Environmental Crime: Towards an Eco-Human Rights Approach

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Introduction

This paper has two objectives. The first of these involves offering a brief but critical review of current thinking on environmental crime. It will be contended that criminologists (and those interested in the sociology of environmental law) have thus far generally failed to explicate the many theoretical and practical implications arising from the continued existence of so many legal yet ecologically damaging practices. Specifically, it will be argued that contemporary thinking in the area of environmental crime has (inadvertently) fostered a regulatory culture based *around the regulation of inherently anti-ecological activities*. It will be demonstrated that what is needed in the field of environmental crime is not 'better regulation' or 'tougher penalties', so much as a new approach capable of explicating 1) what constitutes an environmental problem, 2) how a particular problem relates to the wider logic or machinations of the politico-economic system in which it occurs, and 3) which resources (criminal law, education, technology transfers) should be mobilised to overcome environmental problems.

The second objective will be to articulate the beginnings of a criminological framework that takes account of these three issues. By way of critique and reconstruction, the work of Herman and Julia Schwendinger will be used as a platform from which to develop an *eco-human rights* approach to the study of environmental crime (that is, one which positions the human rights perspective of harm within an ecological foundation). This approach, as shall become clear, requires that activities which pose an ongoing threat to the environment be judged as ultimately detrimental to the long-term well-being of human *and* non-human life (regardless of their supposed 'low risk' status or centrality to 'sustaining' the *human* lives of a particular social world). It will be argued that the universal allocation of certain basic human rights (as formulated, for example, within the treaties devised by the United Nations) can only be meaningfully manifested where individuals and corporate entities adopt methods and relations of production which do not undermine the fundamental bases of all life — namely, air, water, and land. In short, an eco-human rights approach to environmental harm will be presented here as a means to combat the current global trend toward regulating inherently anti-ecological activities.

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Mainstream criminology

The great majority of work undertaken in the area of environmental crime tends to fall within a liberal-reformist or 'mainstream' framework. In general terms, reformist approaches to environmental crime/regulation hold that the right combination of economic, administrative, civil and criminal sanctions will be sufficient to bring ecological sustainability to the *present* mode of producing and consuming (see Richardson et al 1983; Hawkins 1984; Grabosky and Braithwaite 1986; DiMento 1989; Chappell and Norberry 1990; Kraan and in't Veld 1991; Stein 1992; Albrecht and Leppa 1992; del Frate and Norberry 1993; Downs 1993; Gunningham 1993, Norberry 1993, 1994; Poveda 1994:117–119; Doolan and Fitzpatrick 1995; Gunningham et al 1995; Corlett 1996). In contrast to their conservative counterparts, liberal social commentators recognise that certain practices often adversely affect the ecosystems which human beings depend on for survival, and that concerted efforts should be made by governments and legislators to minimise the harm flowing from such activities. However, these legislative and cultural changes should not, according to the liberal-reformist perspective, be so pronounced that they induce 1) a *fundamental* erosion of the basic divisions between capital and labour (Quinney 1974; Greenberg 1993), or 2) a *systematic* reorganisation of the human/ecosystemic interface (Weisberg 1971; Pepper 1993a).

As will become apparent below, constructing 'social reform' in this manner has profoundly influenced the way in which criminologists approach matters of environmental harm. In particular, the mainstream view that present social and ecological relations are *fundamentally* just and sustainable, has meant that commentators working within this milieu have been unable to move beyond positing 'juridical reform' or a certain extension of regulatory powers as the 'best possible' responses to the problem of environmental harm. This mainstream view has also led to a shying away from the more extreme socio-ecological consequences of attempting to legislate against environmental destruction through legal mechanisms which are themselves situated in a mode of production that needs to consume more and more resources to survive (see Pepper 1993b:430; O'Connor 1994a; Martinez-Alier 1995:74). Most importantly though, the emphasis placed on 'reforming' the system has produced a range of measures which have as their final objective the regulation of intrinsically anti-ecological activities rather than the championing of strategies which facilitate qualitatively distinct methods of producing and consuming.

The objective now will be to add empirical weight to the claims made thus far and to explicate precisely what is meant by 'the regulation of intrinsically anti-ecological activities'. To help achieve this, a critical analysis of four studies undertaken in the area of environmental regulation will be presented.[1]

One of the best examples of attempting to regulate against serious occurrences of environmental harm whilst simultaneously attempting to preserve the methods of production which lead to such damage, involves the regulations conceived to 'prevent' oil spills. Recently,

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1 These works have been 'singled out' only in so far as they offer a superior means of identifying the problems inherent within mainstream approaches to 'preventing' ecological harm. That is, the kind of shortcomings common to these studies can also be found to varying degrees throughout most, if not all, those works which adhere to liberal-reformist methods of coping with environmental problems. For a discussion of the problems contained within 'non-criminological' liberal-reformist responses to ecological crises, see Dryzek (1987 and 1992), O'Connor (1989), Paehlke and Torgerson (1990). For a detailed account of how Australian legislatures conceive of 'environmental harm' see Bates (1995:386–460).

legislation for controlling the transport of oil by sea has been designed to reflect the global nature of this activity. Through the introduction of the International Convention for the Prevention of Pollution from Ships (MARPOL), the owner of a vessel discharging substances into the sea in a manner that contravenes this convention can be fined up to $1 million no matter where, internationally, the discharge occurs. In 1992, four years after the Australian inception of MARPOL, 99.1per cent of 2040 ships inspected were found to be in full compliance with all of its requirements (Nelson 1995:182). Moreover, 'under recent amendments, oil tankers of 5000 cwt and above delivered after July 1996 must be fitted with double bottoms and wing tanks extending the full depth of the ship's side' (Nelson 1995:181). Not surprisingly, this 'global approach' to the issue of oil pollution has been viewed by mainstream commentators as a positive step forward in the battle to 'clean up' the world's waters through 'tough and consistently applied penalties'.

Despite these 'positive' developments it is clear that classifying an oil disaster as either 'legal' or 'illegal' makes no difference to the state of the natural environment *after* an oil spill has occurred — in both instances the damage will be exactly the same. Of crucial importance here (from an eco-human rights perspective) is the fact that the *risk* (however small) of an ecological disaster occurring — the very thing that environmental statutes attempt to minimise — will be omnipresent simply due to the nature of the activity in hand. This means that the proponents of MARPOL (and those working in the field of environmental crime who approve of such legislation) are left in the curious position of having to assert that although most major oil spills are catastrophic, a disaster stemming from certain 'legitimate' situations (for example, failure of navigation instruments) must be deemed 'socially tolerable' and therefore legal. The problem here is that the question of what constitutes an environmental problem has been constructed according to anthropocentric criteria (that is, which course of action will benefit *human* rather than nonhuman well-being?). Thus, from a mainstream or liberal-reformist perspective 'the problem' is seen not as the environmental harm which flows from the production of oil *tout court*, so much as how this substance should be managed after it has been extracted from the earth. Accordingly, the question being asked by the mainstream is: What type of legislation and regulatory mechanisms need to be in place in order to allow tankers to carry oil with the minimum of risk?, rather than: Why, given the ecological stakes involved, is the risk of a major oil spill tolerated at all — indeed enshrined in law? Alternatively, what is it about present social and economic arrangements that *requires* such a risk to be taken and subsequently normalised by a great many constituents? If environmental regulation is to be ecologically (as opposed to economically) effective, these would seem to be the kinds of questions that need to be addressed.[2]

Clearly, the primary reason why the risk of an oil spill is tolerated has to do with the necessity of law to facilitate the supply of those substances (coal, oil, minerals) which function as the 'life-blood' of the global economic system. It is, in short, the element of *structural embeddedness* that ensures that the transportation of oil by sea (in addition to the extraction of oil from land or the depths of the sea-bed) remains legal despite being an *intrinsically* hazardous activity. In familiar terms, given its role in the present mode of production, transporting oil — despite all ecological stakes — is rendered logically incapable of being exposed to the forces of criminalisation. (This is not to suggest that such activities

2 See Beck (1992) for an account of the global stakes involved in modernity's 'management' of risk. see also Lash et al (1996).

should be criminalised — indeed, as will become clear below, the shift toward ecologically benign systems of production requires the deployment of very different means).

In contrast to exploring the social and environmental implications of this situation, the adherents of mainstream criminological thought, when faced with problems such as how best to reduce the harm incurred through oil spills, find themselves immersed in programs which have as their basic goal the minimisation of the risks associated with inherently destructive activities. The 'success' of oil pollution 'prevention' legislation thus becomes equated with whether or not there has been a *reduction* in spillages as opposed to *none* at all. Thus, Nelson (1995:177), in an effort to extol the virtues of MARPOL, is quick to draw attention to the fact that since its inception there has been an 'estimated ... 60 per cent reduction' in instances of oil spills 'from 1.4 million tonnes in 1981 to 580,000 tonnes in 1989'. The focus here centres around how best to conceive and enforce laws that require ships to be manufactured in this or that fashion, or mariners to avoid this or that route, or crew members to undertake this or that training scheme, or cargo-holds to be reduced to this or that dimension. In short, the focus is on anything other than how all these regulations function to perpetuate a society where human 'well-being' (manifested here as 'the right to social development') continues to be inextricably (and legally) bound to the greatest possible production of an ecologically disastrous commodity. Approaching environmental regulation in this manner means that the risk of an oil spill is never entirely effaced — only postponed.

Indeed, there has been no shortage of spills in recent years. Just over a decade after instigating the 'global' approach of MARPOL, the *Exxon Valdez* spilled 11 million gallons (40 million litres) of toxic crude oil at Prince William Sound, decimating otter populations, fishing stocks, birdlife and '2,600 square kilometres of Alaskan coastline' and left Exxon with a $2 billion clean-up bill which, in terms of biological standards, has been wholly unsuccessful (Markham 1994:59). A study from Yale calculated that in the year following this disaster no less than 10 000 oil spills occurred throughout the world (three of which were in the range of 4 million litres). In 1994, the *Braer* spilled tens of thousands of tonnes of oil near the Shetland Islands off the Scottish coast. In 1995, the *Iron Baron* spilled its cargo of oil into Bass Strait, Australia. In February 1996, the *Sea Empress* ran aground off the Welsh coast spilling 70 000 tonnes of light crude oil. January 1997 heralded one of the most potentially disastrous oil spills in modern times with a Russian tanker spilling 4000 tonnes of oil off the Japanese coast threatening ten of Japan's fifteen nuclear reactors which 'rely on sea water to cool their systems and avoid a meltdown' (*The Age*, 11 January 1997).

The frequency with which spills occur (whether from ships or some other source) clearly indicates that oil pollution is a problem that stems from the very *essence* of present production processes. As such, the mere existence of laws which facilitate the passage (and extraction) of oil seriously diminishes the possibility of edging present social arrangements toward ecologically sustainable methods of production. In the terminology of Schwendinger and Schwendinger (1975), the law remains, in such instances, the 'defender' of capital accumulation rather than the 'guardian' of ecological sustainability. This is not to argue that capitalism is the sole source of environmental degradation — indeed studies such as that undertaken by Elsom (1992) clearly illustrate the extent of environmental decay which has occurred under certain brands of 'communism'. Rather, it is to acknowledge the way in which the inner logic of capitalism (that is, those basic features which distinguish this kind of production from all others) inexorably leads to the unsustainable domination and exploitation of human beings and nonhuman nature (see Pepper 1993a:78; O'Connor 1994b).

The kinds of criticism applied to the production and transportation of oil can be levelled at a number of other regulatory oriented studies as well. For instance, Farrier (1990a) has compared and contrasted the relative effectiveness of 'coercion' and 'consensus' approaches to the regulation of the private removal of native vegetation for agricultural purposes. Although he raises many important issues, Farrier nonetheless omits to ask one fundamental question — namely, why, after two centuries of employing western agricultural methods which have themselves been indirectly responsible for the clearing of approximately 100 million hectares of native forest and woodland, is it still 'necessary' to destroy *more* vegetation? (Resource Assessment Commission 1992:80).[3]

The point here is that the emphasis given over to examining how best to regulate *further* instances of clearing has the effect of directing attention away from a far more crucial area of social concern — namely, an examination of the kind of production techniques and economic system(s) that repeatedly render land infertile such that more clearing becomes a 'necessity'. Of equal concern is the highly anthropocentric vein in which the matter of land clearing is discussed. That is, there are other beings (other than human) that rely on so-called 'scrub' or 'idle bushland' for their survival — and indeed it is the preservation of these other beings (that is, preservation of the greatest possible biodiversity) that will, over the longer term, aid the survival prospects of the human species. Viewed in this way, the 'right' to clear land also functions as the 'right' to impact on biodiversity, watersheds, groundwater flows, nesting sites and so on. Accordingly, the problem is not — as Farrier suggests (1990a:99) — how best to implement regulations that ensure land where further clearing takes place is planted with 'pasture to prevent soil erosion', so much as how to facilitate the transition toward an economic system that does not expose present agricultural lands to forces of production which undermine their fertility. In short, from an eco-human rights viewpoint, the more important question would seem to be: What needs to take place in order that *existing* agricultural lands are used sustainably?, rather than: Which area of vegetation, under this or that set of regulations, should be cleared next?

Similar problems to those noted above can be found in Szasz's examination of 'the relationship between legitimate corporations that generate hazardous waste and elements of organised crime with whom they contract for the removal, treatment, or disposition of those wastes' (Szasz 1986:1). The main shortcoming here stems from the fact that Szasz employs a legalistic definition of crime. As such, what is treated as environmentally harmful is the *il*legal generation, handling and disposal of hazardous substances rather than the *continued* production of such waste (Szasz 1986:2). Deriving the parameters of what constitutes 'environmental harm' from the law tends to subvert an explication of the kind of politico-economic conditions which allow, for instance, cyanide to be used in the extraction of minerals, plutonium to be used in the construction of nuclear weapons, dioxins to be employed in the manufacture of paper, and so forth. When it is considered that a substance such as plutonium has a half-life of 24 000 years, it can be deduced that social scientists who debate the merits of this or that law designed to ensure its 'safe' handling, have neglected to understand that the most ecologically benign (and socially responsible) solution would be the creation of a society which had absolutely no use for this nor any other kind of hazardous substance (*Cutting Edge*, ABC TV 23 January 1996).

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3 In the decade spanning 1983 to 1993, clearing regulations facilitated the removal of over 5 million hectares of woodland for agricultural related activities (*Landline* ABC TV 11 July 1995).

It might be objected that given the amount of industries that rely on the production of hazardous waste to produce commodities which 'benefit' society (or certain sectors therein), it is highly unreasonable to expect an *immediate* halt in its production. This, of course, is a valid criticism. Clearly, if hazardous waste is being produced (or crude oil is being transported or native vegetation is being cleared) then it is far preferable to have legal mechanisms in place which attempt to regulate its handling (or transportation or removal) than to have no regulatory mechanisms at all. However, it is also fair to say that with the further development of the productive forces of systems such as capitalism, the use of, say, cyanide by the mining industry or chlorine by the pulp and paper industry, becomes not 'a' means of producing commodities but *the* means by which industry can keep 'costs down', 'profits up' and 'expansion of operations' an economic possibility. In other words, the emphasis on regulating inherently anti-ecological activities such as hazardous waste production, clearing native vegetation, transporting oil, emitting greenhouse gases and the like, may, over time, be seen as a goal in itself rather than a *means* to a much larger objective — namely, the shift toward social relations based around ecologically sustainable production techniques (see Daly and Cobb 1989; Toke 1995). A significant drawback of analysing environmental harm from within a mainstream perspective is that the programs implemented by this school of thought (pollution permits, environmental audits and the like), may indeed give way to less ecologically harmful production techniques, but these *in themselves* will not be sufficient to yield ecological sustainability whilst retaining the component of material economic growth. As Weisberg (1971:145) comments:

> While the maneuverings and roles of the various parts themselves are of fantastic concern, it is about the whole that the ecology of capitalism is concerned: not simply better government, more responsible business, better emission standards, or a lowering in the depletion allowance. The nature of corporate capital is somewhat like the body of an amoeba: if a part is cut off, the flow of protoplasm is directed to form another appendage. As long as it is attacked piecemeal, it will continue to flourish and refurbish the lost parts with new extensions. The whole, in this case, is more than the sum of its parts.

In a recent attempt to refute the incompatibility between 'free'-market production and ecological degradation, Grabosky (1994:437) has argued 'that just as market failure has produced environmental despoliation, so too can market forces provide efficient means of environmental protection'. Citing companies such as Du Pont which has 'established a subsidiary company for toxic waste management services', and Dow, Bayer and Hoechst, which 'are developing methods for recycling plastic' (434), in addition to companies such as the 'U.S. computer manufacturer, DEC' which has recently 'converted fifteen tons of recycled computer plastic into roof tiles for two McDonald's restaurants in Chicago' (428), Grabosky declares that '[p]rofit and environmental protection, far from being mutually exclusive, can be part of the same package' (1994:434).

This kind of thinking, however, tends (once again) to overlook the structural embeddedness of the problem in hand. Put differently, it can be said that the parts of the problem have been mistaken for the whole. For example, any 'progress' that Du Pont has made in relation to the handling and disposal of hazardous waste is seriously abraded by the fact that 'since the discovery of the Antarctic ozone hole in 1985 [this same company] has produced $US 5.27 billion worth of ozone destroying chemicals worldwide' (Greenpeace Press Release 5 December 1995). Similarly, McDonald's and DEC may, as Grabosky (1994:428) puts it, be 'able to boast of an enhanced 'green image' ' as a result of their 'collaborations'. However, the creation of this 'enhanced green image' also functions to subvert the fact that the land which supports the cattle which eventually fill McDonald's' hamburgers is presently acquired through the destruction of virgin rainforest and the displacement of indigenous peoples such as that occurring in the Amazon

basin.[4] In 1994 — eight years after McDonald's instigated a law suit against two British environmental activists who co-authored the fact sheet, 'What's wrong with McDonald's? Everything they don't want you to know' — company representatives issued the following statement: 'Our company is obviously an integral and *inevitable* part of an economic system which exploits people, animals and the environment in order to make and increase profits' (emphasis added). It is difficult to understand how McDonald's' recycling efforts can be viewed favourably given the 'inevitability' of the company's need to damage the environment. In the case of DEC, their recycling efforts (although preferable to not recycling) are vastly overshadowed by the environmental destruction wrought via the burning of oil to manufacture the plastic necessary for each of its computers, and, more significantly, by that resulting from the techniques used to locate and extract this oil in the first place. Witness, for instance, the activities of Texaco in Equador or the ecological devastation levied on the Niger Delta in Nigeria by the Shell Petroleum Development Company (see Goodall 1994; Kane 1995; Bruno 1996).

The point that emerges here — and it is one that Grabosky (and others) seem to overlook — is that engaging in ecologically destructive 'behaviour is not only functional for the operation of capitalist market systems but also necessary for actors wishing to survive and prosper in these systems' (Dryzek 1992:21). In other words, efforts such as recycling, producing 'environmentally friendly' products, developing 'improved' waste management techniques, using unleaded petrol — all the things that Grabosky's 'Green Market' model is logically capable of producing — will most likely result in merely a 'greener' version of capitalism rather than a truly ecologically sustainable society.

Another problem with studies such as Grabosky's is that the concept of environmental harm is conceived in terms of 'pollution', thus making the object of law the enforcement of 'pollution-control strategies' (Farrier 1990b:318). Viewing environmental harm in this manner furthers 'the popular misconception of environmental issues as being essentially waste disposal problems' (Russ and Tanner 1978:5). The Environment Protection Authority's annual list of charges and prosecutions stand as stark testimonies to the fact that this misconception is still deeply ingrained in the minds of legislators and/or administrators.[5] When commentators focus only on those activities which the state defines as environmentally harmful, practices which are not normally conceived (let alone legally recognised) as constituting 'pollution' have a far greater chance of remaining beyond the bounds of (formal) critique. Examples of these activities include: clearfelling old-growth forest; constructing dams; building highways; implementing mass-irrigation programs; using

4 For a comprehensive account of how McDonald's impacts on ecology and human well-being go to 'McLibel Case' at http://envirolink.org/mcspotlight/case/index.html. This site covers all aspects of what has become 'the longest civil trial in British history'. For statements by witnesses on McDonald's' relation to cattle-ranching go to http://envirolink.org/mcspotlight/issues/environment/index.html#cattle. For an excellent discussion concerning the relation between the consumption of hamburgers and deforestation in Central America, see Nations and Komer (1987). This piece also serves to demonstrate the profound link between micro (individual) forms of ecological violence (ie, eating a hamburger) and macro (state/industrial) forms of ecological violence (ie, destruction of rainforest).

5 A recent nationwide survey from the United States concerning the prosecution of environmental crimes indicates that the 'most common environmental offences prosecuted involve illegal waste disposal [and that] the most common substances involved in these offences are hazardous wastes' (National Institute of Justice 1994:1). For further corroboration of this trend, see Hammett and Epstein's (1993) report on the Los Angeles County Environmental Crimes Strike Force.

drift-nets and/or longlines; and constructing private dwellings and public offices which dramatically alter the natural topography of the land and ground water run-off, and so on.

Of course, the roots of these kinds of harm take hold due to particular political, cultural and economic arrangements — and indeed this is precisely where criminologists need to look for resolutions to the environmental crisis. As things stand though, commentators such as Grabosky allow criminal law to dictate the objects of criminological inquiry to an extent where the role of the social commentator becomes that of 'legal technician'. What his study fails to grasp is that even if the 'technicians of law' or the 'managers of markets' manage to hit upon a formula for preventing all instances of legally proscribed *pollution,* this would have little or no effect on the quality of nonhuman nature. This is because what is called pollution by legislators and what is called ecologically destructive by most ecologists are often two entirely different things. Support for this contention can be found in the conflict over what constitutes 'environmentally harmful' forestry practices. On the one hand, clearfelling and woodchipping old-growth eucalypt forest has been viewed by successive Australian governments and the bodies that have been called upon to produce 'environmental impact statements' as both economically advantageous and 'ecologically sustainable' (see Parliament of the Commonwealth of Australia 1977; Tasmanian Woodchip Export Study Group 1985). On the other hand, this view greatly conflicts with the majority of reports submitted by ecologists and various environmental organisations to the Forest and Timber Inquiry conducted in the late 1980s and early 1990s — the largest inquiry into forest management undertaken anywhere in the world (see Pittock 1989; Australian Heritage Commission 1990). These reports contend that present forestry practices are resulting in the simplification and fragmentation of habitat on a scale previously unheard of (whether this be in relation to the thousands of years of Aboriginal fire burning practices or early colonial activities) (see Halsey 1997).

One final problem with Grabosky's approach to the issue of environmental harm (and of mainstream analyses more generally) is that advocating a capitalist market means supporting — in one way or another — the relation between owners of the means of production and sellers of labour power. As shall become apparent shortly, because this relation is founded on compulsion and domination, it is unacceptable both from the standpoint of critical criminology and an eco-human rights view of human/ecosystemic interaction (see Bookchin 1986; Pepper 1993a).

In light of the above review it is clear that the mainstream approach to environmental harm is in danger of entrenching an anti-ecological regulatory culture. Specifically, the problem of environmental harm seems, for the most part, to have been constructed around the question: How can society best regulate the *continued* existence of toxic and ecologically destructive activities? rather than: What kinds of politico-economic arrangements permit these toxic and ecologically destructive activities to exist at all? To date, criminological thought has created a 'critical vacuum' such that the 'regulation' of the above (and other) practices is conceived as more important for social well-being than advocating their wholesale *abolition.* Problems such as 'pollution' and 'land degradation' have, through various mechanisms, been made synonymous with the actions of *individual* industries rather than with the way in which particular modes of production are structurally compelled to augment a decidedly anti-ecological nexus between its human constituents and nonhuman nature.[6] The reforms advocated by the mainstream have thereby been premised

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6 As Franklin (1990:92) has incisively observed, 'The pathology has been relocated from the system to the

on the idea that environmental harm is something that results from the dysfunctioning of the various 'defective' parts of an otherwise 'healthy' system, rather than that which results from the anti-ecological operations of a collective whole (that is, modes of production that need to constantly expand in order to survive). A good example of this can be found in Norberry's comments concerning the nature and direction of environmental regulation in Australia:

> New and harsher penalties are being introduced or contemplated, as are more sophisticated penalty structures. Nevertheless, their presence on the statute books will achieve little if regulatory cultures remain unchanged, if enforcement guidelines are absent or inconsistently applied, if training of enforcement officers in criminal investigation is not provided, and if judicial approaches to sentencing environmental offenders continue unaltered (1993:99–100).

Clearly, the problem with this line of thought is that it assumes 1) that present legal mechanisms actually target the most injurious kinds of harm and 2) that the types of conduct required by existing economic tenets do not inevitably (over the longer term) lead to environmental ruin. Put simply, the problem is not just 'the regulatory culture' or an 'inconsistency in the application of enforcement guidelines', so much as the intrinsically anti-ecological nature of the phenomenon being, or as Grabosky and Braithwaite (1986) might argue, *not* being regulated. It is contended here that there is little point establishing environmental norms to coincide with a conception of ecological sustainability that has itself been erected to *augment* the process of capital accumulation. That is, if the main objective of 'modern' society is the creation of the conditions for *material* wealth, and the primary means of achieving this is held to be a *continuation* of economic growth, which, in turn, involves the mass extraction, processing and commodification of the natural environment to provide basic goods and services, it follows that legal notions of environmental harm must predominantly reflect, not impede, the interests of capital. What this would seem to indicate is that the most serious instances of environmental harm are not those which *violate* certain conduct norms, but those which exhibit near *full compliance* with existing environmental and social standards. In more familiar terms, it is not deviance from, but adherence to, legal norms that presents itself as problematic in the field of environmental harm.

Empirical support for this last contention can be generated on at least two interrelated fronts. The first of these derives from the relatively simple observation that each and every individual — regardless of some 'deviant' or 'criminal' status — participates in the process of environmental ruin every day through such seemingly 'harmless' activities as driving cars that emit greenhouse gases, using public transport which receives its power from the burning of coal, wearing clothes made from cotton which is well known to be the most ecologically disastrous fibre on the planet, living in residences that dramatically alter the topography of the land and natural flow of ground-water, wearing gold jewellery which has been mined via the use of toxic chemicals such as cyanide and arsenic, or using computers where the main plastic components have been moulded via the burning of oil. On this account, environmental harm becomes not simply what uncaring individuals do or what big business does, so much as a deeply embedded (or structural) component of daily life. To ignore this situation, means that what legislators deem to be environmentally

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individual. It is not law reform, still less criminal law reform, that will advance environmental quality, but fundamental changes in political and economic priorities.'

criminal may be taken as the whole picture (or for the most serious harms) rather than *part* of the picture (and thus necessarily only a small portion of the harm in question).

The second reason for moving away from legalistic conceptions of environmental harm has to do with the fact that the state itself can be shown to be the perpetrator of the greatest ecological destruction due to its refusal (or incapacity) to either sanction the most environmentally destructive activities or facilitate a move toward a society that does not have at its core the greatest possible exploitation and commodification of nature. Legal activities which result in mass ecological harm include: clearing native woodlands and using pesticides and herbicides for agricultural purposes; instigating the process of erosion and rendering land infertile as a result of unsustainable farming techniques; depleting the supply of water and native animals in Australia's largest rivers via mass irrigation; burning fossil fuels for the operation industry when sustainable alternatives such as solar, biomass, wind and geothermal energy are readily at hand; increasing the rate of extinction of animal and plant species as a result of the expansion of human domains; clearfelling native and/or old-growth forest for paper products; using longlines, driftnets and seabed trawling by the fishing industry; using toxic chemicals such as cyanide to extract and process certain minerals by the mining industry; and so on (see Breuer 1978; Southwick 1983; Goudie 1986; Reeve 1988; Neville 1990; Conacher and Conacher 1994; Kirkpatrick 1994). Once the extent of state complicity in perpetuating environmental destruction has been recognised, it becomes a highly dubious exercise to continue working within the legal categories of environmental harm that this same state articulates through various statutes.

With the exceptions of Franklin (1990), Seis (1993), Birkeland (1995) and Cassell (1995), commentators concerned explicitly with crime and violence have remained predominantly silent about the kinds of harmful processes listed above.[7] As is apparent from the preceding review, there has been little attempt from within traditional analyses of environmental crime to overcome the considerable disjunction between what is officially labelled environmentally harmful, and what, from the point of view of ecology, can be said to constitute the greatest source(s) of ecological harm. What is required, therefore, is a criminological framework that enables an explication of why this situation pertains — a framework that is able to elucidate the power relations which function to ensure that many of the most injurious environmental harms are labelled anything other than 'criminal'. To this end, it has been the adherents of radical criminology who have attempted to shrug off the 'theoretical straitjacket' of past approaches to 'the crime problem' in favour of a criminology that is materialist in method and critical in design (see Taylor et al 1973; Quinney 1974; Chambliss 1974; Inciardi 1980; Reiman 1982; Box 1983; Greenberg 1993; Barak 1994a:159–267). As such, it is this school of thought, and the implications for environmental degradation of conceiving environmental harm from within an eco-human rights framework, that will constitute the focal points below.

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7 The author acknowledges the excellent work of Beirne (1995) who has explicated the absence of nonhuman species (and the pains they suffer at the hands of human beings during the course of committing certain crimes) from criminological discourse to date. The present paper attempts to go beyond Beirne's intradisciplinary concern with nonhuman animals toward an interdisciplinary approach which takes stock of the harm levied on the ecosystems which human and nonhuman beings depend on for their survival. His work nonetheless stands as a long overdue effort to usher in the beginnings of a less anthropocentrised (or, more accurately, androcentrised) criminological outlook.

Critical criminology — towards an eco-human rights approach

Critical criminology, although by no means an entirely homogenous body of thought (see Taylor et al 1975; Scraton and Chadwick 1991; MacLean and Milanovic 1991; Nelken 1994; Hogg 1996:44), conceives crime (and conceptions of crime) to be an outgrowth of the inherently inequitable conditions of the present social system and, therefore, that what is needed is not 'more reform' but a dismantling of the social and economic structures perpetuating these conditions. More than this, the critical approach attempts to explicate the idea that in order to survive, social systems such as capitalism need many of the most injurious kinds of harm (environmental degradation, imperialism and the like) to be interpreted ideologically not as the structural bulwarks of western political economy, but as isolated instances of 'market failure' or 'bad social policy'. Accordingly, the radical or 'critical' brand of criminological inquiry seeks to move beyond a strictly legalistic approach to the study of crime in order to ask how law is constructed, what types of practices the law works for and against, and why the law can be seen to facilitate certain harms over others. In a more specific manner, Pottieger (1980:260) has stated that:

> the two theoretical characteristics of radical criminology are the arguments that (1) crime and criminal justice problems have a logically inherent relationship to the fundamental socio-cultural structure of the society in which they occur and, (2) therefore, they are problems which can be solved only by fundamental (ie, 'radical') changes in that basic structure. 'Reform' of the system is necessarily inadequate; the very nature of the system itself must be changed because as it is now constituted, crime and criminal justice problems are an inseparable part of its continuing operation.

In addition to the two theoretical characteristics listed above can be added another — namely, radical criminological inquiries reject the notion that their subject matter should be limited to that which the state defines as harm. In 1970, two of the leading exponents of this view published an article which argued for a reconceptualisation of 'crime' to encompass those practices which prevent the realisation of certain basic human rights. As stated by these authors:

> All persons must be guaranteed the fundamental prerequisites for well-being, including food, shelter, clothing, medical services, challenging work and recreational experiences, as well as security from predatory individuals or repressive and imperialistic social elites. These material requirements, basic services and enjoyable relationships are not to be regarded as rewards or privileges. They are rights! (Schwendinger and Schwendinger 1975:133–134).

Under this view, 'The State and legal apparatus, rather than directing ... investigations' becomes 'a central focus of investigation as a criminogenic institution ...' (Platt 1975:103). Essentially, a critical human rights approach subordinates analysis of the legal obligations that the individual must fulfil, in order to ask how and why various state armatures (capitalist or otherwise) have failed to provide the individual with the kind of social conditions in which gender, material, cultural, and ultimately social, equity can prevail. By welding the notion of 'unfulfilled human rights' to the concept of crime it becomes possible to place under the rubric of criminological analyses such phenomena as 'imperialism, racism, sexism and poverty' — occurrences which, although the source of considerable harm, would otherwise remain logically precluded from such inquiries (Schwendinger and Schwendinger 1975:137). In short, criminal conduct — from a critical human rights position — becomes equated to the actions of those agencies, structures, and bastions of power that prevent the universal implementation of these rights.

Although an important step forward, the critical human rights approach to the concept of harm exhibits one significant — yet not insurmountable — shortcoming. Specifically,

in the haste to critique those practices and social conditions which undermine 'the fundamental prerequisites for well-being' of '[a]ll *persons*', the critical human rights approach omits to draw the connection between the conditions which degrade human beings and the conditions which degrade *the natural environment* (see Elias 1991; Cohen 1993; Barak 1994b). Put differently, a critical human rights criminological framework needs to look not just at the way in which human beings are exploited in the production of various goods and services, but how this same production process involves the unsustainable commodification and/or exploitation of nonhuman nature as well.

Incorporating an analysis of the way in which the productive forces of capitalism (and certain other politico-economic regimes) damage the environment — as opposed to examining the manner by which certain social systems levy harm on human beings only — is vitally important to those criminological approaches attempting to redefine the manner in which social inquirers (and society writ large) view the problem of (environmental) harm. Clearly, the basic 'prerequisite' for such things as 'food, shelter, clothing, medical services' and so forth, is a social system capable of interacting with nature in a manner that ensures the existence of unspoiled lands, non-toxic seas and unpolluted air. Without sufficient quantities of each of these three elements, notions such as 'human rights', 'crime' or 'harm' would be nonsensical due to the trite (but often overlooked) fact that those who ascribe meaning to these concepts (that is, human beings) would themselves be unable to exist. As Cronon (1990:1124) has observed:

> What Marx labeled 'relations of production' might in an ecological context better be seen as relations of *consumption*, since all human labor consumes ecosystemic energy flows in the process of performing physiological and mechanical work.

The notion of 'harm' submitted here, therefore, is one that conceives the well-being of nonhuman life to be an *indispensable* prerequisite for human well-being. Specifically, it is contended that the theoretical insights of critical criminology can be extended to the problem of environmental harm by moving beyond a wholly anthropocentric conception of what it is to be human (freedom from sexism, imperialism, poverty, racism and so on), toward an *ecocentric* conception that views the realisation of these human rights as inextricably bound to the well-being of nonhuman life as well (freedom from modes of production which engage in the greatest possible despoiling of ecosystems). The objective now will be to outline in greater detail the main points of convergence between the pursuit of social justice by the human rights movement and the pursuit of ecological well-being by environmental groups.

While there are several studies that could be of help in this regard (Gormley 1976; Norton 1982; Waks 1996) it is the work of Nickel and Viola (1994) that will be employed here. Writing in the context of the human rights abuses and environmental destruction taking place in Brazil, these authors suggest that the environmental movement can contribute at least three key ideas to those working in the area of human rights and social justice. In the first instance, environmentalists can attempt to persuade the human rights movement to 'add a general right to a safe and healthy environment to the standard lists of rights — and to take it seriously as part of its agenda' (1994:266). This is a crucial point. As it currently reads, the Universal Declaration of Human Rights (UDHR) makes no mention of the entity which sustains all life. Nonhuman nature (or the 'natural' environment) is simply assumed to be something which will go on existing no matter what human beings or nation states do to it in the course of realising certain of their rights. A possible exception to this occurs in Article 22 where it is stated that '[e]veryone ... is entitled to realisation, ... through national effort and international cooperation and in accordance with the organisation and *resources* of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality' (emphasis added). However,

here it can be seen that the word 'resources' is mentioned only in so far as these stand as a means to satisfy human (that is, anthropocentric), or more accurately, *man's* (that is, androcentric) material requirements. While various environmental agreements have been devised in their own right (see Sand 1992), this nevertheless means that the declaration referred to throughout most of the 'civilised' world as the 'definitive' statement on human rights, fails to give adequate or explicit recognition to the importance of nonhuman nature. Accordingly, there is a real need for this declaration (if only initially for rhetorical or symbolic purposes) to clearly articulate the right of all peoples to unpolluted ecosystems. As noted by Nickel and Viola (1994:266), the African Charter for Human and People's Rights (1981) has already incorporated this kind of article and the US — through the auspices of the American Convention on Human Rights (1978) — is soon to do the same.

The second way that human rights commentators can benefit from environmental knowledge is by appreciating that humans are '*part of nature*' (Nickel and Viola 1994:267) and not some kind of abstraction living above or outside the world's ecosystems (see Devall and Sessions 1985; Eckersley 1992; Steverson 1994). This leads to the explicit realisation that human interests and rights at the individual and collective levels (such as freedom from want and the right to shelter) can only be maintained over the longer term via activities (that is, social relations) which work *with* nonhuman nature rather than against it. So, for example, while the mass extraction, refining and consumption of oil may seem, under certain conditions, to be 'integral' to the maintenance of certain human rights (such as the right to work), an eco-human rights position would argue that the damage which these processes levy on land, sea and air (in addition to the death and injury dealt out to millions of nonhuman species) is ultimately unsustainable. In this way, the 'choice' which industrialised and developing countries purport to have over whether or not to exploit nature solely for human ends, is exposed under an eco-human rights perspective as an *illusion of choice*. That is, an eco-human rights approach understands that *if* human beings desire to exist over the longer term, then there is in fact *no* choice as to whether decisions should be tailored according to the requirements of human and nonhuman entities. Such thinking emanates from the 'five basic assumptions' underlying an ecocentric (as opposed to a strictly anthropocentric) perspective — namely, that '1) Everything is connected to everything else; 2) The whole is greater than the sum of its parts; 3) Meaning is context dependent; 4) Process has primacy over parts; [and] 5) Humans and nonhuman nature are one' (Merchant 1990:59–60).

From these basic tenets it can be deduced that any one decision concerning human rights taken at any point on the earth by a particular individual, community or nation, has implications (however small) for the ongoing quality of nonhuman environs of all those other individuals, communities and nations around the globe (who will, of course, be simultaneously involved in the aforementioned decision-making process in spatially and temporally distinct ways). The decision, for instance, to clearfell massive areas of forest in one part of the world, decreases the level of biodiversity existing on earth *as a whole* (and not simply for the human and nonhuman inhabitants of the region where the clearfelling takes place). Recognising that the earth's human and nonhuman dimensions are characterised by *interrelatedness* not separateness is therefore of fundamental importance for the lived quality and duration of basic human rights.[8] Put differently, the interrelatedness of

8 Steverson (1994:76), after Odum (1983), outlines 'five levels of organisation with which ecological science is concerned'. These are '(1) population (a group of individuals of any one kind of organism), (2) community (all of the populations occupying a given area), (3) ecosystem (a community and its abiotic environment), (4)

all things (human and nonhuman) requires that notions of human rights be broken down into their social *and* ecological dimensions. The destruction of nonhuman nature, therefore, is considered here to be at one and the same time the destruction of that which sustains all life, and by default, the desecration of the conditions within which human rights can be meaningfully manifested. Realising that issues of social justice are equally important as — *and inextricably bound to* — issues of ecology, may, over time, mean that 'such economic rights as a right to food, to a decent standard of living, or to employment [will come to] be implemented in ways that are environmentally sound and sustainable' (Nickel and Viola 1994:267).

The third and final way in which the human rights movement can benefit from ecological knowledge is through questioning whether nonhuman entities such as dolphins, old-growth forests, rivers, microorganisms, swamps, and so forth, have a moral worth in and of themselves — that is, whether there is a sound case for respecting nature irrespective of its instrumental value for human beings (see Elliot 1995). Ecologically, the collective impact of privileging human rights and interests above the needs of all other species has led both to the global destruction of nonhuman ecosystems and the indigenous forms of knowledge that such systems harbour. Accordingly, human rights commentators need to acknowledge that preserving nonhuman nature is a worthwhile activity independent of the economic, political or spiritual benefits that such preservation may or may not bring to human beings. More specifically, human rights commentators need to examine the reasons for the frequently *inverse* relation between the forces that allow for the maintenance of human rights and the forces which degrade nonhuman nature. For instance, it is clear that the forces resulting in the mass simplification and fragmentation of old-growth forest habitat (forces such as 'the market hand', 'increased consumer demand', 'employment of latest technologies', 'export agreements' and 'integrated harvesting techniques') are also touted as the means by which to generate material wealth and increase 'global competition'. Of course, these two factors, in turn, are held by the majority of governments and legislatures to be the key components *par excellence* for the realisation of certain basic human rights.

The same kind of situation pertains in relation to the rights of the agricultural industry to utilise fresh water from Australian rivers for the irrigation of crops. In Victoria, for example, it has been shown that this right (which includes the right to nutrition, work and 'social development') results in the depletion of up to 75per cent of the water in Australia's largest river. This dramatically depletes the oxygen content of the water, which, in turn, has led to extensive outbreaks of toxic algae resulting in the poisoning of native aquatic animals and contaminated water supplies on a continent which has long been recognised as the driest on earth. However, since current conceptions of human rights privilege *human* well-being (or fail to see the link between human and nonhuman well-being), the impact on nonhuman nature — in this case the river Murray and the nonhuman species which dwell within and around it — becomes, as in the previous example, an 'unavoidable' component of modern existence.

Internationally, a similar set of problems concerning the need to respect nonhuman nature and the desire to fulfil certain human rights in a particular manner can be seen in the Malaysian government's commitment to build the world's second largest dam, known as the Bakun, in Borneo. It has been estimated that this hydroelectric dam will result in the

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biome (regional biosystems distinguished by major vegetational types or landscapes), and (5) biosphere or ecosphere (the Earth and all its organisms)'.

permanent flooding of about 1.5 million hectares of Borneo's rainforest (an area equivalent in size to about one third of Tasmania). Presently, the rainforest is the home of countless nonhuman species and approximately 9000 indigenous human inhabitants. On the one hand then, there is a push by the Malaysian government toward allowing 'development' and 'social progress' to take its course and to service the human right to 'share in scientific advancement and its benefits' (UDHR:Article 27). Moreover, it is also clear that the construction of such a dam provides many people with an opportunity to fulfil their right to work, which, in turn, functions as a means for these people to fulfil their rights to 'food, clothing, housing and medical care and necessary social services' (UDHR:Article 25). On the other hand, though, meeting these rights (which amounts to fulfilling the 'modernised needs' of Malaysia's burgeoning market economy) has a devastating impact on the nonhuman environment and the rights of indigenous peoples living in the forest. There appears, in short, to be a decidedly inverse relation between the means used to uphold human rights and the ends or outcomes generated for a great many beings — human and nonhuman. In light of this example — and many others like it — it would seem essential that the ecological impact of securing certain basic human rights be taken account of in the work of those concerned with developing the conditions of social justice. Nickel and Viola (1994:267) suggest that 'human rights activists — and particularly those who are opposed to population control measures — need to begin worrying about the costs to nature of respecting the rights of billions of humans [to have families]' — a right presently upheld in Article 16 of the UDHR.

In addition to the three ways by which human rights commentators/activists can benefit from ecological knowledge, Nickel and Viola (1994) outline six broad senses in which the human rights movement can contribute to environmental matters. In the first instance, governments can uphold the rights of individuals to protest against certain environmentally damaging practices and protect such people from persecution. As these authors comment '... rights to life and liberty protect against extrajudicial execution, torture, and incarceration ... [P]olitical rights such as freedom of speech, freedom of peaceful assembly, and freedom of political participation protect the rights of environmental activists to pursue their goals through political activism' (Nickel and Viola 1994:268). In Australia, there are many instances where environmental protesters have been denied these rights. In November 1991, 160 people were arrested in Sydney for dissenting over the construction of an outfall sewage system on the New South Wales coast. In April 1995, 20 people were arrested for protesting against the clearing of native bushland for the construction of Sydney's M2 freeway. Around this time, Australian Greens Senator Bob Brown and Christine Milne were incarcerated for protesting against the construction of a road through the Tarkine wilderness in Tasmania. At the international level, the month of May 1996 brought what has been described as 'one of the worst confrontations in Germany's post-war history' (*ABC News* 9 May 1996). This involved the deployment of 10 000 police to control the behaviour of just 3000 protesters (a ratio of more than three police for every one citizen) who were protesting against the first of 110 shipments of nuclear waste being returned to Germany from France over the next eight years.

On a second count, the environmental movement can champion the human rights emphasis on 'due process of law' to ensure that developers (such as Keith Williams and his project at Hinchinbrook in the tropics of Queensland) and multinationals (such as BHP and their activities in Papua New Guinea) do not use their power and prestige in a manner that trangresses certain environmental guidelines. This does not mean that efforts to prevent such projects should be abandoned. Nor does it mean surrendering to the power of multinationals. Rather, demanding due process of law is an interim device that can be used to either 'buy time' for environmental groups to prepare their case or to deter prospective

investors from going ahead with certain developments (such as in the case of the withdrawal of Japanese interest in the Wesley Vale pulp mill in Tasmania; see Toyne 1994).

Third, environmentalists need to uphold the right of indigenous peoples to self-determination. This is important because 'indigenous peoples live close to nature ... and are models for sustainable use of natural resources and [are] repositories of knowledge about nature that modern science may not have' (Nickel and Viola 1994:271). In addition, preserving the rights of indigenous peoples frequently guarantees the long-term existence of many of the world's remaining rainforests and unspoilt habitats — essential entities for the long-term well-being of human and nonhuman species alike.

Fourth, the environmental movement can champion the human right to education. The principal reason for this is that lack of education is a catalyst for ignorance. And ignorance, write Nickel and Viola (1994:271), often functions as 'a barrier to the realisation of human rights because uneducated people often lack knowledge of what rights they have and how to act to defend them'. In a related manner, '[i]gnorance is a barrier to environmental progress because uneducated people often lack knowledge of environmental problems and issues, how to avoid toxic substances, and how to live in ways that promote health'. This is not to say that European knowledge of ecosystems should be heralded as the 'antidote' to such ignorance — indeed there is an overwhelming amount of evidence to support precisely the opposite view (see Carson 1962; Weisberg 1971; Meszaros 1972; Markham 1994). However, it is important for people of all cultures to be informed of the specifically 'modern' ways in which human conduct can lead to environmental ruin — 'modern' in the sense that at no other time in history have the people of different nations had the ability to impact (intentionally or otherwise) upon the lived quality of the human and nonhuman dimensions existing within other continents (see Beck 1992:21–22, 38–41). Acid rain and pollution of coastlines (including parts of Antarctica) are just two instances of intercontinental ecological harm.

When discussing such things as 'the need to champion the right to education' it is essential to realise that what constitutes 'relevant knowledge' is — more often than not — intimately related to the production of those discourses capable of developing or extending a given nation's ability to accumulate and distribute *material* wealth on behalf of each citizen. According to the UN General Assembly, the most efficient way to do this is through extending the processes of industrialisation — meaning that so-called first world countries encourage developing/third world countries to give up their 'backward' or 'primitive' ways and modernise all aspects of their existence. Only in this way will it be possible for nations to uphold basic human rights — rights to work, rights to education, rights to a family, rights to a fair trial, rights to property and so on. Eurocentric thinking has resulted in a somewhat contradictory commitment by the United Nations to human rights. For instance, Article 3 of the 'Declaration on Social Progress and Development' (proclaimed in December 1969) states that:

> The following are considered primary conditions of social progress and development:
>
> a) National independence based on the right of peoples to self-determination;
>
> b) The principle of non-interference in the internal affairs of States;
>
> c) Respect for the sovereignty and territorial integrity of States;
>
> d) Permanent sovereignty of each nation over its natural wealth and resources;
>
> e) The right and responsibility of each State and, as far as they are concerned, each nation and people to determine freely its own objectives of social development, to set its own priorities and to decide in conformity with the principles of the charter of the

United Nations the means and methods of their achievement without any external interference;

f) Peaceful coexistence, peace, friendly relations and co-operation among States irrespective of differences in their social, economic or political systems (United Nations 1994:503–504).

Here, then, is an explicit pronouncement that different nations can choose the means and methods of social development that they see fit — whether this be based around tribal, feudal, socialist, capitalist or some other kind of social organisation. Here also is the pronouncement that different cultures have the right to view themselves as superior to and independent of nature (as is the case in most Western countries) or as inextricably entwined with nonhuman nature (such as in Tibet, Papua New Guinea or parts of the Amazon and Borneo rainforests).

In contrast to this commitment to self-determination, Part 3 Article 17 of the same Declaration states, amongst other things, the following:

... The achievement of the objectives of social progress and development requires ...

a) The adoption of means and measures to accelerate the process of industrialisation, especially in developing countries ...; [and the] development of an adequate organisation and legal framework conducive to an uninterrupted and diversified growth of the industrial sector ... (United Nations 1994:509).

Such imperialistic overtones are a graphic reminder that all declarations — whether they concern political, criminal justice, medical or environmental matters — are far from being value neutral. That is, the people who author such declarations have particular conceptions of 1) the way in which nations and their peoples should conduct themselves, 2) what is worth striving for, and 3) how best to achieve certain objectives. It is therefore of paramount importance to acknowledge the particular *Weltanschauung* that underpins the various human rights declarations — especially in view of the fact that there is much evidence to suggest that the majority of human-induced environmental problems and the subsequent impact on human rights, are directly related not only to the industrialisation of the West, but to the way in which the members of these countries have imposed their model of what constitutes 'social development' and 'social progress' on practically all nations (see Drucker 1985; Tuntawiroon 1985; Martinez-Alier 1993; McGarrigle 1994; Gare 1995).

A fifth way that the environmental movement can benefit from a commitment to human rights is by championing the right to nutrition and social justice. There are two basic reasons for this. 'One is that hungry children do not do well in school and are likely to drop out of school. Thus the right to education is unlikely to be fully realised without taking steps to eliminate hunger. The second reason is that hunger and lack of the necessities of life makes people desperate and willing to degrade the environment' (Nickel and Viola 1994:272). In addition, environmentalists — especially those of the 'deep' ecological variety — need to realise that the commitment to such things as wilderness preservation can have a highly adverse effect on issues relating to social justice. Guha (1989:75) cites the example of 'Project Tiger' in India where '[t]he designation of tiger reserves was made possible only by the physical displacement of existing villages and their inhabitants'. Here, the decidedly privileged nature of the groups responsible for conceiving this and other wildlife parks — 'a class of ex-hunters turned conservationists belonging mostly to the declining feudal elite and representatives of international agencies, such as World Wildlife Fund' — 'has resulted in a direct transfer of resources from the poor to the rich' (Guha 1989:75). To this extent, environmental commentators need to realise that attempts to 'fix' environmental problems (such as declining species) via the forced appropriation of

land often leads to ecological dilemmas being superseded by acute social injustices (such as lack of food and shelter).

Sixth, and finally, environmentalists 'may find it useful to create a prominent international declaration of environmental norms analogous to *the Universal Declaration of Human Rights*' — a process which 'is currently underway' (Nickel and Viola 1994:272–273). Although the initial effects of such a declaration would probably be more symbolic than real, Nickel and Viola (1994:272) contend that subsequent to widespread acceptance, 'attempts can be made to embody the general environmental duties that it declares in multinational treaties'. Of course, there is no room for an unbridled optimism that such a declaration would go very far toward solving environmental problems. Indeed, if the degree to which the United Nations follows through on its obligations concerning the UDHR is any kind of indication, then it is difficult to envisage a similar declaration on the environment making any real inroads into the kinds of politico-economic forces which make it necessary for human beings to degrade the ecosphere. Speaking from within a US context, Elias (1991:257) has written that '... the newest generation of human rights — the rights to peace, development, and a clean environment — ... clashes with the American system since this generation would condemn our persistent and far-flung military and economic interventionism, reject our vast nuclear stockpiles, and indict the corporate pollution of our environment'. With the possible exception of nuclear stockpiles, it needs to be remembered that this kind of situation pertains in numerous other countries as well.

In light of these six ideas, it is clear that securing the conditions whereby people can safely and meaningfully reflect on their position in the world and about how their actions contribute to environmental decay, depends — to a marked extent — on the ability to secure certain basic human rights (such as the right to nutrition, shelter, education, clothing and so on). The critical point to be grasped, though, is that *how* human rights are secured is every bit as important as the fact that they are being pursued at all. That is, if these rights are realised in a manner that undermines the world's ecosystems (as is currently the case), then it seems only logical that the day to day quality of these rights will be systematically eroded over time. This is why it is essential that criminologists and other social commentators inject a shade of green into their work on human rights. More specifically, the radical humanising of 'crime' and 'harm' brought about by the writings of such scholars as the Schwendingers, Quinney (1977), Young (1979), Hulsman (1986), Scraton and Chadwick (1991), Greenberg (1993), which has been recast in such postmodern criminological collections as Gelsthorpe and Morris (1990) and Nelken (1994) and then extended in the constitutive thesis of Henry and Milovanovic (1996), needs to be met by a radical *ecologising* of these concepts in order to ensure that the social domain desired by these schools of thought is both egalitarian *and* ecologically sustainable in design. In short, critical criminological perspectives need to take account of the social *and* ecological crises spawned by various politico-economic regimes (see Bookchin 1986; Clark 1990).

Prior to concluding, it is important to say something about one of the central problems encountered by a critical criminological outlook and how this problem impacts (or not) on an eco-human rights approach. This concerns the idea that there necessarily exists a theoretical and practical contradiction between means (reinventing the notion of 'crime' to encompass such acts as racism, sexism, imperialism and so forth) and ends (the creation of a society free from all forms of centralised coercion and control). In short, isn't critical criminology meant ultimately to be about *dismantling* the carceral network rather than 'extending' its reach? Cohen (1992:258) expresses this 'paradox' in the following manner:

> It [crime] becomes more elusive the more we try to stretch the category. If we define more acts of sexual exploitation as crime, the result cannot be less crime but more crime. And if we succeed in raising consciousness about those acts, then more of them will be reported.

> These points are perfectly banal, but why are they so seldom considered by the new criminalisers?

Further, it has been said that by failing to employ a 'self-reflexive' 'critical stance toward the concept of crime' (Cohen 1992:244–249, 257), a radical reconceptualisation of the criminological terrain toward new objects of *criminalisation* (as opposed to imagining a new set of social structures that allow for wholesale *de*criminalisation) is a program which runs the risk of being threatened by serious internal inconsistencies (see O'Malley 1988). In other words, by proceeding to bring a set of practices previously immune from criminal sanctions within the reach of criminal law, the 'critical' or 'radical' brand of criminological inquiry stands to irrevocably undermine its original purpose — does it not?

At first glance this kind of criticism seems to erode the entire foundation of an eco-human rights framework. However, it needs to be clearly understood that what has been proposed in this paper does not equate to some moralistic theoretical approach that seeks to subject any and all environmentally damaging acts to the forces of criminalisation. Indeed, the object of developing an eco-human rights approach is to demonstrate precisely the opposite — namely, that *no* amount of criminal, civil, administrative, nor any other kind of sanction, will be capable of reigning in the tide of ecological destruction until such time as the concept of 'environmental harm' is freed from having to preserve the fundamental tenets of those modes of production which constantly need to stake out new territories within which to carry out the processes of production.

For these reasons, a critical eco-human rights approach to the problem of environmental crime is valid to the extent that it can direct attention away from those environmentally harmful acts which various state armatures view as 'logically subjectable to the forces of criminalisation' (for example, trading in endangered species, sea dumping), toward an analysis of those acts which strike at the heart of present production techniques (for example, burning fossil fuels, clearfelling old-growth forest, producing toxic waste, building freeways). It also needs to be understood that merely because a particular sociological approach contends that there are many serious environmental harms which lie outside the vicissitudes of law, that this does *not* mean that such an approach *ipso facto* holds that these harms ought to be criminalised. Rather, the purpose of such a framework is to highlight the existence of such activities for criminology (that is, for that 'science' of harm) in order to illustrate how and why the process of criminalisation under (anti)-social arrangements such as required by capitalism ultimately works *against* the creation of just, democratic, equitable *and* ecologically sustainable social domains. Put simply, an eco-human rights approach seeks *not* to argue for more criminalisation but to illustrate the *structural embeddedness* of environmental harm — just as critical criminologists have attempted to demonstrate the structural embeddedness of crime generally. Far from being judged 'peripheral' or 'incidental' forces, the juridical and socio-economic relations required by present modes of producing and consuming are held here to be primary conduits for environmental damage (see Weisberg 1971; O'Connor 1988 and 1989; Paehlke and Torgerson 1990; Eckersley 1992; Pepper 1993a; O'Connor 1994b).

Conclusion

As a discipline concerned with how societies control the production of certain 'social harms', it has been contended that criminology is in need of a theoretical framework that is capable of explicating how and why legal notions of environmental harm remain qualitatively distinct from that which can correctly be called significant ecological destruction. Contributing to the development of such a framework has been the main concern of this paper. It has been suggested that a critical eco-human rights approach allows the machinations

of environmental harm to be analysed in terms of what the state is theoretically compelled to do for all its constituents (such as provide clean air, pristine rivers, non-toxic lands, meaningful employment, sustainable forms of shelter, housing and transport) as opposed to what it must, in practice, accomplish for major industrial groups (such as enforce the right to own and exploit eco-systems for material gain, the right to adopt 'clean' technologies only when profit margins allow, the right to secure 'pollution permits' for the discharge of toxic or 'treated' waste into unspoiled ecosystems, the right to render large sectors of the workforce obsolete, and so on).

It is further contended that an eco-human rights approach permits a more thorough exploration of the relation between the principles of (capitalist) political economy and the evolution of environmental statutes within various legal armatures. In particular, approaching the concept of environmental harm both critically *and* ecologically equips the inquirer with the means to examine those practices (industrial or otherwise) which respond to reified individual demands at the expense of socio-ecological needs — where 'need' and 'environmental harm' are conceived in relation to the biological, ecosystemic and entropic limits of the planet rather than forces such as international capital.

The strength of an eco-human rights framework would be its capacity to recognise that environmental harm is not about socio-industrial deviance from environmental norms, but the fact that these norms have themselves been conceived to facilitate decidedly anti-ecological methods of production and, by default, decidedly anti-ecological manifestations of certain human rights. This means that commentators will need to draw the connection (and contradictions) between what is officially labelled environmentally criminal and what is otherwise termed 'the conditions for modern life'. Put differently, in order for the dynamics of environmental harm to be clearly understood it is essential that the micro anti-ecological practices embedded within the fabric of daily existence be viewed as sociologically significant. Arguably, it is these practices (and their relation to macro industrial initiatives) which are contributing to the global destruction of ecological systems. The challenge, therefore, is to explain how and why these anti-ecological practices have become synonymous with the means to successfully secure such things as 'the right to life, liberty and the security of person' (UDHR:Article 3).

There is little doubt that an eco-human rights approach to environmental harm would be judged by many as continuing the anthropocentric philosophy that has been the source of major environmental problems — that retaining an emphasis on *human* rights is a sign that this framework holds human beings to be the measure of all things. Such a view would, however, be a dramatic distortion of what has been argued above. It should be manifestly clear that the conditions which allow for the long-term realisation of human rights are precisely those conditions which allow for long-term ecological well-being. Paradoxically, a thoroughgoing anthropocentrism — as code for privileging the value of human life over all others — translates into a variety of ecocentrism because such a philosophy necessarily requires that human beings interact in ways that preserve all those elements which allow for human life to reproduce itself — and these elements *are* the *non*human dimensions of existence (see Merchant 1990:67). Being human does not *ipso facto* mean being ecologically destructive. Rather, history shows that the latter is most often a product of the way in which members of the former have engaged (or had foisted upon them) certain political, economic and juridical designs that divorce issues of social justice from matters of ecology. What is sociologically and criminologically relevant here is that the convention of abstracting human rights from their ecological context has set in motion the conditions for their dissolution.

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