Environmental Values 6(1997):361-364. Reply to Emyr Vaughan Thomas, "Rolston, Naturogenic Value and Genuine Biocentrism," *Environmental Values* 6(1997):355-360.

Nature, the Genesis of Value, and Human Understanding

HOLMES ROLSTON, III

Department of Philosophy Colorado State University Fort Collins, CO 80523, USA

I agree with Emyr Vaughan Thomas that, in forming an environmental ethic, we ought to try to see plants and animals as 'other than human in a way that is genuinely unsullied by the claims of self (p. 360). If he can help improve that vision, well and good. We have also to see them in their interconnections with us; and much, perhaps most, of environmental ethics is about getting humans in harmony with nature, involving our self-understanding of who and where we are, relating to nature, and also using nature sustainably and resourcefully. Still, appreciation of nature 'for what it is in itself' is required in any comprehensive environmental ethics.

With that in view, I argue that values are present in nature at multiple levels: instrumental, intrinsic, and systemic (Rolston, 1988, 1994). Nature as expressed on Earth, is value-able, able to generate values, and has been doing so over evolutionary history; the result is the biodiversity that we seek to protect 'for what it is in itself,' as well as for its usefulness. The etymological roots of the word 'nature' revolve around the idea of 'giving birth' (Latin: [g]nasci, natus, paralleling the Greek gi[g]nomai, surviving in such words as genesis, gene, and pregnant). In that sense 'naturogenic' is redundant. The '-genic' root is already there in the 'naturo-' element, although the redoubling perhaps reminds us of what we have forgotten. That nature is spontaneously creative is an ancient idea: 'the earth produces of itself (Greek: automatically) (Mark 4.28). More recently this has been called 'autopoiesis' (Maturana and Varela 1980) and 'self-organisation' (Kauffman 1993).

I do find that, among Earth's myriads of species, only humans can understand evolutionary natural history. When they evaluate this history, some scientists and philosophers find nature value-free, unless and until humans arrive to generate value. Many 'anthropogenic' values are indeed important, but I deny that nature is otherwise value free, and recommend to humans a 'psychological joining (with) on-going natural history,' since 'there is value wherever there is positive creativity' (Rolston 1994, p. 29). Thomas finds this 'joining' to be 'assimilationist' as though nature's generative vitality has somehow been drawn into the human orbit.

Epistemologically, of course, it is impossible for any knower not to be participant in what he or she knows. We will have to use our eyes, ears, noses,

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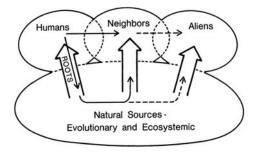
hands, minds. What we know will be filtered through our percepts and concepts-including lenses, meters, instruments, scientific and metaphysical theories. I employ such concepts as 'defending' a life, and the 'information' in the genetic 'code' by which an organism 'copes'. These are, to be sure, concepts that we first learn in everyday life, and I suppose one must say that they are analogically employed of animals and plants.

Critics like Peter Singer hold that to speak of plants defending their own good is meaningless. The problem is that environmental ethicists 'use language metaphorically and then argue as if what they had said was literally true.... [P]lants are not conscious and cannot engage in any intentional behaviour, it is clear that all this language is metaphorical; one might just as well say that a river is pursuing its own good and striving to reach the sea' (Singer 1993, p. 279) So we mistakenly assimilate plants to human intentional life. The property we attribute to plants, on the basis of which we value them, has been surreptitiously stolen from human life. We are really mirroring ourselves in so describing plants.

Singer's mistake is to fail to understand that humans, looking over the creation, can perfectly well see that plants are alive. They differ not only from ourselves but from rivers as well. We correctly discover a botanical vitality in plants, appropriate to them, differing from zoological vitality in animals, also differing from psychological vitality in persons, and find all such vitality absent in rivers. Plants are objectively alive, but not subjects of a life as are we. They are as literally alive as we are, even though they do not enjoy our form of life, nor are we plants.

Life' is hardly a metaphor when applied to them, although we struggle to describe such life. They are self-organising teleonomic systems. I do not use 'defend' or 'information' as though I had never read a biology book. A genetic 'code' and 'coping' may be metaphorical but they are getting at something literal. The (humanly-constructed) concept of 'survival value' discovers values at stake in (biologically self-constructed) plants in ways in that do not apply to rivers (which may be valuable for other reasons). When we further discover that the myriad species have been generated over evolutionary 'history' by the spontaneous 'creativity' of nature, such a 'genesis' does not seem so hopelessly 'entrenched in human analogues' (p. 359) that nothing about nature is known. If this be assimilation, all knowing of any natural other, product or process, must be assimilationist.

Yes, there is sometimes to be discovered a human 'continuity with nature', but that does not make the discovery of valued features that humans share with animals and plants 'a decidedly tenuous' 'implicit extrapolation' (p. 357). It is rather the discovery of what we have in common: vitality with plants; sentience with many animals. In 'Values Gone Wild', I employ a sketch that places humans alongside both neighbours and aliens, overlapping groups, all with common sources in evolutionary ecosystems (Rolston 1983).



The sketch is overly simple, but at least it is quite 'naturogenic' (if we need that word). It invites being discriminating about both kinships and otherness. Humans cannot sense what a bat can hear, or a coyote can smell, or an octopus can see; but still humans can get let in a little on these remarkable abilities, figuring them by careful observation, enriched as this has become with our sciences. Humans can study photosynthesis, vital to plants, and the Krebs cycle in both them and us. We can decipher something of the evolutionary genesis, and place ourselves in this natural history. If this is assimilationist, humans need to get themselves 'assimilated' (or, better: 'integrated') into some general picture of this kind, to know who they are and what they ought to do.

In the present fashions of postmodernists, anti-realists, deconstructionists, social constructionists, radical pragmatists, linguists with nothing 'outside the text', and others on the academic left, we are assured that humans can only know 'nature with a human face', never nature as it is in itself. Even more sober critics, such as Hilary Putnam, insist: 'There is a real world *but* we can only describe it in terms of our own conceptual schemes' (Putnam 1978, p. 32). Everything we know has been 'conceptually contaminated.... Our conceptions of coherence and acceptability are ... deeply interwoven with our psychology ... Objectivity and rationality humanly speaking are what we have; they are better than nothing' (Putnam 1981, pp. 54-55).

Bernard Williams holds: 'A concern for nonhuman animals is indeed a proper part of human life, but we can acquire it, cultivate it, and teach it only in terms of our understanding of ourselves' (Williams 1985, p. 118). There is an epistemological point here; one must be alert for the filters with which we colour nature. Such authors are going to be rather doubtful of promises for more 'clarity as to how nature can be valued without any assimilation to the human or any sense of continuity between nature and the human' (p. 357).

Still, recognising these cautions, I defend a rather more critical realism, both epistemically and axioiogically, one that many find naive. I claim that humans, especially at their native ranges on Earth, can and ought to examine and evaluate the world outside themselves sufficiently to discover and appreciate both facts

and values found there objectively and independently of ourselves. Sometimes this will be by finding in nonhumans parallels and analogues of what we know in ourselves. Sometimes it will be by recognising achievements in which we take no part. If Thomas has some better way by which he can 'more genuinely grasp a sense in which nature is other than and outside the human sphere' (p. 356), I welcome it.

In his Transcendentalist manifesto of 1836, *Nature*, Emerson encounters nature to move through 'commodity, beauty, language, and discipline' and to close with 'idealism' and 'spirit' (Emerson [1836] 1968, the chapter titles). 'Nature is the incarnation of a thought ... the world is mind precipitated', (Emerson [1844] 1961, p. 400). Emerson can be eloquent about the 'affinity', the 'guilding identity' of mind and matter by which man, understanding nature, becomes a microcosm of the macrocosm. The sense of the sublime is often there; humans are taken past their limits before ineffable, divine nature. We but touch the 'outskirts' of nature's ways. Still, part of the mystery of the world is its intelligibility; the human mind does see something of what is taking place in nature. 'Man carries the world in his head Because the history of nature is charactered in his brain, therefore he is the prophet and discoverer of her secrets' (Emerson [1844] 1961, p. 382, p. 391, p. 398). I will be content in my thoughts to incarnate (assimilate?) something of this dramatic natural history that nature has precipitated, to be the prophet and discoverer of some of her values.

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