

2007 ANZSEE Conference: “Re-inventing Sustainability: A Climate for Change”

**“Beyond Public Participation: The disconnection between South Africa's new EIA law
and sustainable development.”**

Tumai Murombo
Lecturer in Environmental & Sustainable Dev Law
University of the Witwatersrand
Johannesburg
South Africa
Tel: +27 11 717 8489
Email: murombot@law.wits.ac.za

Abstract

EIA is one of the recognised techniques to ensure that development is sustainable. South Africa is one of the few developing countries that have successfully enacted and implemented EIA regulations and subjected development projects to scrutiny under such regulations. In this regard the courts have played a crucial role in ensuring compliance. However as a tool to achieve sustainable development, EIA and the process of public participation it mandates fall far short of the expectations of the public. Invariably, once development proponents have gone through the EIA process and have obtained requisite permits and licences the space for the public to participate is closed. I argue that the new EIA regulations in South Africa do not provide for effective public participation, as expected, and consequently flounder in their function as a tool towards achieving sustainable development. Sustainability is not only expected for development projects but also in terms of the benefits that accrue from the development process to the mainly poverty stricken public. To the extent that the EIA process focuses on project authorisation only, I conclude that we need to rethink its focus and utility as a strategy to achieve sustainable development in developing countries.

I. Introduction

South Africa is one of the few developing countries that have taken steps to implement the global aspirational¹ call to take sustainable development² seriously and mainstream this concept in all development activities and policies. At the legal level the country has enacted an array of impressive environmental legislation³ not only aimed at conserving natural resources, but more importantly targeting sustainable use of the little resources that are available for the ever increasing population.⁴ An important development within this trend towards sustainable development is the development and implementation of laws and policies relating to environmental impact assessment procedures (“EIA”).⁵ EIA is an important concept and process as it is one of the most effective tools or techniques for

¹ To the extent that sustainable development remains an aspirational concept at international law; see generally Magraw DB and Hawke LD, ‘Sustainable Development’ in Bodansky D, Brunnée J and Hey E (eds) *The Oxford handbook of International Environmental Law*, Oxford University press (2007) 613, Birnie PW and Boyle AE *International Law and the Environment* 2nd ed Oxford University Press (2002) 85, Osofsky H.M ‘Defining Sustainable Development after the Earth Summit 2002’ (2003) 26 *Loy. L.A. Int’l & Comp. L. Rev.* 111; Osorio L.S, *et al* ‘Debates on Sustainable Development: Towards A Holistic View of Reality’ *Environment, Development & Sustainability* (2005) 7: 501; Hafner G. ‘General principles of Sustainable Development: From Soft Law to Hard Law’ 53 in Fitzmaurice M. & Szuniewicz (eds) *Exploitation of Natural resources in the 21st Century* (2003) however it must be stated from the start that in South Africa the concept has been given legal content and scope and we talk of it as a legal concept and not just an ill defined norm(S24 of the Constitution of the Republic of South Africa Act of 1996; S2National Environment Management Act 107 of 1998(“the NEMA”).

² This concept is used throughout this paper in the conception of the World Commission on Environment and Development *Our Common Future Oxford University Press* (1987)43, nevertheless I acknowledge the still highly debated meaning of the concept at the global level (see note 1 above) At the domestic level South Africa’s framework environmental law the National Environment Management Act No 107 of 1998 (“NEMA”) define the term as “the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations”(S2)

³ This term refers to all the Acts of Parliament and regulations that directly have something to do with the management or natural resources or the control of pollution and land use planning.

⁴ Section 24 Constitution imposes a positive duty on the state to take among other steps, legislative measures to among other things, achieve sustainable development.

⁵ Wood defines EIA as “the evaluation of the effects likely to arise from a major project (or other action) significantly affecting the natural and man-made environment. Consultation and participation are integral to this evaluation” *Environmental Impact Assessment: A Comparative Review* Longman (1995) 1, whilst the UK Environmental Impact Assessment: A guide to procedures, Queens Printer and Controller of Her Majesty’s Stationery Office (2000) www.communities.gov.uk defines it as “a means of drawing together, in a systematic way, an assessment of a project’s likely significant environmental effects. This helps to ensure that the importance of the predicted effects, and the scope for reducing them, are properly understood by the public and the relevant competent authority before it makes its decision. [EIA] enables environmental factors to be given due weight, along with economic or social factors, when planning applications are being considered. It helps to promote a sustainable pattern of physical development and land and property use in cities, towns and the countryside. If properly carried out, it benefits all those involved in the planning process.” In South Africa the NEMA does not define EIA but defines assessment” as used in Chapter 5 thereof as when used in Chapter 5, as “ the process of collecting, organising, analysing, interpreting and communicating information that is relevant to decision-making” Government Notice (“GN”) R.385 of 2006 (EIA regulations) made in terms of S24 of this Act amplify this definition and provide that “in relation to an application to which scoping must be applied, [EIA means] the process of collecting, organising, analysing, interpreting and communicating information that is relevant to the consideration of that application”

ensuring that development projects are sustainable. Whilst some argue that assessment of sustainability differs from EIA because the former is a broader process to guide policy, plans and programmes addressing social, economic and environmental outcomes; the South African approach to EIA has fruitfully conflated the two processes.⁶ In South Africa the EIA is integrative and addresses social, economic and environmental issues. It assists government to keep track of development projects and activities that have potential to cause significant impacts on the environment and ensuring that adequate mitigating measures are integrated into the project. While this development is a commendable, one of the issues that remain of great concern is the extent to which the public participates in this process of ensuring that sustainability⁷ is achieved. South Africa enacted new EIA regulations in 2006⁸ and one of the major reasons for enacting new regulations to replace the old ones⁹ was to ensure that there is more effective public participation in the EIA process. Development projects are, not only supposed to be sustainable in the eyes of the proponent and government, but also in the view and perception of the public and local communities affected by the development projects.¹⁰

In this paper I seek to critically analyse the public participation¹¹ provisions in the new environmental authorisation (hereafter referred to as NEMA EIA regulations for clarity's sake)¹² with specific reference to the extent to which they create more space for effective and informed participation. Sustainable development cannot be achieved without sustained and legally mandated efforts to ensure that development planning is participatory. I hypothesise that the provisions in the NEMA EIA regulations relating to public participation illustrate a disconnection between the regulatory framework and the ideal of sustainable

⁶ Magraw and Hawke note 1 above, 635.(distinction between sustainability assessment and EIA)

⁷ Based on the now accepted definition of sustainable development, sustainability is used here as connoting the need to sustain not only resources, but also the social and economic aspects of life. To achieve sustainability a project must be capable of being sustained both economically and socially and obviously environmentally.

⁸ NEMA Environmental Authorisation Regulations GN R. 385-387 of 2006 published 21 April 2006, effective 3 July 2006 by virtue of GN R.612 of 23 June 2006.

⁹ The old regulations (promulgated by GN R 1182-1184 of 1997 repealed by GN R. 615 of 23 June 2006) were made under the now repealed Environment Conservation Act No 73 of 1989 (“ECA”)

¹⁰ I use the terms ‘public’ and ‘local communities’ in a loose intertwined manner. Local communities are necessarily conceived as being part of the public whilst the public is not limited to local communities.

¹¹ I deliberately refrain from engaging in a detailed critic of the seemingly exhausted debate on the theoretical and philosophical underpinnings of the idea of public participation itself. Extensive research has been done in various contexts and I focus on the legislative attempt to use the concept as a democratic governance tool. See generally Ebbesson J, ‘Public Participation’ in Bodansky D, Brunnee J and Hey E (eds) *The Oxford handbook of International Environmental Law*, Oxford University Press (2007) 681,686; Ventriss C and Kuentzel W, ‘Critical Theory and the Role of Citizen Involvement in Environmental Decision Making: A re-examination’ *International Journal of Organization Theory and Behaviour* 2005(8) 4, 520 (arguing that public participation may in fact limit the boundaries of effecting change under the guise of democracy using Jurgen Habermas and David Harvey’s theories);

¹² See not 8 above.

development as enshrined in South African environmental laws.¹³ To this end the second section consists of an exposition of the connection between idea of sustainability, public participation and the EIA process. I seek to show that whilst there is a connection between on the one hand sustainability and EIA and on the other the notion of public participation, such connection must be reinforced by clearly defined legal provisions. This theoretical framework will be applied in the third section to analyse the public participation provisions in the NEMA EIA regulations with a view to assessing their potential to contribute towards sustainability. Lastly I make recommendations on possible legal reforms that can be made to South Africa’s EIA regulations to ensure that the public participation procedures inure to the benefit of sustainability.¹⁴

Participation by the public is crucial to the success of any EIA process and consequently also to the achievement of sustainable development. However there is no agreed definition of what constitutes public participation. This being one of the constraining factors against effective participation in EIA process, not only in South Africa but in many other countries.¹⁵ Barton whilst noting that there is no agreed definition of the concept of public participation nevertheless correctly gives us factors that usually shape the nature of participation in most countries. He submits that:

[p]ublic participation is a matter of a nation’s legal, political, and administrative arrangements, and therefore closer to the heart of national sovereignty than many other issues in international environmental law. How a nation wishes to conduct its public affairs is a very political matter.¹⁶

He nevertheless points out that in the sphere of natural resources, development of international instruments like the Aarhus Convention can play a crucial role in shaping a

¹³ It has since been argued that the EIA regulations are informed and shaped by crude 'environmentalism' instead of being grounded in the idea of 'sustainable development' and this issue is not revisited in this paper (see generally Field TL, 'Sustainable Development versus Environmentalism; Competing Paradigms for the South African EIA regime' 2006 (123) 3 *SALJ* 409 and authorities there cited). I focus here on is the lack of effective public participation as one of the indicators of the overemphasis on environmentalism instead of sustainability.

¹⁴ The Department of Environmental Affairs and Tourism (“DEAT”) has just commenced a process to review and revise some aspects of the regulations and this paper is seen as part of that process.

¹⁵ Barton B, 'Underlying Concepts and Theoretical Issues in Public Participation in Resources Development' in Zillman DN et al (eds) *Human Rights in Natural Resource Development Public Participation in the Sustainable Development of Mining and energy Resources*, Oxford University Press 2002; (philosophical underpinnings of the idea of public participation and the absence of a common definition and link between EIA and public participation); see also Doelle M and Sinclair AJ 'Time for a new approach to public participation in EIA: Promoting cooperation and consensus for sustainability' *Environmental Impact Assessment Rev.* 26 (2006) 185 (the lack of consensus of the scope and meaning of public participation as one of the major shortcomings of the EIA processes in many countries)

¹⁶ Barton, note 14 above, 84

global right to participation.¹⁷ The socio-political environment is an important variable in the debate on sustainability. In South Africa and other developing countries the parameters and level of participation is not only shaped by the legal and institutional framework, but also by other variables like the social and economic status of the citizens or interested and affected parties. Whilst effective public participation requires a united public driving common or shared understandings, this may be difficult to achieve in a society with very wide gaps between the rich and the poor populations. The needs and concerns of these population groups are by no means homogeneous.¹⁸ Consequently what is sustainable in the view of a particular section of the population is not necessarily sustainable to the other whose needs and aspirations are different from the other groups.¹⁹ It is the role of law to reconcile these diverse interests and promote development that meets the expectations of the public without necessarily compromising the sustainability standards set by law. The development need not only meet the expectations of current generations but also posterity. To fully understand the complexities of this role of the law it is necessary to unravel the connection, if any, between the norm of sustainable development, public participation and the EIA process.

II. Sustainability, EIA and Public Participation: Where is the hook?

It is generally accepted that the main objective behind EIA processes is to ensure that any development that is authorised will not have significant impacts on the environment (widely defined to include the social and economic environment). The aim of averting these significant adverse impacts is to ensure that such development is sustainable. According to Wood consultation and participation are integral appendages of the EIA process.²⁰ In South

¹⁷ Ibid, he adds to the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, June 25 1998. 38 *I.L.M* 517 (1999), <<http://www.unece.org/env/pp/documents/cep43e.pdf> > effective 30 October 2001 (“the Aarhus Convention”) Principle 10 of the Rio Declaration on Environment and Development. (1992) UNEP<<http://www.unep.org/Documents/multilingual/Default.asp?DocumentID=78&ArticleID=1163>>

¹⁸ This contradictions and controversies are well captured by Lindeque AS and Cloete CE, ‘Public participation in lower and higher socio-economic areas in South Africa’ *Acta Structtilia* 2005:12 (2)25 at 32 *et seq*; see also Bradshaw G and Burger W, ‘Public participation, sustainable development and public disputes: Public scoping processes in the Coega deep water port and industrial zone’ *Africanus* 35(1) 2005 44 at 46 (advancing a conflict perspective of public participation and reiterating the deficiencies in South Africa’s public participation process before the NEMA EIA regulations, as well as the link between sustainable development and EIA)

¹⁹ The different views expressed regarding the construction of a super railway link called the Gautrain in preparation for the World Cup in saves to illustrate the diverse view so sustainability obtaining in South Africa. Whereas the majority of the predominantly rich residents of the northern suburbs supported the development, many poor people though the project was a waste of resources that could be used to provide other immediate needs like housing, and transport to the large struggling poor population mainly in the Southern locations. (see ..) this is not to discount the views of some green minds citizens who can be said to be rich but who still thought the project was a waste of resources and therefore not economically sustainable.

²⁰ Wood C, *Environmental Impact Assessment, A Comparative Review*, Longman 1995, 1

Africa the concept of sustainable development is included in the supreme law of the land, the Constitution as one of the objectives of fundamental right to an environment which is not harmful to health and well being.²¹ Acting on its duty imposed by Section 24 to put in place legislative measures to promote, among other things, ecologically sustainable development the government of South Africa enacted an overarching piece of legislation which applies generally to all environmental matters, the National Environment management Act No 107 of 1998. The NEMA is important because it gives further content to the concept of sustainable development in South Africa even though in international law the concept’s meaning remains disputed and subject of much debate. This Act in its preamble opens by stating that, “sustainable development requires the integration of social, economic and environmental factors in the planning, implementation and evaluation of decisions to ensure that development serves present and future generations” and further includes sustainable development among key principles of environmental management that must guide government policy.²² The construction of sustainable development in section 2(4) of NEMA virtually includes all the emerging and established principles of environmental law as principles that are geared towards sustainable development. Important for the purposes of this study is the fact that section 2(4) (f) and (g) provides for the principle of public participation as one of the factors which must be considered if sustainable development is to be achieved. These sections provide that:

(f) The participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured.

²¹ Section 24 of the Constitution of republic of South Africa Act No 108 of 1996 provides that:

Everyone has the right-

- (a) to an environment that is not harmful to their health or well-being; and
- (b) to have the environment protected, for the benefit of present and future generations, through *reasonable legislative and other measures* that-
 - (i) prevent pollution and ecological degradation;
 - (ii) promote conservation; and
 - (iii) secure ecologically *sustainable development* and use of natural resources while promoting justifiable economic and social development.*(my emphasis)*

This right must be read together with the right of access to information (S32), the right to just administrative action (S33) which supplement and strengthen the procedural rights of citizens, in this case, regarding administration of environmental laws including laws regulating the EIA process.

²² Section 2 (3) provide that, “[d]evelopment must be socially, environmentally and economically sustainable” SS(4) (a) then adds that “[s]ustainable development requires the consideration of all relevant factors including the [generally accepted emerging and established principles of environmental law]” Paras (i) to (viii), then (f) and (g) list principles which include the precautionary principle, principle of prevention, environmental justice, public participation, polluter pays, integrated environmental management and many others.

(g) Decisions must take into account the *interests, needs and values* of all interested and affected parties ... (*emphasis*)

The connection between EIA as an implementing strategy or procedure for integrated environmental management and public participation is therefore put beyond doubt by statute.²³

Undoubtedly EIA remains one of the effective frameworks within which public participation in environmental decision-making can take place.²⁴ What remains unsatisfactory in South Africa however is the scope and procedures for public participation provided for in the EIA regulations which are made in terms of S24 of NEMA. NEMA does not define the idea of “public participation”.²⁵ Admittedly a difficult concept to define for all purposes, Spyke correctly concludes that, “[i]n its broadest form, participation can include education and information, review and reaction, and interaction and dialogue”²⁶ The EIA regulations define it as “a process in which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to, specific matters”²⁷ It is apposite to add here that this model of participation has long been perceived as being inadequate and elitist to the extent that it assumes that technocrats and experts are the only people competent to develop a project and then present it to the public for acceptance.²⁸ The new EIA regulations by endorsing what Jones appropriately called the ‘decide-announce-and-defend

²³ Note however that Constitutional Court has since dampened the spirits by ruling that these NEMA principles do not create substantive rights but are merely there to guide decision-making by government departments, (*Minister of Public Works and Others v Kyalami Ridge Environmental Association and Another* 2001 (3) SA 1151 (CC), citing Greyling T, ‘Towards managing environmental disputes: Appropriate public participation’ paper prepared for a Conference on Environmental Dispute Resolution, Fourways, Gauteng, 10-11 June 1998, Bradshaw and Burger 48, however argue that, “[i]f sustainability is to be the goal,[of public participation] it is the function of public participation to assist decision makers to establish “the point of sustainability for each project by contributing essential local knowledge and wisdom to project planning and design, and by clarifying the degree to which stakeholders are willing to accept or live with the trade-offs”

²⁴ See Barton note 14 above, 78

²⁵ Nel J, ‘Stakeholder Relationships in the EIA Process: Some concerns’ 2001(8) *SAJELP* 105,110.

²⁶ Spyke NP, Public Participation in Environmental Decision-making at the New Millennium: Structuring New Spheres of Public Influence, 26 *B.C. Envtl. Aff. L.Rev.* 263, 267 (1999)

²⁷ Regulations in Terms of Chapter 5 of the National Environment Management Act, 1998 GN R.385, Government Gazette No 28753 published 21 April 2006 (“EIA Regs”) Reg 1(1). Chapter 6 of the regulations is dedicated to the public participation procedure. This represents a fundamental improvement on the ECA Regs which cursorily provided for a public participation process which was at best least defined, and at worst vague and left to the discretion of the EIA practitioner. (see generally the now repealed GN R.1183 of 5 September 1997: Activities Identified Under S21(1) [ECA] in the Schedule- Reg 3(1) (f) which provided that the project applicant “is responsible for the public participation process, to ensure that all interested parties, including government departments that may have jurisdiction over any aspect of the activity are given the opportunity to participate in all relevant procedures contemplated in [the] regulations”) (*emphasis*) in *Earthlife Africa (Cape Town) v Director-General: Department of Environmental Affairs and Tourism* 2005 (3) SA 156 (C) Para 59 the court construed the emphasised words to mean that the public were entitled to comment at all stages of the EIA including on the final Environmental Impact Report.

²⁸ In describing this rational elitism theory of state Barton note 14 above, 85 adds that, “an elite has little enthusiasm for public participation. Even a democratic form of elitism, based on rationality and official expertise, sees no need for public participation in solving problems; it knows the answers itself”

decision-making²⁹ model has fails to mainstream one of the essential elements of sustainable development. As provided in S2 of NEMA sustainability requires that decision making processes must include effective participation, not only to endorse decisions about the type of development which a particular community needs, but also in making the choice of the most appropriate and therefore sustainable choices. This issue will further be addressed in the coming section which deals specifically with the new procedures.

However before proceedings to analyse the EIA process itself it is worth noting that the public is broadly defined in the EIA regulations, under the term interested an affected parties. The term “*interested and affected party*” is defined in the regulations as,

interested and affected party contemplated in section 24(4) (d) of the Act, and which in terms of that section includes –

- (a) any person, group of persons or organisation interested in or affected by an activity; and
- (b) any organ *of* state that may have jurisdiction over any aspect of the activity.³⁰

It is doubtful whether this attempt to define the “public” who may participate in the EIA process, albeit, broad will include all potentially affected members of the public. It has been argued that it is better not to attempt to define the “public” who must participate in the EIA process.³¹ The danger of exclusion is a real possibility but it is submitted that in some cases it may not be necessary to include everybody even people whose interest in the project is remote and are not likely to suffer any significant impacts from the project.³² However being part of the governance process there should be no harm in allowing any interested person in participating and giving input into a development project.³³

The connection between sustainability and public participation is even more relevant in South Africa given the counter -productive interpretation which the courts had given to

²⁹ Jones EG, Risky Assessments: Uncertainties in Science and the Human Dimensions of Environmental Decision-making, 22 *Wm. & Mary Envtl. L. & Pol’y Rev.* 1, 25 (1997)

³⁰ Ibid

³¹ Doelle and Sinclair note 14 above, 196. (“any definition of the public brings with it the inherent risk of excluding someone who should be allowed to participate. The only justification for exclusion that seems acceptable is someone who is motivated by a desire to make the process fail”)

³² I would not go as far as advocating for a scoping process where some issues raised by some participants can be disregarded as insignificant before they are fully considered or at the stage of setting the terms of reference for the EIA, see Ross WA *et al*, Common Sense in Environmental Impact Assessment: It is not as common as it should be, *Impact Assessment and Project Appraisal* Vol 24 (1) 2006,3 at 5

³³ See generally Masango R, ‘Public Participation: A Critical Ingredient of Good Governance’ *Politeia* Vol 21 No 2 2002 52 (for the argument that public participation generally is essential to democratic policy implementation and good governance)

the ECA Regs.³⁴ In particular these old regulations did not sustain the complimentary role of public participation by using a notion of EIA which viewed the process as a mere administrative stage to be conducted for the purpose of authorising or rejected development proposals. In one case the court held that once the project proponent had proceeded with the project even without proper authorisation, then EIA was out of the question as the activity sought to be authorised would have already been started.³⁵ The courts did not see the opportunity or utility of allowing public participation through requiring an *ex post facto* assessment. This anomaly was removed by the NEMA which now provides for effective administrative remedies, including the carrying out of an assessment, where a proponent undertakes a project without authorisation when the project is required by law to be subject to the EIA process.³⁶ The idea of EIA not being limited to an authorisation process but a continuous process is welcome as it furthers the interests of interested and affected parties. It is not clear though whether continuous assessment in South African regulations entails continued participation by the public in monitoring or accessing information on the actual implementation of a project and whether or not the anticipated impacts have eventuated and how they have been addressed.³⁷

To be effective participation must not be a once off event, but a sustained iterative process, which begins from project conception or formulation to approval and post approval implementation.³⁸ It appears that the public participation process contemplated by Chapter 5 of the NEMA read with Chapter 6 of EIA Regs ends with the grant or rejection of authorisation. Once interested and affected parties have made their contribution through the process leading up to the preparation of the EIA and decision by the competent authority, the only remedy remaining if they should be dissatisfied is to seek an appeal or review of the process leading to the decision.³⁹ It is submitted that this remains a fundamental defect in the EIA process, as non-compliance or departures from EIA reports and mitigation measures are not uncommon. In fact it can safely be argued that public participation is also crucial during

³⁴ See for instance the decision in *Silvermine Valley Coalition v Sybrand van der Spuy Boerderye and Others* 2002 (1) SA 478 (C) where the court held an EIA is only possible before authorisation of a project. Cf *Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd t/a Pelts Products* 2004 (2) SA 393 (E)

³⁵ *Ibid*

³⁶ Section 24G NEMA inserted by S 3 of NEMA Amendment Act 8 of 2004

³⁷ Although Reg 38 of R385 gives the competent authority powers to impose conditions in an authorisation requiring regular reporting of progress during project implementation. It is unclear whether members of the public can intervene to point out violations at this stage.

³⁸ This can be said to illustrate the overemphasis on process rather than outcomes which Doelle and Sinclair (supra) 186 identify as one of the major sources of problems in EIA processes

³⁹ Regs 10 and 60(2) GN. R.385 the internal appeal against a decision by a competent authority may be available in limited circumstances. However the aggrieved party will have to appeal under the Promotion of Administrative Justice Act (PAJA) against decision of the MEC or Minister.

project implementation and monitoring. An analysis of the innovation introduced by the NEMA EIA Regs in relation to public participation would be necessary to illuminate and fortify the shortcoming thereof.

III. The New EIA Legal Framework in South Africa

The NEMA EIA regulations were first published in April 2006 and they became effective in July 2006.⁴⁰ The main objective of revising the EIA procedure was, not only to address the inadequacies of the old ECA Regulations, but also to take into account continuous developments in sustainable development discourse and contemporary issues of participatory governance.⁴¹ Generally speaking the new regs provide for a two pronged approach to EIA, namely a process for what one can term minor projects (called a Basic assessment) and another for major or more complex projects (called Scoping and EIA).⁴² It is the responsibility of the EIA practitioner (consultant) to assess any particular projects and determine whether it should be assessed using the Basic Assessment or the full blown Scoping and EIA.⁴³

In addition to the main regulations providing for the EIA process itself, two more regulations were promulgated identifying through a process of listing, those activities that must undergo either EIA processes.⁴⁴ There are advantages and disadvantages to this listing approach, the obvious ones being the propensity of being either over or under inclusive.⁴⁵ This process was carried over from the old regulations but under the new regulations the lists have been better thought out and organised providing very specific details of the nature of the activity that must be assessed. For instance the listing regulations identify the activities by name, type, size as well as capacity. It submitted though that these criteria are by no means unambiguous hence it remains an issue as to whether some peripheral or borderline project is susceptible to EIA or not.

⁴⁰ Regulations in Terms of Chapter 5 of the National Environmental Management Act, 1998 GN. R.385 published in the GG No 28753 of 21 April 2006

⁴¹ Glazewski J, *Environmental Law in South Africa* 2nd ed Butterworths (2005); see also Nel J, note 24 above (rights of interested and affected parties were poorly defined in the now repealed GN R.1182-1184 GG 18261 published 5 September 1997)

⁴² In terms of Reg 21 Government Notice R.385 of 2006, activities list under Government Notice R.386 of 2006 undergo a Basic Assessment while those listed under Government Notice R.387 of 2006 must be subjected to Scoping and EIA. Both process are subject to the Public participation Process required by Reg 56 of Notice R 385.

⁴³ Reg 20(1) GN R.385 the decision is guided by the guidelines development by the Department of Environmental Affairs and Tourism ("DEAT") Guideline No 3: General to the EIA Process June 2006

⁴⁴ GN R.386 and 387 of 2006.

⁴⁵ Glazewski note 40 above, 385 raised this as a defect of the now repealed ECA regulations. GN. 1182 of 1997.

If an activity falls under the list in Government Notice R.386 of 2006 then it does not require extensive or what one may call a Phase II scoping and assessment, it being enough to do what may be called a Phase I or Basic Assessment. Projects listed under this list are perceived as not likely to have significant impacts on the environment and therefore it is not necessary to delay project implementation by requiring extensive assessment when the anticipated impacts are miniscule. On the other hand Government Notice R.387 of 2006 lists activities that are expected to have significant impacts on the environment and therefore requiring detailed assessment through scoping and EIA process. For all intents and purposes this schema represents the approach adopted in many other countries consisting of the broad processes of screening, scoping, assessment, reporting, decision making or authorisation and post authorisation monitoring.⁴⁶ A basic assessment seems to end at the stage of screening, while a Phase II assessment continues with scoping, assessment, reporting until authorisation.

It is important for the purposes of this paper to note that in terms of the regulations as well as guidelines prepared to facilitate easy implementation of the regulations public participation must be carried out throughout these processes, both for basic and detailed EIAs. The public are to be consulted at the screening stage, the scoping stage, and must be part of the assessment study itself, they then comment on the report and their comments on the final report must also be before the decision making or competent authority. Recently the courts confirmed that the public are entitled to comment on the final report and not only the draft report.⁴⁷ Logically this is intended to ensure that the final report submitted to the competent authority has properly taken into account the comments from the public. A critical handicap of the public participation process mandated by the regulations is that they provide no more guidance other than the size, contents of the notice to be published and the place of publication.⁴⁸ Quite worrying is the indication that the practitioner can issue the notice to the interested and affected parties after making the application for authorisation or

⁴⁶ Wood C, *Environmental Impact Assessment; A Comparative Review*, Longman (1995)

⁴⁷ *Earthlife Africa (Cape Town) v Director-General: Department of Environmental Affairs and Tourism* 2005 (3) SA 156 (C)

⁴⁸ Reg 56(3) contents of the notice i.e. whether application has already been lodged, type of assessment to be done or already done, description of location of activity) Reg 56(4) (size of notice of the notice) Reg 56(6) “When complying with this regulation, the person conducting public participation process must ensure that the information containing all relevant facts in respect of the application is made available to potential interested and affected parties; and participation by potential interested and affected parties is facilitated in such a manner that all potential interested and affected parties are provided with a reasonable opportunity to comment on the application”

before.⁴⁹ It must be noted that this is the first stage at which the interested and affected parties get any information that a project is to be implemented and an EIA is being or will be carried out. Consideration of alternatives after this stage is merely wasting time. A further most glaring defect in the new regulations is that, to start with, the public does not play any role in project design or conception or formulation and there are no provisions providing for the role of the public once the project is authorised or rejected other than appeal and review procedures.

(a) Project conception and the issue of alternatives

Unsustainable development projects or activities are so from the time they are designed or formulated. No amount of public involvement after the design and formulation of a project will cure a particular project of its unsustainable impacts, whether during implementation or after completion when the project is operating. It has correctly been argued therefore that the critical moment is this stage of project design and it must not just be left to corporations and their experts.⁵⁰ In particular if the project is to offer a service or good to the community, whether a public or private service, it is best to have the input and comments of the ultimate users before even sinking resources into the design of the project. The resources are better spent first on getting the opinions and ideas of the affected community on whether the proposed project is the best way to address the identified problem. In this respect Doelle and Sinclair argue that;

[b]y encouraging collaboration and giving equal opportunity to all interested parties to provide input to the project design and potential resulting impacts, the process itself should ensure the project makes a net contribution to sustainability.⁵¹

More often than not, corporations as well as government departments sink a lot of funds into research and development and then they design a solution to the problem without consulting the users or the public and then present the proposal as the best solution to the problem. The assumption is that it is also the best solution in the eyes of the public. Most alternatives provided in justifying the chosen option have been labelled as “pseudo-alternatives” by others in other jurisdictions.⁵² All too often this is an error which is hard to reverse given the

⁴⁹ Reg 56 (3) (b)

⁵⁰ Barton note..above

⁵¹ Doelle and Sinclair note 14 above, 188

⁵² Pardo M, ‘Environmental Impact Assessment: Myth or Reality? Lessons from Spain’ *Environ Impact Assess Rev* 1997(17) 123,134 commenting on the EIA process in Spain which broadly falls under the European Directive 85/337/EEC effective in Spain in from 1988. Note that public participation in the European Union

resources already spend in researching and developing the solution clandestinely outside the eyes of the public or consumers.⁵³ This is where unsustainability begins, where industry and technology as well as monopoly interests direct the process of development giving little regard to social and environmental sustainability and acceptability of the proposed development. Wood submits that the ideal generic EIA process usually consists of the following steps:

- (a) a *consideration of the alternative means of achieving objectives*
- (b) designing the selected proposal
- (c) determining whether an EIA is necessary in a particular case (screening)
- (d) deciding on the topics to be covered in the EIA (scoping)
- (e) preparing the EIA report (i.e., *inter alia*, describing the proposal and the environment affected by it and assessing the magnitude and significance of impacts)
- (f) reviewing the EIA report to check its adequacy
- (g) making a decision on the proposal, using the *EIA* report and opinions expressed about it
- (h) monitoring the impacts of the proposal if it is implemented.⁵⁴

It is important to note that the first step identified by Wood is to consider the various alternative approaches to solving the problem or achieving the objective sought. A good example of failure to do this in South Africa is where a power utility having identified that there is likely to be a power shortage in the country researches the options open to it to ensure that more energy is produced. The utility considers its options and choices usually considering the resources available to it and the costs implications. It decides to restart coal fired power plants that had been switched off when production was excessive. It also decides to even construct more new coal fired power plants.⁵⁵ This is despite the fact that the country is among the top emitters of green house gases which are fuelling the much talked about climate change.⁵⁶ To make matters worse the country’s share comes mostly from energy

including in EIA processes should now ideally be premised on the Aarhus Convention on Public Participation which Spain signed on...

⁵³ Under Regs 23 (2) (g) and 32(2) (f) both basic and EIA reports must contain “a description of the *need and desirability* of the proposed activity and any *identified alternatives* to the proposed activity *that are feasible and reasonable*, including the advantages and disadvantages that the proposed activity or alternatives will have *on the environment and on the community* that may be affected by the activity” is required but only in the report submitted to the competent authority.”(emphasis added)

⁵⁴ Wood C, note 44 above at 5

⁵⁵ See for instance the Matimba B (Medupi) Transmission Integration Project Scoping Report <<http://www.eskom.co.za/content/294-02%20SR%20MatimbaDelta%2030-04-07v4.pdf> >

⁵⁶ South Africa produces 40% of Africa’s aggregate carbon emissions ‘An Energy Summary of South Africa’ <<http://www.csforum.org/safrica.htm>>; It was in the top 25 emitters as of 2000 Baumert KA, Herzog T, and Jonathan Pershing J, ‘Navigating the Numbers: Greenhouse Gas Data and International Climate Policy’ WRI (2005) <http://pdf.wri.org/navigating_numbers_chapter2.pdf>; see also the Stern Review: The Economics of Climate Change <

production processes. Clearly the decision to continue to use coal fired power plants and build even more is environmentally unsustainable. Even though given the development status and other developmental goals of the country the decision may seem to be the only sustainable options, it cannot be justified without further interrogation. In particular one wonders whether the energy utility and the government which owns the large part of the utility ever considered using the funds and resources put into building new power plants, into other forms of producing energy. What about solar for lighting and gas for cooking? These processes account for much of the increased demand due to population growth and economic growth. But if at least the energy mix can include more renewable energy for lighting and heating then the remaining electricity may be enough for industry and there will be no need to continue digging for coal only to release carbon into the atmosphere.

The EIA processes for these projects only start engaging the public when a decision has already been made to construct a coal fired power plant.⁵⁷ Even if the public were to suggest alternatives to the project altogether, it does not seem like the government and the power utility would back down and chose such alternatives. To the EIA consultants alternatives in this regard refers to alternative routes for the transmission lines and siting, but clearly consideration of alternatives includes alternatives to the type of development envisaged as the solution to the problem, in this case stressed power supply. A further illustration is the construction of a state of the art railway link between Pretoria and Johannesburg presented to the public as the solution to the perennial and worsening traffic congestion and transport problems between the two cities. Who said that the fast railway link is the only sustainable option, who decided that issue? The public only get to know about it as the only proposed solution to the problem even though it is the public suffering from the transport shortage and traffic congestion. Why not for one day assume that maybe these users of the transport system have better ideas of solving the problem? By the time the public is invited to comment on the proposal to build the costly state of the art rail link, enormous resources have already been sunk into designing the project and consultants have already been hired. If one was to approach the EIA consultant and advise them that construction of another free way, or imposition of fuel taxes, or better public transport system would be better alternatives, would the government abandon the Gautrain project? Obviously no, they

http://www.hmtreasury.gov.uk/media/3F8/81/ch_7_projecting_growth_of_ghg_emissions.pdf > (Power production contributes most to green house gas emissions)

⁵⁷ A defect emanating from the regulations themselves see Reg 56.

will and in fact they did defend their proposal as the only sustainable solution regardless of its unsustainable cost. Instead of the Muckleneuk/Lukasrand Property Owners' and Residents' Association (MLPORA) fighting the routing of the train project on the review, these are issues that ideally could have been thrashed and agreed with interested and affected parties when the Gautrain project was designed before authorisation. Perhaps one should note that the Gautrain project was assessed under the ECA Regulations which provided little room for public participation, let alone for suggestion of alternatives. Other pitfalls bedevilled this project, including among others the fact that the construction company that won the tender was also carried out the EIA, and further the competent authority happily defended the project, yet they are supposed to be independent and impartial adjudicators on submitted EIA reports. Though the concerns of the public were heard at various meetings, there was no sustained consideration of the public views when the final decision was made, even though the court thought otherwise.⁵⁸

What remains clear from the above examples is that the new EIA regulations provide for inadequate participation in project design and the issue of suggesting alternatives. On the contrary they entrench the old approach of leaving the design and conception of the project to experts.⁵⁹ This elitism must end if sustainability (social environmental and economic) in all its forms is to be achieved, and if delays through court challenges are to be avoided.

(b) Post authorisation dilemmas and sustainability.

The projects referred to above just as well serve to illustrate that the proponent is usually faced with unending court challenges once the project is authorised. This is an indicator of the fact that the public remains dissatisfied by the participation process. The Eskom case was determined under the NEMA EIA regulations and best illustrates this point.⁶⁰ Most impacts only become clear once project implementation begins. Even those that may have been deemed environmentally insignificant can materialise as major environmental problems necessitating extensive revision of some components of the project without necessarily redoing the assessment. In most cases the public will no longer have room to participate in ensuring that the proponent sticks to the design and procedures approved on authorisation of the project. In most cases due to poor post authorisation monitoring proponents take short

⁵⁸

⁵⁹ Some have added that when the experts present the project proposals they gloss over their adverse impacts glorifying their social and economic benefits, see Pardo M, above note 47, 135-6

⁶⁰ See Eskom EIA Scoping Reports at

cuts and even ignore some mitigation measures which they would have undertaken to do in the EIA reports.

A question that may be asked is whether the public do in fact benefit from the promised positive impacts or benefits of projects once they have been approved for implementation? Benefits in this context do not refer only to material benefits but also environmental goods and services provided or environmental costs and hazards removed. For instance the construction of new power plants inures to the benefit of the public if in fact after construction it improves the supply of energy or lowers the cost of energy. On the other hand if the cost of electricity does not go down and the power plants adds to the emission of green house gases the net impacts to the public consists of added health hazards from pollution including the prospect of suffering from the effects of climate change to which the power plant emissions contribute. Public participation in the scrutinisation of projects to ensure sustainability must include participation in assessing and accessing the benefits of the project once it is approved, if it is a project for the provision of a public good or service.

(c) The role of the courts in ensuring sustainability

The inadequacies of the EIA process in South Africa can be ameliorated if the courts play their role in ensuring that only projects that are proven to be sustainable after an EIA are approved. Even projects that appear to be unsustainable may still be approved if adequate mitigation measures and environmental management plans are put in place to minimise the residual impacts of such projects. Of late the courts in South Africa have indeed proved that they can be a force to reckon with in the face of an ill equipped (resource wise) department overwhelmed by EIA applications.

A number of court decision illustrate that the courts are awake to the need to foster sustainable development in their sphere of influence. In a line of decisions concerning the authorisation of fuel stations, the courts have settled the controversy concerning whether an EIA should include consideration of social and economic factors.⁶¹ It is submitted that this is the better view which is consistent with integrated environmental management espoused in NEMA.⁶² Whilst defensible the interpretation of the NEMA and its EIA regulations seems

⁶¹ See *Fuel Retailers Association of SA (Pty) Ltd v Director-General, Environmental Management, Mpumalanga, and Others* 2007 (2) SA 163 (SCA) Para 14 referring to ss2, 3,4 of NEMA and applying *MEC for Agriculture, Conservation, Environment & Land Affairs v Sasol Oil (Pty) Ltd* 2006 (5) SA 483 (SCA) see further for a comparative discussion of decisions prior to the *Fuel Retailers* case Petersen A ‘Fuelling the Sustainable Development Debate in South Africa’ 2006 (123) 1 *SALJ* 53

⁶² Glazewski note 39 above, 247-248 (an amendment the NEMA in 2004 removing reference to socio-economic factors flies in the face of the essence of environmental assessment and sustainable development); Field TL note

misplaced. Even the amendment of S24 of NEMA to remove direct reference to social and economic factors does seem indecisive. A consideration of “environmental” impacts necessarily refers to environment as defined in environmental legislation that is the ECA and NEMA. Whilst the definition of “environment” in NEMA is admitted limited to the biophysical environment, the one in the ECA which remains unrepealed is much broader and includes social and cultural factors. Needless to say the NEMA provides that the EIA process must be undertaken within the context of the principles of environmental management enunciated in S2 of the Act, which include among others the notion of sustainable development and the requirement that environmental decision must take into account the social, environmental and economic impacts of such projects.⁶³

A detailed discussion of the approach which the courts have taken is beyond the scope of this paper and has extensively been discussed elsewhere.⁶⁴ Suffice to note that sustainability hinges a lot of the availability of judicial remedies where decisions are improperly taken. Furthermore courts are important as they ultimately give content and meaning to legislation which happens to provide for most environmental assessment in many countries including South Africa. The breath and scope of the legislation will eventually be determined by the courts. Similarly whether these laws can be use dot achieve sustainability also partly depends on the ideological orientation of the courts.

IV. Thoughts for the future: A climate for change

The above analysis shows that indeed public participation has a critical role to play in facilitating sustainability. However in order for public participation to effectively play this role the legal provisions providing for opportunities for participation must not only limit the opportunity to procedural involvement without any sustained efforts to ensure that the public earnestly input into development decisions. A persistent issue is how to measure

12 above at 430 (asserting that the amendment is evidence of the crude environmentalism underpinning the new EIA regime - she accepts though that social economic factors remain relevant in view of S23(2) (d)). It is clear though that in terms of the regulations GN R.385 both a basic and EIA report must contain descriptions of “the geographical, physical, biological, *social, economic and cultural aspects* of the environment may be affected by the proposed activity” (*emphasis*) Reg 23 (2) (d). In any case the courts have since ruled that the environmental authorisation process is not limited to biophysical environmental considerations per se. In addition S 23(2) (b) of provides that the general objective of integrated environmental management is to- “identify, predict and evaluate the actual and potential impact on the environment, *socio-economic conditions and cultural heritage*, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and *promoting compliance with the principles of environmental management set out in section 2*” (*emphasis added*)

⁶³ Section 2 NEMA.

⁶⁴ Petersen, note 54 above; Field TL note 12 above.

sustainability. Whilst indicators and models have been developed and are being experimented with, the issue remains elusive.⁶⁵ The EIA process in South Africa provides an opportunity to ensure the sustainability of development projects and activities, the law mandating this process is still wanting in respect of its public participation provisions. This law has also not developed clear cut criteria of measuring sustainability of projects, plans and policies. The problems discussed in the above sections are compound by a myriad of other variables peculiar to a semi-developing socio-economic environment. Pertinent factors include accessibility of information and reports prepared by environmental assessment practitioner.⁶⁶ Accessibility refers to both the issue of language and the issue of availability. In most cases the EIA reports and project documents are prepared using technical and complex language which the ordinary person cannot understand without the assistance of an expert. Worse still these documents are often presented and better understood if presented in English. The EIA regulations do not require the reports and documents to be made available in the language of choice of the interested and affected parties this being a matter for the EIA practitioner’s discretion. Furthermore whether the documents should be simplified is a matter not clearly regulated.

V. Conclusion

I have argued in this paper that, while South Africa is among the few developing and semi developed countries that have seriously taken to implementing the concept of sustainable development; challenges still remain in terms of putting in place clear and effective regulations. This is particularly so with regard to the recently promulgated regulatory framework for environmental impact assessments. The paper shows that while the existence of the regulations and their further refinement in 2006 is commendable, much can be done to enhance public participation. Public participation is a necessary condition for ensuring the sustainability of development projects.

Yet the theory of public participation which is currently focused on procedural notice and comment procedures must give way to a nuanced and sustained participatory framework

⁶⁵ See Birnie and Boyle note 1 above, 85 (parameters of sustainability and criteria not yet clear) ; Blackburn WR, *The Sustainability Handbook Complete Management Guide to Achieving Social Economic and Environmental Responsibility*, Environmental Law Institute (2007); Pinter L, Hardi P and Bartelmus P, *Sustainable Development Indicators Proposals for the Way Forward* Prepared for the United Nations Division for Sustainable Development (UN-DSD) Dec 2005; Hardi P and Zdan T, *Assessing Sustainable Development: Principles in Practice* ,IISD (1997); Bossel H, *Indicators for Sustainable Development*, IISD (1999)(how sustainability indicators can be developed and applied)

⁶⁶ See generally Ebbesson, above note...696-701 (discussing the importance of access to information, minimum standards and access to justice for effective public participation in environmental decision making generally)

which ensures that the public participates from the early stages of project design, and also after authorisation. I have elaborated on the inevitable complimentary nexus that exists between a participatory environmental decision making processes and the achievement of sustainable development. Sustainability is ultimately measured by reference to what the citizens or public consider to be sustainable given their social, economic and political circumstances before and after project implementation. This is especially the case in relation to social, cultural and economic impacts of a project whether anticipated or residual impacts. However all too often the propensity for project proponents and government departments is to presume to know what is sustainable and therefore in the best interest of the citizens. This engenders conflict and lack of confidence in the development agenda. The judiciary can play a role in this regard by progressively interpreting legal instruments and giving content to the ideals embodied in environmental legislation. South African courts have shown their preparedness to play this critical role. However the measurement of what is or is not sustainable remains a challenge as universal indicators cannot be applied across the board and across countries.

VI. Bibliography

Birnie PW and Boyle AE *International Law and the Environment* 2nd ed Oxford University Press (2002)

Blackburn WR *The Sustainability Handbook Complete Management Guide to Achieving Social Economic and Environmental Responsibility*, Environmental Law Institute (2007)

Bodansky D, Brunnée J and Hey E (eds) *The Oxford handbook of International Environmental Law*, Oxford University Press (2007)

Bossel H, *Indicators for Sustainable Development*, IISD (1999)

Baumert KA, Herzog T, and Jonathan Pershing J, ‘Navigating the Numbers: Greenhouse Gas Data and International Climate Policy’ WRI (2005) <http://pdf.wri.org/navigating_numbers_chapter2.pdf>

Bradshaw G and Burger W, ‘Public Participation, Sustainable Development and Public Disputes: Public scoping processes in the Coega deep water port and industrial zone’ *Africanus* 35(1) 2005 44

Fitzmaurice M. & Szuniewicz (eds) *Exploitation of Natural resources in the 21st Century* (2003)

Field TL, ‘Sustainable Development versus Environmentalism; Competing Paradigms for the South African EIA regime’ 2006 (123) 3 *SALJ* 409

Glazewski J, *Environmental Law in South Africa* 2nd Ed Butterworths (2005)

Hardi P and Zdan T, *Assessing Sustainable Development: Principles in Practice*, IISD (1997)

Jones EG, Risky Assessments: Uncertainties in Science and the Human Dimensions of Environmental Decision-making, 22 *Wm. & Mary Env'tl. L. & Pol'y Rev.* 1, 25 (1997)

**“Beyond Public Participation” [2nd DRAFT] by Tumai Murombo
ANZSEE 2007**

Lindeque AS and Cloete CE, ‘Public participation in lower and higher socio-economic areas in South Africa’ *Acta Structilia* 2005:12 (2)25

Masango R, ‘Public Participation: A Critical Ingredient of Good Governance’ *Politeia* Vol 21 No 2 2002

Nel J, ‘Stakeholder Relationships in the EIA Process: Some concerns’ 2001(8) *SAJELP* 105

Osofsky H.M ‘Defining Sustainable Development after the Earth Summit 2002’ (2003) 26 *Loy. L.A. Int’l & Comp. L. Rev.* 111

Osoorio L.S, *et al* ‘Debates on Sustainable Development: Towards a Holistic View of Reality’ *Environment, Development & Sustainability* (2005) 7: 501

Petersen A ‘Fuelling the Sustainable Development Debate in South Africa’ 2006 (123) 1 *SALJ* 53

Pinter L, Hardi P and Bartelmus P, *Sustainable Development Indicators : Proposals for the Way Forward* Prepared for the United Nations Division for Sustainable Development (UN-DSD) Dec 2005

Pardo M, ‘Environmental Impact Assessment: Myth or Reality? Lessons from Spain’ *Environ Impact Assess Rev* 1997(17) 123

Ross WA *et al*, Common Sense in Environmental Impact Assessment: It is not as common as it should be, *Impact Assessment and Project Appraisal* Vol 24 (1) 2006

Spyke NP, Public Participation in Environmental Decision-making at the New Millennium: Structuring New Spheres of Public Influence, 26 *B.C Env’tl. Aff. L.Rev.* 263, 267 (1999)

Stern Review: The Economics of Climate Change <
http://www.hm-treasury.gov.uk/media/3F8/81/ch_7_projecting_growth_of_ghg_emissions.pdf >

UK Environmental Impact Assessment: A guide to procedures, Queens Printer and Controller of Her Majesty’s Stationery Office (2000) www.communities.gov.uk

Ventriss C and Kuentzel W ‘Critical Theory and the Role of Citizen Involvement in Environmental Decision Making: A re-examination’ *International Journal of Organization Theory and Behaviour* 2005(8) 4, 520

Wood C, *Environmental Impact Assessment, A Comparative Review*, Longman 1995

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

Zillman DN *et al* (eds) *Human Rights in Natural Resource Development Public Participation in the Sustainable Development of Mining and energy Resources*, Oxford University Press 2002