Cooperation and public goods: an evolutionary perspective on environmental law

Rosalind English *Academic Consultant, One Crown Office Row*

Introduction

One of the most difficult questions for today's law-makers is how to secure a collective sense of responsibility in tackling the problem of environmental despoliation. However optimistic a view one may take of the range of international and regional instruments dealing with this issue it is clear that our efforts to persuade one another to protect natural resources and diversity are not working well enough. We need better-directed forms of co-operation, not more of the same.[1] Wide-scale cooperation in society is possible. Despite all appearances to the contrary, we are hard wired to cooperate, but only under certain conditions. The first part of this article explores the aspects of our evolved psychology that should be enlisted in the service of environmental protection. It sets them apart from other biases like self-deception and overconfidence that arguably dominate much of our response to environmental problems. The second part explores the extent to which the common law of nuisance harnesses our tendency to cooperate and how it may therefore play a more effective role in environmental regulation. The argument is made that the obligations arising out of private or common law provide a better model simply because it is via private relationships rather than command and control regulation that we have built on our evolved but fragile talents for cooperation.

1 Our selfish interests

In law, as in other social sciences, we do well to remind ourselves that these cooperative tendencies do not derive from some drive to produce objective justice. Our propensity to cooperate with non-related individuals evolved, like anything else, because this trait advanced the reproductive fitness of its bearers. I will expand on this below.

Evolutionary biology not only has something important to tell us about the way we respond to problems and crises arising from this modern environment. It may be a crucial element to be incorporated into a reliable system of rules and precepts that include the useful aspects of our evolved minds but dispense with the maladaptive ones. The analysis of cooperation and its possible solutions have attracted a huge theoretical literature investigating its possibilities in relation to modern society, economics in particular. However, of all the social sciences, law has attracted relatively little attention in this field. This is surprising, as legal relationships and institutions feature in many of the explanations for the functioning of cooperation in society. Much of what has been written about the application of evolutionary psychology to environmental law[2] also tends to focus on the international instruments occupying centre stage. Other proposals for sharpening up individual responsibility involve schemes which place greater onus on actors other than the state to encourage the 'stewardship approach' and shared responsibility toward the natural environment.[3] This article makes a more modest proposal, that we already have in our common law an important instrument that could be adapted to enhance environmental protection at a national level.

First, some preliminary points need to be made concerning the discoveries about human nature which show that we are not well adapted for environmental responsibility.[4] We have limited scope for caring about consequences that go beyond groups of kin and friends. In so far as we do agree to cooperate with non-relatives, we rely on reciprocity. However, any contributions we tend to make to public goods[5] are likely to collapse when this reciprocity cannot be implemented. Status is a stronger drive than far-sightedness. We are prone to self-serving delusions about our own autonomy, generosity and wisdom.

We have to ask ourselves whether any of these tendencies are addressed properly, or at all, by the panoply of laws and regulations aimed at securing the planet's future.

1 Colin T Reid 'The Privatisation of Biodiversity? Possible new approaches to nature conservation law in the UK' (2011) 23 *Journal of Environmental Law* 203–32.

2 Dan Kahan 'The logic of reciprocity: trust, collective action and the law' (2003) 102 Michigan Law Review 71–103; Nichola Raihani and David Aitken 'Uncertainty, rationality and cooperation in the context of climate change' (2011) 108 *Climatic Change* 47–55; Benjamin J Richardson 'A Damp Squib: Environmental Law from a Human Evolutionary Perspective' Osgoode CLPE Research Paper No 08/2011.

3 An eloquent case has been made for harnessing private initiative via conservation easements and other schemes. See Reid 'Privatisation of Biodiversity' (n 1).

4 These vastly simplified formulations are drawn from the work of evolutionary psychologists such as Stephen Pinker *The Blank Slate* (Penguin New York 2002) and biologist Garrett Hardin 'Tragedy of the Commons' (1968) 162 Science 1243–48.

5 The concept of public good covers any resource to which access cannot be restricted and one that will always be in short supply if individuals are left to their own devices – so most environmental assets fit in to this category.

2 Cooperation and reciprocity

2.1 Cooperation in humans and the problem of free-riders

The reason why cooperation has been a particularly active research field in the behavioural sciences is that it presents a particular challenge to the evolutionary paradigm of the 'selfish gene'. Cooperation in animals and humans can be explained if it involves helping close relatives who share a high proportion of genes,[6] but scientists have been puzzling for decades over evidence for cooperation between unrelated individual animals and even between species. Applying some of these important discoveries to people, evolutionary biologists, economists and psychologists agree that people cooperate only if it is in their long-term self-interest. Individuals gain direct benefits (thereby enhancing their ability to pass their genes on to their offspring) from helping others, but only if this cooperation is underpinned by reciprocity, reputational benefits or punishment of non-cooperators.

Experiments have been carried out on volunteers worldwide in order to isolate and understand these evolutionary drivers. 'Community investment games' test the propensity of subjects to make contributions to public goods. A striking and general outcome is that cooperation is fragile and declines over time.[7] Those who cooperate in a group may be willing to punish free-riding, even if this is costly for them and even if they cannot expect future benefits from their punishment activities.

The significance of this finding is that the decay of cooperation will occur not just because people eventually learn what is in their best interest but because frustrated conditional cooperators reduce their contribution. The conclusion drawn from this research is that the collective action that produces public goods for all, without inbuilt punishment mechanisms, is rendered unstable by the incentive it creates to free-ride. This is illustrated by the classic scenario of the tragedy of the commons, a paradigm of modern human nature in the environment.[8]

In a group of herders, each farmer has an incentive to put as many cattle on a common grazing pasture as possible. The inevitable environmental degradation that follows causes all farmers to suffer. Collectively, all farmers would be better off if they were able to constrain the number of cattle that graze on the commons. Yet, each individual farmer is better off by maximising the number of their own cattle on the pasture.

The paradox is that most people prefer the public good to be produced rather than for the tragedy of the commons to occur. However, I only want to commit to contributions if I am assured that everyone else is also contributing. The worst possible outcome – even worse than the tragedy itself – is that I contribute but my neighbours do not. This is because the tragedy still happens but I am even worse off than the cheats.

To avert this self-perpetuating tragedy we need to have in place systems that ensure continuing cooperation. A group agreement to contribute to public goods must be policed by third party enforcers. These can take a number of forms, and the impersonal institutions of the law are just such a mechanism.

Modern laws developed out of rudimentary rules amongst early humans which allowed the gradual integration of cultures of trust based on family into wider cultures governing transactions between non-related individuals.[9] These institutions were only effective in the long term because they were attentive to the fact that human thinking and decision-making are biological adaptations rather than engines of pure rationality. Such aspects of our evolutionary psychology as short-sightedness, self-deception and preoccupation with status should inform modern law as much as they did the prosocial norms of our early past.

2.2 Our fallible minds

Humans display many psychological biases, one of which is the phenomenon of 'temporal discounting', our tendency to undervalue rewards when there is a delay between paying the cost and reaping the benefit of cooperating. This is more a deep-seated intuition than a rational acknowledgement of the fact that future payoffs are inherently more tenuous than those that can be gained immediately. Our propensity to behave as if we will die in a few years is no more than a reflection of the reality facing our evolutionary ancestors, when life was short and the future completely unpredictable.

However, this evolutionary predisposition is maladaptive for environmental responsibility. It is perhaps for this reason that we have failed again and again to rise to the toxic challenge of our environmentally damaging lifestyles. If we respond to these threats at all we constantly show a bias toward those calamities that are immediate, visible and close to home. Foreseeable externalities like greenhouse gases and waste 'sinks' in the air, groundwater, overfishing, and export of waste to far away countries of which we know nothing barely cause a blip on our emotional seismometer.

Another of these biases, possibly the most powerful, is overconfidence, an exaggerated sense of our own integrity, generosity, and control over events; 'positive illusions' which have been shown to have been advantageous in an evolutionary sense.[10] This might seem counterintuitive. After all, such overconfidence leads to assessments and decisions that are hazardous to the individual concerned,

6 William Hamilton's 'The theory of kin selection' in 'The Genetical Evolution of Social Behaviour' (1964) 7 *Journal of Theoretical Biology* 1–52.

7 Ernst Fehr and Simon Gächter 'Cooperation and Punishment in Public Goods Experiments' (2000) 90 *American Economic Review* 980–94

8 Hardin 'The Tragedy of the Commons' (n 4) where he uses the word 'tragedy' not in the sense of 'sadness' but to mean 'the remorseless working of things'.

9 Paul Seabright *The Company of Strangers* (2nd edn Princeton University Press Princeton 2010).

10 Dominic D P Johnson and James H Fowler 'The Evolution of Overconfidence' *Nature* 10384 (September 2011), and Robert Trivers *Deceipt and Self-Deception* (Allen Lane 2011).

so it remains something of a puzzle as to why this tendency has proved so adaptive when we would do much better to adhere only to accurate beliefs. Nevertheless, empirical surveys have established that people consistently overrate their self-worth, ignoring any internal warning bell about the possible inaccuracy of that assessment. This defence mechanism, known in the trade as 'cognitive dissonance reduction', is highly effective because deception is never more successful than when the purveyor is also deceived.

This important mindset informs our sense of morality and in turn feeds in to the thinking behind environmental policy, sometimes doing more harm than good. It lures us into the seductive myths of sustainable development,[11] for example, or intergenerational equity,[12] both of which are placebos masquerading as wonder drugs for the planet's malaise. As Hardin would say, these notions of responsibility are a fake: 'a verbal counterfeit for a substantial quid pro quo. It is an attempt to get something for nothing'.[13]

Similarly, status – an evolutionary impulse very much supported by self-deception – is at odds with any nascent sense of environmental responsibility. We are as powerfully driven by notions of rank and conformity as we were when we lived in small hunter gatherer groups. We are still all set on out-competing our neighbours, except now we do it with bigger cars or satellite dishes rather than finesse in fighting or tribal rank. Our first impulse is to spend money on goods that will enhance our status in the neighbourhood rather than shoring up investment in intangible goods that we know are for our benefit, such as health and a clean and pleasant environment. However, the metric of happiness is a relative one. This drives us into an arms race where everyone has more money to spend on houses and cars; the houses and cars get bigger but no one is any happier. Not only does the social status impulse distract us from investing in hidden benefits such as clean air, but it eats away at those benefits themselves.

A healthy environment, like a comfortable retirement, is an intangible good whose value we recognise, but one which we eschew in the race to beat our neighbours. Increasing attention is being paid to identifying and seeking recognition for the ways in which the natural environment contributes to human well-being. Contributions may therefore have to be enforced[14] – by ecological taxes on consumption, and by overcoming our irrational objection to treating such things as clean water as an economic commodity.[15]

Pricing intangibles like these, and other policy proposals such as personal carbon allowances,[16] are happily not within the remit of this article. However, I will seek to show that common law mechanisms which developed organically in times when environmental problems were smaller and more immediate provide an indispensible model for environmental regulation alongside these top-down strategies.

3 Some solutions from the common law

In the rush to formulate from scratch international instruments and administrative rules regulating our use of natural resources we have neglected some of the most important tools of the common law, those third party mechanisms mentioned earlier, that make it successful in policing opportunism and overriding people's incentive to free-ride. The overall consequence is that the scope and effectiveness of most environmental regulation are largely dependent on the resources, policy and efficiency of a number of public authorities, whose hands are tied in turn by regional and international agreements. Most of the international treaties lack credibility because their punishment mechanisms are weak, probably because they are too costly to administer. Cap and trade systems[17] have been criticised by legal theorists[18] as costly incentive schemes which undermine the conditions of trust necessary to hold collective action problems in check. (It has been suggested that the very existence of an incentive scheme can be seen as a clue that other individuals are not inclined to cooperate voluntarily: if they were, incentives such as these would be unnecessary.) Schemes for offsetting or compensating for environmental damage in EU and planning law simply move the problem somewhere else, again resting the responsibility on the shoulders of the state.[19] The wealth of regulation dealing with responsibility for environmental harm[20] suffers from an inherent defect in that it conveys the message that cheating is the default position. This in turn creates distrust amongst individuals, which triggers a reciprocal motive to evade our individual responsibility and pile all the blame on state bodies (who are the only ones liable under most of this law in the first place).

The private law of nuisance on the other hand secures our sense of mutual accommodation by allowing individuals to calculate how far they can use their surrounding resources without denigrating the value of their neighbour's property. Based as it is on a delicate balance between reciprocity and self interest, the right to sue in

11 Sustainable development is simply a rationalisation of our continuing consumption, proliferation and encroachment on what little there is left of the natural environment.

12 An attempt to suborn our desire for the competitive superiority of our own genetic offspring, in the service of the next generation as a whole. In the absence of an enforcer it has dubious status as a legal principle: Patricia Birnie, Alan Boyle and Catherine Redgwell (eds) *International Law and the Environment* (3rd edn Oxford University Press Oxford 2009) p 125.

13 Hardin 'Tragedy of the Commons' (n 4). Trivers goes as far as pronouncing social sciences themselves as being replete with self-deceiving biases, although the focus of his attack is on economics not law, see n 10 ch 13.

14 Reid 'Privatisation of Biodiversity' (n 1) proposes the idea of 'habitat (or biodiversity) banking', with providers creating a stock of actions with beneficial biodiversity outcomes, the credit for which developers can purchase to offset the debit from the environmental damage of their projects.

15 This is encapsulated, for example, in the EU Water Framework Directive 2000/60/EC where recitals assert that water is a heritage rather than just a commodity 'like any other'.

16 Mayer Hillman *How We can Save the Planet* (Penguin London 2004).

17 Such as the EU Emissions Trading System and the Clean Development Mechanism under the Kyoto Protocol.

18 Kahan 'The logic of reciprocity' (n 2).

nuisance corrects the democratic deficit inherent in most environmental regulation.

The tort of nuisance grew out of property law, which itself governs the right to manage the various valuable resources in our environment. Some economists regard the institution of property law as one of the most central contributors to the stability of cooperation in human society.[21] When something is made subject to property rights, it has a value attached to it and becomes a private good, such as water flowing through a private property.[22]

The strict protection of riparian rights in English common law involved an entitlement to purity long before nationwide pollution by sewage and industrial effluent became an issue; such common law rights usually contained within them the potential for environmental protection. Water in the ocean on the other hand is a public good, since the cost of enforcing rules of access beyond territorial waters is prohibitive. Clean air is, of course, another classic example of a public good. Whilst planning law and EU legislation provide a framework for protecting both private and public goods, the enforcement of these operational controls frequently collapses under their own weight[23] opening the way for cheating and free-riding. In these situations, nuisance may be the most reliable weapon available in the arsenal.

3.1 Nuisance, reciprocity and the principle of give and take

The right to claim the courts' protection in respect of our neighbour's activities which threaten to interfere with the enjoyment of our land, has developed in a remarkably flexible way in response to our need to control the use of our immediate environment.[24] It was in response to the pollution problems spawned by the industrial revolution that the landmark nuisance actions found their place in the law reports, moving the line of battle from parochial disputes between individuals to neighbourhoods over large distances.[25] Although parliament sought to allocate liability for pollution in legislation, the evidence is that the giant nuisance actions of industrial Britain provided the grounds for a cooperative resolution of the considerable environmental challenges then at hand. As one historian has pointed out:

> Some of the most noxious nuisances, such as, for instance, the pollution of rivers, are so imperfectly provided against [by regulation], that the old remedy at [common] law, expensive though it is, remains the only resource to escape grievous injury to health or property.[26]

There is no reason why the common law action in nuisance should not continue to evolve to meet the broader environmental crisis via the same mechanisms of neighbourhood, mutual benefit, foreseeability, and reasonableness. It has numerous advantages over regulation in holding polluters to account and allocating responsibility, not least of all because it is enforceable by private individuals in cases where official regulators have no vested interest, not just protecting property rights but securing an arrangement for land use to the satisfaction of the community that it supports.[27]

Before moving on to a contextual examination of two contemporary cases, it is worth considering the concept of 'reasonable user' at the core of nuisance and how it evolved to be as robust as it is against the defence of social utility. As Lord Millett said in *Southwark LBC v Mills*:[28]

> What is reasonable from the point of views of one party may be completely unreasonable from the point of the other. It is not enough for a landowner to act reasonably in his own interest. He must also be considerate of the interest of his neighbour.

The 'reasonableness' requirement in nuisance, in other words, reflects its reciprocal basis. It allows disputes over the allocation of social benefits and burdens through a fair process of 'give-and-take'.

Ever since the early industrial pollution cases, courts have resisted efforts to promote the utilitarian version of reasonable user. Where a multiplicity of interests collide it is sufficient that property is damaged, and causation is satisfied, for liability to attach. Short of having statutory authority to commit a nuisance, the public interest served by the carrying out of a particular activity (such as landfill) does not confer on the defendant the right to commit what would otherwise be a nuisance. The weighting of public interest goes to the question of remedies, not liability:

> The problem with putting the public interest into the scales when deciding whether a nuisance exits, is simply that if the answer is no . . . because [the claimant's] private rights must be subjugated to the public interest,

19 Reid 'Privatisation of Biodiversity' (n 1). See his summary of the offsetting mechanisms under the Habitats Directive (92/43/EEC), the Environmental Liability Directive (2004/35/EC) and the Town and Country Planning Act 1990 s106.

20 This includes art 8 of the European Convention on Human Rights 1950.

21 For example, see Seabright *Company of Strangers* (n 9) ch 12.

22 What it means to be a private good is that its owner must be able to prevent others from having access to it.

23 As happened in the case of *Barr v Biffa*, considered in section 3.2 below.

24 There is also the tort of public nuisance, an either-way offence for which an unlimited fine and/or a maximum sentence of life imprisonment can be imposed. It involves the endangering of the health, comfort or property of the public and as such is a potentially powerful tool for addressing environmental harm. But its deterrent effect is limited by the fact that individuals can only sue by way of a relator action in the name of the Attorney General.

25 See Ben Pontin's survey of a series of high profile nuisance actions using the common law as an early instrument of environmental protection, starting with *AG v Birmingham Corporation* (1858) 4 K&J 528, a sewage case, and *Tipping v St Helens Smelting Co* (1865) 11 ER 1483 involving emissions in 'The Secret Achievements of Nineteenth Century Nuisance Law' *ELM* 19 (2007) 6 pp 279–90).

26 D Fraser *Urban Politics in Victorian England* (Leicester University Press Leicester 1976) p 22.

27 In *Birmingham Corporation* (n 25) for example, the claimant's concern with the polluted river went beyond the interference with his riparian rights since the odours from untreated sewage affected the general community. Thus the action speaks directly to the modern case law of *Marcic v Thames Water Utilities Limited* [2003] UKHL 66 and *Dobson and others v Thames Water Utilities Ltd* [2011] EWHC 3253 (see Pontin n 25).

28 [2001] 1 AC 1.

> it may well be unjust that he should suffer the damage for the benefit of all. . . .The principles or policy underlying these considerations are that the public interest should be considered and that selected individuals should not bear the cost of public benefit.[29]

Similarly, the locality rule – the idea that a claimant must take his neighbourhood as he finds it – is carefully policed. Nuisance has evolved to deal with sophisticated forms of cheating: a polluter is not permitted to taint the neighbourhood first and then rely on his own tortious actions as a defence, having changed the quality of the locality in question.[30]

So we see that the private law of nuisance neatly harnesses our evolved tendencies to be altruistic and respond to social norms, by making self interest its goal and giving legal status to our tendency to conform. Nuisance mechanisms work because they are based on the social norm that people ought to be aware of the risk of damage to neighbouring property and if they fail to take steps to prevent it they are liable for the consequences. The way the common law has evolved has made it resistant to those pragmatic considerations that tend to undermine the state regulator's role in environment protection. Nor is this common law manifestation of environmental responsibility constantly undermined by our psychological biases discussed above, temporal discounting and status. Individuals can seek remedies fairly quickly and such action may well enhance reputational benefits, particularly if the nuisance complained of affects a large sector of the community (as it frequently does). And it cannot be suborned by our tendency to weave self-deluding myths; the concepts of reasonable user are too set in stone for that.

However, the important service that the tort of nuisance has served in the past in many areas in which humans affect the natural environment – land use, water abstraction and pollution – has been overlooked and diminished as a consequence of a series of judicial pronouncements to the effect that common law should take a back seat where complex statutory environmental controls are involved.[31] This reflects a long-standing orthodoxy about the interface between law and industrialisation, which is essentially that the common law could not by its very nature have controlled environmental impacts with anything like the precision and reliability of regulatory laws enforced by public bodies.[32]

But the efficacy of this patchy and sometimes over-complex legislation has gradually become subject to doubt. As Lord Hobhouse said in 2003,[33] this area of government intervention:

> is not exhaustive; it does not necessarily give the third party affected an adequate or, even, any say; the government decision may give priority to some national or military need which it considers must over-ride legitimate individual interests; it will not normally deal with civil liability for damage to property; it does not provide the third party with adequate knowledge and control to evaluate and protect himself from the consequent risk and insurance cost.

3.2 Nuisance and noxious sites

The problem with most pollution regulation in this country is that it fails to address people's propensity to withhold costly contributions to public goods and instead free-ride on the contributions of others.[34] We all know that someone has to live near landfill sites but nobody wants to be that person. So there has to be some legal mechanism that will reward acceptance of noxious but necessary facilities by deterring any potential cheating on that reward. The armoury of regulations and laws governing the collection and disposal of waste in this country signally fails to do so, a point that is amply played out in the class action taken in respect of landfill operations in Ware, Hertfordshire in *Derek Barr and Others v Biffa Waste Services Limited.*[35]

Biffa operated its site under a permit granted by the Environment Agency (EA). Neighbouring landowners complained of smells from the site over a five year period and brought a claim in nuisance as a group action. They did not claim that Biffa had breached the terms of its permit, so the question before the judge was whether an odour emitting from the authorised operation of a landfill site made the operator liable in nuisance even if it was complying with the detailed requirements of its permit and was not alleged to be negligent.

The EA at first refused to take enforcement proceedings and when it did the prosecution was derailed for technical reasons. The failure of the EA to monitor Biffa under what the judge called a 'cascade of legislation' properly demonstrates what a severe challenge this kind of detailed responsibility presents to human psychology.[36] As a consequence of the campaign and the pressure on Biffa, the EA became, in Coulson J's words:

> not much more than a messenger, passing on the complaints from the residents to Biffa and hoping something might be done about it. Indeed, it seemed that the

29 Buckley J in *Dennis v MOD* [2003] EWHC 793.

30 This point was illustrated in *Dennis v MoD* where the defendant's submission was that the character of the neighbourhood should include the airbase as an established feature, to which Buckley J retorted: 'It would be odd if a potential tortfeasor could itself so alter the character of the neighbourhood over the years as to create a nuisance with impunity'.

31 Lord Goff in *Cambridge Water v Eastern Counties Leather plc* [1994] 2 WLR 53 rejected the proposed extension of liability in nuisance in the light of 'well constructed and complex' legislation regulating the environment.

32 J McLaren 'Nuisance Law and the Industrial Revolution – Some Lessons from Social History' (1983) 3 *OJLS* 155, although more recent thinking on nuisance law has undergone 'a dramatic renaissance, prompted by the realisation that, in practice, regulatory laws often flatter to deceive' (Pontin n 25).

33 *Transco plc v Stockport Metropolitan Borough Council* [2003] UKHL 61 para 56.

34 The NIMBY problem.

35 [2011] EWHC 1003 (TCC).

36 At the time the class action was brought the statutory framework for waste disposal and landfill comprised a range of EU Directives and Decisions, including the Waste Framework Directive of 1975, the IPPC Directive of 1996, The Landfill Directive of 1999, and the New Waste Framework Directive of 2006; national law included the Environment Protection Act 1990; The Environment Act 1995, the Pollution Prevention and Control Regulations 2000, the Landfill Regulations 2002 the Environmental Permitting Regulations 2008 and the Planning Act 2008.

> senior management in Biffa regarded the EA as nothing more than a form of complaints-handling organisation, working on their behalf. This seems to me to be a complete travesty of the EA's statutory role.

The deterrence mechanisms built in to the legislation governing the regulator's responsibilities and the operators' liabilities were simply too difficult to apply with any certainty, so the operator got away with a certain amount of free-riding, leaving the nuisance claim as the only course of action open to the offended public. The claim failed in the end because the judge found that the permit afforded a complete defence to the operator. This ruling has been the subject of much debate and may well be reversed.[37]

Whatever happens on appeal, the case demonstrates what happens when statutory regulation fails. Technically, anyone in the shoes of the lead claimants could have brought proceedings against the operator if it had failed to comply with a condition of its permit.[38] However, this is unrealistic; if adducing evidence of such failure is rendered such a complex exercise that even the specialist regulator is not up to the task, it is difficult to see how an ordinary member of the public might meet that challenge. There has to be a legal instrument in place to strike the balance between two public goods, fresh air and the disposal of waste necessary to achieve it. The claimants were not greedy exemplars of the 'tabloid compensation culture'; they were merely seeking to assert what they considered to be their rights because nobody else, certainly not Biffa or the EA, seemed to pay more than 'lip service' to them.[39]

3.3 Nuisance and noise

Another situation where resort was made to a civil claim where regulation failed was the case of a disused aerodrome used for a number of decades as a motor racing circuit.[40] Homeowners living nearby claimed that the use of the circuit gave rise to excessive noise and constituted a nuisance. The circuit owner's defence was that, although its activities did cause noise and some discomfort and inconvenience to the claimants, there was no actionable nuisance because the use of the circuit was reasonable having regard to the nature and character of the area arising from the grant of planning permission nearly half a century ago. Since the original permission was granted, the use of the circuit had intensified until 1998 when the owners agreed to an undertaking to limit their activities under a section 106 agreement.[41]

This time the private law claim fell on more sympathetic ears – eventually.[42] The Court of Appeal ruled that the grant of planning permission as such did not affect the private law rights of third parties,[43] nor was the consequence of the planning permissions such as to introduce an element of noise which qualified the essentially rural character of the locality. The court found as a matter of 'first principle' that a planning authority (including a minister and an inspector) has no jurisdiction to authorise a nuisance, even if the operator had abided by the terms of the s 106 planning obligation. In refusing to extinguish private rights as a result of administrative decisions in which individuals play no part, and which cannot be appealed, the Court of Appeal has endorsed the continuing role played by nuisance in striking the balance between competing interests in an increasingly crowded environment.

4 Conclusion

It is no accident that the law of nuisance and the concept of neighbourhood developed where communities were local. It is easier to monitor and enforce when there is immediate physical interdependence between people and clearly this is not a model amenable for application to cross-border problems. It remains, nevertheless, a potentially useful tool for environmental regulation at home and therefore it is worth considering how to take nuisance forward in to the twenty-first century. One possible avenue would be to expand the notion of 'enjoyment of the land' to mean something more than that identified by the traditional formula of 'anything which discomposes or injuriously affects the senses or nerves'.[44] In other words, we can derive from the traditional set of specific interests threatened by the nuisance a much wider ranging but nevertheless valuable public good whose value is determined by its scarcity or fragility.[45]

The requirement that the claimant in nuisance should have an interest in property may be a stumbling block if the proprietor of the affected land had no vested interest in taking a claim. Dispensing with the proprietorship requirement was a change to the law of nuisance lengthily debated but ultimately rejected by the House of Lords in *Hunter*[46] and it may yet prove too conceptually problematic in the environmental context. Instead, an environmental commissioner could be appointed to represent these interests in a system analogous to the guardian *ad litem* or Official Solicitor.

We have made the mistake of trying to overcome the problems of scale presented by the global environmental crisis with correspondingly grand solutions – intergovernmental panels, international treaties, regional tribunals. This is a costly regulator apparatus which creates myriad opportunities for advantage seeking by self-interested individuals and groups. We cannot do without it because the most serious environmental problems are cross-border ones. However, we neglect our local nexus of legal relationships at our peril.

37 Permission to appeal was granted on 30 June 2011.
38 The Environmental Protection Act s 73(6).
39 Coulson J at para 574.
40 *Watson v Croft* [2009] EWCA Civ 15.
41 Under the Town and Country Planning Act 1990.
42 At first instance Simon J refused an injunction, holding that the character of the neighbourhood had been changed by the grant of planning permission and that therefore no nuisance arose.
43 *T Allen v Gulf Oil Refining Ltd* [1980] QB 156 CA (Civ Div).
44 *St Helens v Tipping* 11 ER 1483 per Lord Westbury.
45 The Pollution Prevention and Control (PPC) Regulations 2000, which implement the IPPC Directive achieves this by including within its definition anything that causes 'the impairment or interference with amenities and other legitimate uses of the environment'.
46 *Hunter v Canary Wharf Ltd* [1997] AC 655. The point was not taken by the non-proprietary claimants in *Dobson v Thames Water Utilities* [2007] EWHC 2021 because the defendant was a public authority and therefore they could sue under s 6 of the Human Rights Act 1998 for breaches of the right to home and family life under art 8 of the Human Rights Convention.