

## RESEARCH AND EVALUATION

## The Western Australian Regional Forest Agreement: Economic Rationalism and the Normalisation of Political Closure

Martin Brueckner  
Edith Cowan University

*This article explores the constraints imposed by economic rationalism on environmental policy-making in light of Western Australia's (WA) Regional Forest Agreement (RFA) experience. Data derived from interviews with WA RFA stakeholders shed light on their perceptions of the RFA process and its outcomes. The extent to which the involvement of science and the public was enabled by RFA management is analysed. The findings point to a pervasive constrainedness of WA's RFA due to a closing of the process by the administrative decision-making structures. A dominant economic rationality is seen to have normalised and legitimised political closure, effectively excluding rationalities dissenting from an implicit economic orthodoxy. This article argues for the explication of invisible, economic constraints affecting environmental policy and for the public-cum-political negotiation of the points of closure within political processes.*

**Key words:** *economic rationalism, regional forest agreements, stakeholder opinions*

Over the last 25 years, the rise of economic rationalism has changed the nature and workings of Australia's political and administrative structures. These changes paved the way for a new approach to public policy based on a newfound appreciation for economic (neo)-liberalism which promised a freer economy, more openness and less government intervention. Australia's wholesale adaptation of this new rationality and its effects are well documented and debated (eg, Pusey 1991; Carroll and Manne 1992; King and Lloyd 1993; Rees, Rodley and Stilwell 1993; Bell 1997; Beeson and Firth 1998; Orchard 1998; Pusey 2003).

Unsurprisingly, environmental policy-making in Australia has also been subjected to the influence of the burgeoning economic credo. While the growing application of the economic paradigm is welcomed and defended by many commentators and seen as a step towards more efficient decision-making for environmental protection (Hahn 2000), others

warn about its 'over-dominance' (Aplin 2000) and highlight its shortcomings when applied to complex, socio-ecological realities (eg, Eckersley 2001; Dovers 2002). In particular, critics fear that the reductionist, economic rationality is ill-equipped to deal with messy political problems, especially those concerned with social and environmental issues, because of its perceived ontological and epistemological narrowness (Dryzek 1996; Hamilton 2002; Fergus and Rowney 2005).

The author of this article also adopts a more cautious view of the stronghold of economic rationalism within the public policy arena. This article focuses in this context on the problems arising out of the dominant position of economic rationalism in environmental policy processes that claim to respect the democratic imperative of pluralism and the environmental imperative of sustainability. For this purpose, this article will concentrate on the native forest debate in Western Australia (WA) in the late

1990s. During this time, the political attempt was made to implement the National Forest Policy Statement (NFPS) (Commonwealth of Australia 1992) in WA through a Regional Forest Agreement (RFA) process. A case study is presented, offering insights into RFA stakeholders' perceptions of WA's RFA process and the outcomes it achieved. Attention will be focused on the input by science and the general public into the formulation of guidelines for future forest use and management. The case study findings inform a broader discussion about the impact of economic rationalism on environmental policy-making and the openness of political processes per se. It will be argued that, in the case of WA's RFA, economic rationalism was responsible for the political closing of the RFA process, leading to the marginalisation of alternative rationalities and the eventual public rejection of the RFA process and its outcomes.

### **Economic Rationalism and the Environment**

Economic rationalism can broadly be understood as a worldview based on ideas derived from neoclassical economic theory (Edwards 2002; Wright 2003), which 'accepts and advocates the primacy of the markets' (Valentine 1996:3). Within neoclassical economics nature is perceived as separate from and subordinate to the human economy. Based on a highly reductionist subject-object dualism nature is seen mechanistically as the mere provider of resources and services needed to satisfy human demand (Diesendorf and Hamilton 1997; Gare 2002). The substitution of even critical natural resources is deemed permissible, and associated negative environmental effects are either not accounted for or become a matter of adequate pricing (Daly and Cobb 1989).

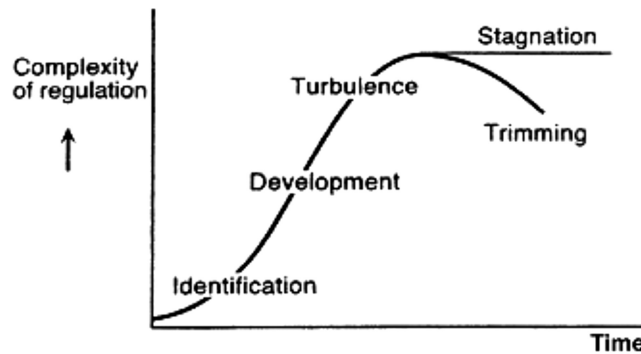
Human-nature conceptions such as these are in stark contrast to more holistic, open-system perspectives developed for the management of complex social and environmental systems within fields such as ecology or ecosystem health (eg, Rapport et al. 1998; Gunderson and Holling 2002). Unsurprisingly conflict is

pre-programmed between ecologists and neo-classical economists, for instance, on issues such as biodiversity protection or land management. Tensions such as these might be regarded as healthy within pluralistic societies. Yet, a single economic rationality frequently dominates over other rationalities in public and political discourses (Handmer, Dovers and Norton 2001) based on asserted scientific objectivity and truth and the denial of any influence of bias (Nevile 1997; van Bavel and Gaskell 2004). The purported apoliticality and neutrality of economic rationalism means that values and assumptions remain hidden (Hamilton 1996; Meppem and Gill 1998) and that a façade of objectivity and truth can be used to legitimise policy prescriptions and discredit and reject dissenting (ir)-rationalities (Pember-ton 1988; Hamilton 2002).

There is agreement in the literature that socio-ecological problems are complex and trans-scientific (Kinzig 2001; Ludwig 2001), requiring collective learning approaches (Stacey 1993) and integrative solutions based on holistic decision-making processes (Mitroff 1998). Complexity within the policy arena often leads to the stagnation of policy processes, necessitating some form of trimming or closure. As illustrated in van Straalen and Souren's (2002) example of the life-cycle of science-policy communication (see Figure 1): growing levels of complexity are shown to lead to greater turbulence and management problems and ultimately to the stagnation of the policy process. A trimming of complexity is thus required for the sake of practicality, implying that closure can be regarded a 'natural' phenomenon in political processes. Yet, the trimming of such processes also harbours risks. In particular, policy processes which are dominated by a bounded (Kasper 1997) or blinkered (Daly and Cobb 1989) economic rationality are prone to dismiss the value of different perspectives and to be insensitive to socio-ecological complexities, compounded further by the rationality's seeming invisibility in political and public discourses.

Many commentators consider economic rationalism and its underlying neoclassical economic theory as today's socially dominant

**Figure 1 The Need for Closure (Trimming) in the face of Complexity**



Adopted from N.M. van Straalen, and A.F. Souren. 2002. "Life-cycle of interactions between science and policy - the case of risk assessment for zinc". *Australasian Journal of Ecotoxicology*. Vol. 8, pp.27-33.

paradigm (eg, Schafer 1994; Korhonen 2002). This dominance has led to the widespread marketisation (after Dovers 2002) of politics, nature and society in Australia. This process served to 'normalise' (after Foucault 1979) an economic rationality which became the ultimate commensurability principle, resulting in other rationalities remaining subordinate (Handmer, Dovers and Norton 2001). It is suggested here that economic rationalism has become socially and politically engrained and thus a largely invisible, 'political rationality' (after Beeson and Firth 1998), the implications of which are illustrated further below in the WA RFA case study.

### **Background to Western Australia's Regional Forest Agreement**

Australia has experienced a long-running dispute over native forest use and management (Dargavel 1998), which resulted from a clash between forest conservation and production agendas since the late 1960s. The forest conflict in Western Australia mirrored the acerbic forest debate at the national level. At the heart of the conflict were calls by conservationists for the reduction of the rate of commercial timber extraction, the cessation of woodchipping of native forests and an end to the practice of old growth forest logging. The timber industry, in contrast, was calling for greater resource

security and employment protection (Stewart and Jones 2003).

A particular conflict surrounded WA's nature conservation agency known as CALM (Department of Conservation and Land Management), which had been the centre of a hostile debate since its inception in 1985. The department stood accused of a conflict of interest because it was in charge of both forest conservation and forest production, being revenue dependent on timber royalties and thus seen as pro-industry. In addition, CALM's forest management practices, its public relations, and perceived philosophical position towards forestry were criticised by members of the public, conservationists and scientists. Disquiet arose, in particular, over what was seen to be a very aggressive defence by CALM of its silvicultural practices based on 'irrefutable in-house' science, being dismissive of alternative perspectives.

In the early 1990s, when the national forest debate reached its zenith, the National Forest Policy Statement (Commonwealth of Australia 1992) was introduced, promising an end to the national stalemate. The NFPS spoke of conflict resolution and certainty for all stakeholders via improved forest reserve systems, industry competitiveness and ecologically sustainable forest management practices. Regional Forest Agreements were the intended vehicles for the operationalisation of the NFPS, aiming to deliver a balance between timber interests and conser-

vation demands. They represented individual, 20-year-long agreements entered into by the Commonwealth and States and Territory governments, which sought to regulate native forest use, conservation and management.

RFAs were purported to be inclusive and accessible (Commonwealth of Australia 1992; Commonwealth of Australia and Government of Western Australia 1996), and it was stressed that effective community involvement was regarded as critical for both the successful completion of RFAs and the durability of their outcomes. In addition, RFAs were hailed as 'agreements backed by science, science and more science' (Commonwealth of Australia 2000:9) and were promoted as having been based on the most detailed and comprehensive scientific assessments ever made in Australia (Commonwealth of Australia and Government of Western Australia 1997).

Comprehensive Regional Assessments (CRAs) formed the scientific basis of RFAs, bringing together new and existing information about the natural, cultural, economic and social values of forested areas (Coakes 1998). In WA, more than 500 high calibre scientists and experts were reported to have been involved in the RFA process, providing input via workshops and expert panels as well as CRA projects (WA Parliamentary Debates – Hansard June 1999). In terms of community involvement, the public was consulted through a wide range of mechanisms, including RFA-related research reports and information kits, an information line, a video and newsletters, fortnightly RFA updates published in the state's daily newspaper as well as local papers and a RFA internet website. In addition, three consultative reference groups were formed, community heritage workshops and public meetings were convened, and surveys and interviews were conducted as part of the RFA's social assessment component (see Social Assessment Unit 1999).<sup>1</sup>

Despite these mechanisms, both the scientific and participative nature of WA's RFA process was criticised widely by various RFA stakeholder groups. Stakeholders, especially scientists and conservation groups, felt that the RFA document neither reflected best science nor the wishes of the community and that

overall decision-makers were ignorant of a wide range of views on forest use and management. In response to immense public pressure generated by conservation groups and Western Australian celebrities (eg. music, fashion, literature) the Court Coalition government repudiated the original RFA only eight weeks after the agreement had been signed. In the face of continued public agitation surrounding the RFA the Court Coalition government lost the state election in early 2001 partially because of the public reaction to the RFA and the Labor opposition's promise to put an end to old growth logging in WA.

In summary, the forest debate in WA had not been resolved, seemingly because of a failure to provide a process and deliver outcomes that were credible scientifically and acceptable to the broad spectrum of RFA stakeholders. In this context, the case study will explore the notion of process failure in the light of stakeholders' perceptions of underlying process constraints that led to the closure of the RFA process. It will be shown that the RFA's lack of credibility and acceptability was linked to the closure of the RFA process to rationalities dissenting from the dominant, economic perspective held at the RFA management level.

## Method

This article is based on a case study-based investigation into the Western Australian RFA (Brueckner 2004). Over a three-year period from 1999 to 2001, 59 interviews were conducted with participants selected via snowball sampling (see Babbie 1992). The group of participants included state and federal politicians and public servants, RFA process managers, conservationists and timber workers as well as forest industry representatives, scientists and members of the general public (see Table 1).

The interview data were analysed following a discourse-analytical approach developed by Butteriss, Wolfenden and Goodridge (2001) as a means of unearthing plural perspectives held within natural resource disputes. This approach is aligned with the perspective of dialogic discourse (Deetz 1996), inclusive in nature and suited to capture a plurality of perspectives,

**Table 1. Participant Groupings**

Participant Group	No. of Participants	Participant Details
Government/Departments/ Political Parties	19	13 employees of government departments 6 State/Federal politicians
Scientific Community	12	12 scientists
Timber Industry/Industry Groups/Unions	9	4 timber mill owners/managers 4 timber worker/industry representatives 1 softwood plantation owner
Stakeholder Reference Group/General Public	8	3 local council members 1 Noongar community spokesperson 1 apiary industry representative 1 tourism industry representative 2 members of the general public
Environment Groups/Conservationists	11	10 NGO members 1 forest protester
<b>Total</b>	<b>59</b>	

Note: participant groupings do not imply intra-group homogeneity

rationalities and subjectivities. The use of visual coding and analytic deduction served to identify discursive themes and patterns, which were developed by way of 'partitioning' the interview data into what are called 'rhetorical landscapes' (Butteriss, Wolfenden and Goodridge 2001). Data partitions were subject to further questioning and analysis in conjunction with RFA-related data derived from the literature and media content.

The data presented below are a digest of themes pertaining to the issue of exclusion in connection with the public's ability to participate and the involvement of science in the RFA process. The different perspectives of the RFA are presented as a coherent meta-narrative, a synthesis of individual accounts of this policy process. Selected quotes from interview transcripts are shown in inverted commas. However, due to confidentiality constraints individual stakeholders must remain anonymous.

### **Stakeholders' Perceptions of Western Australia's Regional Forest Agreement**

In terms of its participatory nature, WA's RFA was purported to be inclusive and to be based on community input (for a detailed discussion see Brueckner et al. 2006). Stakeholders' percep-

tions of the inclusiveness of the process, however, were in stark contrast to the way in which the RFA was being portrayed by RFA management.

While the RFA process was widely seen as generally accessible, the level or quality of access proved to be contentious. Essentially anyone – as a member of a registered organisation – could be signed up with the Stakeholder Reference Group (SRG)<sup>2</sup>, and individuals were free to attend public meetings. Thus, RFA management maintained that 'there were public meetings . . . open to anybody to attend' and that 'everybody [got] a fair go'. In contrast, community members and conservation groups, however, saw the SRG as irrelevant to the process for it was perceived to be a 'Mickey Mouse Committee of everybody from the prospectors to anyone who was nominated.' Even members of the timber industry felt that the SRG 'was never going to be the actual place where major decisions [would be] made.' In addition, conservation groups who sought access to the RFA steering committee believed that RFA management 'formed the Steering Committee and left conservationists out of it', resulting in their boycott of the RFA process.

Public meetings were also seen by participants to have been conducted poorly in that 'meetings were called . . . at too short a notice'

and were more like 'a briefing session by CALM' or a 'lecture by CALM' and that they 'had no input whatsoever.' SRG members interviewed 'felt insulted by this process', which in their view 'demonstrated an incredible level of indifference towards community involvement and community participation and community concerns.' This led to the perception among SRG members and members of the public that they 'did not have ownership of [the process]' as it 'was very obvious [to them] that [their] concerns were going to be sidelined.'

The public's access to RFA-related information was also controversial. RFA management suggested that the 'information that had been provided to the public, both the assessment information and all the other information [was] much greater than you would have in most other government processes.' SRG members as well as members of the public, however, thought that they 'did not get proper access to information' as 'the documentation was nowhere available until the last moment' and that the data provided were 'fudged and massaged.' These perceptions were fuelled further by suspicions that information was kept from the public for strategic reasons based on the attitude that 'knowledge is power or information is power . . . [and that we] will keep it to ourselves and use it maybe in agreed ways but it's never going to be in the public domain.' According to one CALM insider, 'there was a guiding fear that if there are good quality data and they are in the public domain then the nature of the debate would change enormously.'

Across the stakeholder community there was a strong sense that 'CALM drove that process' and that the agency 'had no intention of letting other people be involved.' In particular, CALM's perceived dominance gave rise to the view that the RFA process was effectively ignoring the environment movement and the wider community. While RFA management considered there to have been a 'huge amount of public consultation' and to have done its 'best to adapt that consultation to what people were saying they wanted it to be', SRG members, conservation groups and members of the public 'rebelled against this because they [felt that they] were not part of the decision-making

process', resulting in a 'vote of no confidence in the RFA process'.

Stakeholder perceptions of the treatment of science (for a detailed discussion see Brueckner and Horwitz 2005) during the RFA process mirrored those concerning the consultation process. Science was purported to be the backbone of WA's RFA and to replace emotional arguments with facts. Yet, despite these assertions, many RFA stakeholders, scientists and conservation groups in particular, criticised the science of the RFA.

Scientists involved with the CRA work commented that 'not enough time was given' to compile the CRA reports because of an 'apparent rush and pressure on to get it all over and done with', which was seen to have 'actually constrain[ed] the process.' The same scientists also expressed unease about both the availability and adequacy of the data that were meant to underpin the RFA. With regards to data availability, there was a general feeling among non-CALM scientists that 'information . . . was very, very tightly controlled . . . and limited'. 'Much of the data came from existing information held by [CALM]', yet some non-CALM scientists suspected that a 'lot of data sets . . . were not [made] available' to them, others stated categorically that 'there were quite a few databases, or sets of data . . . that were not available.'

With regards to the adequacy of the data, it was suggested that many of the 'data sets that were available [were] totally inappropriate [for modelling purposes]'. This is why the same scientists believed that 'there needed be data collected, not just data compiled'. However, 'there was no scope to go and acquire additional data which were [thought to have been] fundamentally required' for any flora and fauna modelling. Consequently, non-CALM scientists considered 'the outcomes . . . [as] quite flawed' and scientific conclusions as 'extremely suspect in the sense that they . . . [were] based on inadequate data' and neither ' . . . on a fair and comprehensive assessment of the entire forest region nor . . . on any assessment of major conservation requirements throughout the forest region'. To one CALM staff member the limited scoping of research projects was quite deliberate and based on the attitude that: 'We

don't want a particular sort of information, we don't want good data sets on this, we don't want to know', which explains why CALM stood accused of a blinkered approach to forest management.

In terms of data review and integration non-CALM scientists expressed considerable misgivings about how the 'reports were dealt with and how they were incorporated into the process.' Scientists involved in the CRA projects suggested 'that there ha[d] been an inadequate review process, that all . . . reports went through some sort of haphazard review, an unclear process of incorporating the material found within them, [and] a very stifled publication process in which the reports were made public'. The same scientists raised concerns that 'the people who were actually in control were not scientists' and 'had no knowledge'. It was felt that public servants aligned with the ideology of RFA management, 'took facts or what they thought were facts and figures, out of the reports' but never 'told . . . [the scientists] how . . . [the] reports [were] going to be dealt with.' In the end, a number of scientists found that . . . [the] recommendations that were in . . . [their research] reports were not included in the summary', which was used to inform the community consultation process. Thus, in their view 'the coverage [of different scientific views] was inadequate' because 'certain scientific views that ha[d] been expressed about the ecology of [WA's] forests . . . did not find their way into any of the RFA documentation.' The structure and the process of the RFA seemingly proved resilient towards views and information running counter to the dominant perspective.

Overall, the RFA process was considered to be 'very, very much dominated by CALM staff' and an ideology which had permeated many public sector departments since the early 1970s. CALM's involvement in the RFA was deemed problematic because the department 'received . . . the lion's share in terms of involvement of scientists' which was not considered 'an accurate representation of the amount of science that [was] . . . going on in [WA's] forests.' It was this 'very substantial CALM input into the RFA' that caused non-CALM scientists, conservation groups as well as state and federal civil

servants to be concerned that 'CALM [would be] . . . absolutely and completely in control of the process.'

The dominance of CALM and its ideology was visible particularly in debates on old growth forest logging, which was among the most contentious issues underlying the long-standing conflict in WA's forests. Old growth forests were recognised in the NFPS (Commonwealth of Australia 1992: 11) for their 'high aesthetic' and 'cultural' values as well as their 'nature conservation values.' Yet, calls for the protection of old growth forests during the RFA faced the resistance of CALM, which – as was suggested by a federal civil servant – 'fundamentally did not believe in a special value pertaining to old growth.' Indeed, CALM staff confirmed that 'there is nothing particular about [Western Australian] old growth forests which is absolutely indispensable for biodiversity conservation.'

During the RFA process 347,578 ha of old growth forest were identified, yet a total of 24,300 ha of old growth were excluded on the basis of disturbance, especially dieback disease (*phytophthora cinnamomi*) (WA Parliamentary Debates – Hansard April 1998). This decision was seen to have come about because of CALM's stance on old growth forests. The Department 'appeared to have used *phytophthora* mapping strategically to determine the areas that were not old growth.' Conservation groups, in particular, were convinced that '[CALM] really did fiddle the figures' and saw the formula: 'old growth is virgin forest minus dieback affected forest' as a way of '... allow[ing] them to minimise the area of old growth.' Antagonism also grew when RFA maps revealed that forests with the 'highest timber production areas . . . [seemed to] coincide with the areas that . . . [were] not protected' (see also Burns 1999). Even though the finalised RFA delivered an additional 45 700 ha to WA's old growth estate, a 24% increase (WA Parliamentary Debates – Hansard 1999), there was a strong sense among RFA stakeholders that 'anyone who did not agree with the continued, widespread logging, woodchipping, and clear-felling of old growth forest was marginalised' by the RFA.

In the end, the science of the RFA was tainted as people from across the RFA stakeholder community felt that 'the involvement of the scientific community was an absolute farce' in that 'science and scientists were used to validate a political process.' Interview responses gave the impression that the science of the WA RFA was tamed, meaning that dissent was ignored or vehemently rebutted and that science was made compliant with the dominant ideology. This imposition of a single perspective instilled the widespread feeling that 'science was used as a weapon.' According to one non-CALM scientist science was used to build a façade, a 'façade ... the process would be using science to provide [Western Australians] with ... answers ... whereas in reality, the guidance, the levels of forest reservation and so on, was coming from elsewhere, and it was not coming from science.' It was this blurring of science and politics that, according to a Western Australian parliamentarian, led stakeholders to believe that the 'RFA process ha[d] not been about science' and 'overall that the scientific arguments were rather unimportant.'

## Discussion

The RFA stakeholder sentiments collated above give an indication of the strong sense of exclusion from the RFA process and lack of ownership of the outcomes achieved. A lack of transparency and information sharing, restrictive communication flows and stakeholders' disconnectedness from the decision-making process were seen to have been responsible not only for stakeholder dissatisfaction with the RFA process but also the disparity between the process outcomes and stakeholder aspirations. Similarly, the scientific input into the RFA was regarded as constrained by the imposed format under which the science was conducted. Contrastingly, RFA management thought to have more than fulfilled government regulations regarding community input and viewed the science underpinning the RFA as the best available.

Overall, RFA stakeholder involvement was believed to have been constricted by decisions

concerning, inter alia, process management and leadership, stakeholder consultation and the use of science. These decisions represented points of closure which led to the separation of the process from the wider RFA stakeholder community. Although process closure occurred, this was denied by those at the heart of the closing, which in turn proved to be a source of conflict. In addition, conflict arose in relation to the issues of where, when and by whom closure was initiated.

The closure of the RFA process was a matter of autocratic decision-making, undertaken by those at the top of the decision-making hierarchy and most closely aligned to the political, scientific and economic status quo. The closing of the process meant that those stakeholders who were calling for change in the use and management of WA's native forests faced exclusion in terms of input during both the public consultation process and the scientific work undertaken for the RFA. The closedness of both the process and its governing structures meant that the RFA outcomes were seen as very narrow and a mere reflection of CALM's position on forest management.

The traditional, dominant perspective on forests in WA was one based on a scientific endorsement of the commercial extraction of native timbers. This link between forest science and economic interest, however, is not to be understood as departmental cooption by industry but instead as a sign of ideological alignment. Forestry is an applied natural science, positivistic in nature with a strong adherence to measurable and quantifiable evidence. Claims by forestry to objectivity and truth translate into scientific determinism and result in the discreditation of any 'counter-sciences' (after Paehlke 1989), a stance typical of economic rationalism. Also, as forestry sees its role in the maintenance of perpetual human forest uses it has also become a symbol of human development and economic progress. In this sense, scientific forest management bears the hallmarks of economic rationalism.

The failure of WA's RFA in terms of gaining public acceptance strikes as a rejection by RFA stakeholders of the deterministic nature of the process, which seemingly served to validate



CALM's agenda on forestry. This agenda was implicit in the RFA process which originally intended to aid the negotiation of sustainable forest outcomes in terms of timber production and forest conservation. A closing of the process, however, served to protect the Department's approach to forestry and meant that other rationalities remained subordinate to the dominant perspective. Forest issues were raised, framed, and solved in accordance to an underlying, yet unspoken, but strongly adhered to, economically driven forest rationality. This is what might be coined 'the normalisation of political closure', referring here to the closing of a political process by an implicit economic constraint, affecting both the process and structure of policy-making. CALM's ideology on forestry represented this meta-constraint for it prevented, not directly but through normalised social and political structures and discourses, the broadening and inclusion of alternative perspectives.

The interplay of economic rationalism, reductionist science and politics prevented a joint exploration of shared values among stakeholders and the development of a compromise between the agendas for forest conservation and timber extraction. Complex problems demand problem solving with requisite complexity. In this regard, political processes require openness as this invites the variety of perspectives needed and thus increases the capacity to deal effectively with socio-ecological messes. The dominance of economic rationalism can thus be seen as a constraint for environmental policy-making for it works against notions of openness and plurality and therefore precludes transformational change in the structure, mode and outcomes of political decision-making. Due to its invisibility a better understanding is needed of the implicit existence of constraints arising from economic rationalism and a critical reflection on their effects on and their long-term implications for policy, society and indeed nature.

Echoing the calls from the contemporary literature, it is suggested here that policy processes such as this presented in the RFA case study would benefit greatly from approaches based on open and collectively

engaged decision-making and a widening of the basis of power. The opening of traditional closure points (eg, leadership and problem specification) would enable processes of collective deliberations through which negotiated points of closure become the basis for action along agreed process parameters. Also, the pooling of mental resources would lead to a substantially broader collective outlook on the problems faced by the negotiating parties. Yet, changes to this effect depend chiefly on the willingness of decision-makers to relinquish power and to engage in open dialogue with their constituencies. This is why current political/bureaucratic structures derived from politico-economic and scientific entanglements, which promote today's neo-liberal growth agenda and orthodox economic credo, appear to be one of the key obstacles to be overcome for the enablement of such deliberative processes.

#### Acknowledgement

I am indebted to Richard McKenna for his comments and advice on earlier drafts of this article and his mentorship during the research underpinning this work.

#### Endnotes

1. For a detailed description of the WA RFA process refer to Stewart and Jones (2003) or Worth (2004).
2. The terms of reference for the SRG stipulated a close working relationship between the SRG and the RFA steering committee and a strong involvement of the SRG with the RFA process.

#### References

- Aplin, G. 2000. 'Environmental Rationalism and Beyond: Toward a More Just Sharing of Power and Influence.' *Australian Geographer* 31(3): 273–287.
- Babbie, E. 1992. *The Practice of Social Science*. Belmont, CA: Wadsworth.
- Beeson, M. and A. Firth. 1998. 'Neoliberalism as a Political Rationality: Australian Public Policy Since the 1980s.' *Journal of Sociology* 34(3): 215–231.

- Bell, S. 1997. 'Globalisation, Neoliberalism and the Transformation of the Australian State.' *Australian Journal of Political Science* 32(3): 345–367.
- Brueckner, M. 2004. *Openness in the Face of Systemic Constraints: On Science, Public Participation, and the Western Australian Regional Forest Agreement*. Unpublished PhD thesis, Consortium for Health and Ecology, Edith Cowan University: Perth.
- Brueckner, M., J. Duff, R. McKenna and P. Horwitz. 2006. 'What are They Taking us For? The Participatory Nature of Western Australia's Regional Forest Agreement Process.' *Australasian Journal of Environmental Management* 13(1): 6–16.
- Brueckner, M. and P. Horwitz. 2005. 'The Use of Science in Environmental Policy: A Case Study of the Regional Forest Agreement Process in Western Australia.' *Sustainability: Science, Practice, & Policy* 1(2) [On-line Journal]. URL: < [http://ejournal.nbi.org/archives/vol1iss2/0412-017\\_brueckner.pdf](http://ejournal.nbi.org/archives/vol1iss2/0412-017_brueckner.pdf)>. Consulted 5 July 2005.
- Burns, A. 1999. 'Greens See Red at Hole in RFA.' *The West Australian* 7 May: 16.
- Butteriss, C., J.A.J. Wolfenden and A.P. Goodridge. 2001. 'Discourse Analysis: A Technique to Assist Conflict Management in Environmental Policy Development.' *Australian Journal of Environmental Management* 8: 48–58.
- Carroll, J. and R. Manne, eds. 1992. *Shutdown: The Failure of Economic Rationalism and How to Rescue Australia*. Melbourne: Text Publishing Company.
- Coakes, S. 1998. 'Valuing the Social Dimension: Social Assessment in the Regional Forest Agreement Process.' *Australian Journal of Environmental Management* 5(1): 47–54.
- Commonwealth of Australia. 1992. *National Forest Policy Statement*. Canberra: AGPS.
- Commonwealth of Australia. 2000. *RFA Forest News: Commonwealth Forest Taskforce*. Canberra.
- Commonwealth of Australia and Government of Western Australia. 1996. *Scoping Agreement for a Western Australian Regional Forest Agreement*. Canberra: AGPS.
- Commonwealth of Australia and Government of Western Australia. 1997. *Progress Report: Comprehensive Regional Assessment*. Perth: Joint Commonwealth and Western Australian Regional Forest Agreement (RFA) Steering Committee.
- Daly, H.E. and J.B. Cobb. 1989. *For the Common Good: Redirecting the Economy Towards the Community, the Environment and a Sustainable Future*. Boston: Beacon Press.
- Dargavel, J. 1998. 'Politics, Policy and Process in the Forests.' *Australian Journal of Environmental Management* 5(March): 25–30.
- Deetz, S. 1996. 'Describing Differences in Process to Organization Science: Rethinking Burrell and Morgan and their Legacy.' *Organization Science* 7(2): 191–207.
- Diesendorf, M. and C. Hamilton, eds. 1997. *Human Ecology, Human Economy. Ideas for an Ecologically Sustainable Future*. St Leonards: Allen & Unwin.
- Dovers, S.R. 2002. 'Policy, Science, and Community: Interactions in a Market-Oriented World.' *Australasian Journal of Ecotoxicology* 8: 41–44.
- Dryzek, J.S. 1996. 'Foundations for Environmental Political Economy: The Search for Homo Ecologicus?' *New Political Economy* 1(1): 27–40.
- Eckersley, R. 2001. 'Economic Progress, Social Disquiet: The Modern Paradox.' *Australian Journal of Public Administration* 60(3): 89–97.
- Edwards, L. 2002. *How to Argue With an Economist*. Port Melbourne: Cambridge University Press.
- Fergus, A.H.T. and J.I.A. Rowney. 2005. 'Sustainable Development: Epistemological Framework & an Ethic of Choice.' *Journal of Business Ethics* 57: 197–207.
- Foucault, M. 1979. *Discipline and Punish: The Birth of the Prison*. Harmondsworth: Penguin.
- Gare, A. 2002. 'Human Ecology and Public Policy: Overcoming the Hegemony of Economics.' *Democracy and Nature* 8(1): 131–141.
- Gunderson, L.H. and C.S. Holling, eds. 2002. *Panarchy. Understanding Transformations in Human and Natural Systems*. London: Island Press.
- Hahn, R.W. 2000. 'The Impact of Economics on Environmental Policy.' *Journal of Environmental Economics and Management* 39: 375–399.
- Hamilton, C. 1996. 'Generational Justice: The Marriage of Sustainability and Social Equity.' *Australian Journal of Environmental Management* 3(3): 163–173.
- Hamilton, C. 2002. 'Dualism and Sustainability.' *Ecological Economics* 42(1-2): 89–99.
- Handmer, J.W., S.R. Dovers and T.W. Norton. 2001. 'Managing Ecosystems for Sustainability: Challenges and Opportunities.' In *Ecology, Uncertainty and Policy. Managing Ecosystems for Sustainability*, eds J.W. Handmer, T.W. Norton and S.R. Dovers. Harlow, UK: Pearson Education Ltd.
- Kasper, W. 1997. 'Ignorance, Discovery and Choice – A Requiem for Economic Rationalism?' *Australian Journal of Legal Philosophy* 22: 1–14.

- King, S. and P. Lloyd, eds. 1993. *Economic Rationalism: Dead End or Way Forward?* Sydney: Allen & Unwin.
- Kinzig, A.P. 2001. 'Bridging Disciplinary Divides to Address Environmental and Intellectual Challenges.' *Ecosystems* 4: 709–715.
- Korhonen, J. 2002. 'The Dominant Economics Paradigm and Corporate Social Responsibility.' *Corporate Social Responsibility and Environmental Management* 9: 67–80.
- Ludwig, D. 2001. 'The Era of Management is Over.' *Ecosystems* 4: 758–764.
- Mepem, T. and R. Gill. 1998. 'Planning for Sustainability as a Learning Concept.' *Ecological Economics* 26: 121–137.
- Mitroff, I. 1998. *Smart Thinking for Crazy Times: The Art of Solving the Right Problem*. San Francisco: Berrett-Koehler.
- Neville, J.W. 1997. *Economic Rationalism. Social Philosophy Masquerading as Economic Science*. Background Paper No. 7. Canberra: The Australia Institute.
- Orchard, L. 1998. 'Managerialism, Economic Rationalism and Public Sector Reform in Australia: Connections, Divergences, Alternatives.' *Australian Journal of Public Administration* 57(1): 19–32.
- Pahlke, R. 1989. *Environmentalism and the Future of Progressive Politics*. New Haven: Yale University Press.
- Pemberton, J. 1988. "'The End" of Economic Rationalism.' *Australian Quarterly* 60: 188–199.
- Pusey, M. 1991. *Economic Rationalism in Canberra: A Nation-building State Changes its Mind*. Cambridge: Cambridge University Press.
- Pusey, M. 2003. *The Experience of Middle Australia: The Dark Side of Economic Reform*. Cambridge: Cambridge University Press.
- Rapport, D., R. Costanza, P.R. Epstein, C. Gaudet and R. Levins, eds. 1998. *Ecosystem Health*. Carlton (VIC): Blackwell Science, Inc.
- Rees, S., G. Rodley and F. Stilwell (eds.). 1993. *Beyond the Market. Alternatives to Economic Rationalism*. Leichhardt, NSW: Pluto Press.
- Schafer, D.P. 1994. 'Cultures and Economies.' *Futures* 26(8): 830–845.
- Social Assessment Unit. 1999. *Social Assessment for the WA Regional Forest Agreement*. Perth: Joint Commonwealth and Western Australian Regional Forest Agreement (RFA) Steering Committee.
- Stacey, R.D. 1993. *Strategic Management and Organisational Dynamics*. London: Pitman.
- Stewart, J. and G. Jones. 2003. *Renegotiating the Environment. The Power of Politics*. Leichhardt, New South Wales: The Federation Press.
- Valentine, T. 1996. 'Economic Rationalism vs The Entitlement Consensus.' *Policy* (Spring): 3–10.
- van Bavel, R. and G. Gaskell. 2004. 'Narrative and Systemic Modes of Thinking.' *Culture and Psychology* 10(4): 418–439.
- van Straalen, N.M. and A.F. Souren. 2002. 'Life-cycle of Interactions between Science and Policy – The Case of Risk Assessment for Zinc.' *Australasian Journal of Ecotoxicology* 8: 27–33.
- WA Parliamentary Debates – Hansard. 1999. *Regional Forest Agreement – Matter of Public Interest*. Perth: Parliament of Western Australia – Hansard.
- WA Parliamentary Debates – Hansard. 1998. *Old Growth Forests*. April. Perth: Parliament of Western Australia – Hansard.
- WA Parliamentary Debates – Hansard. 1999. *Regional Forest Agreement – Scientific Process*. June. 9390/3. Perth: Parliament of Western Australia – Hansard.
- Worth, D. 2004. *Reconciliation in the Forest? An Exploration of the Conflict over Logging of Native Forests in the South-west of Western Australia*. Unpublished PhD thesis, Murdoch University, Division of Science and Engineering: Perth.
- Wright, J. 2003. *The Ethics of Economic Rationalism*. Sydney: UNSW Press.