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Sustainable Development: Representing a reflexive modernity inside the United Nations

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This paper suggests that the discourse of sustainable development (SD) within the United Nations (UN) represents a paradigm shift from first/industrial modernity to a reflexive modernity. Reflexive modernity is defined by the changing nature of political structures in the face of globalised environmental risk, as well as a questioning of the hegemony of the scientific process as a basis for the development of humanity and the planet. SD is a concept that innately reflects these concerns, questioning normative assumptions. This paper will argue that the rise of SD in governance discourse is not only a catalyst for a reflexive modernity, but also is representative of a modernity that is already in a state of reflexivity. This proposition is examined by exploring the various ways that SD is utilised in the governance structure of the United Nations (UN).

Keywords: United Nations, Risk, Sustainable Development, Climate Change, Reflexive Modernity, globalisation.

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Introduction

In light of the increasing scientific consensus of the detrimental impact humanity is having on the earth's biosphere, the consequences of, and the possibility for curbing these risks have jumped dramatically onto the priority agendas both politically and academically. Within the social sciences the notion of an emerging World Risk Society (WRS)[1], which has created a reflexive modernity represents this realignment, and in political domains the notion of sustainable development (SD) is being increasingly used to represent the need to realign current developmental patterns. This paper examines the possibility that SD and reflexive modernity are intimately connected. Until very recently these two concepts have been seen as representing different storylines of humanity's interaction with nature[2]. More recently however, there has been a paradigmatic shift in how these issues are being understood and notions of reflexivity and sustainable development are being drawn together in a mutually supportive framework[3]. This relationship is currently underdeveloped and lacking rigorous empirical observation. This paper makes initial, but substantial, steps in addressing this short and proceeds in the following manner. The first section expands on the nature of reflexive modernity in the context of Beck's WRS thesis. Section two will introduce SD, outline initial observations drawn from the literature and suggest a significant relationship between SD and reflexive modernity. Section three discusses the nature of governance and the role of the UN with relation to SD. Section four offers a review of the qualitative methodological approach that is used. Section five presents the substantive component of this paper by exploring the empirical data. The results are separated into three main areas of SD discourse from within the UN. Each area is represented by a 'theme' of SD, and each theme progressively builds a picture of the discursive representations of SD within the UN, and the relationship this has with a reflexive modernity. The paper is concluded with a brief discussion on the implications that these findings have at both a policy and theoretical level. Initially however, it is pertinent to outline the underlying theoretical premises upon which this paper is based.

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1   Ulrich Beck, Risk Society, Towards a New Modernity. London, Sage, 1992; Ulrich Beck, World Risk Society. Malden Mass, Polity Press, 1999

2   Allen Irwin, Sociology and the Environment: A Critical Introduction to Society, Nature and Knowledge, Malden, Polity Press, 2001

3   Ulrich Beck, Cosmopolitan Vision, Cambridge, Polity Press, 2006; Gregory J. Borne, Sustainable Development: The reflexive Governance of Risk. New York, Edwin Mellen Press, 2010

Section One: Reflexivity in a World Risk Society

The consequences and abatement of global environmental risks have been increasingly raised on political and social agendas world wide. In light of this, Ulrich Beck's World Risk Society (WRS) thesis (1999) has become an increasingly relevant assessment of contemporary, social, economic, political and environmental processes.[4] The underlying message of the WRS is that the established ideology of an industrial society, whose basic principle was the distribution of goods, a reliance on scientific certainty and the political autonomy of the nation state, is being replaced by an emergent 'risk society'. Beck focuses on specific forms of risk, referring to the three icons of destruction. These include nuclear power, environmental despoliation and genetic technology.

This risk society is defined by the distribution of hazards, scientific ambiguity, and the opening up of governance processes to wider sectors of society. In a risk society modernity has become *reflexive.* At the most fundamental level, reflexive modernity is seen as a recursive turning of modernity upon itself. The breadth of Beck's conception of reflexivity applies with equal measure to both global institutional and political scales, as well as local and individual levels of analysis.[5] Of course such a sweeping social theory attracts many critics which range from Beck's lack of empirical observation to substantiate his theoretical claims to the often ambiguous and contradictory nature of his definitions of reflexivity. Indeed Beck himself concedes that reflexive modernity "... is not hard to misunderstand".[6] This paper goes some way to addressing both of these criticisms. The following discussion will begin by examining the latter criticism.

The literature surrounding definitions and discussions on reflexivity is often, convoluted and contradictory. Upon review it is evident that the essence of the misunderstanding over reflexive modernity occurs when considering whether reflexivity represents firstly, a purposeful knowledge-based action, which may be termed *reflection*, or secondly, should be considered as the unintended consequence of modernity, which is *reflexivity*. This situation is further complicated by a lack of distinction between the two, not only amongst Beck's critics but also within Beck's work itself. For example, in early elaborations of reflexive modernity Beck argues that:

> "In pointed terms, the 'reflexivity' of modernity and modernisation in my sense does not mean reflection on modernity, self relatedness, the self referentiality of modernity, nor does it mean the self justification or self criticism of modernity in the sense of classical sociology; rather (first of all), modernisation undercuts modernisation, unintended and unforeseen, and is also therefore reflection free, with the force of autonomised modernisation"[7]

From the above, it is apparent that Beck adheres to a definition of reflexive modernity which is created by the unforeseen externalisations of the modern world that are

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4   Anthony Elliot, (2002). Beck's Sociology of Risk: A Critical Assessment, Sociology, Vol. 36 No 2, 2002, p. 293-315; Lacy, M. 'Deconstructing Risk Society', Environmental Politics, Vol. 11, No 4, 2002, p.42-64; Gabe Mythen , Ulrich Beck: A Critical Introduction to The Risk Society. London, Pluto Press, 2004

5   Gregory J. Borne, Sustainable Development: The reflexive Governance of Risk. New York, Edwin Mellen Press, 2010; Gabe Mythen , Ulrich Beck: A Critical Introduction to The Risk Society. London, Pluto Press, 2004

6   Ulrich Beck, World Risk Society. Malden Mass, Polity Press, 1999,109

7   Ulrich Beck, Ecological Politics in an Age of Risk, Cambridge, Polity Press, 2005, 176

reshaping the central components of modernity. However, as Beck's work develops, a softening of this position becomes evident. The reflexive and reflective domains begin to converge. In the WRS, Beck argues that reflexive modernisation is a "… reflex-like threat to industrial society's own foundations through a further modernisation which is blind to dangers, and the growth of awareness, and the reflection of this situation".[8] It may be surmised from this that Beck moves towards a definition of reflexivity that is formed through a combination of reflexivity and reflection. This is a primary observation for research presented here.

This is because the use of SD as a litmus test for examining reflexive modernity presupposes a certain level of reflection as institutional structures and individuals respond to increased evidence of global environmental risk. With this established what remains is the question of proportionality in the reflexivity equation. In order to overcome this Elliot[9] puts forward a framework for accommodating these dichotomies. Elliot begins by arguing that the distinction between reflex and reflection is questionable, a significant problem being to identify where reflexivity ends and reflection begins. In making this assertion Elliot distinguishes between *strong* and *weak* forms of reflexivity. A strong reflexive position maintains that reflexivity occurs because of institutional dynamism, which results from purely unintended consequences. A weak form of reflexivity would suggest a combination of reflex and reflection "…a partial and contextual interaction of dissolution and reflection".[10] Based on this, it is reasonable to surmise that Beck has moved to a weak reflexive position, where reflexivity results from unintended processes, which in turn leads to a process of intended reflection. Extending this proposition it is argued here that the reflective element of reflexivity processes represent the 'tip of the iceberg' as they are influenced by the less visible reflexive processes.

Overall, the relationship suggests that increasing processes of a reflexive modernity will consequently lead to reflective activity. This observation is accompanied with the proviso that this relationship is not linear, well defined, or temporally static. Reflexive processes set in motion today will have unintended reflexive consequences in the future, which in turn will produce altered reflective activity.

The above discussion has important implications for the production and consequences of systems of global governance. Primarily, this analysis accepts at the most elementary level that global governance in the face of globalised risks must be flexible and non linear with the ability to open up space for the unintended or negative, as well as positive, externalities of *intended* governance processes. This paper will explore these issues in the context of the UN in section three, at this stage it is essential to discuss how the increased use of SD in governance networks is seen as an indication of the emergence of a reflexive modernity. The following discussion will elaborate on notions of sustainable development and argue that a symbiotic relationship exists between SD and reflexive modernity.

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8   Ulrich Beck, World Risk Society. Malden Mass, Polity Press, 1999,81

9   Anthony Elliot, (2002). Beck's Sociology of Risk: A Critical Assessment, Sociology, Vol. 36 No 2, 2002, p. 293-315

10   Anthony Elliot, (2002). Beck's Sociology of Risk: A Critical Assessment, Sociology, Vol. 36 No 2, 2002, p. 293-315, 302

Section Two: Sustainable Development: Establishing a Symbiotic Relationship

It is at this point that the concept of SD is introduced. Debates surrounding SD evoke a plethora of issues and diverse viewpoints. These can range from ontological and epistemological speculations through to discussions on appropriate legislative tools for achieving a sustainable future, as well as technological advancements and applications. There is no attempt here to elaborate in any detail on these issues. What is pertinent for this discussion to acknowledge is that the concept is complex and multifaceted with a literature that remains disturbingly muddled.[11] The extent of this muddle is clear as Fowke and Prasad[12] identify more than eighty definitional variations of the concept that substantially extends that set down at the World Conference on Environment and Development.[13]

As a broad assessment, it is sufficient to understand that the way SD is defined depends on a number of factors. These can include scientific evidence of environmental degradation, utilisation of this evidence, political designations, power dynamics, basic understandings of nature and much more.[14]

A number of attempts have been made to categorise and compartmentalise the various elements of the SD literature. [15] These assessments of the nature of SD often rely on a framework that outlines strong and weak forms of the concept. Such interpretations are underpinned by the degree to which SD represents a departure from current modes of production and consumption. Strong sustainability suggests a radical reordering of current socio-political and economic frameworks that are necessary to meet the challenges of current ecological and social risks. This may be said to be closely linked to the eco-centric beliefs of deep green environmentalists like Arne Naess.[16] Such a vision of SD can also be aligned with deep ecology, social ecology, environmental justice, eco-

11 Charachchandra Lele, `Sustainable Development: A Critical Review`, World Development, Vol.19, No 6, 1991 P.607-21; Pezzoli, K 'Sustainable Development: A Trans-Disciplinary Overview of the Literature', Journal of Environmental Planning and Management, Vol 40, No 5, 1997, p.549-74; Williams, C., Millington, C. 'The Diverse and Contested Meanings of Sustainable Development', in The Geographical Journal, Vol.170, No 2, 2004 p. 99-107

12 Fowke, R., and Prasad, D. 'Sustainable Development, Cities and Local Government', Australian Planner, Vol. 33, 1996, p. 61-6

13 World Commission on Environment and Development, Our Common Future, Oxford, Oxford University Press, 1987

14 Allen Irwin, Citizen Science: A Study of People, Expertise, and Sustainable Development. London, Routledge, 1995; Phil Macnaghten and Michael Jacobs. 'Public Identification With Sustainable Development: Investigating Cultural Barriers to Participation', Global Environmental Change: Human and Policy Dimensions, Vol 7, 1997, p 5-24; Yosef Jabareen , 'A Knowledge Map for Describing Variegated and Conflict Domains of Sustainable Development', Journal of Environmental Planning and Management, Vol. 47, No 4, 2004, p. 623-42; Ratner, B. (2004). Sustainability as a Dialogue of Values: Challenges to the Sociology of Development, Sociological Inquiry Vol. 74, No 1, 2004 p.50-69; Micheale Redclift, (1993). Sustainable Development: Needs, Values, Rights, Environmental Values, Vol. 2, No 1, 1993, p. 3-20

15 Paul Chatterton, 'Be Realistic: Demand the Impossible. Moving Towards Strong Sustainable Development in an Old Industrial Region', Regional Studies, Vol 36, No 5, 2002, p. 552-61; Clarke, A. 'Understanding Sustainable Development in the Context of Other Emergent Environmental Perspectives', Policy Sciences, Vol 35, 2002, p 69-90; Pezzoli, K 'Sustainable Development: A Trans-Disciplinary Overview of the Literature', Journal of Environmental Planning and Management, Vol 40, No 5, 1997, p.549-74; Williams, C., Millington, C. 'The Diverse and Contested Meanings of Sustainable Development', in The Geographical Journal, Vol.170, No 2, 2004 p. 99-107

16 Arne Naess, The Shallow and the Deep, Long Range Ecology Movement: A Summary. Scandinavian University Press, 1973; Arne Naess, Ecology, Community and Lifestyle: Outline of an Ecosophy. Cambridge, Cambridge University Press, 1989

feminism and spiritual ecology.[17] Whilst there is some evidence that SD manifests in its strongest form (Chatterton 2002), much of the literature points to SD existing in the weaker incarnation [18]. Weak sustainability operates within the existing socio-political framework; this interpretation of SD focuses on the ability of technology to produce a sustainable future.

SD is representative of a questioning of the current patterns of development, bringing into focus the most basic normative assumptions of modernity. It is at this level that a relationship is observed between SD and reflexive modernity. What is principally argued is that SD and the WRS present a mutually integrative storyline of contemporary society. It is suggested that both highlight particular aspects of modern developmental processes. These can be summarised as follows. Both expose the relationship between humanity and the environment; draw into question notions of progress, science and rationality; open up the boundaries between the global and the local; and both are concerned with inter-generational equity and the incompatibility of geological and political time-scapes.[19] On this basis, it is argued that a symbiotic relationship exists between the concepts of SD and reflexive modernity.

This symbiosis is played out as follows. Perceiving SD through a WRS lens provides a level of sophistication and an overarching theoretical perspective essential for understanding the intricate and dynamic nature of SD. This will ultimately lead to an informed assessment of how SD is being articulated and presented in particular governance frameworks and the consequences this has for wider social formations and environmental impacts. From the reverse perspective, through examining representations of SD, it will be possible to assess some of the assertions made within the WRS thesis, particularly Beck's assertion of the emergence of a reflexive modernity. This will result in a subsequent tightening up of the theoretical base.[20] As has already been noted in this paper, previous accounts of SD and WRS suggest that these two dialogues of contemporary social processes offer different stories of the relationship between society and its environment. For example, Irwin maintains that Beck's radical account offers a strong contrasting framework for the social and natural relationship to that offered by sustainability. Irwin suggests that:

> ...whilst the concept of sustainable development suggests that scientific/ technological development and the institutional system can cope, Beck's account is of a world where everything is open to question, where every aspect of life is imbued with doubt and uncertainty, and where the very sense of science, truth and progress (...) is being challenged and found wanting . [21]

However, this paper argues that Irwin's analysis severely reduces the breadth of interpretations that exists within the sustainability debate, focusing narrowly on its

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17 Julian Agyeman and Bob Evans. (2004). 'Just Sustainability: The emerging discourse of environmental justice in Britain?', Geographical Journal, Vol. 170, No 2, 2004, p.155-164; Susan Buckingham, 'Ecofeminism in the Twenty-First Century', The Geographical Journal, Vol 170, No 2 (2004) 146-154

18 Micheale Hulme, and J. Turnpenny. Understanding and managing climate change: the UK experience The Geographical Journal Vol. 170, 2004, p. 115-125

19 Barbara Adam, Time Scapes of Modernity: The Environment and Invisible Hazards. London, Routledge, 1998

20 Anthony Elliot, (2002). Beck's Sociology of Risk: A Critical Assessment, Sociology, Vol. 36 No 2, 2002, p. 293-315

21 Allen Irwin, Sociology and the Environment: A Critical Introduction to Society, Nature and Knowledge, Malden, Polity Press, 2001,51

scientific/technocratic dimension. As already outlined, SD exists on many different levels and its emerging rhetoric holds strong synergies with Beck's analysis of the WRS. In order to empirically test this proposition sustianable devleopment was explored within the context of the United Nations. The following section will draw connections between SD and the UN.

Section Three: Governing Sustainable Development

The UN is a highly visible and influential actor within global governance. It is also an organisation that integrates SD into the core of its governance structure. As with SD, many definitions of governance present themselves, not least because the notion of governance contains '...powerful tensions, profound contradictions and perplexing paradoxes.[22] The 'Commission for Global Governance' offers the following definition. Governance is:

> "The sum of the many ways individuals and institutions, public and private, manage their common affairs, a continuing process through which conflicting and diverse interests may be accommodated and co-operative action may be taken" .[23]

Applying these definitions of governance to SD, Gupta suggests that SD governance should be defined as "...the interactive network of regimes at international level, that try and integrate the various elements of SD".[24] At the international level the UN is an organisation where the complexities and the contradictions of governance are juxtaposed. As such, the UN does not fit comfortably into the category of international institution. As Cronin points out: "The UN is an organisation of, by, and for independent sovereign states, yet it is also a semi independent actor staffed with a semi autonomous civil service".[25] This assessment leads to the suggestion that there are two faces of the UN; one as a collection of the world's nations pursuing their own narrow interests within a multilateral environment, and the other, an entity in its own right. Moreover, the UN, is not a closed system, but instead is a fundamentally dynamic body, permeated by a myriad of flows that converge internally and are subsequently radiated outwards again towards wider society.

Cautioned by the above, an analytical perspective must be capable of accommodating these two frequently altering dynamics. Knight and Krause[26] suggest looking at the UN from what they term as a state/society perspective. These authors assert that this perspective "...highlights the fact that the interaction between international society and domestic societies is not always mediated through the state"[27]. These authors further argue that simply viewing the UN as a bureaucratic system, constituent of its

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22   James Rosenau, 'Governance in the 21st Century', in R. Wilkinson (ed.), The Global Governance Reader. Oxon, Routledge, 2005, 45

23   Ramphal Shridath, R., and Ingavar Carlsson, Our Global Neighbourhood: The Report of the Commission on Global Governance. OUP, 1998, 2

24   Joyeeta Gupta, 'Global Sustainable Development Governance: Institutional Challenges for a Theoretical Perspective', International Environmental Agreements: Politics, Law and Economics, Vol. 2, No 4, 2002, p. 361-88, 363

25   Bruce Cronin, The Two Faces of the United Nations: The Tension Between Intergovernmentalism and Transnationalism, Global Governance, Vol. 8, No 1, 2002, p. 53-71, 54

26   Andrew Knight and Kieth Kraus, State, Society and the UN System: Changing Perspectives on Multilateralism. United Nations University, 1995

27   Andrew Knight and Kieth Kraus, State, Society and the UN System: Changing Perspectives on Multilateralism. United Nations University, 1995, 253

member states and various organs, is reductionist and misleading. More accurately, the UN should be viewed as an 'arena' of ideologies and values, a forum for discussion and negotiation, and not merely as a 'place of operations'.[28] With the above in mind it is important to outline the following political realities. Each nation state within the UN has considerably diverse global status with regard to their influence on the global political stage. This truism is inevitably reflected within the governance systems of the UN. French indicates that "...formal equality does not mean equity". [29] These observations directly impinge on the ability of SD to represent a reflexive modernity as developmental discourses in general have been criticised for representing the developmental realities of the western world.[30] With specific relation to SD, commentators have argued that the concept represents little more than the extension of current forms of capitalist production.[31]

In sum, understanding the UN in the above terms provides a framework from which the relationship between governance, the UN and SD can be understood, whilst simultaneously developing an insight into the relationship this has with the emergence of a reflexive modernity. To date this paper has explored the various dimensions that interact in order to understand the relationship between SD and reflexive modernity from within the environment of the UN. These discussions have, for practical purposes, reduced highly complex debates into a manageable structure. The following section outlines the methodological framework that was used.

Section Four: Methodology

In order to explore the relationship between SD and reflexive modernity, the research used in-depth qualitative institutional ethnographic techniques in an attempt to decipher the complex discursive representations of SD within the 2002 United Nations General Assembly (UNGA). Whilst a clear definition of ethnography is elusive, Hammersley and Atkinson[32] suggest that it entails participating, for an extended period of time, within the research environment "...collecting any data available to throw light on the issues that are the focus of the research".[33] Ethnographic techniques offer flexibility and the ability to engage with theoretical assumptions whilst embarking on the practical process of data collection. For Herbert[34], ethnography is singularly capable of exploring the complexities of meanings, place and process. As will be discussed the research was conducted from within the United Nations. Smith[35] suggests the use of the term institutional ethnography in order to represent this setting. This is of particular use in exploring the power dynamics that exist in such a setting as they continuously permeate all levels of data.

28   Maurice Strong (2003). 'Global Sustainable Development', in S. Vertovec and S. Posey. (eds.), Globalisation, Globalism Environments and Environmentalism; Consciousness of Connections. The Linacre Lectures, 2003, 117

29   Duncan French, 'The Role of the State and International Organisation in Reconciling Sustainable Development and Globalisation'. International Environmental Agreements. Politics, Law and Economics, Vol. 2, No 2, 2002, p. 135-150, 143

30   Arturo Escobar, Encountering Development: The Making and the Unmaking of the Third World. Princeton, NJ, Princeton University, 1995

31   Maurie Cohen 'Risk Society and Ecological Modernisation: Alternative Visions for Post-Industrial Nations', Futures, Vol 29, No2, 1997 p. 105-19

32   Martyn Hammersley and Paul Atkinson, Ethnography: Principles In Practice. London, Tavistock Institute, 2003

33   Martyn Hammersley and Paul Atkinson, Ethnography: Principles In Practice. London, Tavistock Institute, 2003,1

34   Steve Herbert , 'For Ethnography', Progress in Human Geography, Vol 2, No 4, 2000, p.50-68

35   Dorothy Smith, Institutional Ethnography: A Sociology for People. Oxford. Altamira Press, 2005

Research was conducted whilst the author served a three-month internship with the United Nations Environment Programme (UNEP) at UN Headquarters in New York. The internship took place between September and December 2002, a time-frame of particular importance for exploring discourses of SD. Firstly, September to December represents the convening of the UNGA. This is the decision-making organ of the UN, where resolutions are developed and decisions are made on a plethora of issues relating to global governance. During this time, delegations are sent from all member states to participate in the negotiation processes. Secondly, the 57th UNGA directly followed the World Summit on Sustainable Development (WSSD), providing a singularly unique opportunity to assess, not only interpretations of SD at the international political scale but also its construction within a negotiated framework. Three main sources of data were collected.

Firstly, in-depth observations formed a foundational base of data. This process was ongoing and afforded continuous insights into the way that SD was being articulated. Secondly, documents were collected from many different sources, which included transcripts of speeches made, resolution documents, press releases, official statements made by the Secretary-General and many more. From this overwhelming source of qualitative material, there is a specific focus on the statements made from the United Nations General Debate (UNGD), which included nearly all member states of the UN. The UNGD statements provided a comprehensive insight into the discursive representations of SD from nearly every nation-state in the world. The third form of data collection was interviews conducted with Programme Officers of the UNEP. Officers with whom the author worked were asked if they would be willing to elaborate on a number of issues that related to sustainable development, the UN and broader global issues. Interviews remained dynamic and unstructured with the use of only very broad questions. For example; 'What role do you think sustainable development plays in the United Nations?' The depth of experience of the Programme Officers provided invaluable and unique insights. Taken as a whole, these data sources provided a robust and in-depth understanding of the integration of SD into the governance structures of the UN. The following section will present the results.

Section Five: Results

Sustainable development: The Reflexive Governance of Risk

> "The General assembly of the United Nations should adopt SD as a key element of the overarching framework for United Nations activities, particularly for achieving the internationally agreed development goals, including those contained in the Millennium declaration, and should give overall political direction to the implementation of A21 and its review".[36]

The statement from the WSSD 'Plan of Implementation' reflects the overall movement within the UN to drive SD as a guiding concept within the operations of interstate affairs, as well as broader sections of society. It has already been established that the UN is an institution that is necessarily open to global phenomena and constantly in

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36   United Nations, UN Document A/ Conf.199/20, Report of the World Summit on Sustainable Development, 2002a

need of structural adjustment in order to accommodate national and wider political and social interests.[37] There is little question that observations from within the 2002 UNGA confirm that SD is an integral part of this process, with SD used diversely, ambiguously and often conflictingly. However, as a discursive framework, three abstracted themes of SD have been identified. Each theme represents the stages of analysis that exists in assessing the relationship between SD and reflexive modernity. Firstly, theme one, *divergence*, presents the various interpretations of SD. Theme two, *convergence*, examines the association of SD with broader perceptions of risk. Global risk is a fundamental driver of reflexive modernity and it will be shown here that SD is intimately related to notions of risk at the international and national level. Convergence will highlight the connection between risk, SD and the nation-state. Theme three, *dissolution,* explores the role that sustainable development takes in the active governance setting of resolution negotiation. The relationship between SD and reflexive modernity is further explored by examining how SD is utilised within the resolution negotiation process.

Divergence

Divergence indicates the often fractured and abstracted nature of SD within the UN from a predominantly nation state perspective. Beck outlines the changing nature of the nation state in the face of globalised risk, as a primary prerequisite for the identification of a transition from a first/industrial to second/reflexive modernity. Analysis is based on observational data and the collection of transcripts of the UNGD statements. Of the 188 speeches made, it was possible to collect 180 transcripts. A content analysis was carried out on 177 transcripts which represented 94 per cent of the total speeches made. A total of 72 per cent of speeches included SD. This provides an initial base for assessing the relationship of SD with a reflexive modernity. It is important to emphasise that it is not suggested that the following offers a comprehensive break down of the many discursive positions and ideological frameworks that were present at the time. Furthermore, it is not designed to expose the socio economic and political circumstances of various countries that inevitably underpin statements made. More, this section is designed to highlight the finding that substantial diversity *does* exist.

With the above in mind, it became evident during the research period that national representations predominantly adopted the three pillars approach to SD.[38] The three pillars are social, economic and environmental dimensions of SD. These three pillars are used to organise the diversity of SD rhetoric. For example, within the economic pillar there was particular reference to 'Foreign Direct Investment', globalisation, 'National Development Plans' and levels of Gross National Product. Similarly, the social pillar emphasised issues of power relations, equality, democracy, health, gender and terrorism. The environmental pillar relates to such topics as destruction of ecosystems, climate change, sea level rise, desertification, flood, radioactive waste and more. These categories are not mutually exclusive and are integrated in different formats within the rhetoric of the statements.

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37   Andrew Knight, A Changing United Nations. Hampshire, Palgrave, 2000

38   Tariq Banuri, and Adil Najam Civic Entrepreneurship; A Civil Society Perspective on Sustainable Development, Volume 1, A Global Synthesis. Islamabad. Grandhara Acadamy Press, 2002

Social Pillar

On aggregate, 35 per cent of statements perceived SD as a social issue. Within the Social dimension of SD numerous goals could be identified. Representing the European Union, Denmark makes the following comments:

> 'Until women are in possession of all human rights, able to take charge of their lives and to achieve their full potential, sustainable development will remain but a dream. The EU remains committed to fighting all forms of discrimination and violence against women, including murder and mutilation through a misguided sense of honour '.[39]

Denmark associates SD with the social dimension in the form of gender issues. Gender was an issue which was prominent in discussions but constituted just one facet of the social pillar. Evident throughout the UNGD statements, was the association of SD with poverty. Switzerland stated that *"SD and the elimination of poverty are the main challenges facing humanity today".*[40] Poverty itself was often broken into various elements depending on what each nation viewed as a particular cause of that poverty. For example, the rhetoric of poverty was often associated with issues of health and particularly for countries of the African continent the HIV/AIDS pandemic was a high priority; Djibouti succinctly represents this position:

> "The issue of HIV/AIDS is one of the greatest concerns in Africa. More than 30 million people are infected, nearly 75% of those carrying the virus worldwide. The impact on development is devastating. Life expectancy has plunged in many countries. The observations made by the head of the UN AIDS program are quite apt, if people are not alive, if people are not healthy, the people who are supposed to bring us sustainable development, then it won't happen. AIDS is a major crisis of human resources".[41]

Djibouti is resolute in its statement to draw the connections between SD and HIV/AIDS. It does so in a context that explicitly highlights the failure of achieving a SD without addressing this issue. For many African countries this was a concern to which their understandings of SD were intimately bound.

Economic Pillar

On aggregate, 30 per cent of the statements associated SD with the economic pillar. As an example, Jamaica is typical of many of the statements delivered *"...for sustainable development will not be achieved without financing for development".*[42] Jamaica does not refer to the interconnections between the other pillars but asserts the need to maintain a financing balance within the international community; similarly China's emphasis was on the economic pillar:

> " ...press ahead with our market-oriented reforms, readjust and improve the structure of the ownership system, and further emancipate and develop

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39   57th United Nations General Assembly General Debate

40   57th United Nations General Assembly General Debate

41   57th United Nations General Assembly General Debate

42   57th United Nations General Assembly General Debate

the productive forces. We will focus on higher quality of economic growth through science and technology upgrading and improved management, stress the implementation of the strategy of sustainable development, and attach importance to a balanced approach to development among different regions and between urban and rural areas, with a view to promoting the all-round progress of society."[43]

Unlike Jamaica, China displays a more sophisticated understanding of the inter-connectivity of the elements of SD. It connects a number of discursive realms when outlining what it sees as the goals for achieving a SD. Primarily, the economic growth required for SD should be based on technical advancements. Such perspectives relies on the market to regulate development issues. Furthermore, China connects SD to regional goals and highlights the relationship between rural and urban areas. Moreover, China displays a technocratic interpretation of SD by forwarding the importance of scientific and technological advancement. More generally, statements that predominantly focused on the economic component of achieving SD were engaging with the current political framework, for which they often felt they had a comparative advantage.

Environmental Pillar

On aggregate, 32 per cent of the statements associated SD with environmental issues. The above discussion has already outlined the degree to which different nations of the world interpret SD and how it should be internalised for their nations. This is not to say, however, that environmental issues have become subsumed in significance, more there seems to be a realignment of priorities. Fiji focuses primarily on the oceanic ecosystem, substantiating its commitment to a SD process by citing international law:

> "It is our responsibility, as people of the Islands, to protect and nurture the Pacific. We must do so not only for ourselves, but also for people everywhere. For the first time we have adopted a regional Ocean Policy which lays out the guiding principles for promoting the Pacific as a maritime environment in support of sustainable development. These principles are based on international law, reflected in the UN Convention on the Law of the Sea and other international and regional agreements."[44]

This appears to be an attempt by Fiji to legitimise their perspective of SD by associating it with a specific set of goals and principles. Without the weight of economic security on the global stage, or marginalised by processes of globalisation, poorer nations created an understanding of SD that extends beyond this rhetoric. The 'Convention on the Law and the Sea' is a regime that detracts from the sovereignty of each nation forming an equalising effect in the contest for ideological hegemony. Another approach to this end was the adoption of an ethical and moral perspective for achieving a SD. Where no legal regime was in place, SD would be tied to an expression of a 'collective consciousness'. This is the rhetoric of a 'global community'. Mauritius presents a typical example of this type of strategy:

> "The World Summit on Sustainable Development addressed the fundamental question of the kind of world we want for ourselves and for generations that are yet unborn. The recent devastating floods in Europe and Asia as well as the droughts in many parts of Africa, particularly Southern Africa, where there are

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more than thirteen (13) million people in danger of famine, are a stark reminder of the fragility of the ecosystem of our planet. The WSSD has made the whole world become conscious of the havoc which nature can cause unless drastic measures are taken immediately to redress the ecological imbalance."[45]

What was witnessed in the general debate was a landscape of ideologies and perspectives, often beyond the scope of categorisation as one blended seamlessly into another. Each nation used different discursive tactics to present its definition of what SD *should* entail, and how it *should* be achieved, even if these were often vague and unsubstantiated. Three primary 'tactics' for asserting particular perspectives of SD were observed. These are defined here as legal, moral, and sensationalist. Firstly, where a legal framework was in place sustainable development was emphasised to reinforce the advantages of this to the particular nation state. Secondly, where no legal framework existed states used the moral imperative to project their interpretation of SD. And thirdly, states would use dramatic and catastrophic language in order to project to the assembly their interpretation of SD. The result is a juxtaposition of ideological frameworks. Throughout the research period it was evident that these frameworks were not static, they were constantly altering as certain issues were raised or delegated on the political agenda, as opinion changed, as allegiances altered or as the researchers understanding of the issues evolved. The question that must now be posed is : 'What then does the above mean for the governance of SD within the UN and what bearing does this have on the relationship between a reflexive modernity and SD?'.

As has already been outlined in this paper, it is the language of risk that opens up the boundaries for a reflexive modernity. What is clear from discursive representations of SD amongst the world's nations is the significant association with risk. This is a political discourse which consistently acknowledges the destructive nature of current development patterns. As discussed, it is this risk which is the driving force behind the arguments for a reflexive modernity. Moreover, three quarters of UNGD statements referred not only to their own risk but also risk that extends beyond their sovereign boundaries. What is suggested therefore is that underneath the diversity, and the ambiguity of SD within the UN, the single unifying element of risk exists. The following discussion will examine this proposition by exploring the theme of convergence.

Convergence

This section represents the second substantive theme of SD identified from within the UNGA. Initially, this section elaborates on the overall association of risk with SD inside the UN, which will be followed by looking more closely at the consequences for national SD that emphasises a global risk. To examine the association of risk with each country individually is beyond the scope of this paper. There is, however, utility in examining variations within some of the major subgroups within the UN system. A total of 67 per cent of the UNGD statements that referred to SD directly connected it to specific forms of risk. Another 22 per cent made connections to risk, though these were vague and often de-contextualised. It was expected that there would be wide

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disparities between the developed and developing nations, with those countries at immediate risk from social and environmental problems having the highest proportion of risk association. This however, proved not to be the case; an analysis was performed of the major alliances of nations as they exist within the UN. These alliances represent substantial geographical, social and political diversity. They include the Group of 77, the European Union, the Association of Small Island States and the League of Arab Nations.

The European Union indicates the highest association with risk at 77 per cent and the Association of Small Island States follows with 74 per cent. The Group of 77 had 65 per cent and the League of Arab Nations 57 per cent. The association of increased risk with SD however does not go far enough in establishing the reflexive modernity. For Beck, risk must engender a new form of political co-operation that extends beyond the national territory. As indicated above, SD from within the UNGA, whilst diverse, points to a fundamental shift in the way nations perceive their relationship to internal risk and that of a more globalised risk. The following section will expand on these issues using various data sources from within the UN.

Boundless Risk

There is no doubt that each country articulated SD with reference to their own concerns and risk specific circumstances. However, what was evident was the way that risk beyond the national boundaries was also being incorporated into nationalistic agendas. Programme Officer 5 suggests that:

> Programme Officer 5 – "I am in little doubt that the uptake of SD is directly related to the need for members to cooperate with each other. Many problems today cut across borders and cannot be dealt with on a unilateral basis".

It is argued here that SD represents a globalised risk and encompasses new forms of political co-operation. The internal risk of nations was consistently grafted to expressions of wider global risk. Austria's statement substantiates the above remarks, and is representative of many other statements made:

> "Austria's disastrous floods in parts of Central Europe, including in my own country, in Asia and the Americas as well as droughts in other parts of the world, just before the start of the World Summit on SD in Johannesburg, were a painful indication of changes rendering SD even more important". [46]

The Austrian statement highlights its own plight by infusing its own risk with the risk that is collectively faced by other parts of the world, and uses past catastrophes and the 'risk' of future such events to elevate the necessity of the adoption of SD into governance frameworks. Global warming was a threat which was alluded to repeatedly within the context of SD. It was a risk recognised by many as being a phenomenon to which SD could be particularly applied. The complexity inherent within the processes of global warming could be easily accommodated within the ambiguity of SD. Such observations substantiate assertions that SD is representative of globalised risks

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that are reshaping the sovereign status of the nation state. [47] In line with Frickel and Davidson[48] what is observed are processes of rationalisation and legitimisation. These authors argue that, the rationalisation of the state towards *sustainability* as a goal is dependant on *a new political discourse* that translates into a crisis of state, as well as of environment. Evidence presented here indicates that just such a discourse is appearing in association with SD. However, extending this analysis, what appears in the UN is a discourse of crisis that appeals to all facets of life that operate beyond simply the environmental paradigm of SD. The 'new political discourse' of SD also moves beyond the interaction of one state to another to accommodate other sectors of society that produce an opening of the governance framework. The following discussion will examine SD's role in opening up and accommodating the diverse governance issues.

Governing Diversity

The UN is defined by, and must accommodate a broad spectrum of interests inevitably contained within a global community of nation states. Moreover, each nation does not represent a unitary entity operating in harmony within and beyond its borders. More accurately, the nation state is a dynamic maelstrom of diverse conflict, with each state achieving varying levels of internal stability for varying periods of time. As already indicated, Beck underlines the changing nature of the nation state as a principal indicator of the emergence of a reflexive modernity. Moreover, Beck highlights the importance of the altered structure of the nation state in processes of reflexive governance in light of the integration of the broader stakeholders in the governance structure:

> "... the idea that the existence of global civil society renders the renewal of state-oriented politics superfluous, the same does not hold of the new and as yet untested idea that civil society might itself as it were seize power. Indeed, such a symbiosis of civil society and inter-state cooperation constitutes the very nature of reflexive governance". [49]

Drawing on Beck's statement then, outside of the borders of the nation state, alliances are formed and broken, frequently altering the geopolitical tapestry of the world. This internal and external dynamic is represented in the governance structure of the UN, and is informed by earlier claims in this paper that the UN is a site of contested ideologies. Such an understanding is the first step in unravelling the role of SD within the UN and the role that it plays in governing this diversity. Rhetoric from the members of UNEP as well as broader UN secretariat continuously emphasised SD as a dynamic process that was not static but constantly changing in response to broader social, environmental, political and economic issues. This indicates the concepts capacity to engender a state of reflexive governance and indicates the emergence of a reflexive modernity more broadly. Interviews with UNEP officers proved to be particularly

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47 Ulrich Beck, Cosmopolitan Vision, Cambridge, Polity Press, 2006; Ulrich Beck, World Risk Society. Malden Mass, Polity Press, 1999

48 Scott Frickel and Debra Davidson 'Building Environmental States: Legitimacy and Rationalisation in Sustainability Governance', International Sociology, Vol 19, No 1 2004, p.89-110

49 Ulrich Beck, Cosmopolitan Vision, Cambridge, Polity Press, 2006, 23

insightful for understanding these processes. Programme Officer 4 was asked if he felt that nation's governments would have difficulty internalising a process as opposed to a concrete prescription:

> *Programme Officer 4* – "It is something that we are definitely starting to see. Everybody knows it must be done but there is little evidence of what it is that can be done or should be done, this to us is very worrying. But as you have seen we are not dealing with absolutes".

Clearly, Programme Officer 4 expresses that there is no absolute and definitive form that SD takes when conveying various messages of environmental, social and economic issues. What was clear from Programme Officer 4 and other Programme Officers was an increasing recognition of the important role that SD was playing in national frameworks, with governments anxious to integrate sustainability rhetoric into their own governmental agendas. Programme officers made frequent reference to the 'opening up' of the governance process, with many different sectors of society being 'invited' to participate in the governance process. So whilst national perceptions of SD are undoubtedly diverse and contested, often ambiguous and lacking substance, underpinning this is a fundamental shift in the operation of governance processes. It is in this context that the discursive representations of SD within the 57th UNGA holds its most politically active role. Many sources from within the UN indicated that SD represented a 'convergence', not of a single ideology but of a *'conglomerate of multiple ideological perspectives'* around which not only different nation states could communicate, but also different sectors of society. Such sectors include various non governmental organisations and multinational corporations.[50] Based on these observations this paper suggests that what is often seen as the inert political dialogue of SD is more a representation of a new form of global co-operation underpinned by common global risks.

Thus far, this paper has achieved a number of goals. It has explored the diverse interpretations of SD. Following this it was suggested that through an association with risk the concept can also represent a convergence of SD perception. It is argued that this convergence has facilitated new forms of political interaction, particularly with regard to the nation states ability to deal with new forms of global risk, and the incorporation of wider societal actors in the governance process. These observations go a considerable distance in exploring the relationship between SD and a reflexive modernity. However, standing alone these elements are insufficient to appropriately understand the relationship. The following section will look more closely at the way that underlying knowledge formations, contained in representations of SD influence the governance framework. In order to achieve this SD must be observed in use within the active governance frameworks. This is achieved by examining the way SD is utilised in the context of resolution negotiation.

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50   Tariq Banuri, and Adil Najam Civic Entrepreneurship; A Civil Society Perspective on Sustainable Development, Volume 1, A Global Synthesis. Islamabad. Grandhara Acadamy Press, 2002; Tapper, R. 'Global Policy, Local Action? International Debate and the Role of NGO's', Local Environment, Vol. No 1 p. 1996, 119-126; Konrad Von Moltke 'Governments and International Civil Society in Sustainable Development: A Framework', International Environmental Agreements, Vol.2, No 4, 2004, p.339-57, 2004

Dissolution

The above discussions on SD and its relationship to a reflexive modernity have focused to a large degree on data taken from the UNGD statements and the interviews with UNEP officers. This has been combined with broader observational institutional ethnographic data. The following section examines the implications for the relationship between SD and a reflexive modernity as it emerged in the forum of resolution negotiations. Resolutions are the building blocks of international regime development and have far-reaching implications for wider society. Witnessing the use of SD within the resolution negotiation framework provides insights into the contextualisation of SD and its working integration into governance dynamics. Negotiations took place at definitive stages. These ranged from 'informal informal' discussions to formal meetings. Venues varied from the UN cafeteria to one of the smaller conference rooms within the UN's headquarters through to plenary discussions at the UNGA main hall.

Many informal discussions with representatives from governments and the UN secretariat tentatively suggest an entrenched and unprecedented political realignment based around the principles of SD caused by the increased complexity of global risk phenomena. For example, discussions with various negotiators in a number of contexts suggest deeper processes and consequences of the use of SD in the negotiation process:

> *Negotiator* – "SD can change the balance yes, of course there remains the constant tension between the rich and the poor but the complexity of issues being discussed provide room to manoeuvre, the smaller countries will have a tougher ride but that doesn't mean we can't achieve our goals. Because it is increasingly recognised that issues are very complicated definitive statements are very difficult to make, I think this works to our advantage".

The above statement is representative of substantial opinion on the role that SD plays in the negotiating forum. Further discussions brought to the surface the role that scientific processes played in positioning SD within negotiations. What emerged was a language of uncertainty. Notions of uncertainty and ambiguity were evident throughout the UNGA on issues concerning SD. This finding supports an ever growing body of literature that points to the need to understand the role that this uncertainty plays in the achievement of goals for SD and risk governance more broadly.[51] This is indicative of the nature of the concept, as Voss *et. al.*[52] point out: "SD as a policy goal focuses on long-term dynamics of socio-ecological systems in a global context and transgresses traditional knowledge domains".[53] SD is recognised as drawing into question the very

51   Ulrich Beck, World Risk Society. Malden Mass, Polity Press, 1999; Nuria Castells and Jerry Ravetz, Science and Policy in International Agreements. Lessons from the European Experience on Trans-boundary Air Pollution', International Environmental Agreements: Politics, Law and Economics, Vol. 1, 2001, p. 405-25; Silvio Funowicz, Jerry Ravetz and Martin O'Conner, 'Challenges in the Use of Science for Sustainable Development', International Journal of Sustainable Development, Vol. 1, No 1, 1998, p. 99-107; Sheila Jasianoff , 'Contested Boundaries in Policy Relevant Science', Social Studies of Science, Vol.17, 1987, p. 195-213; Ortwin Renn, Risk Governance, Coping with Uncertainty in an Uncertain World London, Earthscan (2008)

52   Voss, J-P. Bauknecht B., and Kemp, R. (eds.) . Reflexive Governance for Sustainable Development, Cheltenham, Edward Elgar, 2006

53   Voss, J-P. Bauknecht B., and Kemp, R. (eds.) . Reflexive Governance for Sustainable Development, Cheltenham, Edward Elgar, 2006, 8

nature of knowledge formation to such a degree that some commentators have begun to utilise the language of SD in formulating models of scientific enquiry. In particular, Ravetz[54] points to the increasingly important role that the complexities inherent in SD play in scientific enquiry. Ravetz argues that the term precautionary science should now be advanced in order to accentuate themes such as science in relation to nature, industry, society and democracy. Within UNEP, it was recognised that governmental representatives are dependant upon the scientific community for consistent advice in the effective development and negotiation of policy. Three ways in which scientific advice imposes on the policy agenda are identified. Firstly, science sets the terms and the parameters of the debate. Secondly, scientific knowledge provides a legitatory element to the negotiations. Thirdly, science provides a standardising mechanism upon which policies can be negotiated and subsequently implemented. However, it was also acknowledged that SD as a discursive mechanism within these debates poses some what of a conundrum for these aforementioned criteria:

> Programme Officer 1 – "there has to be a scientific basis for issues being discussed otherwise there would be nothing to build on, nothing to negotiate with. But it is fair I think to say that when it comes to using SD great care needs to be taken on the context that it is used in. it has been my experience that outcomes of using the term have been positive but also negative. It has sometimes a paradoxical effect and I personally don't see any way of resolving this, perhaps this is the main point".

What the programme officer indicated was that the effects of using SD within a negotiative framework were unpredictable, but that this unpredictability could be seen in both a negative and positive light. In essence, what is being alluded to at this stage is the reflexive nature of SD within the context of resolution negotiations. It is argued that on the strength of these findings SD within the UN fulfils the criteria laid down for assessing the validity of a reflexive modernity on three main counts. Firstly, the rise in SD at the national and international level is a direct response to the rise in globalised risk.

Secondly, there is an observed alteration to the political dynamics of the nation state. Globalised risk is articulated through SD, so that there is a dynamic between national imperatives and broader global phenomena that permeate the national boundaries. This has engendered a situation where the internal and the external, the domestic and the foreign can no longer be separated in any meaningful way. However, this paper has shown that SD articulated through the language of risk by nearly every nation of the world move beyond discussions that recognise the hollowing out of the state on the global stage. Empirical evidence indicates that there is a common global goal from both developed and developing nations to readjust developmental patterns. It is not suggested here that such observations show equality between nation states. Instead, it is suggested that reflexivity is now in operation on a global scale.

Thirdly, this paper has highlighted the way that scientific processes are intimately connected to social and political processes. Through observations of resolution

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54   Jerry Ravetz, The Post Normal Science of Precaution, Futures 36, 2004, 347-57

negotiations it has been argued that SD is the embodiment of a language of uncertainty that is created by global risks, such as global warming, that often confound conventional cause and effect analysis. The very scale of global risk opens a negotiated dialogue between scientific process and the policy based on uncertainty that is inherently reflexive.[55]

Conclusion

This paper has explored the notion that discursive representations of sustainable development within the UN indicate the emergence of a reflexive modernity. This was achieved in five stages. The first, critically examined Beck's World Risk Society' with a particular emphasis on the reflexive modernity. Section two introduced SD and expanded on the primary proposition of this paper that there is an intimate relationship between SD and reflexive modernity suggesting that a symbiotic relationship exists between the two concepts. Section three expanded on the nature of governance and related this to the primary case study, the UN. Section four introduced the methodological framework used and elaborated on the nature of ethnographic research arguing that the qualitative approach was the most appropriate for this research. Using the themes of convergence, divergence, and dissolution, section five introduced the empirical findings and drew initial conclusions concerning the relationship between sustainable development and reflexive modernity.

Overall, these observations present an initial foray into the relationship between SD and reflexive modernity. There are no claims that there has been a comprehensive assessment of the dynamic that exists, nor a full expose of the consequences they entail. More, what is offered here is an initial insight into the relationship that provides a platform for future research on the nature of governance, sustainable development and reflexive modernity. From a theoretical standpoint and in a limited fashion, this paper has provided empirical ammunition to Beck's claims that a form of reflexive modernity is now in operation. Using SD as a vehicle, future research should endeavour to build on these observations and explore further areas where reflexive processes impinge on governance structures, not just at the global scale but also at the local and individual levels.[56] From a policy perspective this paper offers actors a fresh understanding of the potential consequences of governance decisions with an emphasis on the need to initiate flexible governance structures that are constantly responsive to rapidly altering global processes.

55   Gregory J. Borne, Sustainable Development: The reflexive Governance of Risk. New York, Edwin Mellen Press, 2010

56   Gregory J. Borne, Local Sustainable Development Governance in a Global Context. In 'The Handbook of Environmental Governance' (Burns Eds). World Scientific, 2009a; Gregory J. Borne, Achieving Sustainable Lifestyles or Encouraging a Counter Reflexivity: Exploring Motivations for Sustainability in a Mediated Risk Society, Local Environment Vol 14, No 1 2009b, p 93-107

Bibliography

Barbara Adam, *Time Scapes of Modernity: The Environment and Invisible Hazards*. London, Routledge, 1998

Julian Agyeman and Bob Evans. 'Just Sustainability: The emerging discourse of environmental justice in Britain?', *Geographical Journal,* Vol. 170, No 2, 2004, p.155-164

Tariq Banuri, and Adil Najam *Civic Entrepreneurship; A Civil Society Perspective on Sustainable Development, Volume 1, A Global Synthesis*. Islamabad. Grandhara Acadamy Press, 2002

Ulrich Beck, *Cosmopolitan Vision*, Cambridge, Polity Press, 2006

Ulrich Beck, *World Risk Society*. Cambridge, Polity Press, 1999

Ulrich Beck, *Ecological Politics in an Age of Risk*, Cambridge, Polity Press, 2005

Ulrich Beck, *Risk Society, Towards a New Modernity*, London, Sage, 1992

Gregory J. Borne, *Sustainable Development: The reflexive Governance of Risk.* New York*,* Edwin Mellen Press, 2010

Gregory J. Borne, Local Sustainable Development Governance in a Global Context. *In 'The Handbook of Environmental Governance' (Burns Eds).* World Scientific, 2009a

Gregory J. Borne, 'Achieving Sustainable Lifestyles or Encouraging a Counter Reflexivity: Exploring Motivations for Sustainability in a Mediated Risk Society', *Local Environment* Vol 14, No 1, 2009b, p. 93-107

Susan Buckingham, 'Ecofeminism in the Twenty-First Century', *The Geographical Journal*, Vol. 170, No 2, 2004, p. 146-154

Nuria Castells and Jerry Ravetz, 'Science and Policy in International Agreements. Lessons from the European Experience on Trans-boundary Air Pollution', *International Environmental Agreements: Politics, Law and Economics*, Vol. 1, 2001, p. 405-25

Paul Chatterton and Sophie Style, 'Putting Sustainable Development into Practice? The Role of Local Policy Partnership Networks', *Local Environment*, Vol. 6, No 4, 2001, p. 439-52

Paul Chatterton, 'Be Realistic: Demand the Impossible. Moving Towards Strong Sustainable Development in an Old Industrial Region', *Regional Studies*, Vol 36, No 5, 2002, p. 552-61

Maurie Cohen 'Risk Society and Ecological Modernisation: Alternative Visions for Post-Industrial Nations', *Futures*, Vol 29, No2, 1997 p. 105-19

Anne Clarke, 'Understanding Sustainable Development in the Context of Other Emergent Environmental Perspectives', *Policy Sciences*, Vol 35, 2002, p 69-90

Bruce Cronin, 'The Two Faces of the United Nations: The Tension Between Intergovernmentalism and Transnationalism', *Global Governance*, Vol. 8, No 1, 2002, p. 53-71

Arturo Escobar, *Encountering Development: The Making and the Unmaking of the Third World*. Princeton, NJ, Princeton University, 1995

Anthony Elliot, 'Beck's Sociology of Risk: A Critical Assessment', *Sociology*, Vol. 36 No 2, 2002, p. 293-315

R. Fowke, and D. Prasad, 'Sustainable Development, Cities and Local Government', *Australian Planner*, Vol. 33, 1996, p. 61-6

Duncan French, 'The Role of the State and International Organisation in Reconciling Sustainable Development and Globalisation'. *International Environmental Agreements. Politics, Law and Economics*, Vol. 2, No 2, 2002, p. 135-150

Scott Frickel and Debra Davidson, 'Building Environmental States: Legitimacy and Rationalisation in Sustainability Governance', *International Sociology*, Vol 19, No 1 2004, p.89-110

Silvio Funowicz, Jerry Ravetz and Martin O'Conner, 'Challenges in the Use of Science for Sustainable Development', *International Journal of Sustainable Development*, Vol. 1, No 1, 1998, p. 99-107

David Gibbs, James Longhurst, and Clare Braithwaite, 'Struggling With Sustainability: Weak and Strong Interpretations of Sustainable Development Within Local Authority Policy', *Environment and Planning A*, Vol. 30, No 8, p. 1351-66

Joyeeta Gupta, 'Global Sustainable Development Governance: Institutional Challenges for a Theoretical Perspective', *International Environmental Agreements: Politics, Law and Economics*, Vol. 2, No 4, 2002, p. 361-88

Martyn Hammersley and Paul Atkinson, *Ethnography: Principles In Practice.* London, Tavistock Institute, 2003

Steve Herbert, 'For Ethnography', *Progress in Human Geography,* Vol 2, No 4, 2000, p.50-68

Mike Hulme, and John Turnpenny, 'Understanding and managing climate change: the UK experience', *The Geographical Journal,* Vol. 170, 2004, p. 115-125

Alan Irwin, *Citizen Science: A Study of People, Expertise, and Sustainable Development.* London, Routledge, 1995

Alan Irwin, *Sociology and the Environment: A Critical Introduction to Society, Nature and Knowledge*, Malden, Polity Press, 2001

Yosef Jabareen, 'A Knowledge Map for Describing Variegated and Conflict Domains of Sustainable Development', *Journal of Environmental Planning and Management*, Vol. 47, No 4, 2004, p. 623-42

Sheilla Jasianoff, 'Contested Boundaries in Policy Relevant Science', *Social Studies of Science*, Vol.17, 1987, p. 195-213

Andrew Knight, *A Changing United Nations.* Hampshire, Palgrave, 2000

Andrew Knight and Keith Kraus, *State, Society and the UN System: Changing Perspectives on Multilateralism.* United Nations University, 1995

Scott Lash, 'Reflexivity and its Doubles: Structure, Aesthetics and Community', in U. Beck, A. Giddens and S. Lash (eds.), *Reflexive Modernisation: Politics, Tradition and Aesthetics in the Modern Social Order.* Oxford, Polity, 1996

Mark Lacy, 'Deconstructing Risk Society', *Environmental Politics*, Vol. 11, No 4, 2002, p.42-64

Charachchandra Lele, 'Sustainable Development: A Critical Review', *World Development*, Vol.19, No 6, 1991, p.607-21

Phill Macnaghten and Michael Jacobs. 'Public Identification With Sustainable Development: Investigating Cultural Barriers to Participation', *Global Environmental Change: Human and Policy Dimensions*, *Vol* 7, 1997, p 5-24

Arthur Mol, 'The Environmental Movement in an Era of Ecological Modernisation', *Geoforum*, Vol. 31, 2000, p.45-56

Gabe Mythen, *Ulrich Beck: A Critical Introduction to The Risk Society.* London, Pluto Press, 2004

Arne Naess, *The Shallow and the Deep, Long Range Ecology Movement: A Summary*. Scandinavian University Press, 1973

Arne Naess, *Ecology, Community and Lifestyle: Outline of an Ecosophy.* Cambridge, Cambridge University Press, 1989

Keith Pezzoli, 'Sustainable Development: A Trans-Disciplinary Overview of the Literature', *Journal of Environmental Planning and Management,* Vol 40, No 5, 1997, p.549-74

Blake Ratner, 'Sustainability as a Dialogue of Values: Challenges to the Sociology of Development', *Sociological Inquiry*, *Vol.* 74, No 1, 2004 p.50-69

Jerry Ravetz, The Post Normal Science of Precaution*, Futures, Vol* 36, 2004, p.347-57

Micheale Redclift, (1993). Sustainable Development: Needs, Values, Rights, *Environmental Values,* Vol. 2, No 1, 1993, p. 3-20

Ortwin Renn, *Risk Governance, Coping with Uncertainty in an Uncertain World* London, Earthscan (2008)

James Rosenau. 'Governance in the 21st Century', in R. Wilkinson (ed.), *The Global Governance Reader.* Oxon, Routledge, 2005

John Ruggie, *Constructing the World Polity.* London, Routledge. 2002

Wolfgang Sachs, 'One World', in W. Sachs (ed.) *The Development Dictionary: A Guide to Knowledge and Power.* London, Zed Books, 1992

Wolfgang Sachs, *Planet Dialectics: Explorations in Environmental and Development,* New York: Zed Books, 1999

Ramphal Shridath and Ingavar Carlsson, *Our Global Neighbourhood: The Report of the Commission on Global Governance*. OUP, 1998

Dorothy Smith, *Institutional Ethnography: A Sociology for People,* Oxford, Altamira Press, 2005

Maurice Strong, 'Global Sustainable Development', in S. Vertovec and S. Posey. (eds.), *Globalisation, Globalism Environments and Environmentalism; Consciousness of Connections.* The Linacre Lectures, 2003

Richard Tapper, 'Global Policy, Local Action? International Debate and the Role of NGO's', *Local Environment*, Vol. No 1, 1996, p.119-126

Collin Williams and Andrew Millington, 'The Diverse and Contested Meanings of Sustainable Development', in *The Geographical Journal*, Vol.170, No 2, 2004 p. 99-107

World Commission on Environment and Development, *Our Common Future*, Oxford, Oxford University Press, 1987

United Nations, UN Document A/ Conf.199/20, *Report of the World Summit on Sustainable Development, 2002a*

Jan - Peter Voss, Dierk Bauknecht and Rene Kemp, (eds) *Reflexive Governance for Sustainable Development,* Cheltenham, Edward Elgar, 2006

Konrad Von Moltke 'Governments and International Civil Society in Sustainable Development: A Framework', *International Environmental Agreements,* Vol.2, No 4, 2004, p.339-57, 2004