Figure 2.1: Problem-Solving Strategies and Post-Normal Science (Functowicz and Ravetz 1992)

Although the co-production of environment knowledge and policy-agendas is recognised in environmental decision-making, the extent of participation and the equality given to different views remains ambiguous in practice. Academics have charted the possible degrees of participation (cf. Arnstein 1969; Biggs 1989) and

'prosaic' or 'imaginative', with regards to the degree of departure from the dominant political economic status quo (see Figure 2.2 below).

Figure 2.2: Classifying environmental discourse (adapted from Dryzek 2005:15)

	Reformist	**Radical**
Prosaic	Problem Solving • Administrative Rationalism • Democratic Pragmatism • Economic Rationalism	Survivalism [contrast Promethean]

basis of a wider array of evidence" (Richardson and Razzaque 2005:171, emphasis in original). In environmental discourses, this approach is seen as a remedy to the technocratic expertise of bureaucra

Sustainable Development discourse considers it to be imaginative, in questioning the structure of political systems, but not radical, in its acceptance of the basic premise of the capitalist economy. This discourse is particularly wide-ranging in adopting values of economic growth, environmental protection, distributive justice and the reconfiguration of power relations. Dryzek considers sustainable development to be essentially anthropocentric with nature regarded foremost as something that is useful to humans. However, it will be argued here that this discourse is too opaque and indeterminate to provide a rigorous analytical framing for the participation rationale. This study therefore adopt

company; this could make profitable development of the property difficult" (Holden 2005:432, emphasis in original).

At the international level, the World Bank maintains the right to FPI Consultation within its mandate of poverty alleviation and sustainable development thus rejecting the conclusion of the Extractive Industries Review that recognition of FPI Consent as a necessary condition for the achievement of these goals. The World Commission on Dams (WCD 2000) recognised the right to FPI Consent within its sustainable development objectives of equity in resource and benefit allocation, sustainability in resource use, participation in decision-making, efficiency in infrastructure development and accountability towards present and future generations. In line with this approach, the WCD argued that it is equally important to consider the extent to which alternatives to economic growth exist in resource rich countries, the extent to which adverse environmental and social impacts are acceptable or capable of being mitigated or avoided, and the degree to which local consent should govern development decisions across a wider spectrum of activities.

This analysis supports Coehlo and Favareto's assessment of 'sustainable development' as polysemic. Although this discourse may appear to represent a half-way point between radical and conservative discourses, consent and consultation framings, its current ambiguity ri

or reject, the project. Though Weitzner (2009) of the North South Institute is keen to stress that FPI Consent should not be conflated with the right to veto – containing as it does other fundamental human rights such as self-determination, cultural autonomy and identity – the ability of local communities to make this decision, on the basis of their customary laws and practices, is a radical step in the assertion of indigenous rights. Development and indigenous peoples' organisations thus advocate a move towards more egalitarian power structures, protection of subsistence livelihoods, and decentralised and radical democratic processes. These values are further representative of the Green Radical approach characterised by Environmental Justice and Social Ecology movements and are premised on the conservation of tradition, indigenous livelihoods and natural resources against 'development aggression'.

serve to intensify disputes over social positions and authority. Bottom-up processes for institutional design can thus be distinguished from top-down processes (Elli

3. EMPIRICAL STUDY

3.1 CANADA

Canada is one of the largest mineral producing countries in the world. In 2007, the mining sector contributed $41.9 billion to GDP (Stohart 2008). Canada is also home to a large number of Aboriginal communities, over 1,200 of which are located within 200 kilometres of mining operations (ibid.).

3.1.1 National Framework of Rights

Indigenous rights, including the right to consultation, are enshrined within the constitution and common law of Canada. Section 35 of the Canadian Constitution Act 1982 states “the existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognised and affirmed”. The Supreme Court of Canada has

equal representation of government and aboriginals and are often responsible for reviewing the environmental

Indian and North Affairs Canada (INAC), which previously had responsibility for environmental assessments under a broader mandate of resource and economic development.

MVRMA institutionalised collaborative assessment processes under newly created and regionally distributed organisations, with clear requirements for participation and integration of different knowledge types (Armitage 2005:243). According to Armitage (ibid., 246), the creation of these new institutions and organisations was key to "creating the preconditions necessary for enhanced collaboration and learning in environmental assessments". Thus, responsibility for reviewing and approving land use permits in the NWT lies with four regional co-management boards and two pan-territorial co-management boards: the Mackenzie Valley Environmental Impact Review Board (MVEIRB) and the Mackenzie Valley Land and Water Board (MVLWB). These boards (outlined in the Figure 3.1) are intended to decentralise the decision-making process for land use and facilitate cooperation between aboriginal communities, government agencies and private actors. Armitage (2005:247) provides evidence of 'double-loop learning' within these boards – "learning that addresses and seeks to change worldviews and values" – thus evidence of a deliberative approach. Accordingly, he argues these boards, through increasing involvement of aboriginal groups, have successfully transformed previous political and institutional processes, reconfiguring entrenched power relations and assumptions about environmental assessment (ibid.).

Figure 3.1: Claims-mandated IPGs in the MacKenzie Valley (Armitage 2005:244)

Mining, and other resource development projects, submit applications to MVLWB, which then distributes them to all potentially affected aboriginal groups (i.e. those with traditional land-use interests near the proposed development). This ‘pre-screening’ process typically allows 30-45 days for aboriginal groups to provide comments and recommendations, which are often substantiated with traditional knowledge (MVEIRB 2003; Ellis 2005). The MVLWB will then review the application, consult with technical experts and decide whether to approve or reject the application based on environmental and economic considerations. If a project is deemed to have significant adverse environmental impacts it will be recommended to the MVEIRB for environmental assessment. Further, if a proposed project is deemed to be of significance to the wider population, public hearings will be held to gain public input. Finally, the minister of INAC, which retains ultimate authority on land and resource use, signs off all decisions made by the board.

These processes were adopted recently in the consid

consultation (Armitage 2005). The Sahtu Land and Water Board, for example, has established a standard stratified list of referrals to ensure the appropriate organisations and community groups are consulted. However, increased standardisation and bureaucracy has been criticised as reflecting western values and science that are inconsistent with aboriginal values and traditional knowledge. Armitage (2005:253) recognises that integrating traditional knowledge into environmental assessments may require a "value shift" and a more fundamental transition in procedures. This is partly because these processes are proponent-driven. The screening processes described above are the results of a top-down regulatory initiative by INAC. Mining corporations have also implemented top-down initiatives to foster greater participation in environmental decision-making. For example, De Beers Canada Mining Inc. proposed an environmental assessment for the Snap Lake Diamond Project in which it was maintained "traditional knowledge shall be given full and equal

3.2 PHILIPPINES

The Philippine's total mineral wealth is estimated at $3 trillion in gold, copper, nickel and other minerals, with less than 2% of the mineral area currently explored (Goodland and Wicks 2009:18). Mineral sales were estimated to reach $27 billion in 2009, following a 33% growth in 2007 (ibid.), and are thus regarded as a key component of the country's development model, in line with World Bank recommendations.

The Philippines has a large indigenous population constituting 15-20% of the population. It is estimated that half of all areas identified for mining development in the Philippines are areas subject to indigenous land claims (Holden 2004:422). Indeed, eighteen of the governments' twenty-three priority large scale mining projects are located on indigenous territories (Doyle 2009:55). Like the aboriginal communities in Canada, land is a key part of indigenous communities' cultural identity.

3.2.1 National Framework of Rights

The Philippines is regarded as having some of the most progressive environmental laws and judiciary with constitutional protection for the environment and indigenous groups (IIED 2002). However, according to Hughes (2000:3) "the government of the Philippines has demonstrated a pattern of promoting economic development goals at the expense of the human rights of indigenous cultural communities and peoples".

The NCIP's Implementing Rules and Regulations (IRR 1998) further outline the operational elements of FPIC certification such as who shall be present, the period in which elders/leaders should hold consultative meetings with their members (fifteen days), and how the decisions shall be arrived at (s.14). Section 29 further requires that the community write down the customary practice of consensus building to be followed, identify in writing and register with the NCIP their Council of Elders

Consent from communities between mining agreements and permits yet fails to identify and define the role of the NCIP in this process.

society] in the world" (ESSC 1999:91) with a strong "culture of empowerment" (Broad 1994:816 in Holden 2005:428) and a history of challenging legislation and policies. "Third parties – such as NGOs – can play an instrumental role in helping to level the power balance between communities and mining companies in the community consultation process" (Bass et al. 2004:37). To this end, the strong well-organised NGO movement in the Philippines have played a key role.

This is exemplified in research undertaken on communities living near and affected by the Dipido mine in the Nueva Vizcaya and Quirino provinces (cf. Rovillos et al. 2003; Martin et al. 2007). The potential positive and negative impacts from the mine have divided the local indigenous communities. However, the democratically-elected Didipio Barangay Council, which has primary responsibility for development projects in the area, has consistently rejected the proposed mine (Martin et al. 2007). In response to claims that *barangay* ('village') officials were being co-opted by the mine and government officials, the local communities further established the Didipio Earth Savers Movement Association (DESAMA). DESAMA submitted a petition to the state invoking their 'power of initiative' – a legal mechanism allowing officials and laws deemed detrimental to the interests of the people to be recalled – and callin

within the framework of growth-driven, profit-motivated export-oriented industrialization as encoded in the Philippine Mining Act of 1995”.

customary practices for decision-making within institutional frameworks based on rational choice and efficiency.

The Canadian case study further demonstrates O'Faircheallaigh's (2009) assertion that participatory framings should resist rigid classification and allow for the dynamic processes and political pressure that come with the opportunity for participation. The true deliberative potential of participatory forums may rest with the flexibility of their institutions rather than legislative definition. This is seen clearly in Fitzpatrick et al's (2008) assessment of MVRMA which demonstrates social learning and the gradual institutionalisation of deliberative norms. Thus, institutions which "prescribe neither process nor outcome" (Flyvbjerg 1998:223) may, in a Foucauldain manner, provide the best approach for Green Radicals seeking to restructure liberal capitalist power relations.

4.2 CONCLUDING REMARKS AND RECOMMENDATIONS

bring together divergent discourses as participants are open to change their perspectives and norms. Deliberation should not necessarily seek to achieve consensus but "workable agreements in which participants agree on a course of action, but for different reasons" (Dryzek 2000:170). However, in most cases, a power deferential exists between perspectives regarded as the 'norm' and those regarded as 'additional' to that norm (Isaksson et al 2009:301).

This first conclusion provides the basis for the second, namely that advocates of FPI Consent threaten the power structures and discourses embedded within the Western Industrialism context of economic growth and economic development and are thus restricted in their institutional design. Science has traditionally been employed as a tool in the industrial complex within a discourse of technocratic policymaking and Administrative Rationalism. Efforts to democratise environmental policymaking and science reflects a desire to give equal weight to marginalised discourses, values and knowledge. However, that values inherent to FPI Consent are difficult to equate with industrialism and economic growth mirrors the fact that equitable social and human development can be difficult to equate with quantifiable economic objectives. Hughes (2000) remarks that the situation demonstrated in the Philippines is not unique, as many countries seeking to achieve economic growth tend to violate the human rights of their underrepresented minorities. "The conflict is an unfortunate one between competing interests, all of which have been recognised as legitimate in the international arena" (ibid. 21). FPI Consent may be

empowerment and equal bargaining power under this participatory framing may require the establishment of objectives and practices that oppose the status quo. “The problem is partly one of very different and seemingly incompatible systems of understanding, and fundamentally one of power” (Ellis 2005:75). Mechanisms to adopt FPI Consent are inevitably couched in the terms of the industrialism complex. Attempts to successfully incorporate FPI consent into national legal frameworks and institutional designs requires a shift in discourse towards Green Radicalism, which targets a shift in the balance of power, values and practices that underlie environmental decision-making. Thus the ‘decentred power’ to which Nelson and Wright refer is identified as the preliminary competent of successful deliberative forums.

In conclusion, participatory framings such as FPI Consent and Consultation involve process of knowledge creation, community formation and expert institutionalisation which “are themselves deeply political exercises,

APPENDIX

LAWS AND CONVENTIONS INCLUDING FPI CONSENT

INTERNATIONAL

Convention on Biological Diversity

Convention to Combat Desertification

European Union Resolution Indigenous Peoples within the framework of the development cooperation of the Community and Member States 1998

Inter-American Commission on Human Rights

Inter-American Development Bank

International Labour Organisation Convention 169

International Petroleum Industry Environmental Conservation Association and the International Association of Oil & Gas Producers

IUCN Vth World Parks Congress

Organization of African Unity

UN Centre for Transnational Corporations

UN Commission on Human Rights, Special Rapporteur on situation of the rights and fundamental freedoms of indigenous people

UN Committee on Economic, Social and Cultural Rights

UN Committee on the Elimination of Racial Discrimination

UN Development Programme

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