

HOW CAUTIOUS IS PRECAUTIOUS?: ANTARCTIC TOURISM AND THE PRECAUTIONARY PRINCIPLE

Literature on the Antarctic Treaty System (ATS), particularly that written by citizens of States that are Consultative Parties to the Antarctic Treaty, has often been celebratory in character. The ATS, we have been told, is a model of international co-operation. The regime has prided itself on addressing issues ahead of crisis situations; and, since the conclusion, and subsequent entry into force, of the Environmental Protocol,¹ with its protection of the Antarctic environment. This acclaim of the system that manages Antarctic affairs may be to a large extent warranted. Antarctica has remained peaceful and its value as a scientific laboratory has in recent years been enhanced through the contribution of Antarctic science to understanding environmental issues of global concern. But the environmental credentials of the Treaty System will be immeasurably weakened if it continues to display such a huge anomaly between its treatment of mining and that of tourism. Tourism is covered by only a very weak application of the precautionary principle while the application of the precautionary principle to the issue of mining has been 'extreme'. The principal factor behind this anomaly appears to be political opportunism.

I. THE PRECAUTIONARY PRINCIPLE AND THE ANTARCTIC TREATY SYSTEM

The inclusion of the precautionary principle as Principle 15 of the Rio Declaration marked its widespread acceptance as a principle of international environmental law.² Sometimes formulated alternatively as an 'approach', 'concept', or 'rule', the most generally accepted definition of the principle is that '[w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.'³ The essence of the precautionary principle is that of taking action to address an environmental threat ahead of a disaster.⁴

1. 30 ILM 1455.

2. J. Cameron and J. Abouchar, 'The Status of the Precautionary Principle in International Law' in David Freestone and Ellen Hey (eds.), *The Precautionary Principle and International Law: The Challenge of Implementation* (The Hague: Kluwer, 1996), 29–52.

3. The Rio Declaration 31 ILM 874.

4. Jordan and O'Riordan listed a number of core elements or notions inherent to precaution: a willingness to take action in advance of formal scientific proof, cost-effectiveness of action—i.e. some consideration of proportionality of costs; provision for ecological margins of error; the intrinsic value of non-human entities; a shift in the onus of proof to those who propose change; a concern for future generations; and payment for ecological debts through strict/absolute liability regimes. A. Jordan and T. O'Riordan, *The Precautionary Principle in U.K. Environmental Law and Policy*, CSERGE Working Paper GEC94–11 at 6–12 (London: Centre for Social and Economic Research on the Global Environment, 1994), cited in D. VanderZwaag, 'The Precautionary Principle in Environmental Law and Policy: Elusive Rhetoric and First Embraces', *Journal of Environmental Law and Practice* 8 (1999), 355–75 at 359.

The precautionary principle places on those wishing to undertake an action the burden of proof that 'it will not harm the environment.'⁵

Since 1991 the principle has been included, either explicitly or implicitly, in many environmental treaties including the Montreal Protocol on Substances That Deplete the Ozone Layer, the Framework Convention on Climate Change, and the Biodiversity Convention.⁶ It has been endorsed in relation to protection of the marine environment through the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities and the UN Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks.⁷ The considerably debated question as to whether the principle has become part of customary international law,⁸ is now, in the opinion of Wolfrum, 'academic':

The general formulation of the precautionary principle as contained in Principle 15 of the Rio Declaration, which seems to be widely enough accepted to possibly qualify as customary international law, has, due to its opaque wording, little relevance from the point of view of implementation. The precautionary principle has predominantly become of relevance through its refinements in treaty law. Finally, the International Tribunal for the Law of the Sea has proven in its Order concerning Southern Bluefin Tuna of 27 August 1999 that the precautionary principle can be applied in a meaningful way without being codified and without deciding that the principle constitutes international customary law.⁹

The ATS has prided itself on its preventative attitude towards the regulation of human activity,¹⁰ and the robustness of the Treaty System has sometimes been attributed, at least in part, to its preparedness to tackle issues ahead of a crisis. The Convention for the Conservation of Antarctic Marine Living Resources and CRAMRA can be regarded as illustrations of a precautionary approach;¹¹ as, indeed, can the Environmental Protocol.¹²

We are now into the 'second generation' of writing and debate on the precautionary principle,¹³ in which focus is less on its validity per se than on the complexities of its implementation. Most fundamental is the question as to the extent to which its application should impact on human activities. It is by now clear that the principle does not have to be interpreted in an absolutist form.¹⁴ There has to be a balancing of the environmental risks associated with a particular human activity against any benefits to be achieved from engaging in that activity. In the case of the Framework

5. R. Wolfrum, 'Precautionary Principle' in J-P. Beurier, A. Kiss and S. Mahmoudi (eds.), *New Technologies and Law of the Marine Environment* (The Hague: Kluwer, 2000), at 207.

6. D. VanderZwaag, op cit., 355–75 at 356.

7. Ibid., at 357.

8. See E. Hey, 'The Precautionary Concept in Environmental Policy and Law: Institutionalizing Caution', *Georgetown International Environmental Law Review* IV:2 (Winter/Spring 1992), 303–18 at 307.

9. R. Wolfrum, op cit., at 211.

10. *Handbook of the Antarctic Treaty System*, 8th edn. U.S. Department of State (April 1994), at 2001.

11. D.R. Rothwell, *The Polar Regions and the Development of International Law* (1996), at 401.

12. C. Redgwell, 'Environmental Protection in Antarctica: The 1991 Protocol', 43 ICLQ 599–634 at 633.

13. D. Freestone and E. Hey, 'Implementing the Precautionary Principle: Challenges and Opportunities' in Freestone and Hey (eds.), *The Precautionary Principle and International Law: The Challenge of Implementation* (The Hague: Kluwer, 1996), 249.

14. A. Nolkaemper, '“What you risk reveals what you value”, and Other Dilemmas Encountered in the Legal Assaults on Risks', *ibid.*, 73–94.

Convention on Climate Change, for example, the needs of those who would benefit from prevention of the environmental harm caused by climate change were weighted against the needs for 'cost-effectiveness' and 'socio-economic' factors involved in preventing that impact, resulting in a quite weak application of the precautionary principle.

It is perhaps a little ironic that the precautionary principle, which has emerged from a recognition of the inadequacies—so far as environmental protection is concerned—of a scientific philosophical perspective,¹⁵ nevertheless in its application often necessitates considerable scientific input to the decision-making process. One of the administrative procedures used to institutionalise caution is that of the environmental impact assessment procedure (EIA). By Article 8 of the Environmental Protocol to the Antarctic Treaty, all human activity in Antarctica is to be subject to the environmental impact assessment procedures as set out in Annex 1.¹⁶ EIA is, though, to be carried out at a national level, which 'carries the risk' that the process will be used 'in an instrumental and "cosmetic" manner in order to legitimize . . . activities intrinsically contradictory to the environmental protection required by the Madrid Protocol'.¹⁷ Indeed, when it is considered that earlier proposals for EIA provided for an international institution with broad authority for assessing the environmental impact of various national activities, the general EIA provisions of the Protocol appear to be 'minimalist'.¹⁸

II. MINING AND THE ENVIRONMENTAL PROTOCOL TO THE ANTARCTIC TREATY

While the provisions of the Environmental Protocol provided that a basic level of precaution was to be applied to all human activity in Antarctica, it was from mining that the environment was to be most dramatically protected. Despite the fact that it is now clearly recognised that the precautionary principle does not have to be applied in an absolutist fashion, in relation to mining ATS members did just that. By Article 7, 'any activity relating to mineral resources, other than scientific research, shall be prohibited.' The treatment of mining in the Protocol represents 'one of the most extreme illustrations of the precautionary approach'.¹⁹ This had been an unlikely outcome at the time when ratification of CRAMRA was under debate. Those supportive of the Minerals Convention had been able to argue with some persuasion that CRAMRA was not necessarily pro-mineral resource development and anti-environment; rather, the provisions of

15. Hey describes the essence of the precautionary concept as being 'the rejection of science as the absolute guide for the environmental policy-maker'. Hey, 'The Precautionary Concept in Environmental Policy and Law: Institutionalizing Caution', *Georgetown International Environmental Law Review* IV:2 (Winter-Spring 1992), 303–18 at 311. See also R. C. Earll, 'Commonsense and the Precautionary Principle—An Environmentalist's Perspective', *Marine Pollution Bulletin* 24:4 (1992) 182–6 at 182.

16. See D. R. Rothwell, 'Polar Environmental Protection and International Law: The 1991 Antarctic Protocol', *European Journal of International Law* 11:3 (2000), 591–614 at 599–603.

17. F. Francioni, 'The Madrid Protocol on the Protection of the Antarctic Environment', *Texas International Law Journal* 28:1 (1993), at 65–6.

18. *Ibid.*, at 62. The Protocol does set up a Committee for Environmental Protection but that is only an advisory organ. C. C. Joyner, *Governing the Frozen Commons: The Antarctic Regime and Environmental Protection* (Columbia: University of South Carolina Press, 1998), 154.

19. Rothwell, *op cit.*, 591–614 at 608.

CRAMRA were designed to ensure that, if and when mining did proceed, it did so with a regulatory regime in place and a minimum of environmental impact.²⁰

The extreme application of the precautionary principle in Article 7 of the Environmental Protocol is nevertheless consistent with Article 2, in which the Parties committed themselves to 'the comprehensive protection of the Antarctic environment and dependent and associated ecosystems'. A clear rationale for such a high nominated level of protection can be discerned from regime documents and in the Antarctic literature more generally. It has at least three constituent and interrelated elements. First, that the science carried out in Antarctica is of global significance, and depends, at least in part, on the pristine nature of the Antarctic environment.²¹ Secondly, the Antarctic Treaty area is particularly vulnerable to human interference²²; relatively small areas of the continent are ever ice-free,²³ wastes can persist for long periods without decomposing and there are low growth rates; a footprint in the moss, for example, is visible ten years' later. There is, thirdly, an intangible, perhaps even spiritual, dimension to the respect for the Antarctic environment embedded in the Protocol; it is accepted that, as the last wilderness, Antarctica is worth preserving for its 'intrinsic value', including its 'wilderness and aesthetic values';²⁴ Antarctica was designated a 'natural reserve, devoted to peace and science'.²⁵

At the time the Protocol was being negotiated there was little in the way of socio-economic considerations to counterbalance the extremely high level of environmental protection that was being mooted by environmentalists and certain States including Australia and France. There was no local community that would suffer from a prohibition on an activity which had not yet begun and for which there were little immediate prospects; no commercially exploitable deposits were even known to exist.²⁶ Despite the efforts of members of the Third World in the 1980s, Antarctica had not become the 'common heritage of mankind'; it would likely have been the wealthiest corporations based in the wealthiest countries that would benefit from the mining of Antarctica. The anti-CRAMRA argument won out, and the ATS adopted an extreme application of the precautionary principle in respect of mining.

20. R. T. Scully, 'The Antarctic Treaty as a System' and C. Beeby, 'The Convention on the Regulation of Antarctic Mineral Resource Activities and its Future' in R. A. Herr, H. R. Hall, and M. G. Haward (eds.), *Antarctica's Future: Continuity or Change?* Hobart: Tasmanian Government Printing Office, 1990. See also Joyner, 'CRAMRA: The Ugly Duckling of the Antarctic Treaty System?' in A. Jorgensen-Dahl and W. Ostreng (eds.), *The Antarctic Treaty System in World Politics* (Macmillan in association with the Friedtjof Nansen Institute, 1991) 161–85 at 167.

21. The simplicity of Antarctic ecosystems makes them ideal systems for examining ecosystem dynamics. C. M. Hall, 'Ecotourism in Antarctica and adjacent sub-Antarctic islands: development, impacts, management and prospects for the future', *Tourism Management* (April 1993), 117–22 at 118.

22. Rec. VIII-9; Rec. XVIII-1. W. N. Bonner, 'Environmental Assessment in the Antarctic', *Ambio* 18:1 (1989), 83–9 at 83.

23. In the Australian Antarctic Territory, for example, the ice-free area is less than 0.3 per cent of the land mass. Hall, op cit, 117–22 at 118.

24. Article 3, *Protocol on Environmental Protection to the Antarctic Treaty*. 30 ILM 1455.

25. Article 2, *ibid*.

26. P. J. Beck, 'Antarctica enters the 1990s: an overview', *Applied Geography* 10 (1990), 247–63 at 251–2.

III. THE TREATMENT OF TOURISM BY THE ATS

There is a glaring discrepancy between the treatment by the ATS of tourism and of mining. Antarctic tourism began in the 1950s.²⁷ The first tourist aircraft to visit Antarctica left Punta Arenas on 23 December 1956 and overflew the South Shetland Islands and northern half of the Peninsular.²⁸ A suggestion for an Antarctic cruise had been made as early as 1910 although it was not until 1966 that regular tourist cruises were established.²⁹ There has been a substantial increase in the number of Antarctic tourists, particularly in the 1990s; tourist numbers more than doubled between the 1990–1 and 1995–6 seasons.³⁰ Unlike mining, tourism was not given specific treatment in the Protocol. Tourism is subject to the general environmental provisions of the Protocol,³¹ as well as certain specific decisions of the ATS on tourism³² and some industry self-regulation.³³ But there was nothing in the Protocol relating to tourism commensurate with the ban that the Protocol imposed on mining.

Although not as clearly developed as that justifying the ‘comprehensive’ protection of the Antarctic environment, it is possible to discern a rationale in ATS documents and the Antarctic literature more generally for tourism not to receive separate treatment in the Protocol and not to be curtailed or banned. The received wisdom within the ATS appears to be that tourism in the Antarctic is a ‘natural’ development,³⁴ that it is inevitable. Tourism is regarded as a legitimate, peaceful use of Antarctica.³⁵ Even if it might at one stage have been possible to stop tourism, that point has already passed.³⁶ Serious questioning of its validity is forestalled by the point being made that tourists

27. B. Stonehouse and K. Crosbie, ‘Tourist Impacts and Management in the Antarctic Peninsular Area’, in C. M. Hall and M. E. Johnston (eds.), *Polar Tourism: Tourism in the Arctic and Antarctic Regions* (John Wiley & Sons, 1995), 217. For further information, see R. K. Headland, ‘Historical development of Antarctic Tourism’, *Annals of Tourism Research* 21:2 (1994), 269–80.

28. B. Stonehouse and K. Crosbie, ‘Tourist Impacts and Management in the Antarctic Peninsular Area’, in C. M. Hall and M. E. Johnston (eds.), *Polar Tourism: Tourism in the Arctic and Antarctic Regions* (John Wiley & Sons, 1995), 217.

29. R. J. Reich, ‘The development of Antarctic tourism’, *Polar Record* 20:126 (1980), 214–303.

30. P. A. Mason and S. J. Legg, ‘Antarctic tourism: Activities, Impacts, Management Issues, and a Proposed Research Agenda’, *Pacific Tourism Review* 3 (1999), 71–84 at 75.

31. For a full description, see Enzenbacher in Hall and Johnston (ed.), *op cit*, 183 ff.

32. These can be found on the internet site of the Australian Antarctic Division. <<http://www.aad.gov.au/goingsouth/tourism/Research/TreatySys/ATCM/Recommendations>>

33. The International Association of Antarctic Tour Operators (IAATO) has two sets of guidelines, the first of which is addressed to Antarctic tour operators—crew and staff members, the second to visitors. Tour operators consider these guidelines adequate. See the IAATO Home Page at <<http://www.iaato.org/>>. See also D. J. Enzenbacher, ‘The regulation of Antarctic tourism’ in Hall and Johnston (eds.), *op cit*, and B. Stonehouse, ‘IAATO: an association of Antarctic tour operators’, *Polar Record* 28: 167 (Oct. 1992), 322–4.

34. Recommendation VIII-9, Preamble.

35. P. D. Hart, ‘Bound for 60 South—Taxes, Tips, and Transfers Included: The Growth of Antarctic Tourism’, *Oceanus* 31:2 (1988) 93–100 at 95.

36. J. Bowermaster, ‘Antarctica: Tourism’s Last Frontier’, *Audubon* 96:4 (1994), 90–7 at 97. Similarly: ‘The question to be asked is whether we work with tourism or against it. I believe the latter view is not tenable’, H. F. M. Logan, ‘Tourism and other Activities’, *Proceedings of the Antarctica 150: Scientific Perspectives Policy Futures Conference*, organized by Environmental Science, University of Auckland, Auckland, New Zealand, 8 Sept. 1990.

may not be as problematical for the environment as scientists³⁷ (without whom there may not have been a system of international co-operation for Antarctica), and that those who have seen first-hand the Antarctic environment may be its best ambassadors.³⁸ With tourism accepted in principle, at issue is only how to regulate it, what rules or guidelines should be in place and whether these should be contained within a specific protocol or convention.³⁹ 'Antarctic tourism is not controversial, everyone agrees it's inevitable. What's controversial is how it's done.'⁴⁰

The ATS would undoubtedly encounter substantial practical difficulties were it to begin managing Antarctic tourism in a way commensurate with the 'comprehensive' level of environmental protection provided for in the Protocol. One basic challenge for any attempt to devise a legal instrument on the subject is that of how to define tourism in a way that distinguishes between tourist activities and other non-governmental activity in Antarctica.⁴¹ Even environmental NGOs might not support Antarctic environmental protection if it were to exclude their visits to the continent. A second is the fact that, unlike mining, tourism is an activity that is already underway, and there are commercial beneficiaries of that. Third is the current lack of knowledge about the impact Antarctic visitors do have on the environment,⁴² so making it difficult to assess how extreme would be the necessary measures. And, were a decision made to ban Antarctic tourism, that ban would be extremely difficult, and perhaps impossible, to enforce.⁴³

Difficult as these issues would be in devising a tourist regime that severely curtailed or banned tourism, they are not sufficient to explain the discrepancy in the treatment of mining and tourism by the ATS. The rhetorical 'trump-card' of the enforceability issue had been used by CRAMRA supporters and it is still the case that, were the mining ban

³⁷ R. J. Codling, 'Sea-borne tourism in the Antarctic: an evaluation', *Polar Record* 21 (130) (1982) 3–9 at 4; R. Headland, 'Historical Development of Antarctic Tourism', *Annals of Tourism Research* 21 (2) (1994) 269–80 at 279 and B. Riffenburgh, 'Impacts on the Antarctic environment: tourism vs government programmes', *Polar Record* 34:190 (1998), 193–6.

³⁸ 'Few people returning from Antarctica fail to be untouched in some personal way. Many return almost as missionaries . . .' Hart, 'Bound for 60 South—Taxes, Tips, and Transfers Included: The Growth of Antarctic Tourism', *Oceanus* 31:2 (1988) 93–100 at 98. See also P. Dingwall and G. Cessford, 'Pole Positions', *Environment Australia* 20 (Spring 1996), 65–58 at 65 and J. Rubin, *Antarctica: A Lonely Planet Travel Survival Kit* (Lonely Planet, 1996), at 9.

³⁹ I. E. Nicholson, 'Antarctic Tourism: The Need for a Legal Regime?', *Maritime Studies* (May/June 1986), 1–7. This was a topic of discussion at the Informal Antarctic Treaty Meeting on Tourism, Venice, 1992.

⁴⁰ Parfitt, quoted in D. J. Enzenbacher, 'A policy for Antarctic tourism: conflict or cooperation?' (unpublished Master of Philosophy thesis in Polar Studies, Scott Polar Research Institute, University of Cambridge, Cambridge, 1991). Similarly, 'Antarctic Tourism Must Be Managed, Not Eliminated', an article by M. L. Carvallo in *Forum for Applied Research and Public Policy* 9:1 (Spring 1994), 76–9.

⁴¹ R. A. Herr, 'The regulation of Antarctic tourism: a study in regime effectiveness', in Stokke and Vidas (eds), *Governing the Antarctica* (1996), 203223 at 208; Hall and Johnston, *Polar Tourism: Tourism in the Arctic and Antarctic Regions*. (Chichester: John Wiley & Sons, 1995), 7

⁴² P. A. Mason and S. J. Legg, 'Antarctic Tourism: Activities, Impacts, Management Issues, and a Proposed Research Agenda', *Pacific Tourism Review* 3 (1999), 71–84; G. Cessford and P. R. Dingwall, 'Research on shipborne tourism to the Ross Sea region and the New Zealand sub-Antarctic islands', *Polar Record* 34 (189) (1998), 99–106;

⁴³ Y. Cardozo and B. Hirsch, 'Antarctic Tourism '89', *Sea Frontiers* (Sept–Oct 1989), 285–91 at 291.

to be defied, the Protocol may not prove enforceable.⁴⁴ The level of knowledge about tourism in Antarctica has been steadily increasing; this has indicated that visitor guidelines are inadequate to prevent adverse impacts to flora and fauna.⁴⁵ The growth of Antarctic tourism and associated environmental concerns⁴⁶ means that tourism represents a 'far more immediate source of pollution than a speculative mining'.⁴⁷ The impact of what is still a relatively small number of tourists is compounded by the fact that Antarctic tourism is restricted to certain areas⁴⁸ and to a short period of the year.⁴⁹ Antarctic tourists can disturb Antarctic fauna such as nesting birds and basking seals.⁵⁰ The Antarctic ecosystem is highly interdependent; if one part of it is harmed, all other areas will likely suffer.⁵¹ 'Repeated visits, even by well-regulated tours, can destroy a fragile plant cover,⁵² and, with the number of tourists increasing each year, new sites are opened to tourism and its impacts.'⁵³ The impact of tourism on the Antarctic environment is set to increase as tourist numbers continue to climb. '[T]he perceived wilderness nature of the Arctic and Antarctic, while drawing visitors interested in their outstanding natural values may, paradoxically, lead to their destruction.'⁵⁴

A factor necessary to explaining the discrepancy between the treatment of mining and that of tourism by the ATS⁵⁵—or indeed any other issue of Antarctic law and politics—is the sovereignty issue. Disputed sovereignty is the *raison d'être* of the ATS. As Gillian Triggs explained: 'Just as all roads lead to Rome so all agreements, recommendations and practices within the Antarctic Treaty system are referable to and are explained by differing juridical positions on sovereignty.'⁵⁶ Australia, which, together with France, led the defection from CRAMRA and the push for an environmental

44. See J. N. Barnes, 'Protection of the Environment in Antarctica: Are Present Regimes Enough?' in A. Jorgensen-Dahl and W. Ostreng (eds), *The Antarctic Treaty System in World Politics* (Basingstoke: Macmillan, in association with the Fridtjof Nansen Institute, 1991), 186–228 at 195.

45. P. B. Davis, 'Antarctic visitor behaviour: are guidelines enough?', *Polar Record* 31: 178 (1995) 327–34.

46. See, inter alia, J. M. Acerto and C. A. Aguirre, 'A Monitoring Research Plan for Tourism in Antarctica' in *Annals of Tourism Research* 21:2 (1994), 295–302; J. Hughes, 'Antarctic historic sites: the tourism implications', *Annals of Tourism Research* 21:2 (1994), 281–94; and J. Spletstoesser and M. C. Folks, 'Environmental Guidelines for Tourism in Antarctica', *Annals of Tourism Research* 21:2 (1994), 231–44.

47. D. Vidas, 'Antarctic Tourism: A Challenge to the Legitimacy of the Antarctic Treaty System?', *German Yearbook of International Law* 36 (1993) 187–224 at 192.

48. G. Cessford, 'Antarctic tourism: A frontier for wilderness management', *International Journal of Wilderness* 3:3 (1997), 7–11.

49. P. J. Beck, 'Managing Antarctic Tourism: A Front-Burner Issue', *Annals of Tourism Research* 21:2 (1994), 375–386 at 377.

50. Joyner, *Governing the Frozen Commons: The Antarctic Regime and Environmental Protection*. (Columbia: University of South Carolina Press, 1998), 212.

51. D. J. Enzenbacher, 'The regulation of Antarctic tourism', in Hall and Johnston (eds.), *Polar Tourism: Tourism in the Arctic and Antarctic Regions* (John Wiley & Sons, 1995), 180.

52. N. Wace, 'Antarctica: a new tourist destination', *Applied Geography* 10:4 (1990), 327–41.

53. P. B. Davis, 'Beyond Guidelines: A Model for Antarctic Tourism', *Annals of Tourism Research* 26:3 (1999), 516–33 at 517.

54. Hall and Johnston, *op cit*, 13.

55. See, generally, D. Vidas, 'Antarctic Tourism: A Challenge to the Legitimacy of the Antarctic Treaty System?', *German Yearbook of International Law* 36 (1993) 187–224 at 192 ff.

56. G. D. Triggs (ed.), *The Antarctic Treaty Regime: Law, Environment and Resources* (CUP, 1987), at 51.

protocol banning mining, believed that CRAMRA did not do enough to protect the position of claimant States. Particularly because the Convention did not guarantee royalties to be paid to the claimant States, the Australian Treasurer, Mr Keating, believed that ratification would be 'tantamount to admitting that Australia does not 'own' its own Antarctic territory'.⁵⁷ In contrast to this view of CRAMRA, tourism has the potential to reinforce Antarctic claims. Australia is using tourism, and control of tourist activity, to support its claim to sovereignty.⁵⁸ Similarly, the primary reason for Argentina and Chile promoting tourist activity on the Antarctic Peninsula is that it provides support for their territorial claims.⁵⁹ The ongoing discrepancy between the treatment of mining and tourism by the ATS would lend support to the views of those who have always attributed the success of the anti-CRAMRA movement to 'realist' political considerations of sovereignty and domestic electoral politics⁶⁰ rather than to a newfound environmental idealism on the part of the ATS Consultative Parties.

IV. IMPLICATIONS OF THE MINING-TOURISM DISCREPANCY IN THE ATS

The current management of tourism by the ATS is incompatible with the strong application of the precautionary principle demanded by the 'comprehensive' level of environmental protection to which the regime is committed. This cannot be justified as due to a lack of knowledge of the negative environmental impacts of Antarctic tourism, since the whole logic behind adopting precautionary measures is that vital chances for action may be lost while waiting for the production of scientific knowledge; once the consequences are known then the action to be taken is preventive, not precautionary.⁶¹ While the assertion that Antarctic tourism is inevitable has been powerful politics for those supportive of the regulatory *status quo*, the ATS turnaround on the mining issue demonstrates that what may at one time seem (politically) inevitable need not necessarily be ineluctable.

The precautionary principle has been referred to as 'the most important new policy approach in international environmental co-operation',⁶² and as having the potential to become the 'most important environmental principle' in international law.⁶³ The ATS adopted a weak application of the principle in the Protocol generally, but an extreme application of the principle in the case of mining. While the criteria determining the degree to which an application of the precautionary principle impacts on human activities is still evolving, there is no valid justification for such a discrepancy. Should the ATS not move to apply the precautionary principle more evenly across different types

57. A. Bergin, 'The Politics of Antarctic Minerals: The Greening of White Antarctica', *Australian Journal of Political Science* 26 (1991), 216–39 at 225.

58. 'Search for a Management Regime in Polar Regions' in Hall and Johnston (eds.), *op cit*, at 20.

59. C. M. Hall and M. E. Johnston, 'Introduction: Pole to Pole: Tourism Issues, Impacts and the Search for a Management Regime in Polar Regions' in Hall and Johnston (eds.), *op cit*, at 20.

60. See discussion in A. Bergin, 'The Politics of Antarctic Minerals: The Greening of White Antarctica', *Australian Journal of Political Science* 26 (1991), 216–39.

61. Freestone and Hey, *op cit*, 251.

62. Freestone, 'The Precautionary Principle', in R. R. Churchill and D. Freestone (eds.), *International Law and Global Climate Change* (1991), at 36.

63. J. Cameron and J. Abouchar, 'The precautionary principle: a fundamental principle of law and policy for the protection of the global environment', *Boston College International and Comparative Law Review* 14:1 (Winter 1991), 1–27 at 27.

of human activity in Antarctica, the environmental credentials of the ATS will be damaged. The ATS cannot claim to be safeguarding the Antarctic environment if it is seen to do so only when that is in the political interests of the claimant States; application of the precautionary principle cannot be based solely on political opportunism.

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