked into history. There is a Maori opinion that your future lies behind you for what in fact confronts you is your past and we are still largely constrained by that opinion (1986:236).

Maori people constitute approximately half the Tribunal. Probably, the approach most significant to SIA is that hearings are conducted on the Marae, and according to Maori custom, wherever possible. This has been a powerful process which has contributed to Maori political development and knowledge of paakehaa law and policy.

There have been approximately eight major reports and eight minor reports handed down by the Tribunal, with a large number of recommendations. The New Zealand Parliamentary Commissioner for the Environment has reported that Crown responses have not been adequate, partly because of the number of Government Departments required to give a co-ordinated response, and lack of clear

mechanisms for institutional action (1988). At the time of the Report of the Parliamentary Commissioner, fifty nine recommendations had been made by the Tribunal and about twenty one had been fully or partly implemented. The New Zealand Government responded in 1988 by setting up a Treaty Issues Division within the Department of Maori Affairs to monitor and co-ordinate Departmental responses and liaise with Cabinet. Policy proposals are now reviewed for Treaty of Waitangi implications before going to Cabinet and the Minister for Maori Affairs must report annually to Parliament on the implementation of Tribunal recommendations.

It appears that the procedures and processes developed by the Waitangi Tribunal allow Maori cultural concerns to be articulated in a way which has forced some response from paakehaa institutions. A close examination of the Tribunals Reports show a strong environmental concern in many Maori claims. For example, the first three inquiries dealt with the following proposals:

- (1) An electric power station proposed on the Waiiau Pa site which would have impacts on Maori fishery rights in Manukau Harbour, near Auckland. No recommendations were made when the project was withdrawn.
- (2) A proposal for a synthetic fuel plant at Taranaki which would contribute to the discharge of industrial and sewage waste onto or near Maori fishing grounds. The claim related to excessive discharge from existing outfalls, which would be exacerbated if the proposed plant was built (The Te Atiawa hearing).
- (3) A proposal to construct a nutrient pipeline to discharge raw sewage from Rotorua into the Kaituna River. This river had strong spiritual and cultural associations for Maori people (the Sir Charles Bennett Inquiry).

The judgments of the Tribunal in these inquiries are discussed by Kenderdine (1985). They substantially upheld Maori claims and criticised the insufficiency of existing legislative

and planning mechanisms to deal with Maori interests in natural waters and seafood interests. Recent claims before the Tribunal have evoked concern by some paakehaa, that Maori claims will substantially conflict with their interests. Maori from the Ngati Whatua of Orakei claimed land from which they had been dispossessed, and was to be subdivided by the New Zealand Housing Corporation. A limited settlement had been made between the Crown and the Maori people involved. The Tribunal decided that this was inadequate reparation for the breaches of the Treaty of Waitangi. The Tribunal recommended a settlement which would help achieve an economic base for the Ngati Whatua and restore the tribe's status (Waitangi Tribunal 1987:6).

An interim report has been issued on a large fishery claim by Maori (Waitangi Tribunal 1988) from the Muriwhenua tribes. It has implications for numerous other fishery claims (already lodged) with the Tribunal if they succeed.

The significant features of the Waitangi Tribunal process relevant to SIA are:

- * the use of indigenous forums and customs;
- * the use of Maori and Paakehaa history, as a way of creating a more holistic approach to claims and breaking down abstract legalism;
- * the creation of a richer jurisprudence on the Maori version of the Treaty of Waitangi which focuses on Maori sovereignty and culture;
- * the articulation of strategies about how Maori aspirations and cultural concerns can be reflected in day to day laws, practices and policies in New Zealand;
- * cross-cultural education and institutional development by Maori and paakehaa.

Durie has recognised that a 'once and for all' settlement would not have worked well, as the basis for a bicultural society and a social contract between two peoples must be 'developed over time' (1986:236). As could be expected, the Tribunal came under

great political pressure when it showed some success in articulating Maori aspirations. It had to intervene directly when the government hastily proposed to sell off assets to State owned enterprises (Memo sent to Cabinet by Tribunal on 6 December, 1986). The Tribunal stated that the proposed Bill was in breach of the Treaty of Waitangi, and would affect a number of cases pending before them (including the Muriwhenua hearing). The New Zealand Government also attempted to privatise fisheries through a Quota Management System which included individual transferable quotas (tradeable private property rights).

The State Owned Enterprises Bill, 1986 was challenged by the New Zealand Maori Council, in the landmark case discussed earlier (New Zealand Maori Council v Attorney General (1987) 7 NZAR 353). The Crown proceeded with selling off assets, but issued memorials on titles of land, passed to State owned enterprises, that it was liable for resumption if the Waitangi Tribunal ordered the land be returned to claimants. This threatens to become an administrative nightmare, as purchasers can apply to have memorials removed by the Tribunal. The dispute over the Quota Management System for fisheries has led to intense negotiations between Maori people and Government. Kelsey believes that Maori have been forced into untimely and unfair negotiations and the results are unlikely to be equitable for Maori people (1989:8). The suspicion is that the New Zealand Government fears the growing legitimacy and scope of Maori claims, and is trying to divest itself of as many assets as possible (Kelsey 1989:8).

The rhetoric of the New Zealand Government is 'partnership; with Maori people (see Partnership Response Policy Statement, Department of Maori Affairs, 1988). The devolution of the Department of Maori Affairs to Tribal Governments (IWI) is part of this strategy. The new language of Government is the 'principles' of the Treaty of Waitangi, which implies compromise rather than clear legal obligation.

The Resource Management Law Reform will address SIA and Maori people. It appears that resource management and planning

will be largely devolved to regional and local authorities. The status of Maori cultural concerns and the Treaty of Waitangi in the new regime is not yet clear but it will certainly be a significant factor. There is a very real possibility that some of these initiatives are bona fide 'community development' strategies which will backfire. They will dissipate Maori energies in a huge array of forums and issues. The compromise for Maori will be from a position of weakness, not strength.

This description of contemporary policy developments in New Zealand demonstrates that SIA strategies can work well, but cannot 'ensure' that the wider aspirations of indigenous people are achieved. It is a contribution, not a solution.

CONCLUSIONS

The practice of SIA involving indigenous people provides some useful guidance for assessing sociocultural impacts. Many indigenous peoples continue to assert communal interests, maintain an inseparable connection between the social and physical environment and relate the past to the future. In many ways, sociocultural impacts may be easier to evaluate in these situations. We need gradually to draw lessons which may assist the humane development of urban communities, without romanticising the past or traditional cultures.

Improving Approaches to SIA

The analysis of SIA with indigenous peoples suggest several aspects of SIA which need further development. The following chart indicates some approaches and theoretical contexts that have been useful in developing politically oriented processes in SIA.

POLITICALLY ORIENTED SIA

SIA Processes	Relevant Approaches and Theoretical Context
1. Historical Dimension to study	<ul style="list-style-type: none"> . oral history . academic history . archival research
2. Presenting individual and community perceptions and values	<ul style="list-style-type: none"> . oral history . anthropological approaches (eg ethnography) . psychological approaches (eg personal construct theory) . humanistic, sociology and sociology of knowledge
3. Understanding the community	<ul style="list-style-type: none"> . anthropological approaches (eg ethnography) and methods (eg participant observation) . community studies . oral history
4. Cumulative views (regional and historical)	<ul style="list-style-type: none"> . interdisciplinary research projects . model building (in the tradition of Blishen et al)
5. Community control and self determination	<ul style="list-style-type: none"> . citizen participation . development of research capacity and access to information . control of research . control of procedures at forums . theories of participatory democracy
6. Integration of technical research with politically oriented research elicited in above processes	<ul style="list-style-type: none"> . baseline research . interdisciplinary research projects . interaction forums, such as workshops with experts and non-experts
7. Formulation of action/ strategies	<ul style="list-style-type: none"> . policy analysis . institutional development . citizen participation
8. Monitoring	<ul style="list-style-type: none"> . sociological theories of 'action' and retrospective interpretation . re-evaluation of policy analysis . citizen participation

The above chart makes suggestions about how the theory and practice of politically oriented SIA can be more closely integrated in a way which might be able to overcome many of the limitations arising from technically oriented SIA.

The focus of these suggestions for the development of politically oriented SIA is that it should be community controlled. However, citizen participation is not a "panacea". Citizen participation needs to lock into interdisciplinary research and involve strategies to influence decisions.

Technically-oriented SIA will continue to play an important role in SIA. It provides a useful approach for demographic impacts and other social impacts that can be reduced to quantitative data. This paper argues that politically oriented SIA is essential and legitimate in presenting the perceptions and values in SIA. This subjective dimension is vital to SIA and must be considered along with more "objective" research. This paper has examined ways of further developing the subjective dimension of SIA.

It has also been argued that there are ethical and broader issues relating to politically-oriented SIA such as community development, self-determination and participatory democracy, and challenges to the existing industrial system. The dominance of the industrial ideology, and the technical traditions in the policy sciences have impeded the development of politically-oriented SIAs which are linked to these broader issues and policies. To further develop politically-oriented SIA it is necessary to adopt an interdisciplinary approach, which integrates theoretical and practical approaches in areas such as history, anthropology, sociology, psychology, political science and law.

The most important aspect of such an approach is an ethical commitment by people involved in research, a sensitive and reflexive capacity and a recognition that there is a uniqueness and power in the real lives of people (and their communities)

which must be recognised in the policy-making process. SIA has become more than a technique or a loosely defined activity. It has become a strategy to bring a humanist perspective to the policy sciences (including planning activity).

SIA has special significance for indigenous peoples, who are greatly disadvantaged in technical approaches to the policy sciences and decision-making. They do not desire assimilationist strategies (which would enable them to compete with greater equality). SIA provides a strategy to present the reality and legitimacy of their culture, in a political system which usually marginalizes it. It is clear that only politically-oriented SIA can present this reality and begin to develop linkages with wider aspirations of indigenous peoples. These wider aspirations remain their focal concerns - to protect their land, culture and develop a higher degree of economic and political self determination.

The Turkey Creek Community SIA, undertaken with an Aboriginal community as part of EKIAP, was a useful example of a politically-oriented SIA which focused on community control, historical context, subjective perceptions, values and aspirations for the future. It revealed that Aboriginal people have a contemporary culture that can be recognised by policy-makers. The Turkey Creek SIA also showed the increasing emphasis, by Aboriginal people in connecting past and current impact to their wider aspirations. A fundamental problem remains as to how we can reflect those wider aspirations in the policy processes of non-Aboriginal society.

Short-term SIA can contribute to debate and policy development but cannot develop ongoing institutions and forums for indigenous concerns about sociocultural impacts. The Waitangi Tribunal in New Zealand is an example of a response to these legitimate concerns of indigenous peoples. It remains to be seen whether Maori people will overcome the serious obstacles to building a bicultural society. We should be wary of expecting too much of SIA, even if it is embodied in an ongoing institution

like the Waitangi Tribunal although it may force negotiations, such as currently occurring in New Zealand and Canada, for settlements and agreements (about land claims, resource planning and management).

An accommodation of the claims of indigenous peoples requires a prolonged negotiation and experimentation with legislative change, new institutions and administrative practices. The Alaskan Native Claims Settlement Act, 1971 is a good example of a "well meaning" strategy, which was undertaken with cultural blindness. In the end, ANCSA had little to offer the indigenous people of Alaska. The SIA should have been undertaken before ANCSA was legislated.

Much will depend on the growing political efficacy of indigenous people in dealing with the dominant culture. Politically-oriented SIA can contribute to our understanding (and appreciation of) contemporary indigenous cultures and their growing political efficacy. SIA can be used to predict and monitor socioeconomic impacts, and as part of a wider process to educate the dominant culture and provide a basis for mediation. A lingering suspicion remains that these negotiations and SIA processes will not achieve much more than incremental change until a "just" settlement has been made with indigenous peoples. A "just" settlement, such as recognition of land claims and/or compensation, is a first step in providing an economic and political basis for self-determination by indigenous peoples. Politically-oriented SIA would be a powerful process, when built on this base, and integrated in the planning and management of developments affecting indigenous peoples.

REFERENCES

- Arendt, H. 1958.
The Human Condition.
Chicago: University of Chicago Press.
- Armour, A., Bowron, B., Miller, E., and Miloff, M. 1982.
'A Framework for Community Impact Assessment'
In Finsterbush, K. and Wolf, C.P. Methodology of Social 72
Impact Assessment.
Massachusetts: Hutchinson Ross.
- Australian Institute of Aboriginal Studies. 1984.
Aborigines and Uranium
Canberra: Australian Government Publishing Service.
- Bell, C. and Newby, H. 1971.
Community Studies.
Sydney: George Allen & Unwin.
- Bachrach, P. 1967.
The Theory of Democratic Elitism: A Critique.
Boston: Little Brown and Co.
- Berger, T.R. 1977.
Northern Frontier, Northern Homeland. The report of the
Mackenzie Valley Pipeline Inquiry vols 1 and 2.
Ottawa, Canada: Ministry of Supply and Services.
- Berger, T.R. 1985.
Village Journey: The Report of the Alaska Native Review
Commission.
New York: Hill and Wang.
- Berger, T.R. 1982.
'Resources, Development and Human Values'
Address to First International Conference on Social Impact
Assessment.
Richmond, Canada, 1982. Unpublished.
- Berger, P.L. and Luckman. 1967.
The Social Construction of Reality: A Treatise in the
Sociology of Knowledge.
New York: Anchor Books.
- Blishen, B.R., Lockhart, A., Craib, P. and Lockhart, E. 1979.
Socio-economic Impact Model for Northern Development.
Canada: Department of Indian and Northern Affairs.
- Boer, B.W. 1989.
The Legal Framework Affecting Aboriginal People in the East
Kimberley.
East Kimberley Working Paper No 30.
Canberra: CRES, Australian National University.

- Boggs, S. 1978.
Relationships between Indian Tribes, Science and Government in Preparing Environmental Impact Statements.
 Lame Deer, Massachusetts. Unpublished.
- Boggs, J.P. 1982a.
 'Adversarial Politics and Indian Tribal Involvement in NEPA: A Case Study'.
 In Geisler et al.
- Boggs, J.P. 1982b.
Implementing NEPA on Reservations: Some Problems.
 Paper presented at the International Conference on SIA: Advancing the state of the art.
 Richmond, Canada. Unpublished.
- Bolger, A. 1987
The Effect of Public Sector Activity on Aborigines in the East Kimberlies.
 East Kimberley Working Paper No 23.
 Canberra: CRES, Australian National University.
- Bookchin, M. 1982.
The Ecology of Freedom.
 Palo Alto, California.
- Bowles, R.T. 1981.
Social Impact Assessment in Small Communities.
 Toronto: Butterworths.
- Branch, K., Hooper, D., Thompson, J. and Creighton, J. 1984.
Guide to Social Assessment: A Framework for Assessing Social Change.
 Boulder, Colorado: Westview Press.
- Branch, K., and Thompson, J.G. 1981.
BLM Social Effects Project: Research Priorities.
 Washington: Bureau of Land Management.
- Canadian Environmental Assessment Research Council. 1985.
Social Impact Assessment: A Research Prospectus.
 Quebec: CEARC Secretariat.
- Carew-Reid, J. 1982.
Environmental Public Inquiries - Some Limitations and Potentials.
 Paper presented to National Environment of Law Association Seminar on Environmental Assessment.
 Sydney. Unpublished.
- Carley, M.J. 1984.
Cumulative Socioeconomic Monitoring: Issues and Indicators for the Beaufort Region.
 Vancouver: School of Community and Regional Planning.

- Carley and Bustelo. 1984.
Social Impact Assessment and Monitoring: A Guide to the Literature.
 Boulder: Westview Press.
- Clarke, C., Ross, H., Florey, M. and Trahanas, N. 1984.
Before Lines are Drawn: A Social Impact Study of a Proposed Housing Development of Upurl Upurlila Ngurratja (Cundeelee).
 Perth: Department of Community Welfare.
- Corbett, R., 1986.
A Bargaining and Community Development Approach to Social Impact Assessment and Management.
 Calgary: Faculty of Environmental Design, University of Calgary, Masters thesis.
- Craig, D. 1985.
Citizen Participation and Environmental Impact Assessment.
 Paper delivered to International Workshop on Environmental Impact Assessment, Wellington: unpublished.
- Craig, F.E. and Tester, F.J. 1982.
Indigenous Peoples: Reassessing Directions for SIA.
 In Geisler et al.
- Crimmins, T.J. 1978.
 'Planning for the Future with an Eye on the Past: The Value of Local Historical Sources'.
 In Dickens and Hill (eds).
- Colishaw, G.K. 1986.
 'Aborigines and Anthropologists'.
Australian Aboriginal Studies 1986 (No 1): 2-12.
- Central Land Council 1987.
Sharing the Park: Anangu Initiatives in Ayers Rock Tourism - A Tourism Impact Study.
 Alice Springs: Central Land Council. Unpublished.
- Dames and Moore. 1982.
Environmental Review and Management Programme: Argyle Diamond Project.
 Perth; Dames and Moore.
- Dickens, R.S. and Hill, C.E. (eds). 1978.
Cultural Resources: Planning and Management.
 Boulder, Colorado: Westview Press.
- Dietz, T. 1987.
 'Theory and Method in Social Impact Assessment'.
Sociological Inquiry 77.
- Dixon, R.A. and Dillon, M.C. (eds). forthcoming.
Aborigines and Diamond Mining: The Politics of Resource Development in the East Kimberley.

Perth: University of Western Australia Press.

- Dixon, R.A., Elderson, C., Irvine, S. and Kirkby, I. 1984.
A Preliminary Indication of some Effects of the Argyle
Diamond Mine on Aboriginal Communities in the Region: A
Report to the Kimberley Land Council and National Aboriginal
Congress.
East Kimberley Working Paper No. 8.
Canberra: CRES, Australian National University.
- Donovan, F. 1986.
An Assessment of the Social Impact of Argyle Diamond Mines
on the East Kimberley Region.
East Kimberley Working Paper No. 11.
Canberra: CRES, Australian National University.
- Durie, E. 1985.
'The Waitaingi Tribunal: It's Relationship with the
Judicial System'.
New Zealand Law Journal, July: 235.
- East Kimberley Impact Assessment Project. 1985.
East Kimberley Impact Assessment Project: Project
Description and Feasibility Study.
East Kimberley Working Paper No. 1.
Canberra: CRES, Australian National University.
- Elder, P.S. 1975.
Environmental Management and Public Participation.
Toronto: Canadian Environmental Law Foundation.
- Everett, J. 1985.
The Spearhead of Modern Colonizers: Anthropologists,
Churches and Academics.
Address to 55th Congress of ANZAAS.
Melbourne, Australia. Unpublished.
- Feeney, M. and Kroll, C. 1989.
'Social and Economic Effects of Coal Development on the
Northern Cheyenne Tribe, 1970-1985'.
Impact Assessment Bulletin 6 (No. 2): 71-81.
- Finsterbusch, K., Illewellyn, L.G. and Wolf, C. 1983.
Social Impact Assessment Methods.
Beverly Hills, California: Sage.
- Finsterbush, K. and Wolf, C. (eds). 1977.
Methodology of Social Impact Assessment.
Woods Hole, Massachusetts: Hutchinson Ross.
- Finsterbush, K. 1980.
Understanding Social Impacts: Assessing the Effects of
Public Projects.
Beverly Hills, California: Sage.

- Formby, J. 1986.
Approaches to Social Impact Assessment.
 CRES Working Paper No 8.
 Canberra: CRES, Australian National University.
- Fox, R.W., Kellerher, G.G. and Kerr, C.B. 1977.
Ranger Uranium Inquiry.
 First and Second Reports.
 Canberra: Australian Government Publishing Services.
- Freudenburg, W.R. 1986.
 'Social Impact Assessment'.
Annual Review of Sociology, 12:451-478.
- Fookes, T.W. 1981(a).
 'Public Participation Initiatives'.
Final Report Paper No. 5. Huntly Monitoring Project,
 Hamilton, New Zealand: University of Waikato.
- Fookes, T.W. 1981(b).
 'Intentions and Practice of the Monitoring Project'.
Final Report Paper No 9. Huntly Monitoring Project,
 Hamilton, New Zealand: University of Waikato.
- Fookes, T.W. 1981(c).
 'Socio-economic Monitoring Information'.
Final Report Paper No. 11. Huntly Monitoring Project,
 Hamilton, New Zealand: University of Waikato.
- Fookes, T.W. 1982,
The Huntly Monitoring Project in Retrospect.
 Address to CRES, Australian National University,
 Canberra, 1982. Unpublished.
- Gamble, D.J. 1978.
 'The Berger Inquiry: An Impact Assessment Process'.
Science 199:945-952.
- Gearing, F.O. 1970.
The Face of the Fox.
 Chicago: Aldine Publishing Co.
- Geisler, C.C., Usner, D., Green, R. and West, P. 1982.
Indian SIA: The Social Impact Assessment on Rapid Resource
 Development on Native Peoples.
 Michigan: University of Michigan.
- Gibson, R. 1975.
 'The Value of Participation'.
 In Elder, P.S. (ed).
- Goodhall, H. 1988.
 'Cryin' Out for Land Rights'.
 in Burgmann, V. and Lee, J. (eds).
Staining the Wattle: A Peoples History of Australia Since
 1788.

Melbourne: Gribble/Penguin.

- Gondolf, E.W. and Wills, S.R. 1986.
'Empowered Native Community, modified SIA: The Case of
Hydaburg, Alaska'.
Environmental Impact Assessment Review 6:373-383.
- Gouldner, A. 1970.
The Coming Crisis of Western Sociology.
New York: David McKay Co.
- Grady, R., Braid, R., Bradbury, J. and Kerby, C. 1987.
'Socio-economic Assessment of Plant Closure: Three Case
Studies of Large Manufacturing Facilities'.
Environmental Impact Assessment Review 7:151-169.
- Habermas, J. 1971.
Towards a Rational Society.
London: Heinemann Educational Books.
- Hardin, G. 1970.
'The Tragedy of the Commons'.
Science 161:1243-1248.
- Jacobs, S.E. 1978.
'Experiences in Social Impact Assessment: The
Anthropologist and the Agencies'.
In Dickens, R.S. and Hill, C. (eds).
- Jobes, P.C. 1986.
'Assessing Impacts on Reservations: A Failure of Social
Impact Research'.
Environmental Impact Assessment Review, 6:385-394.
- Kelsey, J. 1989.
'The Labour Government and the Treaty of Waitangi'.
Aboriginal Law Bulletin 2 (No. 37): 7-10.
- Kesteven, S. 1986.
Guidelines for Research into Social Impacts Deriving from
non-Aboriginal Developments on Aboriginal Land.
East Kimberley Working Paper No. 15.
Canberra: CRES, Australian National University.
- Kesteven, S. 1986.
'The Project to Monitor the Social Impact of Uranium Mining
on Aboriginal Communities in the Northern Territory'.
Australian Aboriginal Studies, 1987 No. 1:38.
- Kenderdine, S. 1985.
'Maori Issues in the Planning Process and the Social
Responsibility of Industry'.
New Zealand Law Journal, August and September: 249, 301.
- Kimberley Pastoral Industry Inquiry. 1985.

An industry and government report on the problems and future of the Kimberley pastoral industry.

- King, J. and Mackinolty, C. 1983.
Tindale RAAF Base - Environmental Impact Statement-
Aboriginal Consultation.
Katherine, Northern Territory. Unpublished.
- Kirkby, I. in preparation.
Demography of the East Kimberley.
East Kimberley Working Paper.
Canberra: CRES, Australian National University.
- Lang, R. and Armour, A. 1980.
The Assessment and Review of Social Impacts.
Ottawa: Federal Environment Assessment and Review Office.
- Lasswell, H.D. 1935.
World Politics and Personal Insecurity.
New York: McGraw Hill.
- Lerner, D. and Lasswell, H.D. (eds). 1951.
The Policy Sciences: Recent Developments in Scope and
Method.
Stanford: Stanford University Press.
- Lasswell, H.D. and Kaplan, A. 1950.
Power and Society: A Framework for Political Inquiry.
New Haven: Yale University Press.
- Lasswell, H.D. 1971.
A Preview of Policy Sciences.
New York: American Epsevier.
- Little, R.L. and Krannich, R.S. 1989.
'A Model for Assessing the Social Impacts of Natural
Utilization on Resource Dependent Communities'.
Impact Assessment Bulletin 6 (No. 2): 21-37.
- Macpherson, C.B. 1973.
Democratic Theory: Essays in Retrieval.
Oxford: Oxford University Press.
- Macpherson, C.B. 1977.
The Life and Times of Liberal Democracy.
Toronto: Oxford University Press.
- Meadows. 1974.
The Limits of Growth.
New York: Signet.
- Melser, P. et al. 1982.
Patea after the Freezing Works: An Assessment of the Social
and Economic Impact on Patea of the Closure of the Patea
Freezing Company.
Wellington, New Zealand: Ministry of Works and Development.

- Melser, P. 1983.
Assessing Social Impacts: A Practical Guide.
 Wellington: Ministry of Works and Development.
- Ministry of Maori Affairs. 1988.
Partnership Response.
 Wellington: Ministry of Maori Affairs.
- New Zealand Ministry for Environment. 1988.
People, Environment and Decision Making: The Government's
 Proposals for Resource Management Law Reform.
 Wellington: Ministry for the Environment.
- New Zealand Ministry for Environment. 1988.
Resource Management Law Reform: A Treaty Based Model - The
 Principle of Active Protection.
 Wellington: Ministry for the Environment.
- Northern Land Council. 1985.
Aborigines and Tourism: A Study of the Impact of Tourism an
 Aborigines in The Kakadu Region, Northern Territory.
 Darwin: Northern Land Council.
- Parliamentary Commissioner for the Environment. 1988.
Environment Management and the Principles of the Treaty of
 Waitangi, Report on the Crown Response to the
 Recommendations of the Waitangi Tribunal 1983-1988.
- Pateman, C. 1970.
Participation and Democratic Theory.
 Melbourne: Cambridge University Press.
- Popular Memory Group. 1982.
 'Popular Memory Group: Theory, Politics, Method'.
In Making Histories: Studies in History Writing and
 Politics.
 Minneapolis: University of Minnesota Press.
- Read, P. 1979.
 'Oral History Interviewing'.
 In Barwick, D., Mace, M. and Stannage, T. (eds). Handbook
 for Aboriginal and Islander History.
 Canberra: Aboriginal History.
- Rohe, W.M. 1982.
 'Social Impact Analysis and the Planning Process in the
 United States: A Review and critique'.
Town Planning Review 53: 367-382.
- Roper, R. 1983.
 'Ethnography'.
 In Finsterbusch, K., Llewellyn, L.G., and Wolf, C.P. (eds).
Social Impact Assessment Methods.
 Beverley Hills: Sage.

- Ross, A.H. 1983.
Australian Aboriginal Perceptions of Dwellings and Living Environments.
 Ph.D. thesis.
 London: University of London.
- Ross, H. 1987.
Just for Living: Aboriginal Perceptions of Housing in Northwest Australia.
 Canberra: Aboriginal Studies Press.
- Ross, H. 1989a.
A Cumulative Study in the Turkey Creek Area WA.
 East Kimberley Paper No 27.
 Canberra, CRES ANU.
- Ross, H. and Bray, E. 1989b.
Impact Stories of the East Kimberley.
 East Kimberley Paper No. 28.
 Canberra: CRES, Australian National University.
- Ross, H. 1989c.
Control and Participation in SIA by Aborigines.
 Address to Annual Meeting of the International Association for Impact Assessment.
 Montreal, Canada. Unpublished.
- Rossini, F.A. and Porter, A.L. 1983.
Integrated Impact Assessment.
- Rumley, H. and Rumley, D. 1988.
Aborigines and Local Government in the East Kimberley.
 East Kimberley Working Paper No. 25.
 Canberra, CRES, Australian National University.
- Seaman, P. 1984.
Report of the Aboriginal Land Inquiry.
 Perth: West Australian Government Printer.
- Shaw, B. 1981.
My Country of the Pelican Dreaming: The Life of an Australian Aborigine of the Gadjerong, Grant Ngabidj 1904-1977.
 Canberra: Australian Institute of Aboriginal Studies.
- Shaw, B. 1983.
Banggaiyerri: The Story of Jack Sullivan.
 Canberra: Australian Institute of Aboriginal Studies.
- Spradley, J. 1979.
The Ethnographic Interview.
 New York: Holt, Rinehart and Winston.
- Spradley, J. and McCurdy, D.W. 1972.
The Cultural Experience: Ethnography in Complex Society.
 Chicago: Science Research Associates Inc.

- Sutton Partners. 1983.
RAAF Tindal Environmental Studies: Anthropological Studies.
 Adelaide: Sutton Partners. Unpublished.
- Sullivan, P. 1988.
Aboriginal Community Representative Associations: Intermediate Cultural Processes in the Kimberley Region Western Australian.
 Canberra: CRES, Australian National University.
- Task Force to Review Comprehensive Claims Policy, 1985.
Living Treaties: Lasting Agreements.
 Ottawa: Department of Indian Affairs and Northern Development.
- The Western Arctic Land Claim: The Inuvialuit Final Agreement 1984.
 Canada: Bureau of Indian and Northern Affairs.
- Torgerson, D. 1980.
Industrialization and Assessment: Social Impact Assessment as a Social Phenomenon.
 Toronto: York University Publications in Northern Studies.
- Tribe, L.H. 1973.
 'Technology Assessment and the Fourth Discontinuity' The Limits of Instrumental Rationality'.
Southern Californian Law Review 46:617-633.
- Tribe, L.H. 1974.
 'Ways Not to Think About Plastic Trees: New Foundations for Environmental Law'.
Yale Law Journal (1974) 83:1315-1334.
- Vertigan, N. 1989.,
The Protection of Aboriginal Heritage in NSW.
 Unpublished Honours Thesis, Law School, Macquarie University Sydney, Australia.
- Victorian Department of Community Welfare Services. 1982.
Social Impact Assessment: La Trobe Valley.
 Melbourne: Victorian Department of Community Welfare Services.
- Victorian Department of Community Welfare Services. 1983.
Planning Framework for Social Development - La Trobe Region.
 Melbourne: Victorian Department of Community Welfare Services.
- Waitangi Tribunal. 1983.
Motunui Report - Report Findings and Recommendations of the Waitangi Tribunal on the Application of Aila Taylor for and on behalf of the Te Atiawa Tribe in relation to Fishing Grounds in the Waitara District.
 Wellington: Government Printer.

- Waitangi Tribunal. 1984.
The Sir Charles Bennett Claim in respect of Proposed
Nutrient Pipeline to the Kaituna River from Rotorua.
Wellington: Government Printer.
- Waitangi Tribunal. 1985.
The Manukau Judgement.
Wellington: Government Printer.
- Waitangi Tribunal. 1987.
Waiheke Report - the Waitangi Tribunal, Report to the
Minister of Maori Affairs, in the matter of the Treaty of
Waitangi Act 1975 and in the matter of a claim by Hariata
Gordon for Ngati Paoa.
Wellington: Government Printer.
- Waitangi Tribunal. 1987.
Orakei Report 1987. Report of the Waitangi Tribunal on the
Orakei Claim.
Wellington: Government Printer.
- Waitangi Tribunal. 1988.
Muriwhenua Report 1988. Report of the Waitangi Tribunal on
the Muriwhenua Fishing Claim.
Wellington: Government Printer.
- Waitangi Tribunal. 1988.
Mangonui Sewerage Report.
Wellington: Government Printer.
- Wildman, P., and Baker, G. 1985.
The Social Impact Assessment Handbook.
Armidale, New South Wales: Social Impacts Publications.
- Williams, N. and Kirkby, I.
forthcoming.
- Young, E. 1988.
Aboriginal Cattle Stations in the East Kimberley:
Communities or Enterprises?.
East Kimberley Working Paper No. 21.
Canberra: CRES, Australian National University.

ATTACHMENT 1

EAST KIMBERLEY WORKING PAPERS 1985-89

- 1985/1 East Kimberley Impact Assessment Project: Project Description and Feasibility Study.
East Kimberley Working Paper No.1
ISBN 0 86740 181 8
ISSN 0816-6323
- 1985/2 The East Kimberley Region: Research Guide and Select References.
M.C. Dillon
East Kimberley Working Paper No.2
ISBN 0 86740 182 6
ISSN 0816-6323
- 1985/3 Aborigines and the Argyle Diamond Project.
Submission to the Aboriginal Land Inquiry.
Dr W. Christensen
East Kimberley Working Paper No.3
ISBN - 86740 202 4
ISSN 0816-6323
- 1985/4 Pastoral Resource Use in the Kimberley : A Critical Overview.
East Kimberley Working Paper No.4
ISBN 0 86740 183 4
ISSN 0816-6323
- 1985/5 Preliminary Report : Ethnobotany in the Bungles.
Dr Deborah Bird Rose
East Kimberley Working Paper No.5
ISBN 0 86740 186 9
ISSN 0816-6323
- 1985/6 A Preliminary Account of the Ethnobotany of the Kije People of Bungle Bungle Outcamp.
N.H. Scarlett
East Kimberley Working Paper No.6
ISBN 0 86740 205 9
ISSN 0816-6323
- 1985/7 An Aboriginal Economic Base: Strategies for Remote Communities.
Extracts from *Report of the Committee of Review of Aboriginal Employment and Training Programs.*
East Kimberley Working Paper No.7
ISBN 0 86740 190 7
ISSN 0816-6323

- 1985/8 A Preliminary Indication of some Effects of the Argyle Diamond Mine on Aboriginal Communities in the Region: A Report to the Kimberley Land Council and the National Aboriginal Conference.
East Kimberley Working Paper No.8
ISBN 0 86740 203 2
ISSN 0816-6323
- 1985/9 Structural Change in Wyndham.
M.C. Dillon
East Kimberley Working Paper No.9
ISBN 0 86740 204 0
ISSN 0816-6323
- 1985/10 Inhabited National Parks: Indigenous Peoples in Protected Landscapes.
Stan Stevens
East Kimberley Working Paper No.10
ISBN 0 86740 263
ISSN 0816-6323
- 1986/11 An Assessment of the Social Impact of Argyle Diamond Mines on the East Kimberley Region.
Frank Donovan
East Kimberley Working Paper No.11
ISBN 0 86740 267 9
ISSN 0816-6323
- 1986/12 The Health of Kimberley Aborigines: A Personal 15-Year Perspective.
Michael Gracey and Randolph M. Spargo
East Kimberley Working Paper No.12
ISBN 0 86740 268 7
ISSN 0816-6323
- 1987/13 Annotated Bibliography on Tourism and Aborigines.
Prepared for East Kimberley Impact Assessment Project and the Central Land Council.
Compiled by Ian White
East Kimberley Working Paper No.13
ISBN 0 86740 X
ISSN 0816-6323
- 1987/14 Aborigines in the Tourist Industry.
Sue Kesteven
Aborigines and Tourism in North Australia: Some Suggested Research Approaches.
M.C. Dillon
East Kimberley Working Paper No.14
ISBN 0 86740 276 8
ISSN 0816-6323

- 1987/15 Guidelines for Research into Social Impacts Der.
from Non-Aboriginal Developments on Aboriginal Land.
Sue Kesteven
East Kimberley Working Paper No.15
ISBN 0 86740 277 6
ISSN 0816-6323
- 1987/16 Conservation Priorities in North-Western Australia.
Richard J-P. Davies
East Kimberley Working Paper No.16
ISBN 0 86740 282 2
ISSN 0816-6323
- 1987/17 Social Impact Assessment Bibliography.
Compiled by Donna Craig
East Kimberley Working Paper No.17
ISBN 0 86740 302 0
ISSN 0816-6323
- 1987/18 The Potential for Reduced Dependency at Aboriginal
Communities in the East Kimberley Region.
J.C. Altman
East Kimberley Working Paper No.18
ISBN 0 86740 301 2
ISSN 0816-6323
- 1987/19 The Economic Impact of Tourism on the Warmun (Turkey
Creek) Community, East Kimberley.
J.C. Altman
East Kimberley Working Paper No.19
ISBN 0 86740 303 9
ISSN 0816-6323
- 1987/20 The Effect of Public Sector Activity on Aborigines in
the East Kimberley. Part I. Public Sector Agencies in
the East Kimberley.
Audrey Bolger
East Kimberley Working Paper No.20
ISBN 0 86740 308 X
ISSN 0816-6323
- 1987/21 Aboriginal Cattle Stations in the East Kimberley:
Communities or Enterprises.
Elspeth Young
East Kimberley Working Paper No.21
ISBN 0 86740 324 1
ISSN 0816-6323
- 1987/22 Aboriginal Community Representative Organisations:
Intermediate Cultural Processes in the Kimberley
Region, Western Australia.
Patrick Sullivan
East Kimberley Working Paper No.22
ISBN 0 86740 325 X
ISSN 0816-6323

- 1987/23 The Effect of Public Sector Activity on Aborigines in the East Kimberley.
Part II. Aboriginal Communities in the Kimberley
Audrey Bolger
East Kimberley Working Paper No.23
ISBN 0 86740 309 8
ISSN 0816-6323
- 1988/24 Pre-Settlement Intrusion into the East Kimberley
Cathie Clement.
East Kimberley Working Paper No.24.
ISBN 0 86740 326 8
ISSN 0816-6323
- 1988/25 Aborigines and Local Government in the East Kimberley.
Hilary and Dennis Rumley.
East Kimberley Working Paper No.25
ISBN 0 86740 327 6
ISSN 0816-6323
- 1989/26 Community-Based Illness in Kimberley Aborigines.
Michael Gracey, Stuart Gunzburg and Randolph M. Spargo.
East Kimberley Working Paper No.26
ISBN 0 86740 3500
ISSN 0816 6323
- 1989/27 Community Social Impact Assessment: a cumulative study in the Turkey Creek area, Western Australia.
Helen Ross.
East Kimberley Working Paper No.27.
ISBN 0 86740 355 1
ISSN 0816-6323
- 1989/28 Impact Stories of the East Kimberley.
Helen Ross.
East Kimberley Working Paper No.28.
ISBN 0 86740 356 X
ISSN 0816-6323
- 1989/29 Historical Notes Relevant to Impact Stories of the East Kimberley
East Kimberley Working Paper No.29
Cathie Clement
ISBN 0 86740 357 8
ISSN 0816-6323

1989/30 The Legal Framework Affecting Aboriginal People in
the East Kimberley.
Ben Boer.
East Kimberley Working Paper No.30.
ISBN 0 86740 358 6
ISSN 0816-6323