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**LYNN WHITE, JR 1907–87**

What people do about their ecology depends on what they think about themselves in relation to things around them.<sup>1</sup>

Lynn Townsend White, Jr was born in San Francisco, California, on 29 April 1907. After his academic training at the finest schools in the USA,<sup>2</sup> his first academic post was at Princeton University from 1933 to 1937. In 1938 he joined the faculty of his alma mater, Stanford, and remained there until 1943. From 1944 until 1957 Lynn White served as President of Mills College, a women's college in Oakland, California. In the midst of his stint at Mills, White penned a provocative book entitled *Educating Our Daughters*, which spoke to the problems women faced in higher education in the USA at the time. White clearly made his mark at Mills College: a residence hall and an endowed chair still carry his name. In 1958 White joined the History faculty at the University of California – Los Angeles where he remained until retiring from academic life in 1974. Lynn White, Jr is widely and most notably recognized as the 'founder of all serious modern study' of the history of technology in medieval Europe. His most famous and still classic, *Medieval Technology and Social Change*, was once declared by Joseph Needham to be 'the most stimulating book of the century on the history of technology'. On 30 March 1987 Lynn White, Jr died of heart failure; he was 79. In his lifetime White was known for both his scholarly and his more popular writings, for his timely and controversial intellectual boldness and for his insistence that scholarly parochialism was antithetical to the life of the mind. It is said that throughout his life White remained a Christian, a fact which might seem curious to some given the nature of his most obvious contribution to environmental thought.

In the cold of the Washington, DC winter of 1966, Lynn White, Jr presented a ground-breaking and controversial paper at the annual meeting of the American Association for the Advancement of Science. In the paper, which was published the following year in the journal *Science*,<sup>3</sup> White laid much of the blame for our current environmental predicament upon the doorstep of Christianity. It is, therefore, deeply ironic that 'The Historical Roots of Our Ecologic Crisis', a paper considered to be so critical of the Christian tradition, was presented by a Christian thinker on the day after Christmas.

Within just a few short years the published article had already been dubbed a 'classic'. The essay provoked both immediate and long-term reactions: literally dozens of responses to White's essay have since been published,<sup>4</sup> the essay remains a staple for university 'environmental' courses, and it continues to be reprinted in a wide variety of anthologies and textbooks. White seemed surprised by the response to his essay. However, 'as the tide of protest from

churchmen flowed across his desk in a growing stream of letters and articles', White apparently kept his sense of humour, joking that he 'should have blamed the scientists'.<sup>5</sup> In an essay White wrote in 1973, responding to his critics, he comments that as the criticisms poured forth he 'was denounced, not only in print but also on scraps of brown paper thrust anonymously into envelopes, as a junior Anti-Christ, probably in the Kremlin's pay, bent on destroying the true faith'.<sup>6</sup>

It is, of course, not ordinary to consider someone a key environmental thinker on the basis of essentially a single essay. But this is no ordinary essay. Seldom has the splash of a single work created such enduring ripples. There are two noteworthy contributions made by White's paper.

Understandably the point most people immediately fixated on was White's attack on Christianity. White begins by pointing out that although 'all forms of life modify their context' current anthropogenic environmental impact 'has so increased in force that it has changed in essence'. Whereas past environmental impact was local and point-source impact, currently we are witness to not just a difference in the degree of environmental impact but a different kind of impact all together. We now possess and exercise an ability to affect the globe as a whole. As White put it: 'the impact of our race upon the environment has so increased in force that it has changed in essence'. In fact, the bulk of his scholarly work was an attempt to show how even quite minute alterations in technology – such as the use of horse power and the resulting heavy plough – can and did eventuate in a radical escalation in the ability of humans to exploit nature.<sup>7</sup> Hence, as an historian, White provides us with an explanation of how it is that humans have impacted and altered the environment so extensively. However, White denies that our current rate of environmental change, resulting in our environmental crisis, is merely a result of an increase in our ability to manipulate our context with the tools of modern science and technology. Instead, White asserts that because the fusion of science and technology during the seventeenth-century Scientific Revolution occurred within a Christian conceptual framework, and because Christianity had been interpreted as dictating an essentially despotic relationship between humans and the rest of nature – a relationship where 'technological advance was seen as superlatively virtuous' – Christianity is ultimately responsible for our contemporary environmental crisis. As White puts it:

The artifacts of society, including its political, social and economic patterns, are shaped primarily by what the mass of individuals in that society believe, at the sub-verbal level, about who they are, about their relation to other people and to the natural environment, and about their destiny. Every culture, whether it is overly religious or not, is shaped primarily by its religion.<sup>8</sup>

According to White, the message we have gleaned from Christianity is that we humans are uniquely created in the image of God, a quality which cuts us out from the rest of creation, making us not only separate but special, and that our role on this earth with regard to the rest of God's creation is to dominate and subdue. Hence, because of these background assumptions, humans feel 'we are superior to nature, contemptuous of it, willing to use it for our slightest whim'. Where 'formerly man has been part of nature; now he was the exploiter of nature'. Hence, Christianity not only allows for the anthropogenic exploitation of nature that has resulted in our environmental crisis, it also sanctions and enforces it.

So, what is the solution to our environmental crisis? White dismisses a focus on an increase in science and technology since 'our science and technology have grown out of Christian attitudes toward man's relation to nature'. According to him, since

what we do about our ecology depends on our ideas of the man-nature relationship ... more science and more technology are not going to get us out of the present ecologic crisis until we find a new religion, *or rethink our old one.*<sup>9</sup>

Since 'Christianity in absolute contrast to ancient paganism and Asia's religions ... , not only established a dualism of man and nature but also insisted that it is God's will that man exploit nature for his proper ends' – and since it is, at least in part, the message taken from the establishment of this dualism – the goal, for White, is to not jettison Christianity but, rather, it 'is to find a viable equivalent to animism'.<sup>10</sup>

White's proposal, then, is to rethink Christianity, to focus on the possibility of an alternative message about the human-nature relationship, a message of stewardship. White ends his essay with a tribute to St Francis of Assisi who, White claims, was not only 'the greatest radical in Christian history since Christ' but who delivered

the required nature-sympathetic message of stewardship. In fact, White even goes so far as to propose St Francis as the environmental 'patron saint'. Since the publication of 'Historical Roots' in 1967, Christians seem to have taken up the task White lays out. In fact, the advent of a Christian environmental stewardship is arguably the most powerful thing to happen to the environmental movement since Rachel Carson's *Silent Spring*.

However, apart from attributing the West's brazenly opprobrious environmental behaviour to our narrowly focused and anthropocentric interpretation of Christianity, there is a subtle yet powerful subtext which flows throughout White's essay. White asserts that to solve our environmental crisis we must 'clarify our thinking', 'think about fundamentals', and 'rethink our axioms'. In other words, we must philosophize. White's entire essay, then, is a call for, and stamp of approval on, the new field of environmental ethics, a subdiscipline of philosophy in its infancy when White's challenge broke. In fact, because of this essentially philosophical subtext, environmental philosopher J. Baird Callicott has even gone so far as to dub White's essay 'the seminal paper in environmental ethics'.<sup>11</sup>

Although often misunderstood, Lynn White, Jr's contribution to environmental thought was both important and profound. He boldly challenged us to think deeply about the roots of our environmental problems and to be brave enough to reconsider those fundamental anthropocentric axioms asserting our human superiority. White lays before us a formidable task: we must learn humility. We must learn to care for ourselves as well as for God's creation.

### Notes

1. 'The Historical Roots of Our Ecologic Crisis', *Science*, 155, p. 1205, 1967.
2. BA, Stanford, 1928; MA, Union Theological Seminary, 1929; MA, Harvard, 1930; PhD, Harvard, 1934.
3. 'The Historical Roots of Our Ecologic Crisis', pp. 1203-7.
4. One of the best is James Barr, 'Man and Nature: The Ecological Controversy and the Old Testament', *Bulletin of the John Rylands Library*, 55, pp. 9-32, 1972.
5. Bert S. Hall, 'Obituary of Lynn White, Jr', *ISIS*, 79, p. 480, 1988.
6. 'Continuing the Conversation', in Ian Barbour (ed.), *Western Man and Environmental Ethics*, p. 60.
7. See especially *Medieval Technology and Social Change*, p. 1203.
8. White in Barbour, op. cit., pp. 59, 57.
9. *Ibid.*, pp. 1205-6, emphasis added.
10. White in Barbour, op. cit., p. 63.

- 11 J. Baird Callicott, 'Environmental Philosophy is Environmental Activism: The Most Radical and Effective Kind', in D.E. Marietta and L. Embree (eds), *Environmental Philosophy and Environmental Activism*, Lanham, MD: Rowman & Littlefield, p. 30, 1995.

*See also in this book*

Callicott, Carson, Saint Francis of Assisi

*White's major writings*

- Latin Monasticism in Norman Sicily*, Cambridge, MA: Medieval Academy of America, 1938.  
*Educating Our Daughters: A Challenge to the Colleges*, New York: Harper & Brothers, 1950.  
*Medieval Technology and Social Change*. London: Oxford University Press, 1962.  
*Machina ex deo: Essays in the Dynamism of Western Culture*, Cambridge, MA: MIT Press, 1968.  
*Medieval Religion and Technology: Collected Essays*, Berkeley, CA: University of California Press, 1978.

*Further reading*

- Barbour, Ian G. (ed.), *Western Man and Environmental Ethics: Attitudes Toward Nature and Technology*, Reading, MA: Addison-Wesley, 1973.  
 Callicott, J. Baird, *Earth's Insights: A Multicultural Survey of Ecological Ethics from the Mediterranean Basin to the Australian Outback*, Berkeley, CA: University of California Press, 1994.  
 — 'Genesis and John Muir', in *Beyond the Land Ethic: More Essays in Environmental Philosophy*, Albany, NY: State University of New York Press, 1999.  
 Gimpel, Jean, *The Medieval Machine: The Industrial Revolution of the Middle Ages*, New York: Holmes & Meier, 1974.  
 Gottlieb, Roger (ed.), *This Sacred Earth: Religion, Nature, Environment*, London: Routledge, 1996.  
 Hill, Brennan R., *Christian Faith and the Environment: Making Vital Connections*, Maryknoll, NY: Orbis, 1998.  
 Kinsley, David, *Ecology and Religion: Ecological Spirituality in Cross-cultural Perspective*, Englewood Cliffs, NJ: Prentice-Hall, 1995.

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