Engaging with Nature¹

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Summary

The environmental disasters we experience today necessitate drastic measures to ensure sustainable development of our natural resources. Changing people's attitudes towards the environment is often seen as one such strategy to effect positive changes. Designing effective strategies to do so requires, however, basic insight into the myriad variables that motivate people's positive and negative behaviours towards nature – an area in which very little basic theory-driven empirical research has been forthcoming.

This article explores some of the variables that effect people's attitudes towards nature, more specifically the way in which an aesthetic engagement with nature motivates positive attitudes, which in turn could lead to positive behaviours towards nature. The reductionist character of the psychopathological model of the variables that affect humans' interactions with nature is discussed in Section 2.1. In contrast to this psychopathological model, Sections 2.2 to 2.4 focus on the variables, from the rational to the totally irrational, which could foster positive attitudes and behaviours towards nature. Section 3 presents a case study from the sixteenth century, that remarkable period between the Middle Ages and the Scientific Revolution, when the learned and lay engagement with nature was characterised by curiosity, wonders and amazement. The case study of Adriaen Coenen and his engagement with nature underscores the complexity, diversity, often incongruity, but also "pathology" which can characterise the engagement of individuals with their environments, and which has to be accounted for in a theory of human-environment interaction.

Opsomming

Die natuurrampe wat ons in ons hedendaagse wêreld ervaar noodsaak ingrypende maatreëls om volhoubare ontwikkeling van ons natuurlike hulpbronne te verseker. Om mense se houdings teenoor die omgewing te verander word dikwels gesien as een van die strategieë wat aangewend kan word om positiewe veranderings teweeg te bring. Die ontwerp van effektiewe strategieë vir hierdie doel verg egter basiese insig in die menigte veranderlikes wat mense se positiewe en negatiewe gedrag teenoor die natuur motiveer - 'n gebied waar min basiese teoriegedrewe empiriese navorsing al onderneem is. Hierdie artikel stel ondersoek in na sommige van die veranderlikes wat mense se houdings teenoor die natuur beïnvloed, en in die besonder hoe positiewe houdings aangekweek kan word deur mense te motiveer om esteties met die natuur om te gaan, wat dan weer kan lei tot positiewe gedrag teenoor die natuur. Die reduksionistiese aard van die psigopatologiese model van die veranderlikes wat die mens se omgang met die natuur beïnvloed word in Afdeling 2.1 bespreek. In teëstelling met hierdie psigopatologiese model, fokus Afdelings 2.2 tot 2.4 op die talle veranderlikes - van die rasionele tot die geheel en al irrasionele – wat positiewe houdings en gedrag teenoor die natuur kan bevorder. Afdeling 3 bied 'n gevallestudie aan uit die sestiende eeu, daardie merkwaardige

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tydperk tussen die Middeleeue en die Wetenskaplike Rewolusie, toe die betrokkenheid van geleerdes en leke by die natuur deur nuuskierigheid, wonderwerke en verwondering gekenmerk is. Die geval van Adriaen Coenen en sy betrokkenheid by en omgang met die natuur onderskryf die kompleksiteit, diversiteit, dikwels ongerymdheid, maar ook die "patologie", wat die mens se betrokkenheid by sy of haar omgewing kan kenmerk, en waarvan rekenskap gegee moet word in 'n teorie van mens-omgewingwisselwerking.

1 Introduction

The first recorded sighting of an octopus (poilippus, poelomp, cepia) in Western Europe is that of Adriaen Coenen in 1546. Coenen was an autodidact, clerk of the auction of the Scheveningen fish market, wholesaler in dried and fresh fish, official beachcomber, and supplier of marine curiosities. In his unpublished "Visboock"/"Groot Visboock" ("Fish Book"; written between 1577 and 1579;) and "Walvisboock" ("Whale Book", written between 1583-1584) — works with elements of the modern encyclopedia, thesaurus, field guide, and ego document — he describes the morphology of the octopus (cf. Illustration 1), how he had bought it at the fish auction, had its portrait painted (although the painter in his opinion could not capture the strangeness of the animal), and exhibited the specimen "for money" in The Hague. Finally he sold it to two other men who exhibited it at various other places for a handsome profit and tried to preserve the animal by drying it in an oven, but without success ("Visboock", f. 36-37; Walvisboock", f. 45).



Illustration 1: The poelomp. Adriaen Coenen, Het Walvisboock, p. 106. Reproduced with the permission of the Koninklijke Maatschappij voor Dierkunde, Antwerp, Belgium.

Coenen's second octopus, which he bought on 15 November 1566 ("Visboock", f. 53-54), caused a major commotion in Scheveningen. This strange creature made its appearance in the year in which the Gueux/Beggars (Dutch Protestants) were very active in Holland. They could be identified by their hats and the beggars' bowls they carried. Word had gone round that a "Beggar" fish had been caught. As the tentacles of this "poelomp" were covered with such little "beggar bowls", poor and rich flocked to the artist's house (who again had to paint the "poelomp") to see the Beggar fish and get a piece of its tentacles. The creature was clearly seen as a portent which signalled something important about the Beggars ("Visboock", f. 53v-54). Again Coenen exhibited the animal for money, dried it, and then sold it off to an adventurer.

Although Coenen did not read an apocalyptic message into the appearance of this creature, he did believe in portents (cf. "Visboock", f. 64) as warnings to mankind from God. Moreover, he was at all times very sensitive to how nature testified to the greatness of God. Many of the encyclopedic entries of his fish encyclopedias end with a praise song reflecting Coenen's belief in the pervasive power and greatness of God as manifested in nature (cf. for example, "Visboock", f. 104: "Oh, wonderful God Almighty what wonders you have created in all your creatures."). Equally important to Coenen was the way in which nature testified to God's providence and the fact that nature had been given to man as resource: "For we proudly wish to regard all the stars of the heavens, all crops of the earth, all beasts in the fields, wild and tame, all birds in the sky, all fish in the water, as gifts to us human beings to fulfill our needs" (Egmond & Mason 2000: 335).

All of nature could in fact be symbols and be interpreted, and they could have a range of secular (political, social) and religious or metaphysical meanings in what Ashworth (1990) describes as this *emblematic world view* of the sixteenth century (cf. also Egmond & Mason 1992: 179-186).

These episodes with the *cepia* capture in more than one way how Coenen engaged with nature on a daily basis: collecting and buying specimens, dissecting the strange and rare ones, mainly to satisfy his own curiosity, documenting their morphology and singular features in text and image (watercolour portraits and landscapes), exhibiting them for money, preserving specimens (fish, shells, sea birds, etc.) and then either retaining and exhibiting them, or selling them off to collectors for their cabinets of curiosities, thus utilising nature both for wonder and entertainment, as a source of income and to commemorate the glory of God (Egmond & Mason 1999: 190).

All this may seem a far cry from our current environmental crisis, but the Coenen case study, as deep ecologists, ecofeminists, various environmental groups and environmental aesthetes would no doubt point out (cf. also White 1967), is illustrative of the (long) history of the anthropomorphic,

instrumental, patriarchical (West-European) engagement with nature which lies at the heart of our current environmental crisis. Global warming, ozone depletion, species extinction, the destruction of coral reefs, the draining of wetlands, increased rates of deforestation and pollution are only some of the induced disasters attributed to this kind of engagement with nature.

Ecocriticism has highlighted and critiqued this dominant anthropocentric attitude and other negative gender and racial beliefs which have shaped Western attitudes to the natural world and which motivate these destructive behaviours (cf. Levin 2002: 185-186). However, environmental threats such as these now necessitate drastic measures to ensure sustainable development of our natural resources and human survival and well-being. The institution of local and global legal measures and penalties is one way of curbing these destructive behaviours. As a number of researchers have argued, though, we need a major change in the kinds of attitudes of humans towards the environment, which have brought us to the brink of "ecocide" (Stone 1993 quoted in Holden 2003: 98).

Such alternatives have been outlined by proponents of, for example, deep ecology, ecofeminism, the Gaie hypothesis and the more practically orientated environmentalism (cf. for example Holden 2003). In this article, however, the focus falls on the potential contribution that models from the relatively young field of environmental aesthetics can make to our understanding of the numerous variables which support positive attitudes and behaviours towards the environment. As argued by Eaton (1998), the general strategy underlying this approach is that if people have a positive (aesthetic) appreciation of their environments they will be motivated to act in ways that will better protect those environments.

Studies in the field of psychology (cf. for example Fishbein 2000) make it clear, however, that effecting positive attitudes and behaviours towards the environment would require, first of all, a thorough theoretical and empirical understanding of the myriad personal and contextual variables which underlie humans' engagement with nature. As is evident from the literature on the human-environment interaction, no such overarching model has been forthcoming, and there is very little empirical research on the variables and their motivational force in the human-environment interaction. Needless to say then, that most of the measures which have been proposed to foster our environmental well-being have very little theoretical-empirical motivation.

The main goal of this article is not to come up with a neat theoretical model of the human-environment engagement which specifies all the relevant variables and their mediating and moderating relationships. Any such an attempt would be premature in the face of the lack of research on these issues. The more modest goal is to probe in some depth some of the current perspectives on the complex nature of the human-environment engagement.

In section 2.1 the focus falls on the reductionistic nature of the psycopathological model and on its limitations as basis for a programme of

a positive human-environment engagement. In contrast, Sections 2.2 to 2.4 highlight the variety and complexity of the variables in a number of philosophical models which are hypothesised to foster a positive aesthetic experience of nature. In tandem these models provide us with a clearer picture of the sensorial, rational, emotional and behavioural complexities involved in humans' interaction with nature. Special attention is given to the status of so-called "displaced" religious considerations in philosophical approaches to humans' interaction with nature. As already noted by Diffey (1993), one must distinguish in this regard between learned/intellectual and lay/popular models and experiences of nature. Doing so, forces one to come up with a model of human-environment engagement which not only accounts for the rational and emotional elements of this engagement, but, given its popularity in lay models, also of the basic (rational and emotional) dimensions of the religious experience. These complex variables are analysed in Section 2.3 as they come to the fore in a study of American environmental models (cf. Kempton, Boster & Hartley 1996). The general point that is made, is that at this stage of our research on the complexities of the human-nature engagement an inclusive rather than an exclusive approach should be adopted.

Section 3 goes back to the sixteenth century and focuses on the complexity of Adriaen Coenen's engagement with the Northern Sea and the Scheveningen environment as portrayed in his two fish encyclopedias. As a case study, it illuminates a number of issues that come to the fore in current models of the aesthetic appreciation of nature, viz. the lay/learned distinction, the kinds and status of the knowledge that frames our interpretation and appreciation of nature, the way in which such knowledge determines the depth of the appreciation of nature, the character and status of "rational delight" as aesthetic experience and the way in which scientific and aesthetic criteria can overlap. Overall though, the discussion of Coenen's engagement with nature is meant to give some substance to the abstract issues in current debates on environmental aesthetics and to underline the fact that reductionist approaches to humans' engagement with nature fail to capture the complexity of the phenomenon.

2 Probing the Complexity of the Human Engagement of the Environment

2.1 Psychopathological Engagement

Estok's (2001) essay "A Report Card on Ecocriticism" and Cohen's (2004) essay "Blues in the Green: Ecocriticism under Critique" are deemed important first readings for those who need to orientate themselves in the field of ecocriticism. Much of the focus in both these essays is on the object,

goals, methodology and theoretical approaches in the field and especially on the problems in this regard.

Estok (2001) relates most of these problems to the fact that the "terms of engagement" between the environment and individual lives have not been aptly identified and labelled within the field. He then proposes the term "ecophobia" to capture what may lie at the heart of our environmental crisis. Ecophobia is defined as fear and contempt for the environment – as the "irrational and groundless hatred of the natural world or aspects of it" – a hatred that motivates all kinds of destructive behaviours towards nature. According to Estok, this hatred also finds manifestation in the mania of some people for cutting grass, "notions of personal cleanliness, the military passion for cutting hair, the preference for perfumes over natural bodily odours" (Estok 2001, f. 18).

A number of other ecocritics share Estok's view of the pathological nature of contemporary human-environment engagement. Easterlin (2004), for example, reverts to Glen Love's position in which this pathological engagement resides in the tendency to "love ourselves best of all" and to "celebrate the self-aggrandising ego" even in the face of the profound threats to our biological survival. Robin van Tine (1999: 1) diagnoses this ecopathology as a case of "gaeaphobi", i.e. "a form of insanity characterised by extreme destructive behaviour towards the natural environment and a pathological denial of the effects of that destructive behaviour" – a condition with symptoms that range from obsessive compulsive disorder to paranoid schizophrenia.

This pathological state in which modern humans find themselves gets even darker if one links it up with some of the other learned discourses of our day. Dawkins, for example, argues that those of us who even faintly believe that there is a (redeeming) power higher than the self, which controls the future of man and environment (as Coenen did), suffer from "God delusion", i.e. a persistent false belief in the existence of God held in the face of strong contradictory evidence, "which is a symptom of psychiatric disorder" (Dawkins 2006: 5). If we further add to this delusional state the poststructuralist notion that it is impossible to know the Other (Klein 1995), modern self has been robbed in the academic discourses of our day of the most important signifiers against which self is traditionally profiled: God/religion, the other and nature. According to Cohen (2004: 2) this leaves ecocriticism (in general, or its moral or aesthetic arm) with the arduous task of coming up with a "broad vision of life and our place in nature" which can free modern self from a culture (including a representation of nature) which only mirrors one's "own obnoxious little selfregarding angstridden egomaniacal crypto-smugness".

If the diagnosis of man's destructive engagement with nature resides in such deep, irrational pathology there is obviously little hope of a positive prognosis, given that a basic kind of rationality is also needed for behaviour change. Estok (2001) and Cohen (2004) also do not define an overarching cultural model to save us from this pathology, nor do they address in any detail the therapeutic framework needed to redress this egocentric and psychopathological engagement with nature. As Easterlin (2004) notes, ecocriticism has for the most part been content merely to diagnose our destructive attitudes and behaviours towards nature, but has not come up with a programmatic framework (within a cross-disciplinary approach; cf. Levin 2002; Sugiyama 2003) to readdress these behaviours and attitudes. Space limitations do not allow extensive discussion, but one must bear in mind that the proponents of the various strands of ecocriticism itself (such as deep ecology, radical ecology, Gaie-Aestheticism and ecofeminism) have plotted out, at least in principle if not in detail, an environmental therapeutics to change our interactions with nature from one based on ecophobia to one based on ecophilia, stewardship, or a complete union with nature as an equal force internal and external to ourselves.

There are obvious dangers in generalising this academic, ecocritical view of the psychopathology inherent in the relationship between self and environment to that of modern condition humane. For one, it is reductionistic in that it simply does not account for the wide range of lay and learned experiences or engagements, which one could venture, people in general have with nature, or which they believe can form the basis for a healthy appreciation of nature and a positive engagement of humans with their environments. When David Sobel argues for an environmental education based on a new empathy with nature to take us beyond ecophobia to ecophilia (cf. Sobel 1999), when Johnson (1993) argues for a morality – including one for nature – based on empathy with the other and nature, or when Khalid (2002) ventures an Islamic alternative to saving the planet, they do so with equally strong beliefs that people still have the ability to approach and empathise with the other (including the environment), and that there is a power higher than the self, which controls the future of man and environment.

One would suggest, therefore, that any ecocritical model of the engagement of modern self with nature will have to shed its one-sided academic focus on the pathological nature of this engagement and be conceptualised broad enough to accommodate the diversity, the complexity, and often the contradictory nature of this engagement. Terms such as "man", "human-kind", "engagement", "nature" and "environment" are conceptually complex and ambiguous, and there is a definite need to explore both this complexity and the contextually contingent meanings of these terms when they are used in the wide variety of disciplinary discourses which focus on humankind's engagement with nature/the environment. In Section 2.2 and 2.3 the focus therefore falls on a few alternative and positive perspectives of the human-nature engagement and especially on the complexity of the cognitive and affective variables that motivate this type of engagement.

2.2 Aesthetic Engagement

Philosophical discourses on the characteristics of man's aesthetic engagement with nature take as point of departure that beauty inheres in both scenic and unscenic nature, and that a positive engagement with nature by way of an appreciation of its (intrinsic) beauty (Kemal & Gaskell 1993) is possible. What is at stake in these philosophical discourses is the precise nature of the kind of experience we have when "standing near a towering cascade, our ears reverberat[ing] with the roar of the falling water, [and] we are overwhelmed and excited by its grandeur" (Carroll 1993: 250), or the excitement when the ice blocks of the Bow River splinter "like the random chimes of breaking glass" (Godlovitch 1994), or the admiration and awe invoked when we gaze at the starry heavens and their endless continuity (Carlson 1995).

In the face of such beauty, the main philosophical question then is: What exactly constitutes an aesthetic appreciation of nature? From this follows the question of whether or not the aesthetic appreciation of art, the paradigm case of aesthetic appreciation, is or should serve as a model for the aesthetic appreciation of the environment.

There exist a number of models of environmental aesthetics which aim to answer these questions. Carlson (2000a: 5-13), for example, discusses at least nine such models or approaches. These can be classified mainly into two groups: Carlson's own prescriptive/normative, rationalist natural environmental model; and the rest, which are descriptive, focus more on the sensorial and affective nature of the aesthetic engagement with nature, but of which most do not exclude a rational engagement as part of the overall aesthetic experience. In much of the literature on these models, a dichotomous approach is taken inasmuch as proponents of the other models defend them against Carlson's rational model. However, the approach adopted here, is that these different approaches capture various dimensions (the cognitive, emotive, sensuous and bodily, etc.) of the aesthetic engagement with nature and of the fact that a specific dimension or dimensions may dominate in specific encounters with the natural environment (cf. also Carlson 2000a; Foster 1998; and Lintott 2004). Furthermore, it is accepted, in support of Godlovitch (1998), that it makes little sense to come with prescriptions as to precisely what constitutes a correct/acceptable aesthetic engagement with nature and what its basis should be. Given the lack of empirical research on what motivates a positive experience with nature, the point of departure taken here is that people's engagement with nature can be motivated by various variables (as antecedents) and that the resultant pleasurable states may take on many forms. Godlovitch notes:

The value found in the aesthetic response to nature has numerous irreducible sources. Perceptual, cognitive, and affective challenges do not figure centrally. They figure at best as unprivileged elements in a rambling host of responses.

Newton was struck by the miraculous underlying simplicity and order of nature; many ecologists are overwhelmed by its impenetrable complexity and arbitrariness. Some take delight in the ever-changing sensuous variety nature offers; others in timeless patterns and regularity. John Muir found in nature a deep spiritual and transcendental tonic. Others found neo-religious transport in the great stream of Life and the sweep of evolution. Some find love, endearment, and belonging; others find intellectual savouring; yet others find a seductive darkness. For some nature elicits amazement and wonder; for others enchantment; for others still awe and emotional richness. There is no final fitting affective or intellectual response, no definitive hedonic or cognitive payoff, and with that no authoritative prescriptions from some master-race of nature critics and connoisseurs to be followed obediently by some underclass of adulatory bumpkins. There is no codifying of the proper objects and qualities, no privileged categories, no canon to worship, no tests to pass or clubs to join.

(Godlovitch 1998: 184-185)

Despite the references to the various sources of and resultant states of the aesthetic experience in this quote, no explicit accounts are given in the literature – as far as I could ascertain – of the cognitive-emotive-behavioural model(s) which are assumed implicitly in most discussions of the aesthetic experience of nature/the environment. Plate (2005: 2-3) outlines one such a rudimentary model, and from it, it becomes evident on what aspect or aspects of the aesthetic experience each of the aesthetic models focuses.

The term aesthetics stems from the Greek *aesthesis* which has to do with sense perception, i.e. "how we perceive (and, simultaneously create) our worlds through vision, taste, smell, touch, and hearing, among other possible senses" (Plate 2005: 2). Such sensations are, however, themselves guided by and made meaningful/interpreted by the cognitions (beliefs) we have as part of our long- and short-term memories. Such perceptions – the product of sensorial input and interpretation – motivate our affective reactions, and in cohort they motivate our behaviours (cf. also Johnson 1993). We thus assume that the affective states or emotions, which (mostly) accompany our aesthetic experiences with the environment, are themselves a product not only of bodily states (bodily feelings) but also of our cognitions. In the discussion below we therefore mainly focus on how each of these models highlights one or more of these composite processes and representations.

Carlson's (rationalist/cognitive) *natural environmental model* (cf. Carlson 1995, 2000a; and Parsons 2006) makes the claim, as Carroll (1992: 244-45) summarises it, that the prerequisite for a positive engagement with nature is scientific knowledge of nature, "that it is all a matter of scientific understanding; that is, that the correct or appropriate form that the appreciation of nature ... should take is a species of natural history; appreciating nature is a matter of understanding nature under the suitable scientific categories". The appreciation of flora and fauna, for example, would require an

understanding of evolutionary theory, or, more generally, that one needs something like the knowledge and experience of the naturalist to be able to fully appreciate nature. Carlson (1995: 399) himself has stated though that the cognitive component of the appreciation of nature should not be restricted to a scientific understanding of nature – it could equally well come from the "commonsense end of the spectrum ranging from science to its commonsense analogues". However, the basic "story" (knowledge construct) that should frame our understanding, and thus appreciation, of nature is the one provided by the various disciplines that have nature/the environment as object of study (cf. also Carlson 2001; Heyd 2001; Saito 1998).

Carlson's main argument for his cognitive model is the fact that acquiring appreciation of so many things in our everyday experience (for example art and music) starts off with acquiring knowledge of the object of appreciation, i.e. knowledge or "information which allows the appreciator to achieve a certain cognitive stance toward the object of appreciation" (1995: 396). Following Paul Ziff, this knowledge is needed for a "cognitively-based sizing up' of the object of appreciation. This sizing up should then prepare the appreciator for an appropriate response to the object of appreciation (p. 396), which in fact can take on a variety of forms. Carlson does not specify these responses in detail, but insists that not any kind of response to nature, such as an emotional one, is of necessity an appreciative response. This would imply that the response and not the essential appreciative component (i.e. the rational/cognitive sizing up) is taken to be the key component of the appreciation of nature (cf. Carlson1995: 398; and also Parsons 2006).

As should be obvious from the foregoing, Carlson's view on the nature of the appreciative engagement with nature is rather sketchy (at most "highly programmatic"). He reduces it to a process (model) in which the positive appreciation (and degree of appreciation) of nature is made dependent on the amount of knowledge the appreciator has of whatever aspect of nature forms the object of contemplation and appreciation. Secondly, it allows for the fact that the initial cognitive "sizing up" of nature could induce an emotional experience of nature, but he does not see the emotional effect as a part of the proper appreciation process. Although the relationship between cognitions, attitudes, emotions and behaviours feature prominently in cognitive/psychological theories of behaviour, Carlson in no stage, however, links these to any of these models. (For further critique of the rational model, see Carroll 1993; and Godlovitch 1994.)

Whereas the natural environmental model stresses the highly cognitive and overly intellectual nature of the human-environment engagement, Carroll's (1993) *arousal model* focuses on the more visceral and emotional aspects, i.e. on the visual, the smells, textures and temperatures (Carroll 1993: 248) of being moved by nature (as is implied by the etymology of the term aesthetic.)

Carroll insists that being emotionally moved by nature does not exclude the possibility that emotions can be aroused by cognition. It also does not mean that all emotions which could be aroused by nature "are rooted in cognitions of the sort derived from natural history" (Carroll 1993: 245), or are the residue of displaced religious feelings: "I want to stress that the emotions aroused by nature that concern me can be fully secular and have no call to be demystified as displaced religious sentiment" (p. 246). Carroll does, however, assume that the aesthetic experience, as the title of his essay indicates, may fall somewhere between natural history and religion.

Carroll's focus on the more emotional aspects of the engagement with nature links up with Berleant's (1993) proposal in which the Kantian notion of the *sublime* is used to characterise his notion of the aesthetics of engagement. Berleant rejects a model of this engagement based on first objectifying and then contemplating nature (as one would do with the appreciation of a work of art). In contrast, the sublime engagement involves "sensory acuteness, of a perceptual unity of nature and human, of a congruity of awareness, understanding and involvement mixed with awe and humility, in which the focus is on the immediacy and directness of the occasion of the experience" (Berleant 1993: 236). This engagement model beacons you to immerse yourself in your natural environment and thereby to obliterate such dichotomies as subject and object, ultimately to reduce the distance between us and nature as far as possible (Carlson 2000a: 7).

Carlson (1995) rejects as bordering on the religious, *the mystery model* proposed by Godlovitch (1994). Godlovitch makes the claim that an acentric approach to natural engagement must accept that nature is aloof and that we cannot ever get to fully grasp it, that the only way in which we can belong in nature lies in "a sense of being outside, of not belonging". The best we can do is to "grasp it but without capture". Given that we can have no "cognitive anchorage" in nature (i.e. that the kind of knowledge Carlson propagates for the engagement with nature is irrelevant), our relationship with and experience of nature is a mystery (without solutions) and it therefore borders on or has the nature of a religious experience (Carlson 1995: 394).

Carlson's (2000a: 8) reaction to the mystery model is straightforward: if nature is unknowable, it is also beyond aesthetic appreciation; mystery and aloofness can only support worship, i.e. such an engagement with nature can only be appreciation but not an aesthetic one. To be an aesthetic one, requires some degree of artifactualisation, and human conceptualisation and understanding of nature is a minimal form of artifactualisation: "When we cast the conceptual net of common-sense and scientific understanding over nature we do enough to it to make possible its aesthetic appreciation". There are in fact numerous "other nets woven by human culture in its many forms – nets woven not only by art, but also by literature, folklore, religion, and myth" (Carlson 2000a: 7-9; cf. also Brady 1998; Fudge 2001) – an

admission of the complexity of the cognitive or mental frames or schemas – even world views – by which people interpret the sensorial and affective experiences they have when engaging with nature.

Another such net or "story" is that provided by Hepburn's (1996) metaphysical imagination model, which interprets nature as "revealing metaphysical insights: insights about the whole of experience, about the meaning of life, about the human condition, about humankind's place in the cosmos" (Hepburn quoted in Carlson 2000a: 10-11). Although Carlson admits to such a metaphysical overlay in our interpretation of nature, he prioritises the scientific story/net (mainly on the argument of its objectivity), which brings him in a direct clash with the poststructuralist view that none of these interpretations or understandings have priority or are privileged, i.e., that all of them or any one could in fact form the proper basis for our aesthetic appreciation/engagement with nature (cf. Godlovitch 1998).

In several of his writings (cf. for example Carlson 2000a) Carlson also insists that nature should be appreciated as nature and not as art. In the *object model* the appreciation of nature is approached as one would tackle the appreciation of sculpture, an approach in which the observer mentally or physically abstracts natural objects from their contexts (their stories) and focuses on their formal properties. The landscape model, on the other hand, links up with the picturesque appreciation of nature and mandates the appreciation of nature as a landscape painting, also with a focus on its formal properties. Carlson (2000a: 6) notes that the object model "rips natural objects from their larger environments" while the landscape model "frames and flattens" nature into scenery, and both, by their focus on the formal properties of nature, "neglect much of our normal experience and understanding of nature".

However, given that one could not rule out a priori that at least some people may on occasion experience nature as either an object or a land-scape, one needs to take cognizance of these dimensions of engaging with nature (cf. also the quote from Godlovitch 1998 above). One may also ask whether there are any empirical or logical grounds for such a strict division between our aesthetic appreciation of art and the aesthetic experience of any other facet of our daily lives. We thus add these two models of art appreciation to the environmental aesthetic models to fill in the gaps of our understanding of the aesthetic experience of nature as a phenomenon.

2.3 Religious Engagement

Religion has been a major influence in all cultures in our understanding of the engagement of humans/individual lives with nature, past and present (Holden 2003: 97). Currently, though, the religious appreciation of nature has fallen into disfavour, at least in intellectual or learned circles. Judaic-Christianity, for example, has been condemned by many as the most

anthropocentric of world religions "promoting careless and rapacious attitudes to the non-human environment" (Holden 2003: 97-98; cf. also White 1967). The belief that man is made in the image of God and instructed in Genesis to dominate and subdue the earth, has led to the idea that man had been given dominion over the non-human and inanimate environs (cf. also Thomas 1983 for a historical analysis of the Judaic-Christian ethic and Khalid 2002 for the Islamic approach).

Both Carroll (1993) and Carlson (1995) also rule out what is called a "displaced religious" or metaphysical basis for the engagement of man with nature in their cognitive/emotive models. For Carlson (1995) it speaks for itself that if (scientific) knowledge formed the basis of our appreciation of/engagement with nature, then it would follow that a secular approach to this engagement would be possible. Carroll (1993) also states clearly that although emotional arousal is constitutive of some of the experiences we have of nature, its source should not be seen as being metaphysical in nature – emotions can arise from various sources other than metaphysical considerations. Despite this, Carroll (1993: 263) also notes that being emotionally moved by nature could in itself also be nothing other than displaced religious sentiment, "some sort of delusional state worthy of psychoanalysis or demystification", especially if the emotions evoked by nature, such as serenity (or awe and wonder), for example, is shaped "by repressed religious associations" (p. 263).

Carlson (1993: 219) does not deny the existence of the theist "story" (religion) as a basis for some people's appreciation of nature, but he does note that the theist story is based on the view that the appreciation of nature involves an appreciation of the order in it as imposed on it by a divine creator. However, if the appreciation of nature (or some forms of art) resting on an appreciation of order loses its appeal, so does the theist or metaphysical basis for an aesthetics of engagement. Carlson (1993: 219) also notes that the religious or metaphysical "story" has lost much of its appeal in the face of the alternative story provided by the natural sciences.

The anti-religious stance of philosophical approaches (as learned approaches) to man-nature engagement needs further analysis in the face of research which indicates that religion plays a fundamental role in lay models of natural beauty and engagement with nature (cf. Diffey 1993; Holden 2003; Kempton, Boster & Hartley 1996). Stone (1993) also notes that it is not very convincing to keep on blaming our ecocide upon Judaic-Christianity (or for that matter Muslim) natural philosophy, as the theme of human domination of nature is countered by the themes of "stewardship" and respect for God's creation, which is central to both religions (cf. also Khalid 2002). The argument is even less convincing when one looks at the equally destructive behaviours towards nature of cultures which adhere to religions which discourage a demarcation between the human and non-human environment, such as Hinduism or Chinese Taoism. As Holden

(2003: 99) notes: "Yet, even in those cultures in which the prevalent philosophy encourages a loser an integrated relationship between humanity and nature, industrial development has resulted in a high level of unsustainable use of resources and associated pollution."

Diffey (1993: 55) ascribes current animosity to the religious dimensions of natural engagement to the fact that "Enlightment atheism, to which modern philosophy, and with it aesthetics, subscribes, confuses the rejection of Christianity with the rejection of religion as such. It therefore comes as no surprise then that there will be hostility towards any religious veneration of natural beauty and "displaced" "religious emotions". As the discussion in the previous section no doubt also indicates, when focusing on the emotions people experience when encountering nature, the question unavoidably arises whether these emotions are "supervenient upon some deeper reality", or whether they arise because one is "in the presence of some kind of noumenal meaning" as suggested by Diffey (1993: 59).

In Christian Orthodoxy, for example, these meanings inhere in and can be read off from nature as revelations of God. A philosopher such as Godvolitch, however, seems to reject any religious (or for that matter any other) "reading" of nature:

Nature, is that which is all there entirely on its own, all that there really is. If meaning is gauged primarily in terms of possibility, nature is, all of it, simply actual. It asks for no filling in because there is nothing absent, certainly nothing *qua* natural the mind can complement out of its own resources. Nature is not a work of any kind, nor does it have works. However systematically incomplete may be the text or the sign, however much art depends upon interpretations, nature *qua* nature cannot be thus incomplete or wanting a reading in order for us to apprehend it aesthetically. Books about nature notwithstanding, there is no book of nature. Nature is both text-free and sign-free because in itself it is entirely devoid of meaning and hence not subject *qua* natural to interpretation.

(Godlovitch 1998: 181-182)

On the surface of it, Godlovitch seems to simply ignore in the quote above that our interpretations and representations of nature are themselves human fabrications. However, he also seems to have some existence of nature in mind free from such human fabrications when he talks about the interpretation of "nature *qua* nature" which refers "to the natural world as we might conceive it outside of our functional and explanatory categories, and to things and processes our conception of the existence and subsistence of which depend in no way on human agency" (Godlovitch 1998: 182, fn. 5). One can only ask whether such a conception of nature is humanly possible, and if it is, of what value it could be to an ordinary man.

Diffey's (1993) advice is that one should make a clear distinction between intellectual and popular/lay approaches to all aspects of natural engagement.

Kempton, Boster & Hartley's (1996) research into the cognitions (beliefs and values) and emotions underlying modern America's interaction with nature/the environment and their support for environmental policies clearly supports such a distinction. One of their major findings of this study, for example, is that the public and scientists have completely different understandings (beliefs) of some critical environmental problems and proposed policy solutions (cf. Kempton, Boster & Hartley 1996: ix), but that they converge in unexpected ways on some of the values that underpin these models. The authors hypothesise that these values derive mainly from three sources: (1) religion, whether traditional Judeo-Christian religious teaching or a more abstract feeling of spirituality; (2) anthropocentric (humancentred) values, which are predominantly utilitarian and are concerned with only those environmental changes that affect human welfare; and (3) biocentric (living-thing-centred) values, which grant nature itself intrinsic rights, particularly the rights of species to continue to exist.

Despite Lynn White's contention (cf. White 1967) that much of our current environmental misery can be relegated to the Judeo-Christian view that nature is there for man to exploit, many informants in the Kempton, Boster & Hartley (1996) study – both those who adhere to a traditional religion and those who do not – draw on religious concepts to describe the ethics that should underpin our engagement with nature. As the authors note, "[r]eligious discourse can be useful to scaffold moral arguments even among the agnostic" (Kempton, Boster & Hartley 1996: 90). In line with this reasoning, many argue for the protection of nature/the environment on the basis of it being God's creation with a divine purpose. The authors also note that this unexpected response from non-believers in expressing the idea of the sacredness of nature can be explained by the fact that "[r]egardless of whether one actually believes in biblical Creation, it is the best vehicle we have to express this value" (Kempton, Boster & Hartley 1996: 92).

In contrast to the areligious sentiments of Carroll (1993) and Carlson (1995) discussed above, most informants in this study reported experiencing a spiritual feeling directly from contact with nature – being God's creation, nature becomes a vehicle for humans to experience God's presence, peace and healing. Kempton, Boster & Hartley (1996) therefore reject White's (1967) contention that the Judeo-Christian notion of man's dominion over nature is the root of environmental destruction. Their study shows that a broad range of religious teachings are used by Americans to justify environmental protection; thus "[r]eligion seems not to be getting in the way of environmental support, but instead is reinforcing and justifying it" (p. 94; cf. in this regard also the Islamic view of the protection of nature as discussed in Khalid 2002). Another surprising finding is that only a minority of respondents see the sole function of nature to be to serve man, although protection of nature is motivated by such a utilitarian concern.

What complicates these models of Americans' understanding of the environment and the values that underlie them, is the way in which such religious values mesh within such models with other, seemingly contradictory, values. For example, the religious values in these models stand side by side with biocentric values, i.e. those that have to do with the rights of nature itself. In the folk model justifying the protection of the environment on biocentric values emphasis is placed on such issues as the right of species to continue and the moral problem of how extinction of species can be justified in the face of human needs. A final biocentric value resides in the opinion that nature itself has rights, including, but going beyond the rights of species, to survive (cf. Kempton, Boster & Hartley 1996: 106-114).

Despite the qualms philosophers have with a concept such as "spiritual sustenance", many of the respondents in this study saw nature as being intrinsically beautiful and thus as being there for humans to revitalise themselves spiritually (cf. Kempton, Boster & Hartley 1996: 95-102, 106).

Besides religion, philosophers also harbour negative sentiments towards such notions as beauty, the picturesque, and the sublime, especially if these notions are tied up with the intimation of the universe as God's handiwork and as a source of spiritual sustenance. As Diffey (1993: 54) notes, invoking beauty as a source of an appreciative experience of nature would most probably provoke hostility from intellectuals given its old-fashioned look, the assumption that beauty could have a use (albeit a spiritual one) and the murkiness of a term such as "spiritual sustenance". However, natural beauty and the appreciation of it as basis for the engagement of nature has disappeared for intellectuals only, as it is still very much part of the lay experience, understanding, and explanation (cf. Diffey 1993: 57).

It is also one of the basic tenets of Positive Aesthetics, which incorporates the notions that the natural world, on balance, is essentially aesthetically good, that it is beautiful and has no negative qualities. As Godlovitch indicates (1998: 192), Positive Aesthetics falls within a tradition of efforts to draw from us positive and respectful responses to nature, with such allies as the Transcendental-Mystical-Romantic, metaphysical and affective approaches to the appreciation of nature. If one forgets for a while of the philosophical problems with Positive Aesthetics, it "relights the faded star of the Sublime" (Godlovitch 1998: 195) and has the power to motivate both the lay and the learned mind to preserve and protect nature.

2.4 Restoring the Balance

If the psychopathological model of human-nature engagement (cf. Section 2.1) has proven to be reductionistic in character, so does the rational model of Carlson. All the alternative models, dimensions or perspectives discussed above, are therefore attempts to restore to this engagement that the

rationalist model tries to banish from the very definition of what the aesthetic experience of nature is all about.

In his historical overview of the rise of the rational episteme in the seventeenth century, Foucault (1970: 144-158) summarises in essence what has become lost in this rational engagement with nature. Firstly, there is the loss of the overall sense of coherence of our experiences provided by the principle of similitude. According to this principle every dimension of the macrocosmos/nature finds its reflection in man as microcosm, making it possible, for example, that the firmament not only finds its reflection in man's face, but becomes cognitively graspable as a result of it. Secondly, our engagement with nature no longer passes "through the thickness of the body", i.e. as something experienced by all the senses, as it has become restricted to an epistemology (and a science) based only on "the arrangement of the visible" (Foucault 1970: 149).

In contrast, sixteenth-century epistemology, to which we return below, was based on the premise of the interconnectedness of all beings, in which each thing was cognitively interpreted as part of a holistic semantic network, and of "thick" bodily experience, making the engagement with nature something constituted from elements of the sensorial, cognitive, and affective, any of which may dominate in a single episode but none of which is totally absent in any such episodes.

3 Engagement with Nature and the Multiplicity of Framing Stories: A Historical Perspective

The sixteenth century was by all accounts a remarkable period. In Western Europe it links the Middle Ages with its dominant Catholic world view and the premodern period with its focus on the empirical and the rational. Its "scientific" mentality was characterised by a healthy curiosity and its focus, particularly in the area of the natural history, was on the singular, the wondrous, and on the immense pleasure the wonders of the natural world could invoke (cf. Daston & Park 1998). Above all it was also an emblematic world; nature was infused with layers of meaning and there for the faithful to be deciphered (cf. Ashworth 1990; Foucault 1970).

Coenen was a child of his times and exemplifies how the practical scientific knowledge of the non-educated, their strong religious beliefs, their aesthetic sensibilities but also their sense for the instrumental and showmanship of the marketplace provide for a profound experience of nature (cf. Egmond & Mason 1992, 1994, 2000).

Coenen (1514-1587), a native of Scheveningen, describes himself as a man that was eager for knowledge about anything that was new and exotic; that he was in fact jealous of everything new and strange and driven by these passions (cf. "Visboock", f. 46, f. 150). Drawing on his first-hand

experiences of the sea and its surrounds, what he could gather from the fishermen with whom he interacted closely, and from the published works of his contemporary natural historians, he documented these engagements with nature in his "Visboock" and "Walvisboock". Both manuscripts contain rich illustrations and texts in a very lively idiom on a much wider collection of topics than their titles suggest: besides fish and whales they also contain encyclopedic entries on sea mammals, birds, tortoises, and comets, various ethnographic categories, sea monsters, etc.

Coenen was primarily interested in singularities/curiosities, the unusual phenomena, and what these could possibly signify (e.g. ethnographic curiosities such as the Eskimos, noblemen of Calicut and the Plinian races, exotic animals and monsters such as a Brazilian sea monster, the armadillo from the new world, a tuna fish found off the coast of Gibraltar, whose body was decorated with ships, and beached whales on the Dutch coast). What made these objects, phenomena or people rarities was the fact that they shared one or more of the following features: being unusual, unexpected, exotic, extraordinary, awesome, rare or simply inexplicable. These characteristics drew Coenen and his contemporaries' attention to these phenomena and the experiences they had while engaging with them had an intellectual, emotional and aesthetic impact (cf. Morillo 1991: 66).

As Coenen admits in "Visboock" (f. 264), he committed himself to focus mainly on fish, but simply could not ignore these other rare creatures of which he read in other books as they are to be greatly admired/to be wondered at, just as there are some fish one has to admire (cf. "Visboock", f. 264). Furthermore, Coenen argued that although he focused mainly on the wonderful and the wondrous, all of nature could be included in his encyclopedias because "each beast, fish, exotic animal, Plinian figure, or natural phenomenon in its own way demonstrated the miraculous powers of God" (cf. Egmond & Mason 1992: 188). On the other hand, and in line with the humanist endeavours of his time, the heterogeneity of the "Visboock" was also the result of Coenen's effort to give an overview of the rich variety of creatures that inhabits this world.

With regard to the natural world, Coenen's manuscripts attest to his appreciation for the sheer quantity, variety, and power of nature's creatures, elements and forces, and he catalogued them in a natural history in which pure fancy (such as sea monsters, the Plinian races) was equally at home as "more-or-less accurate depictions" of existing creatures (cf. Mirollo 1991: 62). Besides diversity in kind, there was appreciation for diversity in formal features: the excessively large (e.g. whales, contrasted or compared to the excessively minute spiders) and an occupation with notions of scale, height, depth, extent and point of view – the term "marvel" itself being generally applied to something that was unusually large or small, extremely rare, exotic, abnormally or grotesquely shaped (such as Siamese twins), or spectacularly beautiful (cf. Kenseth 1991c). The botanical and animal

fantasies of ancient and medieval lore, such as the barnacle goose, unicorns, the Plinian races, etc. were counted among the natural wonders. These are also paraded in the "Visboock" as part of the Prologue.

The taste for the metamorphic as catalyst of the wondrous is exemplified by Coenen's depiction of how larvae turn into butterflies. As Morillo (1991: 63) notes, "[m]etamorphosis also meant the fluidity of and boundaries between various worlds of experiences and their elements, hence the possibility of convertibility and transcendence, real or symbolic and emblematic".

However, not all experiences of the marvellous were pleasurable – there is the marvellous *in malo* as well as the marvellous *in bono*: "If the marvelous or wondrous exhilarates because of its size or scope, its rarity or novelty, its ingenuity, its paradoxicalness, it may also depress because of the fearful destructiveness that religion, nature, and human events may display or promise" (Morillo 1991: 63). Coenen was also acutely aware of the darker side of nature – especially in his analysis of comets and other portents, and the numerous sea monsters that inhabited the seas come to portray the dangers the sea held in store for the fishermen.

In the age of the marvellous there was appreciation for the way in which the ordinary and the mundane was elevated to the wondrous by infusing it with "higher" secular or religious meaning – from a Christian perspective, especially how ordinary nature, as is abundantly manifested in the fish encyclopedias, has "marvelous spiritual resonances or reveal graceful intimations of the sacred" (Morillo 1991: 64). In the "Visboock" and the "Walvisboock" Coenen is not only bound here by what the Scriptures have to say about the immanence of God in nature. He is bent on finding evidence of that; looking beyond the surface of nature and deciphering how God manifests his presence, greatness and providence not only in the spectacular, wondrous, strange, and exotic but also in the mundane. This is more than visceral interaction, it borders on what Hepburn ascribes to the workings of metaphysical imagination in our engagement with nature (cf. Carlson 200a). These are ecstatic experiences, intellectually grounded, inasmuch as the religious messages are deciphered from the natural "facts".

Elements of the Positive Aesthetic experience discussed above clearly resound in declarations by Coenen such as the following: "O Governor of the creatures, almighty God, Lord be blessed because every part of our creation is influenced by your sweet virtue.

By your might everything is sustained and preserved and all that lives in the world hopes to receive its support from you.

("Visboock", f. 6, translated by Egmond & Mason 2000: 325)

I am inspired to praise and honor you when I behold your good creatures. For they are immensely beautiful, good and manifold and have been supremely allotted by number and mass. For this reason it has been written that you have made all things in your wisdom and also in the strength of your power which presides over all creatures. Everything that swims in the water and walks or crawls on the earth has been ordained by you, O glorious creator.

("Visboock", f. 13; translated by Egmond & Mason 2000: 325)

For Coenen most of the natural world has positive aesthetic qualities: being beautiful, graceful, delicate, intense, unified, and orderly so that a negative aesthetic experience or judgment would be out of place. The major motivation for such a positivist aesthetics is the basic assumption that the natural world is aesthetically good because of its divine creation, that it was created by the divine Artist, that "the natural world is designed, created, and maintained by an all-knowing and all-powerful God", and, as such, an objectification of the divine mind (Carlson 2000: 72, 81, 82).

4 A New Cosmovision?

In contrast to many of the current philosophical and environmental positions on humans' engagement with nature, the Coenen case study illustrates that both the learned and the religious, and both the instrumental and the aesthetic can fuse seamlessly to provide for an ecstatic experience of nature. As such, this case study provides further support for Godlovitch's (1998) view that prescriptions as to what should be an aesthetic experience of nature makes little sense.

This study also stresses the complexity of the variables that underlie our engagement with nature and of the reductionistic nature of models such as the psychopathological and the rational ones. The more complex model that emerges in this study in fact predicts that it will be no easy task to change people's negative engagement with nature and that simplistic attempts are bound to fail.

Some scholars suggest (cf. the discussion in Frank 2003) that the way to go is to abolish the fundamental dyad of the Western ontological model of self and nature in favour of the existing, but non-Western cosmovision based on a view of humankind woven into the fabric of nature, a new ecological embodiment, and an "ecological (transpersonal) self" (Frank 2003: 131) – surely no easy task, but one which, according to Frank (2003: 131), can be tackled by fundamentally problematising the split between self/culture and nature.

However, the cosmovision outlined by Frank above is basically a deep ecological one. If we propagate, furthermore, the abolishment of the male-female dyad and its relations of dominance and subjugation in our Western ontological model, we arrive at one of the basic tenets of ecofeminism. Both strategies, however, bring us back to the basic problem outlined at the beginning of this article, viz. the inability of current ecological paradigms to come up with programmes of action that could basically alter negative

engagements of humans with nature. Obviously, we still need major research efforts in this regard if we want to make nature once again an object of curiosity, wonder and desire.

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