Okowa, Phoebe N., State Responsibility for Transboundary Air Pollution in International Law. Oxford: Oxford University Press. 2000. ISBN 0-19-826097-0. Pp. xxxi, 278. Index. £65.

Romano, Cesare P.R., *The Peaceful Settlement of International Environmental Disputes: A Pragmatic Approach.* The Hague, London and Boston: Kluwer Law International. 2000. ISBN 90–411-9808–3. Pp. xlvi, 398. Index. €136.

Brown Weiss, Edith, and Jacobson, Harold K. (eds.). *Engaging Countries: Strengthening Compliance with International Accords*. Cambridge, MA: MIT Press. 2000. ISBN 0–262-73132–0. Pp. xx, 589. Index. Paperback US\$35.

Ehrmann, Markus, *Erfüllungskontrolle im Umweltvölkerrecht*. Baden-Baden: Nomos Verlagsgesellschaft. 2000. ISBN 3-7890-6821-7. Pp. 518. DM148.

The central theme common to these four books — albeit not readily apparent from their titles — is the concept of compliance, i.e. the ways and means of forcing countries to abide by international rules of environmental law. Curiously, that concept seems to have opened a new 'battle of the books', for no sooner had some sceptical international lawyers confessed to their frustration with traditional

enforcement theories in this field¹⁷ than they were met by a chorus of defenders of traditional legal sanctions (led, of all hawks, by political scientists).¹⁸ So how will these four books acquit themselves 'in battle'?

Phoebe Okowa's Oxford dissertation, prepared under the supervision of Professor Ian Brownlie, takes a straightforward lawyer's approach to the topic. State responsibility and liability remain the classical legal answer to non-compliance with international duties even though environmental economists have begun to appropriate liability as an 'economic instrument'.19 After a thorough review of the international rules and state practices applicable to transboundary and long-distance air pollution (including radioactive pollution) under treaties as well as custom - such as the 'procedural' duty of warning in emergencies Okowa concludes that the available norms of general international law offer an adequate basis for imposing liability on states found in breach of those rules. Why then, she asks at the end (p. 257), 'have states failed to rely on the regime of state responsibility for their enforcement?'

Part of the explanation may well be the notorious reluctance of diplomatic negotiators to stumble into the minefield of damages — epitomized by the infamous disclaimer

- Chayes and Chayes, 'Compliance Without Enforcement: State Behaviour Under Regulatory Treaties', 7 Negotiation Journal (1991) 311; Chayes and Chayes, 'On Compliance', 47 International Organization (1993) 175; A. Chayes and A.E. Chayes, The New Sovereignty: Compliance with International Regulatory Regimes (1995); and Chayes and Chayes, 'Compliance Without Enforcement', 91 ASIL Proceedings (1997) 53.
- Downs, Rocke and Barsoom, 'Is the Good News About Compliance Good News About Cooperation?', 50 International Organization (1996) 379; Downs, 'Compliance and Enforcement in Regime Management', 91 ASIL Proceedings (1997) 59; and Downs, 'Enforcement and the Evolution of Cooperation', 19 Michigan Journal of International Law (1998) 319.
- Opschoor, de Savornin Lohman and Vos, Managing the Environment: The Role of Economic Instruments (1994) 19–21.

footnote to Article 8 of the 1979 Geneva Convention on Long-Range Transboundary Air Pollution²⁰ (which was inserted at the insistence of the UK Foreign Office, and the legal bearing of which is questioned by Okowa on p. 33), to the effect that 'the present Convention does not contain a rule on state liability as to damage'. More important, however, is the difficulty of applying what is essentially an adversarial instrument to collective duties in 'multi-party claims', far more characteristic of international air pollution regimes today than the rather atypical *Trail Smelter* case in 1941.²¹

That point is largely confirmed for environmental dispute settlement in general by Cesare Romano's Geneva dissertation, prepared under the supervision of Professor Lucius Caflisch. This is a well-researched survey based on 10 case studies, which in addition to air pollution covers marine and freshwater resources — though curiously omitting any reference to private international law (conflict of laws) and its significant contribution to what the author (p. xliii) calls the 'thaumaturgical capacities' of judgemade law in the transnational environmental domain. Romano concludes that, while traditional international adjudication may facilitate the settlement of localized natural resource conflicts, such as the 1992/93 Nauru Phosphates case,22 the role of classical adjudication methods in the environmental field is 'marginalized' (p. 332) by the increasing institutionalization of international environmental regimes, by the emergence of new non-compliance procedures, and by the growing influence of non-state actors.

The consortium study edited by Professors Edith Brown Weiss (Georgetown University) and Harold K. Jacobson (University of Michigan) is one of several empirical research projects to assess actual compliance with multilateral environmental agreements (MEAs), triggered mainly by the 1992 Rio Conference on Environment and Develop-

²⁰ 1302 UNTS 217.

²¹ 3 UNRIAA (1949) 1905.

²² 32 ILM (1993) 1471.

ment and its new emphasis on the 'effectiveness' international environmental regimes.23 Other volumes on this topic have since been published under the auspices of the US General Accounting Office (1992), the Nordic Council of Ministers (1996), the German Federal Environmental Agency (1997), the French Environment Ministry (1998), the International Institute for Applied Systems Analysis (1998), the Fridtjof Nansen Institute (1999), the MacArthur Foundation's 'Social Learning Group' (2001) and the Carnegie Endowment for International Peace (2001). The Georgetown-Michigan project selected five global environmental treaties for a 'reality check': the 1972 World Heritage Convention, the 1973 Endangered Species Convention (CITES), the 1972/96 London Dumping Convention, the 1983/94 Tropical Timber Agreement and the 1985/87 Vienna/Montreal instruments to protect the ozone layer. Domestic compliance with these five MEAs is verified in eight countries (Brazil, Cameroon, China, Hungary, India, Japan, Russia and the United States) and the European Union. The case studies developed for this purpose by an interdisciplinary project team of lawyers, political scientists, sociologists and economists yield a wealth of useful and often surprising comparative information.

Among the not-so-unexpected findings is the conclusion that traditional legal mechanisms of dispute resolution — let alone state responsibility — have played *no* role whatsoever in the implementation and enforcement of these agreements. According to the editors, 'it is, of course, arguable that the existence of such mechanisms encourages parties to settle their disputes in other ways, although the experience in the five treaties under study does not demonstrate that' (p. 166). Instead,

the study illustrates the growing importance of alternative methods of 'treaty management' to induce compliance — including positive incentives, new types of economic sanctions, and especially 'sunshine' methods to increase transparency and hence the pressures of public opinion and civil society.

Markus Ehrmann's Heidelberg dissertation, prepared under the supervision of Professor Ulrich Beyerlin, picks up where the earlier, predominantly diagnostic studies leave off. From the new spectrum of MEAs surveyed, he selects for further in-depth examination some of the innovative instruments of compliance control: the subsidiary 'implementation committees' grafted onto the Montreal Ozone Protocol in 1990/92, onto the Transboundary Air Pollution Convention in 1991/94 and onto the Climate Change Convention since 1995; the 'compliance procedure' introduced in the 1992 Northeast Atlantic Convention; and similar recent proposals under the 1989 Basel Convention on Hazardous Wastes and under the 1994 Desertification Convention. Comparable precedents from outside the environmental field are also taken into account (starting with the ILO system of compliance control in the 1920s), as is some of the relevant early MEA experience with 'systematic implementation especially as developed by the Conference of Parties to CITES since 1979 — though typically praeter legem, without explicit treaty provisions or amendments to that effect.

The net result, as sketched out by the author, are indeed genuine innovations in multilateral cooperation, which in turn are bound to raise new questions of international law — not the least difficult being their procedural coexistence with the more traditional state responsibility rules and dispute settlement clauses (dead letter as they may be) under the MEAs concerned.

In summary, the four books reviewed here are outstanding studies in contemporary compliance theory and *praxis*. Between them, they reflect significant advances in international environmental law and in our understanding of what works, and what does not work. Nonetheless, it may be wise to heed a warning

²³ See A/CONF.151/PC/103, and the related series of preparatory papers. See P.H. Sand (ed.), The Effectiveness of International Environmental Agreements: A Survey of Existing Legal Instruments (1992).

sounded by Martti Koskenniemi (quoting Judge Jennings):²⁴ even the most persuasive compliance controls developed by environmental regimes will not obviate the cardinal principle of *pacta sunt servanda*, and the legitimacy it alone confers.

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²⁴ Koskenniemi, 'New Institutions and Procedures for Implementation Control and Reaction', in J. Werksman (ed.), Greening International Institutions (1996) 236, at 248.