

Deep Ecology, the Radical Enlightenment, and Ecological Civilization

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The publication of Arne Naess' paper "The Shallow and the Deep, Long-Range Ecology Movement: A Summary" was almost immediately embraced around the world. It expressed the radical spirit of the time looking for a unified vision beyond consumerism, industrial capitalism, exploitation and oppression of Third-World countries, and destruction of nature, questioning the roots of these in the anthropocentrism of the culture of Western civilization. It became a reference point for what became a growing field of environmental ethics, although Naess was highly critical of the 'man-in-environment' image presupposed by conceiving ethics in this way. Those who embraced 'deep ecology' revisited and attempted to integrate the work of a range of philosophers, most importantly Spinoza and the work of a number of ecologists, including Aldo Leopold, while fostering a new respect for non-Western cultures and religions. It was criticized by philosophers who claimed to be defending more radical views, such as the eco-feminists, with the most extreme position being put forward by Richard Sylvan. His 'deep green' philosophy questioned the life-centric attitudes of the deep ecologists. Other radicals, such as Murray Bookchin, criticized it for being anti-human while more orthodox philosophers treated it as a challenge to their basic philosophical beliefs. While these more orthodox philosophers defended the traditions with which they were aligned, they were also stimulated to extend them, to argue that Christianity, rights theory or utilitarianism had the resources required to embrace the concerns of the deep ecologists. 'Deep ecology' was one of the most important reference points for radical 'environmentalists'. Over the next thirty years anthologies were published at regular intervals dealing with and developing the philosophy of deep ecology. While initially many ecologists sought to distance themselves from radical environmentalists who embraced their science, other ecologists became increasingly sympathetic to their ideas. The last major anthology on deep ecology, *Beneath the Surface: Critical Essays in the Philosophy of Deep Ecology*, edited by Eric Katz, Andrew Light, and David Rothenberg was published in 2000 and suggested a convergence between eco-feminism, postmodernism, ecology, proponents of non-Western attitudes to nature, and other radical critiques of mainstream anthropocentric thinking and alignment of all this with deep ecology, with criticisms of deep

ecology being met and new horizons opening up.¹ Then, publications on deep ecology became rarer. Today, as we face a global ecological catastrophe that could destroy most of the world's ecosystems and species and threatens the lives of billions of people, the deep ecology movement appears as a quaint echo from the past.

It could be claimed that this brief sketch misrepresents what has happened. Those aligned with deep ecology have continued to develop and promote their ideas under different labels. Michael E. Zimmerman, for instance, originally influenced by Heidegger and a deep ecology fellow traveler, published *Contesting Earth's Future: Radical Ecology and Postmodernity* in 1994, most of which was devoted to deep ecology.² Since then he has aligned himself with Ken Wilber and written a major work with Sean Esbjörn-Hargens, titled *Integral Ecology: Multiple Perspectives on the Natural World*, which was published in 2009. Wilber and Esbjörn-Hargens' work is not identified as a work concerned with deep ecology and only has one reference to Naess. Deep ecology is acknowledged as only one of a very large number of movements of environmental thought. Nevertheless, it can still be seen as a development within this tradition.³ However, even interpreted in this way it appears that the intellectual climate had changed. This book has not had the impact of Zimmerman's earlier books. His book *Heidegger's Confrontation with Modernity* published in 1990 shows 469 online citations according to Google and *Contesting Earth's Future* published four years later shows 369 citations; *Integral Ecology* shows just 8. While only being one example, this reflects the declining interest aroused by such work.

It is impossible to understand this marginalization simply in terms of debates within environmental philosophy or within the Green movement. It is a manifestation of far broader changes. One of these is the decline of the status of philosophy itself, and along with philosophy, the humanities generally. Philosophy nowadays is valued almost entirely for its contribution of symbolic logic and its semantics to the development of information technology. Apart from that, as with other disciplines in the humanities, it is regarded as part of the entertainment industry, for the small number of people who like to play intellectual parlour games. This in turn reflects the transformation of universities, from public institutions preserving, developing, and passing on from one generation to the next the culture of nations

¹ Eric Katz, Andrew Light, and David Rothenberg, *Beneath the Surface: Critical Essays in the Philosophy of Deep Ecology* (Cambridge, Mass.: MIT Press, 2000). A larger and less critically reflective anthology had been published five years earlier: George Sessions, ed., *Deep Ecology for the Twenty-First Century* (Boston: Shambhala, 1995).

² Michael E. Zimmerman, *Contesting Earth's Future: Radical Ecology and Postmodernity* (Berkeley: University of California Press, 1994).

³ Sean Esbjörn-Hargens and Michael E. Zimmerman, *Integral Ecology: Multiple Perspectives on the Natural World* (Boston: Integral Books, 2009).

and civilizations, into transnational business corporations training people for jobs to improve their and earning power.⁴ These developments are part of a massive transformation of the entire world-order. What is driving this transformation?

THE NEO-LIBERAL REVOLUTION

Those who thought of themselves at the cutting edge of radical thought in the 1970s were really the last gasp of an earlier transformation of the world that had begun in the late nineteenth century, a transformation that had been accelerated by the First World War and then the Great Depression and World War II. This was a project to overcome the brutality of the nineteenth century world-order associated with imperialism and the subordination of societies to market forces legitimated by economists and social Darwinists. It was associated with support for democracy, egalitarianism and greater 'humanity', and liberation of previously subjugated peoples. Despite massive resistance and many false directions this struggle was successful, with the advance of democracy, the development of the League of Nations, the defeat of Nazism, and then after World War II, the establishment of the United Nations. These were associated with efforts to create a world order in which each nation would be recognized as having the right to self-determination, the advance of the welfare state and social democracy, and the growth of large middle-classes in nations that had achieved self-determination, the liberalization of communism in Eastern Europe after the death of Stalin, and successful struggles against imperialism and then neo-colonialism in Third World countries. Deep ecology appeared as the logical next step in this advance, rejecting the elitism of Western environmentalists promoting 'life-boat ethics' and extolling the value of all life.

This transformation always had its opponents; after World War II, they had regrouped under the banner of neo-liberalism.⁵ Aligned with big business, the leaders of this movement identified Stalinism, Naziism, social democracy, and the welfare state with mass rule threatening individual freedom, and planned to return the world to the form of free-market capitalism that had existed in the nineteenth century (although there were neo-liberals who were far less extreme, just as there had been Marxist opponents to Stalinism in the Soviet Union and Nazi opponents of Hitler in Germany). After working out their strategy in 1947 at Mont Pèlerin, they seized their opportunity with the political turmoil of the late 1960s and early 1970s and then the economic crisis of the 1970s. Major landmarks in the success of this project were the co-opting of leaders of the Chinese Communist Party and trade unions and social

⁴ See Bill Readings, *The University in Ruins* (Cambridge: Cambridge University Press, 1996).

⁵ See Philip Mirowski and Dieter Plehwe, *The Road From Mont Pèlerin: The Making of the Neoliberal Thought Collective* (Cambridge: Harvard University Press, 2009) and Dieter Plehwe, Bernard Walpen and Gisela Neunhöffer, *Neoliberal Hegemony: A Global Critique* (London: Routledge, 2006).

democratic and labor parties in the First World, the domination of the media by a small number of globalized media moguls, augmented by massive expenditure on advertising and public relations (the mind-control industries), followed by the implosion of communist countries of Eastern Europe, the privatization or subversion of public institutions such as universities, the deregulation and increasing power of financial institutions, all accompanied by the continued growth and power of transnational corporations and their managers.⁶ Removing trade barriers, freeing capital to move where-ever labour is cheapest and regulations most lax, undermining the tax base of governments and plundering public assets, promoting managerialism, removing job security and deprofessionalizing the work force, and dismantling the welfare state while developing new technologies of surveillance are just some of the manifestations of this. Right from the beginning of their ascendancy in the 1970s, the members of this movement saw the greatest threat to their hegemony coming from their inability to deal with environmental problems and from environmentalists. They embraced the notion of 'sustainable development' as a slogan that would enable them to co-opt environmentalists.⁷

All these developments required new technologies together with ideological legitimation. In hindsight, it was the development of information technology based on advances in symbolic logic, the revival of neo-classical economics by Milton Friedman in opposition to Keynesian economics and the revival of social-Darwinism by socio-biologists and psychologists that were the really significant intellectual revolutions of the 1970s.⁸

The success of the neo-liberals meant disempowering national governments and the general population, taking control of State institutions and using them as instruments to serve the interests of corporations rather than nations. Together with efforts to corrupt core institutions required for the functioning of democracy (such as the press and the education system), this undermined the public sphere. In place of traditional broadly educated intellectuals engaging people in the public sphere, universities promoted a new kind of integrated technocratic intellectual connected to the knowledge industry who questioned the cognitive claims both of old style intellectuals and the general public. As the full implications of the success of the neo-liberals dawned on people it was not philosophers, let alone deep ecologists, who led the challenge to neo-liberalism, but radical economists, climate scientists and ecologists, specialist intellectuals with the credentials to challenge their more conformist colleagues. For those who

⁶ See Carl Boggs, *The End of Politics: Corporate Power and the Decline of the Public Sphere* (New York: Guilford Press, 2000).

⁷ See Leslie Sklair, *The Transnational Capitalist Class* (Oxford: Blackwell, 2001), 204ff.

⁸ These developments and their implications were clearly recognized and criticized by R.C. Lewontin, Steven Rose, and Leon J. Kamin in *Not in Our Genes* (New York: Pantheon, 1984).

were still interested in resisting neo-liberalism and taking democracy seriously, there appeared to be no need to look to philosophers or philosophy to interpret these thinkers. They could turn to the original theorists, many of whom were beginning to write for broader audiences in frustration at their inability to influence governments. They did not refer to deep ecology.

Does this mean that the deep ecology movement was merely the expression of a marginal group of academics and poets in the First World, made possible by the struggles of people in the past who had created and sustained the institutions that provided them with the conditions to develop and disseminate their ideas? It could be argued that the apparent success of deep ecologists in the 1970s, 80s and 90s came from their having gained tenured positions in universities before their transformation. As these academics retired, their readership disappeared. Like so many purported radicals of the late 1960s and early 1970s, through the inadequacy of their ideas to orient people to act and live, the deep ecologists were to some extent culpable in the triumph of neo-liberalism. As Hegel argued, ideas are only refuted by the ideas that replace them, and far from replacing the dominant ideas, deep ecologists left in the lurch people who looked to them for guidance in the face of the growing power of neo-liberals, transnational corporations and the new global ruling class, the corporatocracy, reinvigorating Nineteenth Century cultural forms.⁹

To evaluate this suggestion it is necessary to examine the ideas of the deep ecologists from a broader historical perspective.

THE 'RADICAL' AND 'MODERATE' ENLIGHTENMENTS

The debates that took place between deep ecologists and allied radical environmentalists, to begin with at least, were rather bewildering. While Naess looked back to Spinoza, others defended Nietzsche, Heidegger, and Merleau-Ponty, among many others. The aim was often to demonstrate that some philosopher or other was really a proto-deep ecologist, as though this was somehow going to lead more people to become deep ecologists, or perhaps more plausibly, to rank their favourite philosopher a little higher. However, such arguments were productive because in conjunction with work in the history of ideas, it gradually became apparent that these philosophers were not isolated thinkers but part of a tradition with its own history, a tradition opposed to the dominant ideas of modernity. It was a submerged tradition, submerged by a tradition that began and developed in reaction to this submerged tradition. To begin with, this alternative tradition was characterized as postmodernism, but this was misleading and it is my contention that this should be recognized as a revival of what Margaret

⁹ This was the basis of my criticism of the deep ecologists in *Nihilism Incorporated: European Civilization and Environmental Destruction* (Bungendore: Eco-Logical Press, 1993), 58ff.

Jacob dubbed the 'Radical Enlightenment'.¹⁰ The mainstream or what has recently been called the mainstream or 'Moderate Enlightenment' (as Jonathan Israel called it)¹¹ does go back to Francis Bacon, as Theodor Adorno and Max Horkheimer argued in their famous work, *Dialectic of the Enlightenment*; however it was more influenced by John Locke's philosophy and Newton's physics. These in turn were made possible by the work of Hobbes and Descartes. While in the past it was common to see this Moderate Enlightenment as developing in reaction to medieval thought, it is now being argued that it emerged as a reaction to more radical ideas. Israel claims that it was Spinoza's philosophy that they were reacting against. However, Jacob saw this as a continuation of Renaissance thought, particularly in its most radical form in the work of Giordano Bruno. The Renaissance gave birth to the civic humanists (people educated in the humanities) who revived Roman republicanism and Greek philosophy in their efforts to defend their liberty. Bruno's work was a radicalization of Renaissance thought. The philosophies of Descartes and Hobbes, developed to counter the influence of Bruno and the civic humanists, have been characterized as the counter-Renaissance.¹² The Radical Enlightenment, which survived as an underground movement in the first half of the Eighteenth Century, kept alive and further developed these Renaissance ideas.

The central concern of the Renaissance civic humanists was to cultivate the virtues required for people to defend their 'liberty' (that is, the condition where they were not being dependent upon the good will of others who could arbitrarily harm them) and to govern themselves wisely.¹³ This meant defending a conception of humans as capable of such self-governance. Bruno's concern was to extend this philosophy to embrace even the poor and to defend a conception of nature as self-organizing, promoting a religion of nature which legitimated in a more egalitarian form the values of the civic humanists.¹⁴ For this reason he and those who followed him were characterized as the Nature Enthusiasts. The development of the new 'mechanical philosophy' of Descartes and Hobbes was designed to combat the influence of these ideas, to deny any but instrumental value to nature and, in the case of Hobbes, to

¹⁰ Margaret C. Jacob, *The Radical Enlightenment: Pantheists, Freemasons and Republicans*, [1981] 2nd ed. (n.p.: The Temple Publishers, 2003).

¹¹ See Jonathan I. Israel, *The Radical Enlightenment: Philosophy and the Making of Modernity 1650-1750* (Oxford: Oxford University Press, 2002) and *Enlightenment Contested: Philosophy, Modernity, and the Emancipation of Man 1670-1752* (Oxford: Oxford University Press, 2006).

¹² Stephen Toulmin, *Cosmopolis: The Hidden Agenda of Modernity* (Chicago: Chicago University Press, 1994), 24.

¹³ See Quentin Skinner, *Liberty Before Liberalism* (Cambridge: Cambridge University Press, 1998) and *Visions of Politics, Volume II, Renaissance Virtues* (Cambridge: Cambridge University Press, 2002).

¹⁴ See Arran Gare, "Reviving the Radical Enlightenment," in *Researching with Whitehead: System and Adventure*, ed. Franz Riffert and Hans-Joachim Sander (Frieberg: Verlag Karl Alber, 2008), 25-58.

reconceive humans and their goals and change the meaning of words such as freedom so that the liberty defended and aspired to by the civic humanists would become unintelligible.¹⁵ If we use the terminology of Aristotle, Hobbes was really defending rule by an intelligent tyrant. This was rejected by Locke, but as C.B. Macpherson argued in *The Political Theory of Possessive Individualism*, 'all the evidence [is] that Locke was not a democrat at all.'¹⁶ From an Aristotelian perspective, he was a defender of 'oligarchy', that is, rule by an elite acting on self-interest rather than for the common good.¹⁷ Locke was promoting possessive individualism and religious tolerance rather than liberty as the Romans and Renaissance neo-Romanists had understood it, or democracy as this had been understood in Ancient Greece.¹⁸ These are the ideas taken up by the Moderate Enlightenment, and it is not difficult to trace this influence and the evolution of this form of the Enlightenment. The project and grand narrative of the Moderate Enlightenment indeed was, as Adorno and Horkheimer revealed, 'the disenchantment of the world ... to learn from nature ... how to use it in order to wholly dominate it and other men.'¹⁹ This was based on the acceptance of Newtonian science and Locke's epistemology and political philosophy, in each case based on the assumption that all complex wholes can be entirely explained as effects of the interaction between their atomic components. Locke's conception of society and politics as based on contracts to protect property was followed by the development of utilitarianism. While utilitarianism's most important expositor, Jeremy Bentham, rejected the notion of rights and defended a form of democracy, utilitarianism also derived from Locke's psychology according to which evil is pain and good is pleasure. Utilitarianism was first and foremost a doctrine of social control, as Foucault reminded us. Following Hobbes' portrayal of society and Newton's model of science, Adam Smith incorporated both these dimensions of Locke's philosophy into economic theory

¹⁵ As Quentin Skinner argued in *Hobbes and Republican Liberty* (Cambridge: Cambridge University Press, 2008) and elsewhere.

¹⁶ C.B. Macpherson, *The Political Theory of Possessive Individualism* (Oxford: Oxford University Press, 1964), 196. Macpherson's ideas have been critically examined in *Democracy and Possessive Individualism: The Intellectual Legacy of C.B. Macpherson*, ed. Joseph H. Carens (New York: S.U.N.Y. Press, 1993).

¹⁷ In *The Politics* Aristotle divided constitutions into those in which one ruled, those in which some ruled, and those in which all ruled. In the proper forms of these – monarchy, aristocracy and polity, people ruled for the common good. In defective forms, tyranny, oligarchy and democracy, rulers ruled in their own interest. The conception of humans defended by Hobbes and Locke precluded people being capable of the virtues required to rule for the common good.

¹⁸ For what democracy meant for the Ancient Greeks, see Cornelius Castoriadis, "The Greek Polis and the Creation of Democracy", in *Philosophy, Politics, Autonomy*, ed. David Ames Curtis (New York: Oxford University Press, 1991), ch.5.

¹⁹ Max Horkheimer and Theodor W. Adorno, *Dialectic of Enlightenment*, trans. John Cumming (London: Verso, 1972), 2 & 4.

which then represented society to its members as a machine driven by the egoism of individuals.²⁰

The Radical Enlightenment maintained a subterranean presence, however. Jonathan Israel argued that this was associated with Spinoza, but it was Spinozism rather than Spinoza himself that influenced the radicals.²¹ Spinoza's geometrical form of argument and mechanistic view of nature were not accepted by them, which meant that Spinozists were really upholding a philosophy closer to that of Bruno, who had strongly influenced Spinoza. While it was advanced by Diderot and Rousseau, the ideas of the Radical Enlightenment came into their own in Germany towards the end of the Eighteenth and the beginning of the Nineteenth Centuries as a reaction against the atomism and utilitarianism of the Moderate Enlightenment. Kant, strongly influenced by Rousseau, was important in this, but it was through the radicalization of Kant's efforts to defend freedom by rethinking Spinozism through Kant's philosophy that the complex of ideas that can be identified as a development of the Radical Enlightenment came of age. The major figures in this development were Herder, Fichte, and the early Romantics, Hegel, Schleiermacher, and Schelling, although there were many others. While the basic assumptions of proponents of the Moderate Enlightenment are best characterized and identified through their affinity to Hobbes' mechanistic world-view, the proponents of the Radical Enlightenment are best characterized and identified through their affinity to Herder's philosophy. Herder, who defended democracy, saw nature as dynamic and creative, humans as socio-cultural beings striving for self-actualization and history as a slow and irregular progression towards greater humanity. Herder's ideas were developed much more rigorously by his successors. While in the past Hegel, Marx, and Nietzsche have received most attention as the figures in this movement, it is now coming to be recognized that to even understand the radical dimensions of these philosophers, and then to overcome their deficiencies, it is necessary to appreciate the contribution to philosophy and science and influence of Herder and Schelling, the 'prince of the Romantics'. As I have argued in a number of places, it was Schelling who combined the philosophies of Herder and Fichte by developing the more radical ideas of Kant to challenge the Newtonian world-view, thereby inspiring *Naturphilosophie*, post-mechanist science and new forms of mathematics.²² The view of the Romantics as only concerned with art and literature

²⁰ On this, see Andrew S. Skinner, *A System of Social Science: Papers Relating to Adam Smith* (Oxford: Clarendon, 1979).

²¹ See the reviews of Israel's book by Margaret Jacob and Anthony La Volpa in *The Journal of Modern History*, 75, no. 2 (June 2003): 387-393, and John H. Zammito, "'The Most Hidden Conditions of Men of the First Rank': The Pantheist Current in Eighteenth-Century Germany 'Uncovered' by the Spinoza Controversy," *Eighteenth Century Thought* 1 (2003): 335-368.

²² On this, see Arran Gare, "From Kant to Schelling to Process Metaphysics: On the Way to Ecological Civilization" *Cosmos and History* 7, no. 2 (2011): 26-69.

while defending emotion and feeling against reason has been exposed as a caricature of its major figures. Coleridge, allied with Schelling, cultivated a circle of the leading scientists and mathematicians of his day, including the mathematician William Hamilton, and promoted the work of Faraday. To a considerable extent, the most creative developments in science since that time can be seen as progress of the Romantic conception of nature as consisting of activity producing and maintaining stable forms, fields of force and self-organizing processes in place of Newtonian cosmology.²³

THE DIALECTIC OF THE RADICAL AND THE MODERATE ENLIGHTENMENTS

I have argued elsewhere that the subsequent history of philosophy, science, the humanities and European culture can be understood as the struggle between proponents of the Moderate and the Radical Enlightenments.²⁴ This does not mean that there was not a great diversity of philosophies or that any particular philosopher can be neatly categorized on one side or the other of this opposition, or that all philosophy was aligned with the Enlightenment. Nevertheless, the history of modernity only becomes fully intelligible when this dialectic is recognized. Recognizing this dialectic makes it much easier to understand the confusions in individual thinkers as proponents of each tradition struggled to assimilate ideas or advances from the opposing tradition, with proponents of the Radical Enlightenment also finding common ground with conservative and sometimes reactionary opponents of the Moderate Enlightenment. The idea of evolution, for instance, originated with thinkers aligned with the Radical Enlightenment, but was given a very sinister twist by Darwin who was aligned with the Moderate Enlightenment and concerned to make sense of, and thereby tacitly to legitimate, the brutality and imperialism of Victorian society.²⁵ Later, he attempted to soften his original views, moving them closer to the Radical Enlightenment in *The Descent of Man*. Marx was clearly aligned with the Radical Enlightenment (although he also drew on the work of conservatives), but in his effort to incorporate while criticizing ideas from the Moderate

²³ In other words, thermodynamics, field theories and systems theories along with Hermann Grassmann's mathematics are the fruit of Romantic science. See Arran Gare, "Overcoming the Newtonian Paradigm: The Unfinished Project of Theoretical Biology from a Schellingian Perspective," *Progress in Biophysics and Molecular Biology* 113 (2013): 5-24.

²⁴ See Arran Gare, "Democracy and Education: Defending the Humboldtian University and the Democratic Nation-State as Institutions of the Radical Enlightenment," *Congrescence* 6 (2005): 3-25 and "Reviving the Radical Enlightenment: Process Philosophy and the Struggle for Democracy," in *Researching with Whitehead: System and Adventure*, ed. Franz Riffert and Hans-Joachim Sander (München: Verlag Karl Alber Freiburg, 2008), 25-58.

²⁵ As Robert M. Young convincingly argued in "The Historiographic and Ideological Contexts of the Nineteenth-century Debate on Man's Place in Nature," *Darwin's Metaphor: Nature's Place in Victorian Culture*, (Cambridge: Cambridge University Press, 1985), ch.6. See also Jim Moore, "Socializing Darwinism," in *Science as Politics*, ed. Les Levidow (London: Free Association Books, 1986), 38-80.

Enlightenment found himself misinterpreted by most of his followers as an essentially Hobbesian thinker, leading him to proclaim that if there was one thing he knew, it was that he was not a Marxist.²⁶

The same confusion is often found in social and political movements, greatly magnified by deliberate efforts of the leaders of these to disguise their true colours. Traditional liberalism derives from Locke and was not committed to democracy. As C.B. Macpherson noted, up until the mid-eighteenth century, '[e]verybody who was anybody knew that democracy, in its original sense of rule by the people or government in accordance with the will of the bulk of the people, would be a bad thing – fatal to individual freedom.'²⁷ However a different form of liberalism developed as part of the Radical Enlightenment exemplified by Herder and Wilhelm von Humboldt. John Stuart Mill, strongly influenced by Bentham, began as a radical Lockean liberal, but influenced by Romantic poetry, Coleridge, Kant, Herder, and von Humboldt, he increasingly aligned himself with the Radical Enlightenment. His later ideas influenced the British Idealists who promoted social liberalism (or 'liberal socialism') very much in the tradition of the Radical Enlightenment, who in turn were a major influence on the development of the welfare state and social democracy.²⁸ Opponents of this trend among those aligned with Lockean liberalism do not proclaim themselves opponents of democracy, but redefine democracy as 'freedom to shop' without people being told what they should buy or sell.²⁹ For those inspired by the Ancient Greek notion of democracy or the republicanism of the civic humanists, including Cornelius Castoriadis, Benjamin Barber, and Michael Sandel, this is not democracy at all.³⁰ Most (although not all) of the leaders of the communist revolution in Russia were aligned with the Moderate Enlightenment, seeing communism as a means to mobilize society to achieve rational mastery over nature, while using the higher ideals of Marx (to

²⁶ Quoted by Engels in a letter to C. Schmidt, August 5, 1890, *Karl Marx and Frederick Engels, Selected Works Volume II* (Moscow: Foreign Languages Publishing House, 1962), 486. The roots of Marx's thinking in the Early Romantics and the subsequent misinterpretation of his work as been analysed by James D. White in *Karl Marx and The Intellectual Origins of Dialectical Materialism* (Houndmills: Macmillan Press, 1996).

²⁷ C.B. Macpherson, *The Real World of Democracy* (New York: Oxford University Press, 1972) 1.

²⁸ On this, see (among other recent books) David Boucher and Andrew Vincent, *British Idealism and Political Theory* (Edinburgh: Edinburgh University Press, 2000). On the democratic commitment of T.H. Green, the founder of this movement, see Colin Tyler, "Contesting the Common Good: T.H. Green and Contemporary Republicanism," *T.H. Green: Ethic, Metaphysics, and Political Philosophy*, ed. Maria Dimova-Cookson and W.J. Mander (Oxford: Clarendon Press, 2006).

²⁹ See James Galbraith, *The Predator State* (New York: Free Press, 2008), 16.

³⁰ See for instance, Benjamin Barber, *Strong Democracy: Participatory Politics for a New Age* (Berkeley: University of California Press, 1984) and Michael J. Sandel, *Democracy's Discontent* (Cambridge: Harvard University Press, 1996).

overcome alienation and democratize the economy) and those who believed in these as a disguise for their Moderate Enlightenment values.³¹ When, in 1967, Czechoslovakian Marxists, aligned with the Radical Enlightenment (led philosophically by Karel Kosik), attempted to implement a form of humanist Marxism, they were crushed. Even Naziism was initially influenced by the Radical Enlightenment. This was the case with a number of important anti-reductionist scientists who initially were attracted to Nazism.³² Heidegger, when he was apologizing for the Nazis, was a conservative also strongly influenced by Radical Enlightenment ideas. However, Hitler was a social Darwinist who ignored works in German philosophy, such as the work of Fichte and Nietzsche who are often identified as antecedents to Nazism, and spent his time carefully studying the obscure works of social Darwinists on scientific racism.³³ These defined his true, racist agenda.

Once these confusions are seen through, the current trajectory of civilization under the hegemony of a new global ruling class based in transnational corporations deploying the ideology of neo-liberalism should not surprise anyone. It is a return to the dominant thinking of European and Western civilization after a brief interlude where ideas from the Moderate Enlightenment had been discredited and ideas from the Radical Enlightenment had been in the ascendant. Nor should it surprise anyone that vulgar Marxists from Eastern Europe, who are now part of the European Union, and Maoists from Western Europe should have aligned themselves with neo-liberalism and opposed social democracy,³⁴ since they never took seriously those aspects of Marx's philosophy inspired by the Radical Enlightenment. Western Marxist philosophers, such as Herbert Marcuse, had recognized this from the beginning. The rule of the world by the managers of transnational corporations is really an alliance of market fundamentalism and managerialism against democracy. For proponents of the Moderate Enlightenment, modernization means controlling nature more efficiently. While supposedly in the service of humanity, people are treated as 'human resources' or 'standing reserve' to be efficiently exploited (as Heidegger pointed out), or as an excess that will eventually be

³¹ See Arran Gare, "Soviet Environmentalism: The Path Not Taken," *Capitalism, Nature, Socialism* 4, no. 3 (September 1993): 69-88. The democratic wing was represented by Lunacharski. For a more extended treatment of this see Arran Gare, *Beyond European Civilization: Marxism, Process Philosophy and the Environment* (Bungendore: Eco-Logical Press, 1993).

³² See Anne Harrington, *Reenchanted Science: Holism in German Culture from Wilhelm II to Hitler* (Princeton: Princeton University Press, 1996). See also Anna Bramwell, *Ecology in the 20th Century: A History* (New Haven: Yale University Press, 1989). Among early leaders of national socialism, Otto Strasser was deeply opposed to Hitler who, he claimed, was neither a socialist nor a nationalist. See Otto Strasser, *Hitler and I*, trans. Gwenda David and Eric Mosbacher (London: Jonathoan Cape, 1940), 217.

³³ See Timothy W. Ryback, *Hitler's Private Library* (New York: Vintage, 2010), 126ff.

³⁴ See Alain Supiot, "Under Eastern Eyes", *New Left Review* 75 (Jan-Feb 2012): 29-36.

eliminated through the process of natural selection (although this is never talked about).³⁵ This conception of the world is assumed and purveyed by adherents of neo-liberalism and the doctrine of the selfish gene. In the modern or postmodern world, this way of thinking and this belief structure are assumed rather than defended. It is embodied in organizations and in people's habitual way of interpreting every situation, their *habitus*, to use Pierre Bourdieu's language.³⁶ It is taken as the hard-headed view of reality, and anything opposing it is seen as unnatural. What are taken to be the units in the struggle for survival vary from species, races, individuals to genes. In its most recent incarnation race is less significant and genes and individuals are more prominent. Billionaires and the brightest and best graduates of top universities who serve them, whatever their racial background, are seen to have proved themselves superior beings who therefore should dominate lower life forms, whether human or non-human. Just as the market should be freed to allow this logic to work itself out, so also there should not be any effort to prevent ecological destruction, apart from market generated responses.³⁷ The strong will survive and be better for having met this challenge while excess population will be eliminated.

Once the history, coherence, and trajectory of the Moderate Enlightenment is understood, it is possible to get a clearer picture of the challenge posed to it by the Radical Enlightenment. The tradition of the Radical Enlightenment is more difficult to discern because it has been a subordinate tradition, plundered for its insights, frequently distorted, and most importantly, denied proper recognition for its achievements, most importantly for its success up until the 1970s in advancing democracy and the conditions for its functioning, including providing people with economic security and extending education in the liberal arts. For the Radical Enlightenment, liberty is understood as not being enslaved, where enslavement is understood as being in a position in which one can be harmed by those on whom one is dependent.³⁸ Liberty is guaranteed through participation in one's governance and by maintaining the institutions that recognize the freedom and significance of each individual. The institutions through which people could be recognized as free and govern themselves were the institutions

³⁵ This, as Bourdieu put it, it has become 'doxa,' taken for granted without ever being brought to full consciousness. It is only when such doxa have been effectively opposed that such ideas become fully conscious and attempts are made to impose them as orthodoxy, a far less effective way of organizing consent.

³⁶ I have argued this in detail *Nihilism Incorporated*, especially chapters 5, 6 & 7.

³⁷ See Philip Mirowski, "The Neoliberal Response to Global Warming" in *Never Let a Serious Crisis Go To Waste: How Neoliberalism Survived the Financial Meltdown* (London: Verso, 2013), 334ff.

³⁸ On this concept of slavery, see Skinner, *Liberty before Liberalism* (Cambridge: Cambridge University Press, 1998), 41ff.

of the *civitas libera* or 'free state.'³⁹ Under the influence of the Radical Enlightenment philosophy in Germany associated with Kant, Herder, Fichte, and Hegel, it also meant freedom to do what is worthwhile.⁴⁰ As a follower of the British Idealists (who were influenced by the Germans), Walter Murdoch, wrote in 1912 in a book written for school children:

Liberty – the only liberty worth fighting for – should be thought of, not as freedom from, but as freedom to; not freedom from this or that restraint, but freedom to do this or that thing that is worth doing. ... [L]ook upon liberty as a positive thing, - as freedom to do, to be, to enjoy, to understand, - and you will find that, in innumerable ways, government sets us free. ... The aim of the best government is to make the best kind of life possible to all.⁴¹

Through doing what is worthwhile, people achieve self-realization, a notion that had been developed by Herder in the late Eighteenth Century. Depriving people of access to the means of production and forcing them to compete for employment while maintaining a large reserve army of unemployed is a new form of slavery that has to be overcome by unionizing workers, extending the franchise for elections and engaging in national politics to ensure that people have economic security, guaranteed employment, and the conditions of work that will make work fulfilling. Along with all this, as with the Ancient Greeks, Cicero, the civic humanists of the Florentine Renaissance and the German revival of these ideas, cultivating the highest potential of people and civilizing them through education was seen as absolutely essential to advancing all this. The Humboldtian form of the university in which first Arts Faculties and then Arts and Science Faculties had privileged status because of their commitment to truth, was one of the most important contributions of the Radical Enlightenment to civilization. Such ideas gained traction from the late nineteenth century onwards as governments in conflict with each other aligned themselves with such ideas and their proponents to gain support from their own populations and to undermine support for the governments of rival nations.

The sabotaging by neo-liberals with well funded and well organized think tanks of all the achievements made by those committed to liberty, self-realization, and the pursuit of truth involved a massive drive for cultural hegemony to organize consent.⁴² They waged a campaign

³⁹ As Skinner observed in *Visions of Politics*, 6.

⁴⁰ All these were influenced by Rousseau. The most important and most original proponent of democracy was Herder. See F.M. Barnard, *Self-Direction and Political Legitimacy* (Oxford: Clarendon Press, 1988).

⁴¹ Walter Murdoch, *The Australian Citizen: An Elementary Account of Civic Rights and Duties* (Melbourne: Whitcombe and Tombs Limited, 1912), 208f.

⁴² This ideological assault has been well described by George Lakoff in *Don't Think of an Elephant: Know Your Values and Frame the Debate* (Carlton North: Scribe Publications, 2004).

against the 'State' and 'Big Government', calling for lower taxes and promoting a culture of consumerism. There was resistance to this, but it was pathetically inadequate. Neo-liberals were successful because of the ease with which they were able to co-opt potential opposition, partly because this opposition was so confused. To begin with, they co-opted economists in universities and their graduates who took over and transformed civil services. Pierre Bourdieu characterized these as a 'new state nobility', 'a small group of academically educated elites [that] feels entitled to rearrange society top to bottom because of its superior knowledge and its economist approach.' As he pointed out:

This state-nobility, preaching the retreat of the state and the undivided rule of market and consumer – this commercial substitute of the citizen – has monopolized the state. It has transformed public into private property and made the public matter of the republic its own private concern. What matters today is reclaiming of democracy and its victory over technocracy.

Bourdieu wrote of this development as an 'ideology of competence' or 'racism of intelligence': 'In fact, the power of neo-liberal hegemony is based on a new form of social Darwinism: In the words of Harvard, "the best and the most remarkable" win the race.'⁴³ What is more difficult to understand is the role played in this by academics and students in Arts Faculties. These 'intellectuals' thought of themselves as radicals when they rejected Radical Enlightenment ideas promulgated by proponents of hermeneutics, existential phenomenology, and humanist Marxism and embraced structuralism and post-structuralism, doctrines that reduced individuals to nothing but effects of structures. This implies that democracy is impossible, at least one which assumes the capacity of people to take responsibility for the governance of their societies, to develop a comprehensive understanding of their goals and ideals, to interrogate received beliefs and institutions, and to participate in discussions and decision-making and make judgements. What they were promoting, as Carl Boggs has argued, was an 'antipolitics' which effectively was surrender to, and government and enslavement by, transnational corporations. With opposition to neo-liberalism crippled in universities it was a relatively easy matter for neo-liberals to transform previously leftist political parties, newspapers, and trade unions and even to invade and transform primary and secondary education.⁴⁴

⁴³ Citations and quotes from Bourdieu in Oliver Schöller and Olaf Groh-Samberg, 'The Education of Neoliberalism', in *Neoliberal Hegemony: A Global Critique*, ed. Dieter Plehwe, Bernard Walpen and Gisela Neunhöffer (Milton Park: Routledge, 2006), 172. These can be found differently and less well translated in Pierre Bourdieu, *Acts of Resistance: Against the Tyranny of the Market*, trans. Richard Nice (New York: The New Press, 1998), 25ff and 42.

⁴⁴ As documented by Sharon Beder in *This Little Kiddy Went to Market: The Corporate Capture of Childhood* (London: Pluto, 2009).

DEEP ECOLOGY AND THE RADICAL ENLIGHTENMENT

Where does deep ecology stand in relation to all this? It should be clear from the account of Herder's ideas that the doctrines defended by Arne Naess and those he influenced (such as the notion of self-realization) which he saw as having its roots in the philosophy of Spinoza were echoes and developments of Herder's philosophy. Ecology itself originated with scientists influenced by *Naturphilosophie* and aligned with the Radical Enlightenment, although some ecologists have defended a reductionist form of it. Fritjof Capra's alignment with deep ecology becomes intelligible when the influence on science of Schelling's philosophy is appreciated. Seen in this light, facing up to all dimensions of the destructive effects of modernity and the assumptions that underpinned the social order that has become so destructive, deep ecology stands out as an island of sanity against the juggernaut of the megamachine (to use Lewis Mumford's term) engendered by the Moderate Enlightenment.

Yet the deep ecologists had not freed themselves completely from the spell of the Moderate Enlightenment. Like the later Romantics who were pilloried by Heinrich Heine, most of those who embraced deep ecology appear to have not taken seriously the task of replacing the Moderate Enlightenment as Herder and the early Romantics aspired to do. This, essentially, is the conclusion reached by Carl Boggs, one of the most profound Marxist critics of late modernity. Boggs is far from being unsympathetic to the Greens. In *Ecology and Revolution: Global Crisis and the Political Challenge*, he noted that 'the Greens have for three decades embodied the closest thing the world has seen to a mature, strategically defined ecological Radicalism. Despite limits and flaws, they seem to constitute the only political force, with some global presence, dedicated to reversing the modern crisis – and the only force with a coherent strategy for change.'⁴⁵ However, Boggs also argued that the potential of the Greens is not being realized because they have not faced up the forces driving ecological destruction. In an earlier work he wrote of deep ecology, focusing explicitly on Naess, Capra, and Snyder:

Ecological crisis, according to Arne Naess, strikes at the very heart of modern culture, especially in the United States, "because of our inability to question deeply what is and what is not worthwhile in life." The main challenge is to mount a thoroughgoing cultural revolution since, in Naess' words, "Our culture is the only one in the history of mankind in which our culture has adjusted itself to the technology, rather than vice-versa." The emphasis on normal politics in conventional environmentalism fails to see this, and yet ends up with, a kind of "computerized cost-benefit analysis designed to benefit only humans." ... The political value of deep ecology is ultimately weakened by a theory that fetishizes

⁴⁵ Carl Boggs, *Ecology and Revolution: Global Crisis and the Political Challenge* (Houndmills: Palgrave Macmillan, 2012), 149.

“nature” and turns it into something detached from the real, ever changing, conditions of social existence. ... Despite the undeniable radical vision of deep ecology, it contains no language of political engagement, no effort to specify how epochal transformations might be expected to unfold in real time and space, With alienated individuals pitted against huge (but largely incomprehensible) structures of domination, deep ecology simply assumes that an outmoded system, propped up by Enlightenment values will gradually be replaced by an entirely new civilization rooted in the equilibrium between humans and nature.⁴⁶

For those who know of Naess’ work, this clearly does not do justice to his efforts in *Ecology, Community and Lifestyle* to work out what kind of political action can be taken,⁴⁷ and, like most Marxists, Boggs has not fully faced up to the failures of communist governments and of Marxism. With the notable exception of Ernst Bloch, who generally is ignored, Western Marxists have tended to treat nature as a social category, and with the exception of Bloch, have made very little effort to develop a political philosophy. Nevertheless, for those who have been involved with the environmental movement, there is a ring of truth to Boggs’ complaint. The failure of both deep ecologists and Marxists was manifest in the entirely predictable global financial crisis that began in 2007. While prior to the 1970s economic crisis the neo-liberal movement had been developing a whole raft of policies to put in place when the opportunity arose, with the exception of a very small number of isolated individuals and groups, the political movements that had been marginalized by neo-liberalism had made very little effort to develop a comprehensive and viable alternative political, economic, social, and cultural agenda, reviving but going well beyond the environmentally engaged policies put in place by Franklin Roosevelt in USA in response to the Great Depression of the 1930s. Like the later Romantics, it is clear that most of those supposedly radical political movements did not take their own rhetoric seriously and had accommodated themselves to occupying comfortable positions within the neo-liberal order, similar in some respects to the role of courtier jesters in medieval society.

Once the tradition of the Radical Enlightenment and its fundamental opposition to the Moderate Enlightenment is understood, however, it should be evident that there was no need for the retreat of the 1970s. What appears to have happened is that those whose allegiance had been to mere fragments of what I have characterized as the tradition of the Radical Enlightenment lost the larger plot, the story of the advance of civilization as the development of greater humanity and democracy as self-governance. This is the real meaning of the

⁴⁶ Carl Boggs, *The End of Politics: Corporate Power and the Decline of the Public Sphere* (New York: Guilford Press, 2000), 202, 203 & 204. The quotations within this quote are from Stephen Bodian, “An Interview with Arne Naess” in *Sessions, Deep Ecology for the Twenty-First Century*, 28 & 32.

⁴⁷ Arne Naess, *Ecology, Community and Lifestyle*, trans. David Rothenberg (Cambridge: Cambridge University Press, 1989). Here Naess grapples with both politics and economics.

postmodern claim that there is an “incredulity towards metanarratives”. It is not merely incredulity; it is a failure to properly appreciate what the plot was in the first place, largely due to the confusion generated by those purporting to stand for the ideals of the Radical Enlightenment when they were really deeply committed to the quest for power sanctioned by the Moderate Enlightenment, and then simply ignorance of the Radical Enlightenment, its core ideas and its history. Promoting individual rights without responsibilities and utilitarianism generally functioned as Trojan horses for the Moderate Enlightenment. Meanwhile, different components of the Radical Enlightenment have survived and been further developed.

The most important of these are found in political philosophy. The Radical Enlightenment above all was opposed to slavery and upheld the quest by people to govern themselves, and if they are to govern themselves, then politics is absolutely central. Through the work of Cornelius Castoriadis we can now understand what this meant for the Ancient Greeks.⁴⁸ Similarly, through the work of Quentin Skinner we can now understand what this meant for the Ancient Roman republicans and the political thinkers of the Florentine Renaissance to live in a republic (that is, a ‘public thing’) and what they saw as being required to defend their liberty, and how Lockean liberals and Benthamite utilitarians have subverted liberty.⁴⁹ Appreciating the works of these earlier thinkers, we can better appreciate the developments in political philosophy in early Nineteenth Century Germany, and then with the British and American Idealists and the process metaphysicians (including John Dewey) they influenced in the late Nineteenth and first part of the Twentieth Century. We can also understand why, in each case, in Ancient Greece, Renaissance Florence, and late Eighteenth and early Nineteenth Century Germany and late Nineteenth and early Twentieth Century this quest for autonomy, liberty, or freedom was associated with bursts of cultural creativity. It is in these societies that people interrogated their institutions, ways of life, and beliefs and struggled to develop and sustain the virtues required to defend their liberty and govern themselves.

We can also see why this was also associated with greater appreciation of nature and why this tended to be seen as self-creating, while their opponents tend to deny real creativity and thereby any significance to nature. Hierarchical organizations which aspire to total control of both their subordinates and what they wish to control cannot acknowledge real creativity or intrinsic significance to these without circumscribing their ambitions to dominate. Analysing this logic and its origins, Lewis Mumford wrote:

With mordant symbolism, the ultimate products of the megamachine in Egypt were colossal tombs, inhabited by mummified corpses; while later in Assyria, as

⁴⁸ See Castoriadis, *Philosophy, Politics, Autonomy*.

⁴⁹ See Skinner, *Liberty Before Liberalism*.

repeatedly in every other expanding empire, the chief testimony to its technical efficiency was a waste of destroyed villages and cities, and poisoned soils: the prototype of similar “civilized” atrocities today.⁵⁰

It is in reacting against this that those aspiring to democracy defend the creativity and significance of nature, from Anaximander to the Nature Enthusiasts to Herder and the early Romantics to the process metaphysicians.⁵¹ One of the most important battles that has to be fought at present is the subversion of autonomy, liberty, and democracy by the new global corporatocracy and its priesthood of neo-liberal economists, reducing everything and all people but themselves to resources to be efficiently exploited by the market and its managers. And as other Greens, notably those associated with ecological economics have realized, overcoming this slavery means subordinating markets to communities of communities organized democratically at multiple levels.⁵² Working out how to achieve this is underway, but it is a huge task, requiring integration of thousands of years of political insight while simultaneously struggling to understand the new problems generated by the complexity of the present.⁵³

The second important component of the Radical Enlightenment is cosmology, our conception of the order of the universe and our place within it. Despite the trivialization of philosophy by analytic philosophers and the efforts to reduce science to nothing but a means to make predictions and develop technology, thereby crippling work in science that is not reductionist, there have been major advances in the effort to understand nature as self-organizing, and thereby, to situate humans as participants in a creative nature. In philosophy, this is associated with reviving interest in the work of Schelling, which has enabled a range of philosophers, including C.S. Peirce, Aleksandr Bogdanov, Alfred North Whitehead, and Ludwig von Bertalanffy to be recognized as part of a coherent tradition of process metaphysics that is underpinning a revolution in science. While elementary particle physics has stagnated, major advances have been made in non-linear thermodynamics, theoretical biology, and, most importantly, ecology

⁵⁰ Cited by Erich Fromm, *The Anatomy of Human Destructiveness* (New York: Holt, Rinehart and Winston, 1973), 342.

⁵¹ This significance of Anaximander for Greek democracy was noted by Castoriadis in “The Greek Polis and the Creation of Democracy”, *Philosophy, Politics, Autonomy*, ch. 5, 103ff. A similar argument was made by Jean-Pierre Vernant, *The Origins of Greek Thought* [1962], trans. from French by unnamed translator (Ithaca: Cornell University Press, 1982), ch. 8. The relationship of the Nature Enthusiasts, Herder, the early Romantics and various process metaphysicians to democracy has been studied separately, but the relationship between these and the way in which later thinkers draw inspiration and ideas from earlier thinkers has not been given due attention.

⁵² See Herman Daly and John Cobb Jr., *For the Common Good* (Boston: Beacon Press, 1994), especially chapter 9: “From Cosmopolitanism to Communities of Communities.”

⁵³ For a start on this, see Thomas Prugh, Robert Constanza, and Herman Daly, *The Local Politics of Global Sustainability* (Washington: Island Press, 2000).

under the banner of complexity science. Now non-reductionist ecology is being promoted as a replacement for physics as the pre-eminent science against which all other sciences should be measured, with organisms conceived as highly integrated ecosystems.⁵⁴ While in the early 1980s ecologists were distancing themselves from earlier anti-reductionist forms of ecology and from environmentalists, this is no longer the case. One of the most promising developments associated with this is the development of biosemiotics and ecosemiotics, with 'semiosis' (the production and interpretation of signs), held to be the defining feature of life.

FROM THE RADICAL ENLIGHTENMENT TO ECOLOGICAL CIVILIZATION

To some extent, these developments support deep ecology, with some qualifications. Humans with their cultures and institutions must be seen as part of ecosystems, or at least, regimes of ecosystems, and can only exist in the process of their functioning, concurring with Naess' 'relational, total-field image' in which organisms are 'knots in the biospherical net or field of intrinsic relations.' Taking the goal of science as 'understanding' (involving 'indwelling', to use Michael Polanyi's terminology), seeing nature as self-organizing and recognizing semiosis as central to life, it is now very easy to appreciate the intrinsic value of all life, including ecosystems, and to conceive of humans, including their organizations and culture, as part of nature, and to defend self-realization as the end of life. In fact, to indwell in nature, to understand nature as self-organizing and self-creating and to appreciate the semiosis involved in living processes makes it almost impossible not to appreciate the intrinsic significance of life. On this view we are internally related to ecosystems; but not to all life. These ecosystems can be healthy or unhealthy, and their unhealthiness can be due to the specific forms developed by humans, but they can also be due to non-human living processes. While appreciating the intrinsic value of all life, ultimately, it is necessary to judge human cultures, institutions and activities and all other life forms according to whether they augment or undermine the health of the ecosystems of which they are part, including the global ecosystem or *Gaia*. It is Aldo Leopold's land ethic focused on the integrity, stability and beauty of 'biotic communities' rather than Naess's 'biospherical egalitarianism' that needs to be built upon.

Another word for health is sanity, from the Latin word for health, *sanitas*. It was on this understanding of the term that James A. Coffman and Donald C. Mikulecky wrote their recent book, *Global Insanity: How Homo sapiens Lost Touch with Reality while Transforming the World*.⁵⁵ Their diagnosis largely concurs with the work of theoretical biologists who have

⁵⁴ See Robert E. Ulanowicz, *Ecology: The Ascendent Perspective* (New York: Columbia University Press, 1997), 6.

⁵⁵ James A. Coffman and Donald C. Mikulecky, *Global Insanity: How Homo sapiens Lost Touch with Reality while Transforming the World* (Litchfield Park: Emergent Publications, 2012).

examined the growth of transnational corporations. Mae-Wan Ho argued that they are cancers in the global ecosystem, pointing out (along with the theoretical ecologist Robert Ulanowicz):

The economic globalization promoted by the rich countries in the World Trade Organization is aimed at removing all barriers to trade, finance and procurement, which is tantamount to destroying the system's intricate space-time structure. This inevitably results in the over-exploitation of the poor, especially in third world countries, that will impoverish the whole economic system. But that is not all. As the global economic system is embedded in the global ecosystem, over-exploitation in the global economy will drive people to use natural resources at unsustainable rates, so that the global ecosystem increasingly fails to renew itself. This leads to diminished input into the economic system so that even more natural resources will have to be harvested, resulting in a vicious cycle that will ultimately destroy both the global economy and the earth's ecosystem.⁵⁶

This development, Coffman and Mikulecki argue, is a manifestation of a civilization that has fundamentally misconceived the nature of life and, as a consequence, has been operating with fundamentally defective models of nature and the place of humanity within it. It is necessary to replace the current defective models of ourselves and our relation to the rest of nature.

To correct our defective models it will be necessary to transform the human sciences, seeing humans simultaneously as part of nature and as self-creative. This will require the development of human ecology as a transdiscipline to reinterpret anthropology, integrate physical and human geography and subordinate or replace sociology and to situate economics, and the development of an institutionalist form of ecological economics to replace mainstream economics. The latter is required to free economics from the assumption of humans as *homo economicus* – efficient functioning psychopaths (in the tradition of thought that goes back to Hobbes) and to focus on what kinds of institutions are required to augment our ecosystems, as well as to situate humanity within nature.⁵⁷ These developments in turn should provide the basis for policy formation, with democracy-friendly retrospective path analysis and position analysis (which can be easily formulated as a development of narratology – defining our goals by refiguring the stories we are living out) replacing the pseudo-experts of cost-benefit analyses.

The value accorded all life by deep ecologists and their call for a transformation of civilization are no longer idealistic sentiments; incorporated into a regenerated form of the Radical Enlightenment they are now essential for the survival of most of humanity, and possibly civilization, as well as most of the world's species and ecosystems. However, it has become

⁵⁶ Mae-Wan Ho and Robert Ulanowicz, "Sustainable Systems as Organisms?" *Biosystems*, 82 (2005): 47.

⁵⁷ These issues have been brought into sharp focus by Arid Vatn, *Institutions and the Environment* (Cheltenham: Edward Elgar, 2005).

clear that it is virtually impossible to frighten people into action. People have to be inspired by hope. As Naess argued, it is necessary to put forward utopian visions of the future. However, here also the deep ecologists have not been successful. The response of Thomas Prugh, Robert Costanza, and Herman Daly to their vision illustrates the problem:

There seems to be only two visions put on the table. In the conventional vision, the human economy and population keep growing vigorously, and everyone eagerly chases the dream of greater consumption. The environmentalist point of view rightly denies the workability of this vision but offers in its place a kind of lifelong global celery diet. It is hardly surprising that most people choose the first path.⁵⁸

The humanities are particularly important in addressing this problem and thus have to be revived. As Mikhail Epstein noted, the immediate practical outcome of the sciences is technology, of the social sciences, the transformation of society through politics; the practical outcome of the humanities is the transformation of culture.⁵⁹ This must transform the nature of the sciences and technology and how they are conceived, and thereby our relationship to the rest of nature, to each other and to our communities. To achieve this, it is necessary to present a vision of the future that really engages most of humanity. To achieve this it will be necessary to rescue philosophy from analytic philosophers. It will be necessary for philosophers to provide synopses of all aspects of their civilizations, their histories and their present condition and develop new syntheses (that is, new conceptual frameworks) that do justice to all dimensions of experience and enable people to orient themselves to create the future.

To this end, philosophy must be historical, orienting people in the present to create the future through an understanding of the past with all its achievements and failures. This will require far more hard work than most deep ecologists thought necessary. It will mean engaging with all specialized areas of research in the sciences and humanities to reveal, criticize, and, if necessary, replace defective assumptions, and put all specialist disciplines in perspective (as the great philosophers of the past prior to the rise of analytic philosophy attempted to do), thereby orienting researchers in these diverse specialized areas to transform their disciplines to align them with the Radical Enlightenment. To give the humanities a backbone, it will be necessary to make the history and philosophy of science (historically oriented) central and uphold some version of process metaphysics, that is, the anti-mechanistic tradition of philosophy and science going back to Herder, Goethe, and Schelling and defended by recent scientists such as Ilya Prigogine, Robert Ulanowicz, and Lee Smolin, that grants a central place to real creativity in

⁵⁸ Prugh, Costanza, and Daly, *The Local Politics of Global Sustainability*, 41.

⁵⁹ Mikhail Epstein, *The Transformation of the Humanities: A Manifesto*, trans. Igor Klyukanov (New York: Bloomsbury, 2012), 12.

nature. Only in this way will it be possible to overcome the cringe of the humanities in the face of the scientism promoted by US analytic philosophers and reveal the enormous potential of post-reductionist science inspired by the tradition of the Radical Enlightenment. What should emerge from this is a far more hard-headed vision of the future than Naess was able to provide, a vision that incorporates the reworking of the natural and social sciences and, given what has happened over the last half century, a reformulated grand narrative of life on Earth as the struggle to liberate humanity from enslavement to the corporatocracy and the global market so people as individuals and community members can fully realize their potential to augment life. The aim should be to create a new global civilization based on ecology and human ecology rather than physics and mainstream economics, to free people so that they no longer have to participate in the destruction of life to prosper economically but will be free to prosper while augmenting life. In place of the monologic grand narratives of the past that purported to grasp the whole of reality and to judge every particular perspective from the one, true perspective vouchsafed by theology or science (or in the case of the neo-liberals, a perverted combination of the two in which a purported 'science' of economics deifies and sacrifices everything to the market), it will be necessary to develop a dialogic, polyphonic grand narrative that acknowledges diverse perspectives, fostering their engagement with each other and with this grand narrative, endlessly struggling to do justice to every aspect of reality. As Mikhail Epstein argued, 'the fundamental principle of transcultural thinking and existence' is the '[l]iberation from culture through culture itself', generating a 'transcultural world which lies not apart from, but within all existing cultures.'⁶⁰ This is the condition for creativity in the quest for truth, justice, and liberty, for as the Russian philosopher Vladimir Bibler observed, 'Culture can live and develop, as culture, only on the borders of cultures.'⁶¹ This outcome will be the dialogic, polyphonic grand narrative of a new global civilization; an 'ecological civilization'.⁶²

⁶⁰ Mikhail N. Epstein, *After the Future*, trans. Anesa Miller-Pogacar (Amherst: The University of Massachusetts Press, 1995), 298ff.

⁶¹ Quoted by Epstein, *After the Future*, 291.

⁶² On this, see Arran Gare, "Towards an Ecological Civilization: The Science, Ethics and Politics of Ecopoiesis", *Process Studies* 39, no. 1 (2010): 5-38.