‘somewhat academic question’ as to whether qualities such as hot or red or sombre adhere to the subject or to the objective world. And then to clarify this abstruse question, he writes:

a tree’s sombreness S is represented by the relation symbol S (A,B,C,D,… where A could be a location on a map, B location of observer, C emotional status of person, D linguistic competence of the describer ... (p.65)

Even if one is interested in such epistemological problems as the relationship between subjectivism and objectivism — which presupposes the classical epistemology — one gets lost in such abstractions. But this is to make a philosophical point — one long ago made by the pragmatists, Hegelian-Marxists, and existentialists. What about his equation of what constitutes well-being?

$W = \frac{G^2}{P_b + P_m}$

Where $W = \text{well-being}$, $G = \text{glow (passion)}$, $P_b = \text{bodily pains}$ and $P_m = \text{mental pains}$ (p.81). This is quantitative mysticism, expressing what to most people is fairly obvious. Even better — and even more obfuscating — is his discussion of needs.

Let A represent a living being in a time-dimensional space having four vital needs to satisfy... The quadruple a 1/1 to a 1/4 symbolises the four sources of need satisfaction... If the sources are a 2/1, a 2/3, a 2/5, a 2/7, and separated from A by interposed, qualitatively different parts a 1/1 to a 1/4 of the environment, the organism is vitally and normally dependent upon the control of these parts and also of a 2/2, a 2/4, a 2/8, the parts adjacent to the sources with another set of qualitatively different properties, (p.205)
on self-realisation, and on individual life styles, Naess offers little in the way of exploring the underlying causes of the present ecological crisis, other than to offer a general indictment of the present economic ‘system’.

In outlining his philosophical worldview and in his advocacy of an ‘ecological consciousness’ Naess has many interesting and important things to say — on the need for a ‘gestalt’ or relational way of thinking; on the need to reflect on, and explicitly articulate the basic norms of an alternative ontology, and to avoid as far as possible purely instrumental norms; and on the problems of making ecology itself into an all-encompassing ‘ism’, as if it were a universal science. But Naess’ discussion is marred, and its flow continually disrupted, by philosophical scholasticism and at times jargon. As with the positivists the dichotomy between facts (hypotheses) and values (norms) runs like a silver thread throughout the text, although being a moral philosopher in the tradition of Spinoza, Naess, far from dismissing values, stresses their priority and importance. Yet although the idea that basic norms are not logically derived from factual hypotheses may be true, Naess’ suggestion that they are therefore in some degree arbitrary verges on sophistry. Food, shelter and freedom are basic to human life, and norms related to these hypotheses are not arbitrary. Certainly humans do not live by bread alone, but only someone who does not have to worry about food and shelter, and has some degree of autonomy, could define well being in terms of such high level ‘ultimate goals’ as pleasure, happiness and perfection.

But quite apart from the normative level on which much of Naess’ discussion moves, there is also his insatiable tendency to lapse into almost impenetrable philosophical jargon. For example, while in essence properly questioning the classical Cartesian distinction between the epistemological subject and the objective world — a distinction which Hegel and many generations of philosophers and social scientists have long made redundant with their stress on the social nature of humans — Naess asks the...
was merely environmental engineering based on a technocratic rationality that only suggested tinkering with existing social institutions, technologies and values. But Bookchin’s alternative to ‘environmentalism’ (or ‘shallow’ ecology) seems to me to carry far more intellectual and political substance than the ‘deep ecology’ suggested by Naess.

The basic principles of deep ecology Naess outlines as follows:

i. That the richness and diversity of life forms have an intrinsic value in themselves and that they contribute to the flourishing of humans and non-humans alike, and that we should in no way reduce this diversity except to satisfy vital needs. At present humans are interfering in non-human life forms in an unnecessarily destructive and excessive way and this needs to be understood and curbed.

ii. That the world is overpopulated with humans and that this is causing serious problems to life on earth — ‘life’ for Naess being used in a comprehensive sense to cover not only living forms but rivers, landscapes, cultures, ecosystems, and the living earth itself.

iii. That fundamental changes are necessary in basic economic, technological and ideological structures, and in individual life styles — Naess clearly addressing himself to those in Europe and North America who enjoy ‘high standards of living’.

Naess suggests that ‘economic growth’ is completely incompatible with these basic principles, but it is of interest that nowhere in the book does Naess directly address himself to social problems — poverty, inequality, racism, state repression, neo-colonialism, exploitation — all of which are directly linked to environmental issues — even though his ‘normative’ premises indicate his opposition to these. In fact, given his emphasis on ideological transformations,
and Spinoza, and the influence of these two contrasting figures is clearly apparent in his work. His whole mode of presentation — abstract, normative and geometric — as well as his philosophy — in seeing self-realisation as involving ‘identification’ with nature — has affinities with that of Spinoza. Indeed he summarises his own philosophy on one page (209), with an abstract schema of numbered boxes all neatly and logically linked by a series of lines, hanging together like a frozen mobile. Anything less organic it would be hard to imagine, but it reminds one of the gentle Spinoza.

Naess calls his own philosophy of deep ecology ‘Philosophy T’ — the suggestion being that what he presents in the book is his own unique philosophy, named after a mountain hut in Norway, Tvergastein. (Without Naess is a ghost writer who would have thought otherwise?) The implication of this, however, is his insistence that everyone should work out their own philosophy and develop, through reflection and action, their own system of thought. Like many contemporary writers — and in this Naess is offering little that is original — Naess stresses the gravity of the present ecological situation — the environmental deterioration and devastation that is taking place on an ever-increasing scale due to the present system of production and consumption, and to the lack of any adequate policies regarding human population increase. This ecological crisis Naess suggests can only be countered by a ‘new renaissance’, by a ‘new path’ with new criteria for ‘progress, efficiency and rational action’ — Naess strangely retaining some of the key terms of the market economists and of capitalist ideology. This leads Naess to make a clear distinction between ‘deep’ and ‘shallow’ ecology — which he first introduced in an article in 1973 — the latter being a reformist attitude to the present ecological crisis, one that still retains a utilitarian, anthropocentric approach to nature, and does not suggest any fundamental change to the present economic system. This distinction is similar to that long ago made by Bookchin who contrasted ‘environmentalism’ with a radical social ecology. For Bookchin ‘environmentalism’
a staunch ‘anti-capitalist’ and had withdrawn many of his more extreme anti-humanist statements — Bookchin continued to reiterate with stridency the kind of social ecology that he had been advocating and developing over the years — and thus came to argue for a ‘new politics’, the need for a social movement that can effectively resist and ultimately replace both the nation-state and corporate capitalism. He admitted that he had no pat formulas for making such a revolution, but questioned the feasibility of a reformist strategy, one that merely sets its sights on ‘improving’ the current system of power and inequality.\(^3\)

What is of interest about these various debates is that the figure of Arne Naess, who is alleged to be the founder and the ‘inspiration’ behind the ‘deep ecology’ movement tends to hover only in the background. Naess is discussed by writers like Devall,\(^4\) but though deep ecology itself has had media prominence, its founder is very much a marginal scholar. A couple of years ago I scoured the bookshops in London looking for something on, or by, Arne Naess and drew a complete blank. Happily his important study *Ecology, Community and Lifestyle\(^5\)* has now been translated from the Norwegian, and this gives us an opportunity to assess the thoughts of a philosopher the deep ecologists pay homage to, but whose own ideas remain largely unknown outside his own country and a narrow circle of deep ecology enthusiasts. Now approaching his eightieth year, Arne Naess is a Norwegian philosopher and mountaineer who has spent most of his life teaching philosophy in academia. His particular interests were semantics and the philosophy of science, and in the 1930s he appears to have been associated with the logical positivists — whose philosophy stands in stark contrast to Naess’ present views. Naess has published important studies of Gandhi

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\(^3\) David Levine 1991 Ed. *Defending the Earth*, A Dialogue between Murray Bookchin and Dave Foreman.


\(^5\) Arne Naess 1989 *Ecology, Community and Lifestyle* Cambridge Univ. Press.
Throughout history, visionaries and prophets, who have cared passionately about the future of the human race, have sought guidance, not from the rich and powerful, but from oppressed and despised minorities.

Only under wellnigh intolerable ‘marginal conditions’, does human nature plumb its full potentialities of inner strength and practical wisdom, that can enable it to pull through against seemingly insuperable odds.

As a young man, Kropotkin infuriated his aristocratic father by rejecting a life of luxury and ease at the court of St. Petersburg in favour of a posting to a military unit in Siberia.

In the then largely unexplored eastern fastnesses of the Russian empire, he sought and found proof of the thesis that mutual aid, rather than conflict and competition, is the crucial factor in evolution.

Similarly, I suggest that Gandhi, Kagawa and Baba Amte sought out the ‘lowest of the low’, not only out of compassion for their plight, but because they found in them inspiration and encouragement for the colossal regenerative tasks which they were undertaking.

They were establishing new poles, by which the dynamics of human development could be regulated.

At the present time similar poles of achievement are being set by the women of Africa and the Himalayas who, out of selfless dedication to their families, undertake ever-lengthening and ever more exhausting journeys on foot in search of wood and water.

In both the developmental and environmental spheres, the pendulum swings continually between ‘North’ and ‘South’, the rich world and the poor. ‘Northern’ statesmen, administrators and industrialists see the problems only in the light of charity and population control: how little money they can decently spend on ‘relief’ while putting most of the blame on the ‘South’ for their economic and ecological problems and for not checking the ‘population explosion’.

ecologists “have no really ‘deep’ critique of the state, empire, technology and capital, reducing the complex web of human relations to a simplistic, abstract, scientific caricature” (p. 10). Bookchin of course argues that the ecological crisis is not caused by an undifferentiated ‘humanity’ but by the capitalist system, which has reduced human beings to mere commodities, destroyed the cultural integrity of many ‘Third World’ communities, and, via corporate interests, has caused devastation and deterioration of the natural world — through deforestation, monoculture, and pollution.

In response to the criticisms of the social ecologists several deep ecologists, like Warwick Fox and Judi Bari, have suggested that Bookchin still retains an ‘anthropocentric’ outlook, and that the ‘left’ have no vision of an ecological society — a suggestion that indicates either a woeful ignorance or, alternatively, a slanderous misinterpretation of what Bookchin has been advocating for over three decades.

The polemical exchanges between the deep and social ecologists have been very much a part of the radical ecology scene in the United States over the past decade — in contrast to the ecology scene in Britain where the likes of Jonathon Porritt, a genteel reformer, seem to get the media prominence. But this debate took an important twist in May 1989 when Dave Foreman was arrested by the FBI. An ecological activist who advocates non-violent direct action to protect wilderness areas and rainforests, Foreman had been one of the founders of the ‘Earth First!’ group. Over the years this group had been infiltrated by US government informers and agent provocateurs seeking to entrap the ecological activists into illegal activities. Foreman was dragged out of his bed by armed FBI men one dawn and charged with conspiracy to damage government property. Six months later Murray Bookchin and Dave Foreman came together for a public debate, to discuss their differences, and to defend the integrity of the radical ecology movement. What came out of this debate is that whereas Foreman had largely taken to heart the criticisms of deep ecology — and had become
poused by writers like Bill Devall, George Sessions and Dave Foreman, and it echoed many of the criticisms earlier voiced by Murray Bookchin. Both Bradford and Bookchin essentially challenge the biocentric approach of the deep ecologists — which entails the notion of ‘biospecies equality.’ This in essence was the deep ecologists’ answer to the anthropocentrism so dominant in Western culture, anthropocentrism being the idea that humans are separate from, and superior to the rest of nature, and that this therefore justified using nature simply as a resource. What Bradford and Bookchin suggest is that the deep ecologists simply replicate (and inverse) the opposition between humans and nature. But whereas the advocates of the Promethean ethic imply the control and domination of nature by humans, contemporary deep ecologists, many of them acolytes of ‘natural law’ theory, have an insidious image of a humanity that is ‘dominated by nature’. Such ‘anti-humanism’ Bookchin and Bradford feel is perverse, unecological, and at extremes leads to misanthropy. The idea that humans should ‘obey’ the ‘laws of nature’ is an idea that they both seriously challenge. And they go on to suggest that by focusing entirely on the category ‘humanity’ the deep ecologists ignore, or completely obscure, the social origins of ecological problems. The notion that African children should be left to starve because they are over-populating the continent, that disease is a natural check on humans and helps to maintain the ‘balance of nature’, that ‘immigrants’ to the United States should be kept out because they threaten ‘our’ resources — all advocated by deep ecology enthusiasts in a rather Malthusian fashion — are all discussed and refuted by Bookchin and Bradford. Such biocentrism and anti-humanism, they argue, is both reactionary and authoritarian in its implications, and substitutes a naive understanding of ‘nature’ for a critical study of real social issues and concerns. Bradford sums it up by suggesting that the deep

Such attitudes betray gross ignorance of the true facts. Environmental degradation is overwhelmingly the responsibility of the ‘North’: its prodigious emissions of polluting gases and other chemicals, with its wholesale destruction of trees and chemical contamination of soils, combined with its ruthless economic and political exploitation of the ‘South’. The ‘North’s’ first duty is not to lecture the ‘South’ and administer meagre charity, but to get off its back.

If the South were allowed to work out its own salvation, freed from domination, not only by the North, but also by its own North-sponsored dictators and ‘elites’, there is ample evidence that it would find solutions to its economic and ecological problems from which the North could learn valuable lessons.

Despite all the encroachments and invasions of Northern political and economic imperialisms, a characteristic feature of many Southern societies is still the largely self-governing and self-sufficient local community. Such a community provides comprehensive answers to economic, ecological and even population problems. Bound together by ties of mutual aid, the members have the wisdom and sense of responsibility not to burden their successors with multitudes of mouths that will be unable to be fed. At the same time, the co-operative labour of farming, growing and craftsmanship, often involving music and other cultural activities, together with the natural beauty of the environment, satisfies the inhabitants’ emotional and creative urges in ways unimagined by soul-starved Northern city dwellers.

Such communities often exist in remote or difficult areas, rejected by the North as offering sparse or risky financial returns on investment. It is the hardships of life in such areas that strengthen the inhabitants’ cohesiveness. The day may well come when many people in the North will be glad to study their survival techniques. Already life in many Northern inner cities is becoming so intolerable that many people are being drawn to adopt ‘Southern’ ways of life. A prospectus for a summer camp in the Shropshire countryside

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issued by Whose World?, a group with headquarters in Manchester, asks:

Do you believe in the need for a radical transformation of society? Do you long for a world that’s truly equal and just; where we all live sustainably and non-exploitatively; where everyone’s needs are met now and always?

It then states the aims of the camp:

- To provide all of us who come with an experience of what simple, non-materialistic, communal living — consensus decision-making, trying to look after each other emotionally etc. — could be like and have fun while doing so.
- To provide support and encouragement for all of us working towards a vision of a just, sustainable, non-violent way of life.
- To build a network of people and communities who want to promote active non-violent resistance and simple, anti-materialist ways of living.

As regards the economic advantages of Third World village communities, many of them satisfy their basic needs, and some even have surpluses for sale, from agroforestry systems that provide an intensity of land-use unknown in the North. Villages in Java, one of the most densely populated rural areas in the world, are surrounded by dense green screens of forest gardens, or *pekarangan*, in which many of the 500 different species of food plant which the people consume are grown.

These forest gardens provide the best comprehensive, constructive answer to one of today’s predominant environmental preoccupations: what to do with the rainforest. Well-meaning Northern

necessary, is not a particularly exacting intellectual task. Literally to filch all the major ecological insights of anarchist theory and practice, superficially dress them up in a socialist-feminist cum neo-hegelian garb and go on to more or less claim them as his own is reprehensible. To actively misrepresent the movement from where these ideas originally came is to exhibit an intellectual schizophrenia and commit an intellectual outrage.

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Like Gresham’s Law, not only does bad money drive out good, but futuristic ‘scenarios’ will destroy the Utopian dimension of the revolutionary project. Never in the past has it been so necessary to retain the utmost clarity, coherence, and purposefulness that is required of our era. In a society that has made survival, adaptation, and co-existence a mode of domination and annihilation, there can be no compromises with contradictions — only their total resolution in a new ecological society or the inevitability of hopeless surrender.

Murray Bookchin
*Toward an Ecological Society*

**Reflections on ‘Deep Ecology’**
by Brian Morris

A couple of years ago George Bradford wrote a lucid and trenchant critique of ‘deep ecology’ in a pamphlet entitled *How Deep is Deep Ecology*.¹ It was specifically aimed at the deep ecology es-

exhibits no real desire to deal with Kropotkin’s thought in the detail and at the length it deserves. There are of course no real developments in social and political theory. The battles between nature and society, freedom and tyranny, liberty and authority etc., have been with us since the beginning of human-time and Kropotkin no more than Bookchin can claim to have originated the libertarian and anarchist debate. Nonetheless, with the possible exception of his analysis of the development of patriarchy (and Reclus’ concepts of the organic, complementary nature of the man-woman-nature relationship are in many ways similar to Bookchin’s) all of the basic components of Bookchin’s social-ecological vision — diversity, decentralisation, complementarity, alternative technology, municipal-socialism, self-sufficiency, direct-democracy — were fully elaborated in the works of the great anarchist thinkers of the past — Charles Fourier, Elisee Reclus and Peter Kropotkin — all of whom advocate a global federation of autonomous and ecologically integrated cities and towns — and Bookchin has done little more than update these ideas and present them in a modern form. A task I might say that is no small achievement and one that he has performed admirably.

To be sure anarchism in common with most other movements and practices has much to gain from incorporating the insights of feminist analysis of the development of authority and hierarchy into its vision of a social and ecologically harmonious society — and Bookchin in attempting to integrate a broadly socialist-feminist perspective with anarchist principles has done much valuable work in recent years. Many view-points contained in the socialist-feminist analysis of history and society, have however, always existed (though latent) within the anarchist movement, and anarchism is considerably less guilty of having ignored women’s issues than most other social protest movements of the recent past. To use socialist-feminist ideas on hierarchy, authority and the state and blend them with concepts within the broader anarchist tradition, as Bookchin has done, although environmentalists get very hot under the collar when rainforests are mentioned, asserting forcefully that, at all costs, they must be preserved in toto. But the forests are far too valuable resources to be kept in glass cases. The tribal peoples who make them their homes have an encyclopaedic knowledge of all the right answers. They know almost every plant and what its uses are. At the same time they use the wild plants to provide shade and shelter for economic crops such as bananas, pineapples and coffee. More than half Tanzania’s coffee output is derived from the famous Chagga gardens on the slopes of Mount Kilimanjaro. The forest garden is the world’s most advanced system for supplying basic needs, not only food, but fuel, timber, textiles, energy and many other necessities. Agroforestry, in fact, provides the only safe, non-polluting, sustainable answer to the Northern industrialism that is causing such appalling damage to the world’s environment, and which is rapidly disintegrating.

In fact, the only comprehensive, constructive answer to both the world’s economic and ecological crises is a post-industrial order, which far-sighted Greens have already been advocating for a number of years.

The colossal dangers to all life represented by greenhouse gases, radioactive wastes, CFCs, halons and deforestation will never be overcome by the small-scale piecemeal tinkering measures put forward by statesmen at the Rio conference. Nor will the colossal and ever-increasing suffering caused by poverty, hunger, homelessness, unemployment, violence and avoidable disease be overcome by ‘market forces’, bank loans and IMF-sponsored hydro-electric schemes.

In a world order of which the basic unit would be the small self-sufficient community, meeting most of its essential needs by means of agroforestry, small workshops, and small-scale alternative technology devices, there would be little or no need for road, rail or air transport using polluting fuels. Energy needs would be met by envi-
ronmentally friendly, non-polluting wind, water, tidal, geothermal, solar and biogas systems. All wastes would be recycled.

Above all, there should be a total ban on the barbarous practice of war, which causes unspeakable damage to the environment as well as untold human suffering. Civilised methods of solving disputes based on reason, mutual respect and psychology, as advocated by religious leaders throughout history, should be developed.

All life on earth could be annihilated by nuclear war as well as by environmental degradation.

War never brings lasting solutions to any problem, because it does not eradicate the deep-seated psychological and moral causes of conflict. Imperialistic drives, if suppressed by military action, reappear in economic, political and cultural forms, which do just as much harm to human bodies and minds — in more subtle ways — as does armed conquest. The Second World War has led to a period of environmental destruction, homelessness, human misery, disease, torture, violence, crime and corruption unprecedented in history.

Paul Harrison’s latest book on the worldwide ecological-economic crisis is called The Third Revolution. The three revolutions which he considers crucial to human history are the Neolithic, the Industrial, and the present Environmental Revolution.

The Neolithic Revolution took place when Stone Age man, having developed axes almost as sharp as steel, began his onslaught on his forest home, which has continued with increasing ferocity ever since. Rejecting his hunter-gatherer lifestyle, Neolithic man tried to gain control over his environment by domesticating wild animals and wild crops and thus establishing agriculture. At the same time he developed the crafts of spinning, weaving, pottery and carpentry, and built the first towns.

A little later, war appeared for the first time on the human scene, as did the erosion of upland areas caused by deforestation. Both these trends were greatly intensified by the discovery of metals.

Kropotkin’s ethical naturalism, Reclus’ bioregionalism or Fourier’s ecological-utopianism — all of which (as Bookchin well knows) contain important truths and insights and have made a significant contribution to the development of his own social-ecological thinking. Instead, the book, which is subtitled Essays on Dialectical Naturalism, informs those readers who wish to find out more about the philosophical basis of Social Ecology and Ecological Ethics to study the notoriously cloudy pages of Hegel’s Phenomenology of Spirit.

What has led to Bookchin’s disillusionment with the organised anarchist movement is of course a matter of speculation. A generous explanation of his objectives is that he wishes to produce an ecological ethics and philosophy that does not scare people off through using the emotionally loaded and popularly misunderstood term ‘Anarchy’ whilst integrating the more anarchistic ideas and elements floating around in the peace, environmentalist and feminist movements within a broadly anti-statist framework. If this is indeed his intention then he has, in my opinion been quite successful. His theory of social ecology is presented in a rational, scientific and secular format that can enter dialogue in a meaningful way with other bodies of thought in the western philosophical tradition.

The misrepresentations of anarchist theory and practice do however perhaps require a less generous assessment of Bookchin’s motives, unconscious or not, that goes beyond the not-uncommon fault of having an insatiable appetite for controversy. Bookchin is a gifted and talented writer and thinker, the value and intellectual credibility of his work may however be coming increasingly undermined by an unhealthy desire to be the intellectual leader and founder of a ‘new’ ecological movement. The sole modern originator of the bundle of ideas he had chosen to call Social Ecology.

Although to be fair Bookchin does acknowledge the influence of the great anarchist theoretician and bio-geographer in all the above mentioned works, he does so only in passing and certainly
The overly aggressive industrial culture which has led our planet to the brink of catastrophe must certainly undergo radical changes, but this in no way implies that industrial unionism should disappear. On the contrary, an ecologically informed and regenerated trade union movement could do much to initiate the necessary changes. The boycotting of environmentally damaging substances and industrial practices; the insistence on doing healthy work in an environmentally sustainable manner; of producing socially necessary products based on need rather than profit; etc., are real issues, capable of being forced home by traditional means. Strikes, walkouts, and sabotage would undoubtedly bring about the changes in our industrial infrastructure quicker than environmental legislation and any number of health food stores. For instance, the Green Bans. In fact the tragic failure of the green movement to get their message across to ordinary workers and union members, has resulted in a significant lack of power for both parties. Bookchin’s comments are at best unconstructive and at worst positively harmful.

Further evidence of Bookchin’s attempt to distance himself and his theory of Social Ecology from Anarchism can be seen in his latest book, *The Philosophy of Social Ecology* (1990) in which he attempts to provide an abstract philosophical basis for his social-ecological theories.

Depressingly, the rich ecological content contained in anarchist life-philosophy is largely unacknowledged — and although Bookchin regards an anti-hierarchical, non-centrist, self-determining and freely evolving concept of nature and society as both rational and desirable — Anarchism a rich intellectual source of many of these ideas in terms of both its theory and practice is dealt with in a few paragraphs in a token, shallow and unconvincing manner. Instead Bookchin presents us with an intellectual history of the development of social-ecological thought which sees fit to devote pages upon pages to Diderot’s ‘sensibilities’ and Hegel’s ‘Concept of Spirit’ at the expense of

The Industrial Revolution, which began at the beginning of the 18th century, has had infinitely more drastic effects on both human life and the environment. While it has brought great and undeniable benefits in lessening toil, facilitating travel and, above all, in greatly extending the dissemination of information, its wholesale pollution of the environment and use of weapons of mass destruction are totally unacceptable. If human life is to survive beyond the middle of the next century in any tolerable form — or at all — both these features of industrialism must be superseded.

Thus the Environmental Revolution, if it is to succeed, must be as drastic and far-reaching in positive ways, as have the two previous world revolutions in negative ways. It must involve equally radical transformations of life-styles; these cannot be imposed from ‘above’ but must be voluntarily adopted by the people most deeply affected. The motive-power for the Environmental Revolution can only be a worldwide eruption of constructive, non-violent People’s Power, comparable to the Gandhian ‘satya-grahas’ in India in the 1920s and 1930s and the overthrow of Communism in Eastern Europe in 1989.

Already there are many indications in many countries that such a movement is building up.

Above all, there is increasing worldwide awareness of the fundamental importance of trees for healing the environment, assuring water supplies, ameliorating the climate, purifying the atmosphere, absorbing CO2, exhaling oxygen, regenerating degraded soils, stopping erosion — and supplying basic human needs of food, fuel, building materials, textiles, oils and plastics.

A pioneer campaign for the preservation of trees involving People’s Power — mainly Women’s Power — was launched in the early 1970s in an appallingly degraded sector of the Himalayas. Called the Chipko movement (Chipko means ‘embrace’), it began spontaneously when a group of women embraced trees to prevent them from being felled. From that dramatic start the movement has spread to other parts of India; it has led to a number of
official bans on tree-felling and has generated pressure for a more environmentally friendly natural resource policy.

A tree-planting campaign, also largely involving women, is the Green Belt Movement in Kenya, which has spread rapidly and which its founder, Professor Wangari Maathai, is seeking to extend to twelve other African countries.

There are similar campaigns in many other countries. In the Highlands of Scotland, one of the world’s many environmental black spots, a campaign is afoot to restore the Great Wood of Caledon, which once covered almost the entire area, and build up a prosperous forest economy, which might absorb many unemployed city-dwellers.

Similar wilderness areas throughout the world — almost all the result of human misuse of the land — could be restored by tree-planting campaigns which could lead to the provision of homes and vital, constructive work for countless millions of homeless, deprived people.

Certain countries, above all, perhaps China and Israel, have demonstrated that even the most arid of deserts can be transformed by trees into areas of fertility, prosperity and beauty. Restoration techniques have been scientifically worked out, involving the planting of drought-resistant trees and shrubs, which provide ‘nurse conditions’ for more delicate trees and other plants supplying fruit and many other economic products and supporting large populations.

The main cause of the ecological crisis is not the ‘population explosion’, as many Northern analysts claim, but gross under-use of the world’s land resources.

Apart from totally unproductive deserts, which cover one-third of the earth’s land surface, there are vast areas of grassland, much of very poor quality, which is used for grazing cattle and sheep. The average food production of such areas is about half a hundredweight per acre per year. In the Highlands of Scotland it is reckoned that it takes five acres of grassland and moorland to support one

Besides the specific organisation to which he refers, the IWW was not unappealing to ‘native’ Americans as Bookchin suggests — rather they were systematically smashed in a most brutal fashion by the combined forces of federal military might, and the black plantation workers of America’s deep south who were organised at great risk to life by IWW representatives had little stake in the comfortable middle-class vision of small town life of which Bookchin speaks. Moreover the IWW who counted both lesbians and Red Indian organisers amongst its ranks was the first union to call for equal pay and conditions for women and actively sought to set up unions for prostitutes — and in doing so achieved far more for the feminist cause than any amount of theorising about the evolution of patriarchy could ever hope to have done.

Finally anarchism in embracing trades-unionism did not, as Bookchin claims, have some naive or mythical faith in the ability of working class culture to save the world. Anarchism did not look towards the Marxist vision of a worker’s paradise; it merely said that working people if they wanted to create a more balanced and equitable world they must join together and organise for themselves. Trades Unionists which were then, as now, capable of bringing millions of workers together in the general strike was not an end in itself but rather a vehicle for putting ideas into action and produce movement capable of resisting the military might and economic imperialism of the state-capitalist power monopoly.

Groups of peace protesters or environmentalists singing songs outside nuclear bases, although not irrelevant or unproductive, do not by themselves represent an organisational basis for sustained resistance to the state-capitalist system on a country-wide basis, as Bookchin claims. Unless the telephones, railways, and other vital industrial systems continue to function from the moment the state-capitalist order begins to crumble, then all Bookchin’s ideas concerning an ecologically integrated and decentralised republic in the absence of the state (i.e. anarchism) will remain nothing but a pipe-dream.
wrought from the struggle for Englishmen’s Rights, not against feudal satraps. Admittedly these ‘rights’ were meant for white men rather than people of colour. But rights they were in any case — universal, ‘inalienable rights’ that could have expressed higher ethical and political aspirations than the myths of a ‘workers’ party’ or the day dream of ‘One Big Union’ to cite the illusions of socialists and syndicalists alike. Had the Congregationalist town-meeting conception of democracy been fostered ... and the middle classes been joined to the working classes by a genuine people’s movement instead of being fractured into sharply delineated class movements it would be difficult to predict the innovative direction American social life might have followed. Yet never did American radicals, foreign born or native, ask why socialist ideas never took root outside the confines of the ghettos, in this, the most industrialised country in the world.

(The Modern Crisis, Ch 4 passim)

Again what sense is one to make of such comments? Bookchin accuses American radicals of the past of having a ghetto outlook — yet it is precisely this group of people, ‘ethnics, unemployables and the ghetto people’ whom Bookchin underlined in the previously quoted passage as representing the new revolutionary ‘classless class’ of people who will somehow organise the co-operative suburban communities of the future social ecological order. Interestingly the ‘ethnic, unemployable and ghetto people’ of the 19th century of whom he speaks so disparagingly found the best way to overcome their difficulties was to form themselves into unions on the basis of location, culture, trade and interest and collectively fight in One Big Union of ordinary people for a more just and equitable world.

The food plants produced by an agroforestry system supply the most important factors in human nutrition, in which most diets, in the poor and rich worlds alike, are gravely deficient. These are fruit, whose natural sugars feed the brain and energise the body, and green plants, whose chlorophyll — the basic constituent of all physical life — has a special affinity for the blood. A diet designed for optimum positive health should comprise seventy percent of fruit and green vegetables, preferably consumed fresh and raw.

A disaster afflicting today’s world, which is at least as serious as any actual or potential environmental disaster, is the colossal toll of disease caused by bad or inadequate food. The malnutrition of poverty in the Third World is no more drastic in its effects than the malnutrition of affluence in the rich sector — the malnutrition caused by excess of fatty, clogging, over-flavoured and chemically processed foods causes the ‘diseases of civilisation’ which are no less lethal than the diseases caused by destitution and dirt.

Before there can be an Environmental Revolution there must be a Humanistic Revolution. The reason why ever-growing stretches of the earth’s surface are hells for human beings, whether they are squalid shanty-towns, polluted and violent inner-city ghettos, squatters’ camps, concentration camps or treeless wildernesses, is that the powers who run the world regard people as things, as objects of exploitation or domination. A word coined by Karl Marx in his critique of the capitalist system was verdinglichung — ‘thing-making’, though Communist commissars have proved as guilty in this respect as capitalist entrepreneurs. Both groups regard human beings as mere pawns to be used for the furtherance of their per-
sonal power and wealth. Similarly, their only interest in a stretch of beautiful countryside is, not how its beauty can be preserved and enhanced, but how most effectively it can be ‘developed’; whether it can be made to generate more wealth as the site of a building estate, an industrial complex, a factory farm, an airfield, a hydroelectric dam, a nuclear power station, a motorway, or a ‘theme park’.

The attitude of the powers-that-be towards Life in its infinite complexity, whether in the form of a human being or a tropical rainforest, is one of gross over-simplification. The human being is only of interest as ‘consumer’, ‘investor’, ‘labour’, ‘voter’, ‘soldier’ or ‘taxpayer’. The forest, with its vast diversity of species, is only of interest as a purveyor of timber, or, burnt to the ground and converted into pasture, as a brief purveyor of hamburgers. The only standard is short-term profit; no regard is paid to longer and wider prospects, to the needs and survival of living beings.

It is among ordinary human beings, not industrial chiefs, bankers, bureaucrats and politicians, that humanistic feelings are found in their greatest intensity. Among our tortured world’s supreme needs is the divine commonsense and compassion of the conscientious mother and housewife. This is a manifestation of the power of Gaia, the grassroots dynamic which must supply much of the motive-force of the Environmental Revolution.

Unlike previous revolutions, this must be overwhelmingly non-violent and constructive. It will comprise an ever-increasing profusion of small growing-points, like the new plants that irresistibly spring forth in an area devastated by volcanic eruption.

Already it is possible to detect a multitude of such growing-points in almost every country. A report critical of industrialism was entitled *Limits to Growth*, but no limits should be placed on the growth of new village communities, family farms, organic market-gardens, conservation groups, Green organisations, and co-operative enterprises of all kinds. Even now, the people involved in these must number many millions. If only their efforts all the more puzzling! How is one to design, implement, manufacture and recycle in a non-authoritarian and co-operative manner the environmentally friendly eco-technologies to which he so frequently refers unless he is willing to enter dialogue with the industrial proletariat who form the backbone of the profoundly destructive oil-steel-coal culture of the present day, but whose force of strength and brute labour could turn ammunitions factories into wind generator manufacturing plants and our forests into gardens, undreamt of by the prophets of all ages? The need to move away from large-scale industrial activity is obvious to the ecologist — but our present factories must begin to design, manufacture and distribute the new technologies of tomorrow. A successful end to this period of transition and technological scale readjustment towards the decentralised application of agro-industrial production cannot be achieved without the co-operation of the industrial proletariat.

Undeterred, Bookchin goes on to insult American anarchists and trade-unionists of the past. ‘These immigrant socialists and anarchists (presumably referring to such people as Emma Goldman or Alexander Berkman) were largely unionists rather than revolutionary Utopians’ who had little understanding of American democratic traditions. Had the American people ignored the ‘narrow’ and ‘class based’ ideologies of these anarchist and socialist foreigners and upheld the individualistic values of the American Constitution — concretely enshrined in the small town meetings of the pioneers — an authentic American radicalism could have taken a firmer root and the confederal and decentralised vision of a free-American republic could well have become a reality:

Irish direct action, German Marxism, Italian anarchism and Jewish socialism have always been confined to the ghettos of American social life. Combatants of a pre-capitalist world, these militant European immigrants stood at odds with an ever-changing Anglo-Saxon society ... whose constitution had been
I have encountered thousands of people who on a local and co-operative basis are constructively working towards a greener future — there are however many intellectually degenerate and philosophically idiotic concepts contained within the ‘green ideology’ that holds many of these people together — Earthworshipping, rituals, astrology and eco-mysticism, etc. which tend to make for a less than coherent green movement. The bourgeois or middle class element has further weakened the practical worth of many of the more successful ‘green’ ventures of recent years (e.g. The Body Shop). Expensive health food shops and trendy bookshops selling a wealth of over-priced environmental paraphernalia reveal more a love of profit — an ability to ‘catch on’ to a new idea rather than a genuine and unimpeded love of nature. Lacking in class consciousness the green movement has all too easily let itself be integrated with the capitalist system and is therefore caught in an intellectual and tactical contradiction. Its members, predominantly coming from bourgeois background, are unable to be truly critical of the inherently destructive and anti-ecological aspects of the capitalist and class system of which they uncritically form a part.

Large sections of the ‘green movement’ take a simplistic and anti-technological stance. Industrialism as such and not industrial being seen as a curse of humanity and nature. Other sections of the anarchist and green movement take a more sophisticated position about technology and insist upon the fact that there has been a second industrial revolution — the communications, computer and technological revolution which has a life of its own that may have superseded its origins in capitalism and which threatens to wreak ever-greater levels of social and ecological disintegration. Whether the technological revolution will yield predominantly libertarian or authoritarian results is of course a matter of speculation — and only time will tell. But Bookchin in advocating both craftsmanship and large industrial plants run by robots seems confused on the issue! Bookchin has never to my knowledge ever endorsed any kind of anti-technological viewpoint — that makes his anti-union stance could be integrated and co-ordinated into a worldwide New Life Network, they could give rise to an NGO — a Non-Governmental Organisation — which could speak with real authority in the United Nations.

As the primary impulse for all activity comes from the human psyche, the first essential, if mankind is to survive the colossal challenges of the present and future, must be a Moral Revolution. Mutual Aid, rather than money, power, status and self-indulgence, must be accepted as the basic Law of Life. Modern communication technology has forcibly brought home the fact that it is One World. Disasters involving human suffering are shown on television screens with equal immediacy, whether they occur in distant countries or the next street. No longer can people shrug off responsibility for the tribulations of their distant cousins. In fact those tribulations are generally caused by negative or positive factors in the worldwide system and ethos which govern the way the majority of the world’s citizens live and work — a system and ethos based on blind selfishness and materialism.

Gandhi said, ‘There is enough in the world to satisfy everyone’s need but not everyone’s greed’. In fact, the technological know-how exists to give every human being adequate food, water, shelter, clothing, energy and opportunity for self-fulfilment. A worldwide campaign of resource development for need could be a ‘moral equivalent of war’, which would bring deep psychological as well as physical satisfaction to countless millions, not least among those who at present are seeking the soul-destroying ‘satisfaction’ of exploiting, dominating or otherwise hurting their fellow human beings.

Such a campaign, wholly constructive and transcending environmental problems as well as human barriers and rivalries — and involving the planting of trillions of trees — could usher in a period of positive peace and creative activity such as mankind has never known throughout history.
The alternatives face each one of us: a series of ever deepening environmental and economic disasters and conflicts or a world of unprecedented beauty, diversity and abundance.

Eco-activists are relative newcomers to the art of organised resistance to the capitalist and military state and have yet to digest the hard historical fact that the institution of state-sponsored multinational exploitation cannot be defeated without the commitment of large sections of the organised working classes to the green cause. It is the working classes who transform raw nature (trees, minerals, etc.) into the industrial products we consume — and regardless of the wishes of government, or their capitalist masters, are ultimately capable of initiating change.

The tragic lack of communication between eco-activist groups and trades unions has meant that the ecology movement has suffered from a significant lessening of its practical power-base and has led to the absurd situation in Australia of green activists fighting with rank-and-file members of logging-unions, whose members, history has shown us, have little to gain from large scale exploitation of primary forest land. The attempted assassination of IWW/Earth First organisers recently in the USA should serve as a lesson for both the greenies and the workers alike — that the real enemy are the institutions of capital and state and not one another. Both the greenies and the working class would be better served by joining together and working towards a grass-roots, revitalised and ecologically informed trades-union movement which if not capable (for the time being) of overthrowing the state-military forces of the rich and powerful is at least able to resist the worst excesses of the present profoundly destructive state-capitalist order. That the welfare of the worker is intimately dependent upon a healthy environment is an unquestionable fact, and both eco-activists and trade-unionists must choose the path of strength and victory by striving to achieve ever greater levels of co-operation and common purpose within and between their respective organisations.
bution, organic food co-operatives, forest action groups and a plethora of specialised ecological journals and zines, etc., bringing people together from all backgrounds, races and classes. The local, popular decentralised nature of this green networking representing a powerful and non-centralised force in the direction of social and ecological change. At the more radical end of the green-network there are people who care deeply about the environment but have become disillusioned about the ability of the state/capitalist order to solve the urgent ecological problems of the day and have set out in the name of common-sense and humanity to save the planet by any reasonable means — legal or otherwise. These people have flung themselves in front of bulldozers and rainforest timber ships. Their antics and exploits have undoubtedly captured the popular imagination and these people have thankfully had comparative success in saving significant portions of wilderness from destruction. Due however to the lack of a significant working class power base their efforts have resulted in them having won few battles at the price of rapidly losing the ecological war. They didn’t get their message across to their potentially most powerful and effective ally — trades-unions and the organised working classes. Capitalism and the state which have undoubtedly been the cause of untold environmental destruction has been fought for centuries by working class organisations inspired by a vision of more equal, just and equitable society. The fact that capitalism and state are not only unjust and authoritarian but also extremely environmentally destructive only seeks to confirm the inherent correctness of centuries of radical working class organisation and trades-union opposition to the encroachment of capitalism and the military state upon the social and ecological fabric of human society. The heroic and consistent effort of working class organisation to resist state-sponsored capitalist exploitation is a long and bloody history involving the useless murder, ruthless torture of millions upon millions of ordinary people whose only crime was to attempt to protect their communities and their

A Polemic on Deep Ecology

Deep Ecology: Not Man Apart
by Rodney Aitchtey

It is the intent of the following essay to shine deep ecology’s light onto the question of land itself: Land from which everything emanates.

Arne Naess launched the long range international deep ecology movement in Norway in 1972, which attracted the attention of environmental academics worldwide. Awareness grew of just how deep is the deep water in which we are habituated to wallow.

Naess has compared our position to being at the bottom of a well, with our will-power succumbing to the lingering deadly fumes, which would explain the prevalent inertia. Fumes being, apart from insidious vehicle exhausts and airborne pollution, television and advertising.

P.D. Ouspensky’s prognosis is useful. ‘All the absurdities and all the contradictions of people, and of human life in general, become explained when we realise that people live in sleep, do everything in sleep, and do not know that they are asleep.’ Each is a bundle of memories of experiences with some ‘reserve energy’. It is this ‘reserve energy’ which deep ecology taps, and brings to the surface, waking us up.

Deep ecology has become an emotive term and does carry multi-connotations which are like sparks flying from a live terminal, which is as Arne Naess intended. No two people are the same. Deep ecology’s philosophy is not rigid, although it does
not deviate from Naess’ original intention which is to question preconceptions and assumptions until the answer reaches the level of intuition. Something made the American philosopher John Rodman say, in 1978, ‘It is probably a safe maxim that there will be no revolution in ethics without a revolution in perception.’

Naess has said that his vision of deep ecology was awakened by reading a book by Rachel Carson which was published in America in 1962. Her title, *Man Against the Earth*, was changed to *Silent Spring*. She dedicated the book to Albert Schweitzer in his words: ‘Man has lost the capacity to foresee and to forestall. He will end by destroying the earth.’

When she had finished writing she sent the manuscript to William Shawn, editor of the *New Yorker*. His enthusiasm buoyed her into noting, ‘I knew from his reaction that my message would get across’. While listening to Beethoven’s Violin Concerto, ‘suddenly the tension of four years was broken and I let the tears come... The thoughts of all the birds and other creatures and all the loveliness that is in nature came to me with such a surge of deep happiness, that now I had done what I could — I had been able to complete it’. Her book struck home, at people’s preconceptions and assumptions, and attempts were made to suppress it. She recalled John Muir (see later) when she said at the end of the book, the ‘control of nature’ is a phrase conceived in arrogance, born of the Neanderthal age of biology and philosophy, when it was supposed that nature exists for the convenience of man.

Arne Naess said of *Silent Spring*, ‘Rachel Carson went deep and questioned the premises of her society’. In 1964, Rachel Carson died. In 1969, Naess resigned as professor in philosophy at the University of Oslo after being there thirty years, so that he could ‘live rather than function’. During his time at the University he had established a name for his work on the philosophies of Spinoza and Gandhi which he put into practice in direct action in Norway. One of his actions was to pin himself high up to one side of a threatened people can come to organise their trade or industry in a spirit of equality, peace and co-operation.

Although thankfully, tens of millions of people are no longer forced to claw at rock with crude picks in the bowels of the earth I fail to see why Bookchin is confident that the ‘worker’ is an ob-solent. How is one to travel or phone another city in Bookchin’s ideal world of liberated, self- sufficient city-communes unless we have to repair the roads, railway or telephone cables? People will always wish to direct objects through organised space and hence a postal service will always be necessary (if we ever come to colonise other planets even more necessary). Economic and industrial life is unfortunately global in nature and the idea that one could organise an inter-continental railway network from the individual town or city is as absurd as the proposition that one could organise social life from the factory floor — an idea that he mistakenly credits to industrial-syndicalism.

The industrial proletariat, although it may certainly never repre-sent the force of numbers that it did a century ago is hardly likely to disappear and Anarchism simply states that in the absence of capitalism and the nation state the workers in each industry must organise their affairs for the good of themselves, their city, their ecological region and the whole of humanity. Anarchism is not a worker’s party — it is an idea that embraces all manifestations of human social life — the free city, the agricultural collective, the hobby group and trades-union in so far as they are useful to our species and operate freely of government in a non hierarchical manner.

Bookchin is more constructive when he points to the ‘green-net-work’ as providing a new and significant springboard to rev-olutionary transformation.

Over the past 30 years, individuals and groups of people con-nected by nothing else than a love of the Earth have set about putting their philosophies into action upon a local basis. Local groups of horticulturalists growing native trees for free distri-
women, countercultural people, environmentalists, the aged, unemployables or unemployed, the ‘ghetto’ people, etc. It is this ‘counterculture’ in the broadest sense of the term with its battery of alternative organisations, technologies, periodicals, food co-operatives, health and women’s centres that seems to offer common resistance to Caesarism and corporatism. The re-emergence of ‘the people’ in contrast to the steady decline of ‘the proletariat’ verifies the ascendancy of community over factory, of town and neighbourhood over assembly line. The hand fits the glove perfectly — and clenched it makes the real fist of our time. *(The Modern Crisis, Ch.4, passim)*

Exactly what sense are we to make of such sweeping dismissals of several centuries of sustained resistance to the encroachments of capital and state by ordinary working people is quite unclear. Anarchism and Anarcho-syndicalism have to my knowledge always emphasised the need to foster community and has never made the absurd claim that society could be ‘organised from the factory floor’. The primary unit of Anarchist society has always been the free, ecologically integrated city or town — how else could one hope to organise social life in the absence of the nation-state?? Besides, in the absence of state-supported industrial capitalism trades unions and workers’ co-operatives — be they bakers, grocers, coach builders, postal workers or tram drivers would seem to be a quite natural, indeed logical and rational way of enabling ordinary working people to co-ordinate the economic and industrial life of their city, for the benefit of themselves rather than for the state or a handful of capitalist barons and it is simply dishonest of Bookchin to claim that anarchism has emphasised the historical destiny of the industrial proletariat at the expense of community and free city life. Beyond this, trade unions are composed of people — feminists, peace activists and ecologists included and are simply a means by which

Norwegian fjord; he refused to descend until plans to build a dam there were dropped, which they were!

He was in tune with the lines from this poem by the American poet, Robinson Jeffers (1887–1962):

*The Answer*

*A severed hand
Is an ugly thing, and man disserved from the earth and stars and his history ... for contemplation or in fact ...
Often appears atrociously ugly. Integrity is wholeness, the greatest beauty is
Organic wholeness, the wholeness of life and things, the divine beauty of the universe. Love that, not man
Apart from that, or else you will share man’s pitiful confusions, or drown in despair when his days darken.*

Naess also emphasises ‘the responsibility of an integrated person to work out his or her reaction to contemporary environmental problems on the basis of a total view’.

It is now almost thirty years since *Silent Spring* said ‘What we have to face is not an occasional dose of poison which has accidentally got into some particle of food, but a persistent and continuous poisoning of the whole human environment’. And it was not a new phenomenon then. It has taken centuries to virtually strip the planet of its natural covering.

Five hundred years ago, in 1492, an Italian, Christobal Colón (Columbus) blazed the trail for extermination and environmental destruction up to the present time. He discovered and ravished, where he could, the islands of the West Indies. In 1498, on his third voyage, when he landed on what became Venezuela he took it for another island, until afterwards when natives disabused him. Under the impression he had come upon islands off India he named the natives Indians, which misnomer has stuck onto all the natives of South and North America and Canada. A fellow Italian, Amerigo
Vespucci landed up in North America and his first name became attached to the whole continent. There is a statue of him in New York.

In 1993, a statue of Columbus is projected for London, although no likeness of the man exists. At school I was given the impression he was English. But 1993 is when we are to be Europeanised with its centralised, humanist, materialist values, and Columbus would therefore be seen as a good European to admire.

In the 1780s accounts of the exploits of Columbus and his successors varied so much on the Continent that the learned Abbé Guillaume Raynal decided to assemble the different accounts to find a common thread. It was that they had ‘harassed the globe and stained it with blood’. And the situation has not changed. In Sarawak a quite horrific extermination process is in force with the destruction of the rainforest. One of the indigenous people recently said, ‘We are now like fish in the pool of a drying out riverbed’. Such distress and death to enable the Japanese to make their fax paper is diabolical.

Ralph Waldo Emerson (1803–1882) in his essay, ‘Nature’, says, ‘Man is fallen; nature is erect, and serves as a differential thermometer, detecting the presence or absence of the divine sentiment in man’. He inspired both Henry Thoreau and John Muir; each in their differing ways put his philosophy into practice. Thoreau, Emerson said, had developed his own thoughts a step further.

Thoreau (1817–1862) urged viewing nature free of preconceptions. Nature became his ‘society’. In his essay ‘Walking’, he said, ‘...from the forests and wilderness come the tonics and barks which brace mankind’. He believed that there would be no regeneration of society without self-reform of the individual. He went to prison in 1848 rather than pay a poll tax because of its going toward the Mexican war effort. In his hut by Waiden pond he put into practice his growing convictions.

John Muir (1838–1914) felt that ‘One day’s exposure to mountains is better than cartloads of books’, and he believed that lack of None the less, many things that Bookchin has to say about a range of issues are relevant to anarchism and anarchists. This is especially true of his extended discussions on the role of patriarchy in creating a hierarchical, exploitative and anti-ecological social system which are valuable and explore issues, somewhat underplayed by Kropotkin and Emma Goldman in their analysis of the evolution and maintenance of authoritarian structures in human society. (Reclus however in the way he uses gender ascription, he & she, about nature is more interesting in this respect than otherwise supposed.)

It is in his rejection of class analysis, however, that Bookchin really seeks to form a cleavage between Anarchism and his favoured theory of Social Ecology. In the most accessible of his recent works, The Modern Crisis, his attacks on Anarchism, the IWW and Trades-unionism are simply outrageous.

Anarchism, claims Bookchin, because of its insistence upon class analysis and a belief in the overriding revolutionary importance of the industrial proletariat, represents with Marxism just another tired old socialist philosophy which is no longer relevant to the present day:

‘The politics we must pursue is grassroots, fertilised by the ecological, feminist, communitarian and anti-war movements that have patently displaced the traditional workers’ movement of half a century ago. Here the so called revolutionary ideologies of our era — socialism and anarchism — fall upon hard times. Besides, their ‘constituency’ is literally being 'phased out'. The factory in its traditional form is gradually becoming an archaism. Robots will soon replace the assembly line as the agents of mass industrial production. Hence future generation of industrial proletarian may be a marginal stratum marking the end of American industrial society.

The new ‘classless class’ we now deduce is united more by cultural ties than economic ones: ethnics,
anthology of his writings from the period entitled *Post Scarcity Anarchism* are clear, succinct, and easily understandable statements of the ecological-anarchist viewpoint displaying all the most admirable aspects of anarchist pamphleteering and collectively representing some of the best and most important radical writings of the 1960s. Bookchin in these early pamphlets as well as his two later books; *The Limits of the City* (1974) and *Toward an Ecological Society* (1980) brought up to date and enlarged upon many of the social-ecological insights and ideas to be found in the works of past anarchist thinkers (Fourier, Peter Kropotkin & Elisee Reclus) clearly, logically and convincingly showing that anarchism with its non-centralist and non-hierarchical philosophy envisioning a harmonious stateless order composed of federation of self-governing cities ecologically integrated with their surrounding bio-regions is the only social philosophy capable of ensuring the long-term survival of both our species and our planet. Most of the above mentioned works were however written nearly two decades ago and since the end of the 1970s Bookchin has spent his time expounding his ‘self-styled’ ecological philosophy — *Social Ecology* — publishing many books on the subject; *The Ecology of Freedom* (1982), *The Modern Crisis* (1986), *Remaking Society* (1989) and *The Philosophy of Social Ecology* (1990).

**Part II: Bookchin, the Social Ecologist of the 80s and 90s**

Although none of the basic tenets of Bookchin’s theory of social Ecology are in anyway incompatible with social-anarchism and although not denying the importance of anarchism, in his more recent works he rarely mentions the word, and then only in passing. His explicit rejection of ‘working class organisation’ and ‘trade unions’ shows a widening emotional and philosophical gap between his theory of Social Ecology with the traditions of anarchism.

immersion in the natural world was what flawed Emerson’s writings. However, he said of Emerson, ‘He was as sincere as the trees, his eyes sincere as the sun’. Muir was aware of himself going deeper into Nature’s secrets than Thoreau had been. In 1870 an experience shook him, and he wrote in a letter joyfully, ‘I’m in the woods woods woods, and they are in me!’ He knew that there was no creature higher or lower than another; each had equal right to live and blossom in its own way and own time.

Muir chose to spend most of his life in the mountains, finding comfort among them. Walking was not a word he used for himself; instead, sauntering, with its original sense of musing. Here are words addressed to the boy King Edward VI which show it in use before deep ecological consideration was made to give way to shallowness, losing a sense of rootedness, by the Reformation: ‘...do not yourselfe sitt saunteringe alone: as wone that weare in studye most deepe’.

Muir’s encounters with Indians were reciprocal in admiration. He was given the name Ancoutahan by a band of the Tlingit tribe. A translation might be: revered/learned writer, writing in his notebook; and of them he wrote, ‘To the Indian mind all nature was instinct with deity. A spirit was embodied in every mountain, stream, and waterfall.’

Muir’s published studies of natural forces brought him to the notice of the scientific establishment, and he realised that the concern of science was not with the essential oneness of all things, but with breaking down and classification. What frustration he suffered: ‘When we try to pick out anything by itself we find it hitched to everything else in the universe’.

In San Francisco Muir attended some Sunday night sessions with Henry George who was having an influence on early conservation thinking. In *Progress and Poverty* (1879) he suggested that as people had equal rights to breathe the air, so they should to enjoy the earth. He reasoned that whatever man makes or grows is his to do with it as he will. But, he asks, who made the earth? As it is a ‘temporary
dwelling place’ it is not ours to buy or sell, (or despoil). Morally, no man should have more land than that with which he can cope, without exploiting others, and he advocated a Single Tax on undeserved and unearned appreciating income. Marx’s wrestle with capital did not go deep enough to touch the earth. He overlooked land, and actually encouraged its exploitation and despoliation. Muir agreed with George that ‘what has destroyed all previous civilisations has been the conditions produced by the growth of civilisation itself. Henry George was described by President Roosevelt as one of the century’s ‘really great thinkers’.

Muir was driven into immediate, frenzied action by a notice signed by three men claiming a valley for themselves to raise livestock. His letter appeared in the San Francisco Bulletin in August 1875. It marked the beginning of the concentration of his energies toward defending wilderness from man. Eventually he came up against the commercial conservationists: a deep versus shallow dichotomy. In May 1892, Muir, with sympathetic friends, launched the redoubtable Sierra Club to campaign to preserve the forests and wild features. Muir was elected president and remained so until he died. The National Parks of America owe their existence to Muir’s energy. In 1876 he had said, ‘My life-work is all over the world’; and indeed, the John Muir Trust in Scotland was founded in 1983 with the object of keeping wilderness wild; it is affiliated to the Sierra Club in San Francisco.

And how the Sierra Club for more than three years had to fight the determined attempts of lumbermen and stockmen to cut down nearly half of the Yosemite National Park; they flouted the law, and their 500,000 sheep stripped the earth of meadows and forest.

In 1894, Muir’s first book, The Mountains of California, roused America to the need for determination to preserve the forests. Serious opposition came from the influential General Land Office. When Muir joined the Forest Commission on a fact-searching inspection, wherever they stopped they found forests cut down and threatens to engulf both anarchisms alike. The reasons for this are historical and practical and are not due to any theoretical shortcomings. At the end of the 19th century, which witnessed rapid industrial development (a peasantry, an urban proletariat, and a Marxist and socialist opposition that regarded the ecological and anarchist ideal of eco-regional self-sufficiency and town/country balance as too Utopian, or as indicative of a backward looking, pre-industrial ideology), anarchism and anarchists as an organised political force saw fit, and with good reasons, to devote a substantial amount of its efforts towards industrial and trades-unions activity and down play the more ecological aspects of the anarchist vision. This was an eminently practical response to the organisational problems of the day and anarcho-syndicalists through no fault of their own have tended to focus upon industrial democracy within the factory or yard and have to some extent ignored other, wider ecological aspects of the anarchist tradition. Anarchism however, unlike Marxism has always taken a profound interest in the proper relationship of industry to ecology (most famously exhibited in Kropotkin’s Fields, Factories & Workshops) and Bookchin has in response to our current ecological concerns been quite correct in stressing the importance of the ecological region, green technology and ecologically integrated cities and communities within anarchist theory and thereby restore a proper sense of balance to the anarchist and ecological debate.

This essay was however written over a decade ago and with the other essays in Towards an Ecological Society in which it is anthologised forms a bridge between the two phases of his writing and thinking: Bookchin the Anarchist-Ecologist of the 1960s and 70s and Bookchin the Social Ecologist of the 1980s and 90s. Bookchin the Social Ecologist is far less kind on anarchism and trades unionism than he might otherwise be. Bookchin has without doubt been one of the most prominent anti-statist thinkers of recent decades. His two pamphlets Ecology and Revolutionary Thought and Towards a Liberatory Technology (both written in 1965 and reprinted in an
Bookchin concludes that the factory system upon which industrial syndicalism rests, is intrinsically authoritarian and dehumanising. The syndicalists have confused the factory, the ‘realm of economic necessity’, with the ‘realm of social freedom’, which is nature, wilderness, community and the liberated city. Contrary to the syndicalist vision, the factory could not on any account ever be regarded as the primary locus of political action and freedom. Only the re-emergence of a freely communicating, non-hierarchical and economically-integrated social existence would be genuinely capable of guaranteeing liberty and prosperity. Besides, Bookchin later argues, the coal-steel-oil technology upon which the factory system was based is economically redundant, through resource depletion. Solar and wind energies etc., although capable of being used in large scale industrial manufacturing processes, are much more efficiently applied on a local or small scale basis. An economic infrastructure consisting of a large number of much smaller workshops producing individually crafted tools from local non-polluting power sources, within the context of an ecologically integrated community, not only represented a truly ecological vision of human social destiny, but one that also saw no need for the vast and intrinsically dehumanising industrial manufacturing plants and factories of a past era. The factory no longer represented even the realm of necessity — environmental determinants having rendered the factory system of industrial production ecologically and vis a vis economically redundant.

Bookchin in this penetrating essay makes fair comment. The pictures that have until recently adorned our anarcho-syndicalist journals — of thousands of workers, heads held high and anarchist banners in hand, marching out of rows of factories triumphantly belching out black smoke in unison — exhibit a singular inability to appreciate the scope and challenge of the ecological revolution that burned, largely by fraudulent means. Muir wrote home, ‘Wherever the white man goes, the groves vanish’.

Roosevelt camped with Muir and told him in a letter afterwards that he had ‘always begrudged Emerson’s not having gone into camp’ with him. And after a later visit to California he pronounced on the importance of its water supply: ‘the water supply cannot be preserved unless the forests are preserved’.

In May 1913, Muir was made Doctor of Laws by the President of the University of California who said of him: ‘John Muir, born in Scotland, reared in the University of Wisconsin, by final choice a Californian, Widely travelled Observer of the world we dwell in, Man of Science and of Letters, Friend and Protector of Nature, Uniquely gifted to Interpret unto others Her mind and ways’. In 1914 he died. He had said, ‘A little pure wildness is the one great present want’ for people to realise that ‘Everything is so immeasurably united’. Time Magazine announced in 1965: ‘The real father of conservation is considered to be John Muir, a Californian naturalist’.

Emerson had absorbed Indian teachings into his writing, Thoreau absorbed Emerson with reservations, Muir likewise and deepened on Thoreau’s understanding; then came Aldo Leopold who had absorbed Muir’s writings which he had had corroborated by P.D. Ouspensky’s Tertium Organum, and his contemporary, Robinson Jeffers, whose influences appear to have been Heraclitus, Spinoza, Schopenhauer, and Nietzsche.

Aldo Leopold (1886–1948) said, ‘We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect’. His Land Ethic is much quoted and appears in Part III, The Upshot, of A Sand County Almanac. It was a distillation of nearly half a century of his lifetime spent in forestry and wild life conservation: ‘The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land’.
P.D. Ouspensky was a contemporary also. Leopold accepted his assurance that there was nothing dead or mechanical in nature; there was life and feeling in everything: a mountain, a tree, a river, the fish in the river, drops of water, rain, a plant, fire — each separately must possess a mind of its own. A section in *Sand County Almanac* is titled ‘Thinking like a mountain’, as is a recent book about deep ecology.

It was also Robinson Jeffers’ conviction that the devaluation of human-centered illusions, the turning outward from man to what is boundlessly greater, is the next step in human development; and an essential condition of freedom and of spiritual (i.e. moral and vital) sanity:

*Mourning the broken balance, the hopeless prostration of the earth under men’s hands and their minds…*

He believed human life to be so easy, spent, as it is, thoughtlessly. His poetry delineates ‘conflict and charity, love, jealousy, hatred, competition, government, vanity and cruelty, and that puerile passion the will to power’.

*At the fall of an age men must make sacrifice to renew beauty, to restore strength.*

He has been called the poet of inhumanism. Certainly deep ecology is ‘not man apart’ from the earth, taking one beyond that relative thought which separates and competes.

*The beauty of things —
Is in the beholder’s brain — the human mind’s translation of their transhuman Intrinsic value.*

In 1945 John Muir’s integral approach was repersonified by David Brower who not only brought Muir to people’s minds, but it ever specialised tasks demolished the technical structure of self-managed societies and ultimately of workmanship — the ‘selfhood’ of the economic realm … True craftsmanship is loving work, not onerous toil. It arouses the senses, not dulls them. It adds dignity to humanity, not demeans it. It gives free range to the spirit, not aborts it. Within the technical sphere it is the expression of selfhood par excellence — of individuation, consciousness, and freedom. These words dance throughout every account of well-crafted objects and artistic works.

The factory worker lives merely on the memory of such traits. The din of the factory drowns out every thought, not to speak of any song; the division of labour denies the worker any relationship to the community; the rationalisation of labour dulls his or her senses and exhausts his or her body. There is no room whatever for any of the artisan’s modes of expression — from artistry to spirituality — other than an interaction with objects that reduce the worker to a mere object… Marxism and syndicalism alike, by virtue of their commitment to the factory as a revolutionary social arena, must recast self-management to mean the industrial management of the self… Both ideologies share the notion that the factory is the ‘school’ of revolution and in the case of syndicalism, of social reconstruction, rather than its undoing. Most share a common commitment to the factory’s structural role as a source of social mobilisation… The factory not only serves to mobilise and train the proletariat but to dehumanise it. Freedom is to be found not within the factory but outside it.
Part I: Bookchin: The Anarchist-Ecologist of the late 60s and 70s

Bookchin has deservedly emerged as a major thinker and writer of the late Twentieth Century. His ideas on the relationship between social ecology, anarchism, and trade-unionism, although controversial and sometimes straightforwardly wrong or dishonest, are nonetheless worthy of our close and considered attention.

Although Bookchin has recently become openly hostile towards trade-unionism and anarcho-syndicalism, in fact to any class analysis at all, this has not always been the case. Some of his earlier thinking on these subjects, although deeply critical of syndicalism, were insightful comments upon the value of traditional revolutionary theory and practice, unlike his recent quite unnecessary attacks on anarchism. His essay Self-management and the New Technology, written in 1979 is perhaps most important in this respect. In this essay Bookchin argues that the syndicalist conception of the ‘factory’ or the ‘workplace’ as being of overriding importance as a focus for political and social activity in a future anarchist society is an overly optimistic view of the liberatory potential of large-scale industrial activity. Bookchin claims the factory has destroyed the craftsman and the artisan and degraded the nature of work and labour through relying on a system of mass-industrial production that reduces human beings to mere engine parts:

Of the technical changes that separate our own era from the past ones no single device was more important than that of the least mechanical of all — the factory. Neither Watt’s steam engine nor Bessemer’s furnace was more significant than the simple process of rationalising labour into an industrial engine for the production of commodities. Machinery, in the conventional sense of the term, heightened this process vastly — but the systemic rationalisation of labour to serve in
also.’ Can it be time?’...when ‘Man will once more feel his unity with his fellows, he will feel his unity with the animals, with the mountains and the streams, with the earth itself and the slow pulse of constellations, not as an abstract dogma of Science or Theology, but as a living and ever present fact’.

Naess says, ‘The essence of deep ecology is to ask deeper questions’, to get at the root of truth, not merely the branches and leaves. ‘We question our society’s underlying assumptions. For instance, we can see that instead of an energy crisis we have a crisis of consumption.’

Naess’ absorption of the *Tao Te Ching* and Chuang Tzu corroborated his understanding of Spinoza. He was accustomed to regularly retreat to his hut high in the Norwegian mountains, where increasingly he found ‘contraries indistinguishably blended’ (Chuang Tzu). He was getting to the bottom of John Muir’s ‘no mystery but the mystery of harmony’.

Chuang Tzu’s blending of contraries was nothing other, in the Western mind-frame, than God. The truth dawned as when the first rays of the rising sun embrace the earth. By getting to know nature those glimpses of God, and feeling of being a part of God, grow and deepen. The ultimate, speechless joy can be likened to success after painstaking months, even years, to master a ‘difficult’ musical instrument, and suddenly the purest notes are heard; and there is left only wonder why it eluded one for so long, so simple it has become.

A somersault of the mind, once achieved it is there to stay. For a deep ecologist it is an emotional attachment or expansion of consciousness which underlies being and interrelation with nature. Naess calls it Self-realisation when one’s self is widened and deepened. Protection of nature becomes second nature, it becomes naturally protection of one’s very own self! Distinctions are overcome: one’s self and other cease to be considered as separate. Thus, one identifies with the threatened forest, and acts accordingly.

Without land we would not exist. Without domesticated animals there would be no deserts. The erosion of man’s just nature brought with it the erosion of the land. With greed unbounded it is no wonder that we are where we are. The word recession is now bandied about, but not understood for what it is. Material growth is said to be round the corner.

Man did not intend to change the weather, but now that that fact is being acknowledged nothing very much is being done. Profit, like a necklace, must not be tightened, but Capital’s self-imposed recession expects everyone to tighten their belts. Reforms are announced which give the impression that something is happening, when nothing is at all.

When Arne Naess led the Norwegian Himalaya Expedition in 1949, he said, ‘One of the principal objects of the expedition will be to discover at what height the ordinary burner conks out, and how the second functions at greater heights’. I would suggest that the ordinary burner, man’s suiciding the planet, is conking out, and deep ecology is the second burner.

It is necessary to practise deep ecology with its ‘total view’; to be self-reliant, rooted in place and nature, simple in means, rich in ends. (Gandhi).

**Social Ecology, Anarchism and Trades Unionism**

**by Graham Purchase**

This essay is a revision of three book reviews published in *Rebel Worker* between 1989 and 1991.
This convoluted discussion is simply — it seems — to illustrate the evident truism that ‘the requirement of control increases with the remoteness of sources of satisfaction of needs’.

This abstract theorising does not cease when Naess in later chapters discusses technology and lifestyle, economics and ecopolitics. This is a pity given the interesting things he has to say. He stresses in Gandhian fashion the importance of linking changes in personal life style with political action, and the importance of non-violent direct action. Drawing a distinction between action, campaigns and social movements, Naess pleads for the continuation of struggles even if specific actions and campaigns appear to have been unsuccessful. But when he comes to discuss the state and the present economic system — Naess never brings himself to describe it as capitalism — Naess expresses very ambivalent attitudes. He continually emphasises, often in strident terms, that the present economic system must be fundamentally transformed. The goal of the deep ecology movement, he writes, cannot be achieved without a ‘deep change’ of present industrial societies. Seeing contemporary environmental problems as being overcome solely by technical means reflects a ‘shallow’ ecological approach — what is needed are fundamental changes in consciousness and the economic system. Yet he follows — and quotes approvingly — Erik Dammann’s suggestion that it is far too simple to claim that capitalists, industrial magnates, bureaucrats and politicians alone have the power to preserve the system, implying that people in democratic countries (so-called) are free to make the changes if they desire. But then the disclaimer completely obscures the real causes of the environmental problems we now face — which are intrinsically related to an economic system, namely capitalism, which for centuries has been one of tyranny and exploitation, and which is based on the endless pursuit of profit. And to think that power lies in parliaments reflects a very limited conception of power under monopoly capitalism.
Drawing up a political triangle of red, blue and green, Naess sees ‘green’ as transcending the opposition between blue (capitalism) and red (socialism). He can only do this by making some very dubious equations. The greens (deep ecology) have affinity, he suggests, with the blues in valuing personal enterprise and in opposing bureaucracies. But, of course, supporters of capitalism when they talk about freedom and personal enterprise and initiative are not really concerned with the freedom of the individual but only with the needs of private ‘capital’. When the latter is challenged freedom goes by the board, and capitalist enterprises are highly bureaucratic. And when Naess distances himself from the reds (socialism) — which he sees as bureaucratic and as supporting industrialism and ‘big industry’ — what he does is to equate socialism with the state capitalism of the Soviet Union, as do most apologists for capitalism. Yet when Naess writes that the aims and values of the society cannot change unless the way of production is altered, when he speaks out for decentralisation and for the importance of social justice, and when he writes that ‘The Utopians of green societies point towards a kind of direct democracy with local control of the means of production as the best means of achieving the goals’ (p. 158), all he does of course is to suggest socialist ideas that communist anarchists and libertarian socialists have been propagating for a century or more. Like many in the ecology movement Naess seems quite oblivious to the libertarian socialist tradition and so offers suggestions for a ‘new renaissance’ that are anything but new or original. He makes no reference at all to Bookchin, let alone any of the earlier anarchists.

Yet paradoxically this advocate of direct democracy and critic of contemporary capitalism makes two glaring admissions. The first is to suggest that there is hardly any capitalistic political ideology (p. 156). What on earth is liberalism, fascism, Thatcherism, and the so-called ‘enterprise culture’ — not to mention intellectual fashions like socio-biology? Capitalist ideology — with its emphasis on competition, on efficiency, on management, on monitoring, on
privatisation, and on so-called free enterprise — permeates current social and political thought, and libertarian and real socialist thought hardly gets a hearing in any of the major institutions and cultural arenas. Democracy ends as soon as you enter the office or factory gate. Naess’ own book is infused with terms and ideas implicitly drawn from the capitalist paradigm — even when he is arguing against its tendencies. Naess makes, for instance, a very cogent critique of the ‘quantification’ (and the attempts to put a price tag on nature) that is so dominant in shaping the policies and attitudes of contemporary societies — but it is all done very much in the language of the market economists.

Secondly, although advocating decentralisation, Naess suggests that in order to counter the increasing population pressure and war ‘some fairly strong central political institutions’ (p. 157) are necessary, and to keep transnational corporations in check we may in the future have to envision global institutions with some power ‘not only to criticise certain states and companies but also to implement certain measures against the states which violate the rules’ (p. 139). This is virtually the advocacy of a global state, the totalitarian implications of which are too ghastly to behold — but it is paradoxically suggested by Naess in order to safeguard ‘green communities’ from the forces of disruption and violence.

Although Naess argues for a biocentric approach towards nature, and stresses that all life forms should be seen as having intrinsic value — the principle of ‘biospherical egalitarianism’ — he is aware of the limitations of this principle and never lapses like other deep ecologists into misanthropy. Taken literally or seriously ‘biocentric equality’ would of course lead to the quick demise of the human species. What however Naess suggests is that we use this principle or norm as a ‘guideline’ — that we do not inflict unnecessary suffering upon other living beings, and that we treat all aspects of nature as having intrinsic value. He is aware that human praxis and the human condition necessarily involves a transgression of this norm, and that some killing and exploitation of non-human
life forms is unavoidable. But his point is that this instrumentality should be kept to a minimum, and only serve vital human needs — for sustenance and shelter. Unlike many other ecologists — and many vegetarians — he is aware that among many tribal communities a sense of kinship or identification with nature coexists with a hunting culture. Unlike other ecologists too, Naess doesn’t deny the importance of humans, or treat humankind as if it were a blot upon the landscape. Like Bookchin he recognises that there is a certain uniqueness about humans on earth — but he strongly argues that this uniqueness must not be used as a premise for the domination of nature, and for treating other life-forms simply as a means to human satisfaction. But rather it must be used as a premise for a universal care that other species can neither understand nor afford (p. 171). And this concern extends to humans, for social justice is an important component of his philosophy — ‘no exploitation’, ‘no subjection’ and ‘no class societies’ are constituent norms of his rather abstract normative schema.

The most fundamental norm for Naess and the logical starting point of his whole philosophy is the idea of Self-realisation — the self having a capital S. All other norms are derived from this key idea. But he is ambivalent about what this Self stands for. He writes that this Self is known throughout the history of philosophy under such names as ‘the Universal Self,’ the Absolute’, ‘the atman’. But in the religious traditions from which these terms derive Self does not imply an identification with nature but rather has spiritual connotations, and the discovery of the Self means the identification with god, the absolute or Brahman. For example, atman means that spiritual aspect of the person (soul) which is distinct from the mind, sense organs and the physical body, and self realisation (moksha, or salvation) entails the realisation that this soul is in fact Brahman — the supreme Self or world spirit. In this Vedanta tradition the natural world is an illusion (maya). In other religious traditions, as Naess himself writes, the spirit (soul) was considered radically distinct from the body, and the body and the material world were
seen as a positive hindrance to self-realisation. In the gnostic tradition the body is seen as a temporary ‘prison’ or ‘tomb’ of the soul (self) and, as Hans Jonas has perceptively written, this radical religious dualism — exemplified in the European tradition by Platonism, gnosticism and Judeo-Christianity — is an essential precursor of mechanistic philosophy and anthropocentrism.\(^6\) This form of religious Self realisation is profoundly anti-ecological — for as Naess suggests in writing about Plotinus, it involves a ‘deprecation of physical reality’. As he writes ‘A search for supernatural being can easily become an endeavour hostile to man and environment’ (p. 190) — but of course this is precisely what most mystical traditions entail — the detachment of self from organic life. What Naess seems to be suggesting however is something quite different: for the ‘oneness’ he suggests is not the identification of the self with god, the absolute or world spirit (Brahman), but rather the identification of the person with the natural world (in his case, especially with mountains). And in this, of course, he follows Spinoza and such nature mystics as Richard Jefferies. Although he seems to suggest that Spinoza was influenced by the idea of an ‘immanent God’ (p.201), Spinoza’s philosophy was in fact something quite different, for he equated god with nature, and advocated a religious atheism or a profane mysticism. He advocated a salvation ethic in which god is neither a transcendental nor immanent spirit but nature itself. Naess seems to suggest a similar ethic — a ‘philosophy of oneness’ — in which a deep identification with the natural world is felt or experienced. It is an ‘ecological consciousness’, or the development of an ‘ecological self that goes beyond the narrow ego and the ordinary self (with a small S). Naess thus seems to play down the ‘spiritual’ interpretation — God is hardly mentioned — and is sceptical of a mystical oneness. What we have to do, he writes, is to walk a difficult ridge: ‘To the left we have the ocean of organic

the characteristics and life cycle of the Apple tree. Some of it appears to show the worst aspects of modern science, in its violent, reductionist methods and its tendency to reshape nature to fit capitalist societies’ needs. The fact that the Apple tree can be transformed from a beautiful 20–30 foot tree, to an eight foot stick with no branches, stuck in a pot, was finally too outrageous for it to be allowed to pass without comment.

The gaps that have appeared are in the section on Commodification of Symbolism, in which no texts could be found. Also on the work of the orchard worker, who seems to be totally ignored along with the many other horticultural workers. Even Howard Newby who is one of the few writers to broach the subject of agricultural workers’ conditions has neglected horticultural workers and this remains something that should be rectified.

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and mystic views, to the right the abyss of atomic individualism’ (p. 165).

Naess writes as a philosopher rather than as a social theorist, and although he stresses the importance of community, autonomy, local self-sufficiency and co-operation, and decentralisation, the discussion of these always tends to be rather abstract — ‘normative’. There is therefore very little in the book about bioregionalism, about feminism, about neighbourhood associations, or about the communitarian movements and anarchist collectives that have been erupting throughout history to challenge capitalist exploitation and hierarchy. And the stress he puts on changing one’s lifestyle and on ‘self-realisation’ while perhaps important to the white affluent middle classes of Europe and North America, can all too easily lead to a politics of ‘survivalism’. Following Gandhi, Naess stresses the importance of political action, but such action as he envisages tends to focus on ‘symptoms’ — on environmental issues — rather than directly challenging the primary social institutions of the capitalist system — the multinational corporations and state structures that support them. Indeed in the future ecological society that he postulates after the radical transformation of the present system, he seems to envisage the continued existence of both these capitalist firms and the nation state — so one wonders how radical or ‘deep’ is the transformation that Naess envisages?

**Deep Ecology, Anarchosyndicalism, and the Future of Anarchist Thought by Murray Bookchin**

There is very little I can add to the outstanding criticism Brian Morris levels at deep ecology. Indeed, Morris’s contribution to the debate around eco-mysticism generally has been insightful as well as incisive, and I have found his writings an educational experience.
that hopefully will reach a very wide audience in the United States in addition to Britain.

I should hope that his review of Arne Naess’s *Ecology, Community and Lifestyle* has revealed the intellectual poverty of the ‘father of deep ecology’ and the silliness of the entire deep ecology ‘movement’. Rodney Aitchey’s rather airy, often inaccurate, and mystical *Deep Ecology: Not Man Apart*, it would seem to me, is perhaps the best argument against deep ecology that I have seen in quite a while. But after dealing with deep ecologists in North America for quite a few years, I have reluctantly come to the conclusion that the acolytes of Naess et al operate on faith and are motivated in their allegiances by theological rather than rational impulses. There is no reasoned argument, I suspect, that will shake a belief-system of this kind — hence I will leave discussion of the issues involved to others who still have the energy to deal with mindless dogmas.

I would add — or possibly reinforce — only one observation to the incisive ones that Morris makes. One wonders whether deep ecology’s biocentric maxim that all living beings can be equatable with one another in terms of their ‘intrinsic worth’ would have had any meaning during the long eras of organic evolution before human beings emerged. The entire conceptual framework of deep ecology is entirely a product of human agency — a fact that imparts to the human species a unique status in the natural world. All ethical systems (including those that can be grounded in biotic evolution) are formulated by human beings in distinctly cultural situations. Remove human agency from the scene, and there is not the least evidence that animals exhibit behaviour that can be regarded as discursive, meaningful, or moral. When Elisee Reclus, the anarchist geographer, tells us that pussycats are (as cited by George Woodcock in his introduction to the Marie Fleming biography of Reclus) ‘natural anarchists’, or worse, that ‘there is not a human sentiment which on occasion they [i.e. cats] do not understand or share, not an idea which they do not divine [sic!], not a desire but what they forestall it’, Reclus is writing ethological and purely a decorative tree. The Plane tree is also symbolic of moral superiority.91 How much better to have the Apple tree, in its many forms, growing all over London *again*. Symbolic of health, immortality, love and fertility — these are qualities our towns and cities should seek to emulate.

Appendix

The original interest in this subject has come from the ‘Save Old Orchards’ campaign run by the environmental arts group Common Ground. In 1988 a short project was carried out by myself at Thames Polytechnic into attitudes to, and uses of, fruit grown in people’s gardens. This research threw up many more questions than it answered, but the background knowledge gained then, has added much to this research.

Part one of this paper dealing with mythology and symbolism was researched mainly at the Folklore Library, University College and relies extensively on the 1928 work by Eleanor Hull, who truly seems to have loved the symbolism surrounding apples. Much more remains to be discovered on this subject however.

The history of fruit cultivation is well covered by F.A. Roach, but coming from an ex-director of East Mailing research station, reflects a very pro-scientific view regarding developments. In reviewing the history I have followed Carolyn Merchant’s method that historical change becomes ecological change, emphasising human impact on the system as a whole, whilst using the Apple as an example. As she rightly points out, Natural and Cultural sub-systems are in dynamic interaction and cannot be separated.

The modern developments in fruit cultivation are by no means dealt with exhaustively, there being so many. It has also been hard to find works to explain adequately the mind-boggling nature of some of the work undertaken by these researchers in controlling

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91 Cooper, J C — *Op Cit* p 132.
posits humanity as inseparable from nature can these problems be properly addressed. If this is fully understood ‘...it will no longer be possible for us to injure nature wantonly, as this would mean injuring an integral part of ourselves’.  

Such a move may seem far off today. Yet much can and is being done to educate people, and to encourage awareness of the more manifold meanings of nature, especially in urban areas which remain so alienated from nature and alienating for people.

There is no reason for example, why we should not have ‘real’ Apple trees and other fruits growing all over our cities. As Alexander states:

> The presence of orchards adds an experience that has all but vanished from our cities — the experience of growth, harvest, local sources of fresh food; walking down a city street pulling an apple out of a tree and biting into it.  

Appleyard quotes the example of Chandigarh, the capital of India’s Punjab, where the main roads of the city are lined with peaches and plum trees. In Nanking in China, one sixth of trees planted in the city are fruit bearing, including lychees and mangoes. There are problems of course in the amount of pollution from cars etc, in cities, but fruit growing can help draw more attention to this pollution.

The main tree identified with London is the London Plane (*Platanus x acerifolia*), a tree of uncertain origin, large, unusual, but ecological nonsense. That anarchist writers celebrate the author of such an anthropomorphic absurdity as ‘ecological’ is regrettable to say the least. To the extent that ‘intrinsic worth’ is something more than merely an agreeable intuition in modern ecological thought, it is an ‘attribute’ that human beings formulate in their minds and a ‘right’ that they may *decide to confer* on animals and other creatures. It does not exist apart from the operations of the human mind or humanity’s social values.

To turn from the silliness of deep ecology to the preposterous elucidation of anarchosyndicalism that Graham Purchase advances is a thankless task that I would ignore were it not scheduled to be published in book form. Purchase’s piece, ‘Social Ecology, Anarchism and Trade Unionism’, is a malicious essay that begins by accusing me of writing belligerently and ‘insult(ing) American anarchists and trade unionists’, then goes on to heap upon me some of the most vituperative and ad hominem attacks that I’ve encountered in a long time. Not only am I ‘at best unconstructive and at worst positively harmful’, Purchase warns his readers, but worse, I am consumed by ‘an insatiable appetite for controversy’. Having advanced this no doubt balanced, unprovocative, and objective evaluation of my role in the anarchist movement, Purchase displays his psychoanalytic acumen by alleging that I suffer from ‘an unhealthy desire to be the intellectual leader and founder of a “new” ecological movement’, that I exhibit evidence of ‘intellectual schizophrenia’, and finally that I ‘filch all the major ecological insights of anarchist theory and practice [and] dress them up in a socialist-feminist [!] cum neo-hegelian garb and go on to more or less claim them as [my] own’. As if this level of vituperation were not enough — no doubt it is intended to subdue my own ‘insatiable appetite for controversy’! — Purchase goes on to characterize the body of views that I have advanced over a dozen or so books and scores of articles as ‘an intellectual outrage’.

To correct Purchase’s often convoluted account of the evolution of my views — presumably I was an ‘anarchist-ecologist’ in
the late 1960s and 1970s, only to mutate into an ‘outrageous’ anti-
syndicalist and hence anti-anarchist ‘social ecologist’ in the 1980s
and 1990s — would be as tedious as it would be futile. I shall leave
it to serious readers of my work to sort out the absurdities of his
account. Suffice it here to make a few points. No one, least of all
I, believes that we can radically alter society without the support
of the proletariat and working people of all kinds. But to assume
that industrial workers will play the ‘hegemonic’ role that Marxists
traditionally assigned to them — and that the anarchosyndicalists
merely echoed — is to smother radical thought and practice with a
vengeance. My criticism of theories that assign a hegemonic role to
the proletariat in the struggle for an anarchist society — generically
denoted by labour historians as ‘proletarian socialism’ — is simply
that they are obsolete. The reasons for the passage of the era of
proletarian socialism into history have been explored not only by
myself but by serious radical theorists of all kinds — including an-
archists. From decades of experience in my own life, I learned that
industrial workers can more easily be reached as men and women,
husbands and wives, fathers and mothers, brothers and sisters, in-
deed, as neighbours and citizens. They are often more concerned
about community problems, pollution, public education, democ-
racy, morality, and the quality of their lives than about whether
they ‘control’ the factories in which they are ruthlessly exploited.
Indeed, the majority of workers and trade-union members with
whom I worked for years in foundries and auto plants were more
eager to get out of their factories after working hours were over
than to ponder production schedules and vocational assignments.

Is it inconceivable that we have misread the historical nature
of the proletariat (more a Marxian failing, I may add, than a tra-
ditional anarchist one) as a revolutionary hegemonic class? Is it
inconceivable that the factory system, far from organizing and rad-
cializing the proletariat, has steadily assimilated it to industrial sys-
tems of command and obedience? Have capitalism and the work-
ing class stood still since the nineteenth and early twentieth cen-

As Tisdell has noted, the market system operates in a way that
minimises the amount of knowledge needed to make an economic
decision. As the divided responsibility of production has led to di-
vided responsibility for its social and environmental impacts, so
the overall lack of knowledge arising out of the market system has
further diminished the moral responsibility for these impacts. For
example, when one buys Apples one need only know the price and
quality of Apples. No knowledge is required of the producer, the
production process or its social and environmental impacts (both
of production and consumption). Yet without such knowledge, says
Tisdell, no moral responsibility for environmental consequences of
one’s decisions seems possible. Even if knowledge is available, the
remoteness of production may reduce any feeling of responsibility
for social and environmental effects. As Jones states, in his discussion of Weber, this is a function of the
fragmentation of reason, whereby reason is constrained to seek the
most efficient, scientifically and logically based means to achieve
pre-determined ends. This formal rationality therefore does not ex-
tend our vision or grasp of meaning in the world:

On the contrary, the myth, legend, folklore, poetry and
magic, necessary for the creation of ultimate mean-
ings in human societies and the emergence of a holistic
worldview are rejected.^86^  

Seen in this way it is evident that capitalism and its scientifically
backed formal rationality, cannot solve the current, and growing,
social and environmental problems. The problems emanate from
the system itself. Nor can going back to a cosmological view be an
answer, such philosophies were long ago destroyed by Mechanistic
science. Only with an Ecological way of thinking and acting which

^85^ Tisdell, C A — Op Cit p107.
^86^ Jones, Alwyn — Op Cit p142.
eties; ‘most’ people seem to think we get Apples that no longer
taste much at all, and we get Apples that are sprayed with innu-
merable hazardous chemicals. Such developments are leading to a
greater questioning of how far we can trust food producers, chem-
ical companies etc, when their motive is profits.

Yet things do not have to be this way. The Apple need not be con-
fined to massive orchards, as staked up, chemically soaked bush
trees. In Switzerland for example, as I was informed by a research
scientist from East Mailing, there seems to be a move to take a
broader view of fruit cultivation. Instead of following a policy of
transformingtheApplletree to fit economic needs, fruit cultivation
was being seen as part of the workings and aesthetics of the wider
landscape and this was leading to a more ‘traditional’ form of cul-
tivation.

Nor should we rely on private gardens in Britain, as a refuge for
varieties not commercially available. As Alexander states:

Fruit trees on common land add much more to the
neighbourhood and the community than the same
trees in private backyards: privately grown, the trees
tend to produce more fruit than one household can
consume. On public land, the trees concentrate the
feeling of mutual benefit and responsibility. And
because they require yearly care, pruning and harvest-
ing the fruit trees naturally involve people in their
common land.  

The idea of community orchards, like the aim of growing one’s
own food (or at least a portion of it), aiming at buying fewer en-
vironmentally and socially destructive products, and insisting on
organic foods, can be seen as an attempt to achieve some form of
moral responsibility for one’s economic decisions in the market.

\[\text{84 Alexander, C et al — A Pattern Language, Towns, Buildings, Construction
O.U.P. 1977 p795.}\]
ued to call for a far more expansive form of anarchist organization and practice than many syndicalists were prepared to accept.

In practice, anarchist groups often came into outright conflict with anarcho-syndicalist organizations — not to speak of syndicalist organizations, many of which eschewed anarchism. Early in the century, the Spanish anarchocommunsists, influenced primarily by Juan Barón and Francisco Cardinal, the editors of *Tierra y Libertad*, furiously denounced the anarchosyndicalists who were later to form the CNT as ‘deserters’ and ‘reformists’. Similar conflicts developed in Italy, France, and the United States, and perhaps not without reason. The record of the anarchosyndicalist movement has been one of the most abysmal in the history of anarchism generally. In the Mexican Revolution, for example, the anarchosyndicalist leaders of the Casa del Obrero Mundial shamefully placed their proletarian ‘Red Battalions’ at the service of Carranza, one of the revolution’s most bloodthirsty thugs, to fight the truly revolutionary militia of Zapata — all to gain a few paltry reforms, which Carranza withdrew once the Zapatista challenge had been broken with their collaboration. The great Mexican anarchist Ricardo Flores Magon justly denounced their behaviour as a betrayal.

Nor can much be said in defence of the leaders of the CNT in Spain. They swallowed their libertarian principles by becoming ‘ministers’ in the Madrid government late in 1936, not without the support of many of their followers, I should add, and in May 1937 they used their prestige to disarm the Barcelona proletariat when it tried to resist the Stalinist counterrevolution in the Catalan capital. In the United States, lest present-day anarchosyndicalists get carried away by legendary movements like the Industrial Workers of the World (IWW), they should be advised that this syndicalist movement, like others elsewhere, was by no means committed to anarchism. ‘Big Bill’ Haywood, its most renowned leader, was never an anarchist. Still other IWW leaders, many of whom tilted toward an anarchist outlook, not only became Communists in the 1920s but became ardent Stalinists in the 1930s.

7. Futures

As we have seen, it is the nature of our current economic and social system which reduces the Apple to a commodity with a single function. This has led to the transformation of the Apple tree to meet the needs of capitalist production, a process which has mainly taken place in the Horticultural Research Stations. It is clear that big business — particularly chemical companies — do well out of this research, yet what does the customer, the buyer of Apples receive in return for the huge amount of public investment? Cheaper Apples perhaps, but we also get a smaller choice of Apple varieties in its members’ gardens.
days when the job was more varied, skilled and spread more evenly throughout the year.\textsuperscript{78}

The sorting of fruit is now carried out on factory production line systems in on-farm refrigerated stores which are usually run on a co-operative basis between local farmers. Here the fruit is sorted into its various classes under EC quality standards and the Agricultural Development and Advisory Services Fruit Group provides advice to employers on how to run these lines on strict ‘time and motion’ systems to get the best results from the mainly female, part-time and low-paid workforce.

6. The Commodification of Apple Symbolism

As society has changed, the old symbols of ancient and pre-modern cultures have to a great extent lost their meaning\textsuperscript{79} and have been replaced by new symbols that reflect the surroundings of contemporary, materialistic culture. Yet as Cooper states, a large body of symbolism has become traditional over the ages and this constitutes an international language transcending the normal limits of communication.\textsuperscript{80}

It may be that this traditional form of symbolism (which is most often nature symbolism and includes the Apple) is selectively commodified by capitalism, in that it is used to imbue or associate technologies, goods and services with symbolic qualities of other phenomena, to make products more attractive to buyers. For example the Apple is used by Apple Macintosh Computers and for Midland Bank’s orchard account, amongst others. This can be seen as a marketing or advertising ploy to associate these products with the traditional symbolic qualities of the Apple, of health, wisdom and fer-

\textsuperscript{78} Blythe, Ronald — \textit{Akenfield} Penguin 1969 Chapter 12. This information is based on several interviews undertaken in 1988–89 in large commercial orchards in North Kent and so cannot be taken as representative of all orchard works.

\textsuperscript{79} Cooper, J C — \textit{Op Cit} p7.

\textsuperscript{80} Jackson, A A — \textit{Semi-Detached London} Allen and Unwin 1973 p49.
The diggers of Spanish anarchism. Syndicalism — be it anarchosyndicalism or its less libertarian variants — has probably done more to denature the ethical content of anarchism than any other single factor in the history of the movement, apart from anarchism’s largely marginal and ineffectual individualist tendencies. Indeed, until anarchism shakes off this syndicalist heritage and expands its communalistic and communistic heritage, it will be little more than a rhetorical and mindless echo of vulgar Marxism and the ghost of an era that has long passed into history.

But as the Germans say, genug! I’ve had it with Purchase and his kind. Let them explore more thoroughly the historical and textual bases of anarchist theory and practice before they leap into print with inanities that reveal their appalling ignorance of the intellectual and practical trajectories of their own beliefs. And they should also take some pains to read what I have written on the history and failings of the workers’ movement before they undertake to criticize my own views. What I strongly resent, however, is the fatuous implication — one that even more sensible anarchists sometimes imply — that I ‘filch’ my ecological views from ‘anarchist theory and practice’. In fact, I have been overly eager to cite anarchist antecedents for social ecology (as I call my eco-anarchist views), and I have done so wherever I could. The Ecology of Freedom, written in 1982 — that is, during the period when, according to Purchase, I abandoned my anarchist views for social ecology — opens with an epigraph from Kropotkin’s Ethics. In the Acknowledgments section of that book, I observed that “Peter Kropotkin’s writings on mutual aid and anarchism remain an abiding tradition to which I am committed”. For reasons that I shall explain, this is a bit of an overstatement so far as Kropotkin is concerned, but the text contains no less than nine favourable, often laudatory references to him, including an extensive quotation from Mutual Aid with which I expressed my warm approval. If I have not mentioned Elise Reclus, it was because I knew nothing about his work and views until I read Marie Fleming’s 1988 biography of him for the

The effects of increasing economic rationalisation have also been evident in the numbers of varieties grown commercially and available in shops. Over 6000 varieties of Apple are known, yet modern commercial orchards are dominated by only nine varieties. English orchards are dominated by Cox’s Orange Pippin and its coloured forms, making up 63% of dessert apple production in 1986, while Bramley’s Seedlings made up 90% of culinary apples. Only another six or seven dessert apples are widely available; most of these being imported often from as far away as Canada or New Zealand.

This increasing specialisation in only a few varieties is a relatively recent trend of the twentieth century. In 1917, Prothero could boast that as many as 200 varieties of Apple were collected in a single orchard, now he would be lucky to find more than two or three varieties in most orchards. This loss of local varieties of apples that were often intimately related to their area can be seen as yet another factor in the loss of distinctiveness and identification of regions that has followed from the application of scientific management to agriculture.

The work of the orchard labourer has also been transformed, with developments to reduce ‘maintenance’ and harvesting labour costs becoming increasingly deskillled and seasonally intense. Little information about these changes is available however, with only brief references in works such as Ronald Blythe’s Akenfield. The older orchard workers spoken to in connection with this research all bemoaned the lack of activity of most of the year and the much more intense and fast harvesting season in comparison to earlier

in December 1989 that all daminozide based products (Alar and Dazide) were safe.69

Developments in plant breeding have also led to more intensive planting systems with even more dwarfing trees. These can be as little as 1 metre in height, while some bush trees need to be permanently staked and their branches strung up because they cannot support themselves. These developments allow labour ‘maintenance and picking’ costs to be reduced. Attempts to mechanise harvesting altogether are at present limited to fruit for cider or juice due to damage to the fruit.70 Though fully automated chemical sprayers have recently been developed.71

Recent research has turned to genetic control of Apple characteristics. Here, by mapping genes responsible for control of tree habit, pest and disease resistance, and fruit characteristics, genes will be selected and transferred to give the right requirements for high yields, pest resistance and early cropping, this ‘…will allow the normally slow process of conventional breeding to be accelerated’.72

So far this has resulted in the new columnar varieties, compact, branchless ‘trees’ which have taken thirty years to develop. They require no pruning, crop early, need very little space and are thus being marketed under the legend: ‘Now even the smallest garden can have an orchard’.73 These mutations however, bear little relation to a tree at all, having been stripped down to a purely functional level. Like the dwarf varieties of commercial orchards, they have no meaning beyond a straight economic one.

70 Luckwill, L C — Some Factors in Successful Cropping 5 Apples Span 27(2) 1984 p66.

first time only a few weeks ago. And in retrospect, I doubt that I would have quoted or cited him in any case.

Try as I have to cite my affinity with anarchist writers of the past, guardians of the anarchist ossuary often miss a very crucial point. Social ecology is a fairly integrated and coherent viewpoint that encompasses a philosophy of natural evolution and of humanity’s place in that evolutionary process; a reformulation of dialectics along ecological lines; an account of the emergence of hierarchy; a historical examination of the dialectic between legacies and epistemologies of domination and freedom; an evaluation of technology from an historical, ethical, and philosophical standpoint; a wide-ranging critique of Marxism, the Frankfurt School, justice, rationalism, scientism, and instrumentalism; and finally, an eduction of a vision of a Utopian, decentralized, confederal, and aesthetically grounded future society based on an objective ethics of complementarity. I do not present these ideas as a mere inventory of subjects but as a highly coherent viewpoint. The Ecology of Freedom, moreover, must be supplemented by the later Urbanization Without Cities, The Philosophy of Social Ecology, and Remaking Society, not to speak of quite a few important essays published mainly in Green Perspectives, if one is to recognize that social ecology is more than the sum of its parts.

Whether adequately or not, the holistic body of ideas in these works endeavours to place ‘eco-anarchism’, a term that to the best of my knowledge has come into existence entirely as a result of my writings, on a theoretical and intellectual par with the best systematic works in radical social theory. To pick this corpus apart by citing an antecedent, in the writings of some prominent nineteenth-century anarchists, for an idea that I developed in this whole, and thereby deal with only part of what I have tried to integrate into a meaningful and relevant whole for our times, is simply fatuous. One could similarly reduce systematic accounts of any body of social or even scientific theory by citing historical antecedents for various constituent fragments. If there is any ‘filching’ going on, it
may well be by the guardians of the anarchist ossuary who have
turned the rather smug boast ‘We said it long ago’ into a veritable
industry, while themselves benefiting from whatever prestige anar-
chism has gained over the past decades by virtue of its association
with social ecology.

I would not make such an assertion, had I not been provoked by
the arrogance and dogmatism of these guardians in my encounters
with them. To set the record straight: The fact is that Kropotkin
had no influence on my turn from Marxism to anarchism — nor,
for that matter, did Bakunin or Proudhon. It was Herbert Read’s
“The Philosophy of Anarchism” that I found most useful for root-
ing the views that I slowly developed over the fifties and well into
the sixties in a libertarian pedigree; hence the considerable atten-
tion he received in my 1964 essay, ‘Ecology and Revolutionary
Thought’. Odd as it may seem, it was my reaction against Marx
and Engels’s critiques of anarchism, my readings into the Athe-
nian polis, George Woodcock’s informative history of anarchism,
my own avocation as a biologist, and my studies in technology
that gave rise to the views in my early essays — not any exten-
sive readings into the works of early anarchists. Had I been ‘born
into’ the anarchist tradition, as some of our more self-righteous
anarchists claim to have been, I might well have taken umbrage at
Proudhon’s exchange-oriented contractualism, and after my long
experience in the workers’ movement, I would have felt smothered
by the rubbish about syndicalism advanced by Graham Purchase
and his kind.

Purchase’s fatuous attempt to distinguish my post-1980 writings
on social ecology from my presumably ‘true-blue’ anarchist writ-
ings before that date leaves a number of facts about the develop-
ment of social ecology unexplained. I wrote my earliest, almost
book-length work on the ecological dislocations produced by cap-
talism, ‘The Problems of Chemicals in Food’, in 1952, while I was
a neo-Marxist and had in no way been influenced by anarchist
thinkers. Many of Marx’s views heavily contributed to my notion

is seen as the ‘ultimate’ control of the Apple, through genetic en-
gineering. Up to twelve chemicals and hormones can be applied
to apples in a single season, rich pickings indeed for the chemi-
cal companies. These are applied to Apples at almost every stage
of growth from beginning to end. They are used to control pests
and diseases (of which there are an increasing number due to fur-
ther disruption of predator-prey relationships), to thin fruit out on
the tree, to control growth, to ‘stick’ apples to the tree and prevent
windblow losses, to prevent rotting in storage and to lengthen shelf
life. This is a potent cocktail synergistically speaking, yet what in-
adequate testing does take place is only to define lethal doses, not
how chemicals may work together or effects of long term low level
exposures.

Already several fungicides used regularly in the fruit industry,
such as Mancozeb, Captan, and Folpet, are known carcino-
gens. But most menacing are the growth regulators such as Alar
(daminozide), which are used to slow the growth of leaves and
branches on trees, and thus force an increase in budding and fruit
production. These regulators and some herbicides dramatically
alter growth rates at the level of the individual cell. Alar sales
were stopped in the USA because of links with cancer in young
children and caused storms of protest from farmers and industry
with the decision being roundly condemned by the Wall Street
Journal as: ‘false or superficial science prevailing over the real
thing’. A similar controversy erupted in Britain over the Amer-
ican decision, but after a brief review, the government decided

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65 This is based on reviews of horticultural product magazines and on per-
sonal communications with East Mailing and Fruit Growers. There is a move to-
wards integrated pest control but this is developing only slowly.
66 McCully, P and Hildyard, N — Intolerable Risks: Pesticides in Children’s
Food The Ecologist Vol 19(3) 1989 p97.
67 Snell, Peter — Pesticide Residues: The Scandal Continues The Ecologist Vol
19(3) 1989 p94.
68 Flaherty, Ann — Uniroyal Pushed into Suspending Alar Sales in US Grower
revolution, scientific management sets itself the problem of grasping the process of production as a whole and controlling every element of it, without exception. As H.L. Gantt wrote:

Improving the system of management means the elimination of elements of chance or accident and the accomplishment of all the ends desired in accordance with knowledge derived from a scientific investigation of everything down to the smallest details of labour.\(^{61}\)

The result of this approach is that commercial fruit production has been revolutionised and has followed the precepts of rationalisation apparent in other industries and agricultural sectors. Fruit growers have become ever more specialised, landholdings have become bigger, more capital intensive and more incorporated into sectors of the chemical, engineering and food processing industries.\(^{62}\)

These developments have been made possible by the scientific investigations of the fruit research stations, much of it sponsored by companies such as ICI, Monsanto, Ciba-Geigy Agrochemicals, J Sainsbury Pic, Hoechst, and of course The Ministry of Agriculture, Fisheries and Food (MAFF) who are the main sponsors.\(^{63}\) MAFF grants are not given unless it can be shown that the research is of ‘practical’ importance and the current government’s policy is emphasising this by cutting financial support for East Mailing and other research stations, so that a higher proportion of funding comes from the private sector and is thus more market orientated.\(^{64}\)

Currently, control of Apple production is mainly focussed on chemicals and hybridisation, though this is shifting towards what of post-scarcity, very much a ’pre-1980’ outlook to which I still adhere. (Certain Spanish anarchists, I may add, held similar views in the 1930s, as I discovered decades later when I wrote The Spanish Anarchists.) I say all of this without being in the least concerned that my anarchist views may be ‘adulterated’ by some of Marx’s concepts. With Bakunin, I share the view that Marx made invaluable contributions to radical theory, contributions one can easily value without accepting his authoritarian politics or perspectives. For anarchists to foolishly demonize Marx — or even Hegel, for that matter — is to abandon a rich legacy of ideas that should be brought to the service of libertarian thought, just as the fascinating work of many biologists should be brought to the service of ecological thought. Which does not mean that we have to accept Marx’s gross errors about centralism, his commitment to a ‘worker’s party’, his support of the nation-state, and the like, any more than learning from Hegel’s dialectic means that we must necessarily accept the existence of an ‘Absolute’, a strict teleological system, a hybridized corporate-parliamentary monarchy, or what he broadly called ‘absolute idealism’.

By the same token, we will be deceiving nobody but ourselves if we celebrate the insights of traditional anarchism without dealing forthrightly with its shortcomings. Due honour should certainly be given to Proudhon for developing federalistic notions of social organization against the nation-state and defending the rights of craftspeople and peasants who were under the assault of industrial capitalism — a system that Marx dogmatically celebrated in so many of his writings. But it would be sheer myopia to ignore Proudhon’s commitment to a contractual form of economic relationships, as distinguished from the communistic maxim ‘From each according to his or her abilities, to each according to his or her needs’. His contractualism permeated his federalistic concepts and can scarcely be distinguished from bourgeois conceptions of ‘right’. I say this despite some attempts that have been made to cast his proclivity for contractual exchanges into a quasi-philosophical

\(^{61}\) Braverman, Harry — Op Cit p171.
\(^{64}\) Ibid p3.
notion of ‘social contract’. Even if Proudhonism really were a social contract theory, this would be quite unsatisfactory, in my eyes. Nor can we ignore Richard Vernon’s observation in his introduction to Proudhon’s *The Principle of Federalism* that Proudhon viewed federalism as an abridgment of his earlier, largely personalistic anarchism. If thought out carefully, Proudhon’s views seem to be premised on the existence of free-floating, seemingly ‘sovereign’ individuals, craftspersons, or even collectives structured around contractual, exchangelike relationships and property ownership rather than on a communistic system of ‘ownership’ and distribution of goods.

Bakunin, in turn, was an avowed collectivist, not a communist, and his views on organization in particular were often at odds with themselves. (I might remind Purchase, here, that Fourier was in no sense a socialist, anarchist or even a revolutionary, despite his many rich insights.) Maximoff’s later assemblage of small portions of Bakunin’s many writings under the rubric of ‘scientific anarchism’ would probably have astonished Bakunin, just as many of Bakunin’s insights would shock orthodox anarchists today. I, for one, would generally agree with Bakunin, for example, that ‘municipal elections always best reflect the real attitude and will of the people’, although I would want to restate his formulation to mean that municipal elections can more accurately reflect the popular will than parliamentary ones. But how many orthodox anarchists would agree with Bakunin’s view — or even my qualified one? The extreme resistance I have encountered from anarchist traditionalists and ‘purists’ on this issue has virtually foreclosed any possibility of developing a libertarian, participatory, municipalist, and confederal politics today as part of the anarchist tradition.

Given his time and place, Kropotkin was perhaps one of the most far-seeing of the theorists I encountered in the libertarian tradition. It was not until the late sixties, when reprints of his works began to appear in American bookshops, that I became familiar with his *Fields, Factories, and Workshops* (and at a later time, Colin

The setting up of Fruit Research stations, principally those at Long Ashton, Bristol in 1903 (initially as the Cider Institute) and East Mailing, Kent in 1913, can be seen as part of the more general ‘scientific-technical revolution’, in which science became directly organised and dominated by capitalist institutions and was placed at the centre of production. This process of integration is described by Braverman:

> Science is the last — and after labour the most important — social property to be turned into an adjunct of capital... At first science costs the capitalist nothing, since he merely exploits the accumulated knowledge of the physical sciences, but later the capitalist systematically organises and harnesses science, paying for scientific education, research, laboratories etc, out of the huge surplus social product which either belongs directly to him or which the capitalist class as a whole controls in the form of tax revenues. A formerly relatively free-floating social endeavour is integrated into production and the market.

The mechanistic philosophy and reductionist method of science harmonised well with the expanding capitalist system into a rationalised system of scientific management, in which the most efficient, scientifically and logically based means are sought to achieve pre-determined capitalist ends. Thus, in the scientific-technical

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57 Ibid p69-72.
59 Ibid p256.
By the middle of the eighteenth century, English agriculture was well on the way to becoming a fully commercial activity, organised and administered according to the needs of the market,

and dominated by the triple divisions into landlords, tenant farmers and hired labourers.

In the nineteenth century few new developments came about in fruit cultivation. However, fruit growing continued to intensify under the influence of rapid population growth and urbanisation, increasing per capita incomes, cheaper transport costs and more integrated markets. At the same time French imports of Apples and high sugar prices caused periodic contractions in cultivation.

At this time many Apple varieties grown today were introduced, these often having arisen as chance seedlings, Bramleys Seedling, Cox’s Orange Pippin, and Worcester Pearmain being examples.

The next set of new developments in fruit cultivation did not come about until the early twentieth century with the integration of science into commercial fruit production.

5. The Apple as a Machine

Most developments and improvements in fruit cultivation before the twentieth century came from individual growers and gardeners, amateur ‘Scientists’ and particularly in the nineteenth century from commercial nurseries such as Laxtons of Bedford.

By the early twentieth century however, research into new varieties by nurseries was largely given up as the new scientific research sta-

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54 Harvey, David — Fruit Growing in Kent in the Nineteenth Century in Essays in Kentish History Op Cit p214-6.
55 Roach, F A — Op Cit p95.
56 Ibid p65.
solitary animals, including highly advanced mammals. Even more troubling is that he tends to confuse animal troops, herds, packs, and transient communities with societies: that is to say, with highly mutable institutions, alterable as they are by virtue of the distinctly human ability to form, develop, subvert, and overthrow them according to their interests and will.

Elisee Reclus, for his part, carried certain elements of Kropotkin’s outlook to the point of absurdity. I am at a loss to understand how cats ‘understand or share’ or ‘forestall’ our ‘sentiments’, ‘desires’, and ‘ideas’, as Reclus asserted they do in the quotation I cited near the beginning of this article. I am certain that my doubts about so saintly and gentle an anarchist as Reclus will place me in the bad graces of cat owners, but I find such anthropomorphism naive. His view that ‘secret harmony exists between the earth and people’, one that ‘imprudent societies’ will always regret if they violate it, is far too vague, at times even mystical, to be regarded as more than a generous sentiment. One may surely respect such sentiments, but countless writers (including some very reactionary nature romantics) have reiterated them more emphatically to regard them as eco-anarchist in nature. Deep ecology, eco-theology, and air-headed spiritualists have found more ‘secret harmonies’ between humanity and nonhuman nature than I know what to do with. I would certainly praise Reclus as an anarchist and a resolute revolutionary, but I would be disquieted if his particular views on the natural world were identified, apart from their good intentions, with eco-anarchism.

Yes, let us give Proudhon, Bakunin, Kropotkin, Reclus, Malatesta, and other leading anarchist thinkers due honour and respect for what they did in their time and what they have to offer to ours. But cannot anarchism go further than the terrain they charted out a century ago? If some of us try to do so, must we live under the tyranny of ossuary guardians like Graham Purchase, who can be expected to lift a bony finger from out of the crypt and reprove us for ignoring nineteenth-century anarchists’ passages on ecolog-

new developments came about which signalled the move towards increasing economic rationalisation.

The first of these was the introduction of dwarving rootstocks from France, called ‘Paradise’. These enabled more trees to be planted in an area than before. Legendre, in his book *The Manner of Ordering Fruit Trees* (translated in 1660) suggested these should be spaced 6–9 feet apart, instead of the 18–24 feet for trees on seedlings. This practice of dwarving trees prevented the undercropping of other plants beneath the trees which had previously been widespread and marks the beginning of the transformation of the Apple tree to fit economic ‘needs’ of humans.

The developing mechanistic worldview, which saw nature as disorder and cultivation as the imposition of human order was distinguished by increasingly regular planting forms and monocultures, and an increasing admiration of it. None was more admired than the Quincunx, the old Roman way of setting out an orchard. Thus, in the time of Henry VIII, Richard Harris planted over 100 acres of fruit trees at Teynham, Kent: ‘So beautifully as they not only stand in most right lines, but seem to be of one sort, shape and fashion’. Increased planting of orchards continued in the eighteenth century, supplied by many new nurseries especially around London. However, the increased acreage of orchards and the monocultural system began to have adverse side-effects by the late eighteenth century, with large-scale devastation by pests and diseases, as a result of the disruption of ecosystem balances. Canker and Woolly Aphid — introduced on dwarving rootstocks — became rife, fruit quality and yields became very poor. These problems led to more attention being given to possible remedies by the likes of the newly-formed Royal Horticultural Society, rather than any basic questioning of their causes.

Ibid p91.
Ibid p256
Ibid p256
Roach, F A — Op Cit p59
time and this sale of fruit and other crops became so profitable that the system of renting gardens and orchards to grow especially for market became established.43 This market gardening first developed in and around London in the late thirteenth and fourteenth centuries.44

Cantor states that because this was a small-scale affair it was well suited to peasants with plenty of family labour, producing vegetables in beds separated by fruit trees and supplemented by produce from communal fields. By 1650 however, a class of wealthy market gardeners emerged who acquired larger holdings and whose soil they improved with fertilisers and employed wage earners of displaced peasants to work them.45 Specialised fruit production was already well established in Kent by the end of the fifteenth century also supplying the markets of London. Jordan states that this required very heavy and certainly very profitable capital outlay.46

Herefordshire, Worcestershire, Somerset and Devon were also becoming main fruit growing areas, tending to focus more on cider production due to poorer transport and smaller markets.47 Each of these areas had their own local varieties such as Cornish Aromatic, Hereford Pearmain, Flower of Kent and Devonshire Quarrenden, as well as growing more widespread varieties such as Golden Pippin.

Until the sixteenth century fruit growing in Britain had changed little from how it was undertaken in Greek or Roman times, apart from becoming somewhat more intensive. However, at this time
cically oriented social relationships and humanity’s relationship to nature — a hint here, an antecedent fragment there, even a sizable passage — whose formulations are inadequate today and were often quite erroneous to begin with? We can certainly build on views advanced by the great anarchist thinkers of the past. But must we ignore the need for more sophisticated notions of confederalism, anti-statism, decentralism, definitions of freedom, and sensitivity to the natural world, than those that they advanced? There are many notions that were central to their views that we are obliged to discard. Such advances, hopefully, and the coherence they provide are part of the history of cultural development as a whole. Is anarchism to be immunized from further developments and revisions by the guardians of its ossuary? I would hope not, especially since anarchism — almost by definition — is the exercise of freedom not only in the social realm but also in the realm of thought. To lock anarchism into a crypt and condemn any innovative body of libertarian ideas as booty ‘filched’ from a sacred precinct is an affront to the libertarian spirit and all that the libertarian tradition stands for.

Times do change. The proletariat and, more marginally, the peasantry to which anarchosyndicalism turned as a ‘historical subject’, or agents for revolution, are numerically diminishing at best or are being integrated into the existing system at worst. The most crucial contradictions of capitalism are not those within the system but between the system and the natural world. Today, a broad consensus is growing among all oppressed people — by no means strictly industrial workers — that ecological dislocation has produced monumental problems, problems that may well bring the biosphere as we know it to an end. With the emergence of a general human interest, largely the need to maintain and restore a viable biosphere, an interest around which people of highly disparate backgrounds and social strata may yet unite, anarchosyndicalism is simply archaic, both as a movement and as a body of ideas. If anarchist theory and practice cannot keep pace with — let alone go beyond — historic

changes that have altered the entire social, cultural, and moral landscape and effaced a good part of the world in which traditional anarchism was developed, the entire movement will indeed become what Theodor Adorno called it — ‘a ghost’. If every attempt to provide a coherent, contemporary interpretation of the anarchist tradition is fragmented, shattered, and parcelled out to antecedents whose views were often more appropriate to their times than they are to ours, the libertarian tradition will fade back into history as surely as the anarchic Anabaptists have disappeared. Then capitalism and the Right will indeed have society completely under their control, and self-styled libertarian ideas may well become relics in an ideological museum that will be as remote to the coming century as Jacobinism is to our own.

July 11, 1992

sure of common lands. This process was aided by new books in the sixteenth and seventeenth centuries on agricultural improvements (in a scientific sense) and in the case of fruit, instructions on ordering, grafting and propagation.

These early changes were essentially focussed around London being the largest urban market and in this it is worth remembering the words of Hughes:

It is significant that the first urban societies were also the first societies to abandon a religious attitude of oneness with nature and to adopt one of separation.

4. Transformations in Fruit Cultivation

Norman London, according to a contemporary account, was full of citizens gardens and orchards. All the main monasteries, encouraged to be self-sufficient since the time of St Benedict, at Whitefriars, Blackfriars, Charterhouse and Holborn had their own gardens in which fruit was grown. In the thirteenth century fruit was extensively grown in the Royal Gardens at Tower Hill and Westminster. But fruit growing was not confined to the rich and monastic orders, though few records survive of peasant cultivation, Langland in Piers Ploughman of 1362 mentions that the poor ate baked apples and cherries.

Surplus fruits from the monasteries and Royal gardens, and from the Manor farming systems were sold at the ‘Market Cross’ at this

37 Roach, F A — Op Cit p34.
38 Hughes, J Donald — Ecology in Ancient Civilisations Univ of New Mexico USA p29.
42 Ibid p22.
3. The Apple and the Rising Market System

The transformation from Feudalism to Capitalism set in motion a number of changes which eventually affected every form of life in western societies. When we look at these historical changes in human impact on the system as a whole, we can see that historical change becomes ecological change due to the ‘...dynamic interactions of the natural and cultural subsystems’.\(^{31}\)

The main factor in the transformation of the early modern period was the growth in the market system for food production and other goods, such as wool, based on property rights and exchanges in land and money. This, along with population increases and urbanisation, advances in agricultural improvement and the growth of rural industry, gradually broke down communal farming practices that were part of the feudal system.\(^{32}\) People’s experiences of an increasingly manipulated nature also undermined the organic worldview and made way for the mechanistic model which reinforced and accelerated the exploitation of nature and human beings as resources.\(^{33}\) While the spreading use of money facilitated open-ended accumulation of capital as opposed to the somewhat more limited feudal aim of production for consumption (including conspicuous consumption).\(^{34}\) In these ways (and others) production for subsistence was replaced by rationally maximising modes of economic organisation for the market.

The tendency towards growth, expansion and accumulation in Capitalism led to continued displacement of subsistence farmers,\(^{35}\) the growth of waged labour and the bringing into cultivation of new lands by improvement and reclamation as well as by enclo-

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\(^{31}\) Merchant, C — *Op Cit* p43.

\(^{32}\) Ibid p78.

\(^{33}\) Ibid p43.


\(^{35}\) Merchant, C — *Op Cit* p52.
capitalism has taken the Apple from a fruit imbued with spiritual and symbolic meaning — the fruit of health and immortality — to a fruit given only a single function, that of production of profit and a fruit feared because of the chemicals that are applied to it. Now genetic engineering promises to make the Apple almost unrecognisable as a Tree, in the drive to increase production, standardisation and remove labour costs.

The old symbolism has not completely gone however, instead it too has been commodified and now adorns the ‘industries of the new age’, Apple Computers being but one example.

In these ways capitalism has separated us from the source and knowledge of production of essentials such as food, we are encouraged to trust the experts who are motivated mainly by profits and we are learning that we should not. Without such knowledge of production for food, no moral responsibility for social and environmental consequences of one’s decisions of what to buy seems possible.

Alternatives do exist, and ways of breaking out of this impersonal, morally irresponsible system, to bring the knowledge and meaning of food production and nature back into our lives, can and must be found. These cannot be separated from wider political realities however, nor should it be seen that to go back to some mythical golden age is the answer. But we can learn from the past by seeing what has been and what has gone wrong and look to a future to see what can be.

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29 Wicks, J H — Op Cit p122.
30 Fräser, J G — Op Cit p682.
bol and offering, sacred to Venus as love and desire. The Apple being round in shape, like many fruits, represents totality and unity and is sacred to Apollo the Sun god (Ibid), while the Temple of Artemis was within an orchard.

In Celtic mythology, the Apple was one of the central life trees of the Gaelic elysium, seen as the Silver Bough, it has magic and chthonic powers, it is the emblem of security, immortality and the fruit of the other world:

The Apple was the talisman which led him into the world of the immortals and fed him with the fruit of life and everlasting happiness.

The Druids planted Apple trees in sacred places for their fruit and as harbours for mistletoe which was also sacred to them. Hallowe’en is the Celtic Apple festival which marks the celebration of the beginning of winter and death of the old year — on the eve of November 1st. This was also the eve of New Year’s Day in Anglo-Saxon times and this date was also dedicated to the spirit which presides over fruit and seeds.

On Twelfth night, which has absorbed many early hallowe’en customs many folkrites were also carried out by people in orchards. One such is Apple Wassailing which took place in Cornwall, Devon and Somerset. On this night parishioners walk in procession visiting the main orchards in the parish. In each orchard one tree is selected and saluted with an incantation, the tree is then sprinkled

2. Fruit Cultivation: Myth, Magic and Folksymbols

In the essential prose of things, the Apple Tree stands up, emphatic among the accidents of the afternoon, solvent not to be denied.

Wild fruits have probably always been collected by humans and still are, the Apple was particularly valued for its nutritional and storable qualities, and because it can be dried and kept over winter. Cultivation of the Apple probably dates back to the Stone Age and most likely began in the area of the Caucasus and Northern India where forests of wild Apples are found. The Apple was cultivated in Egypt in the twelfth century BC and the Greeks and Romans were also adept at grafting and propagation of Apple trees. The Roman Palladius wrote of thirty-seven varieties in the fourth century BC.

It is not known whether the Apple was cultivated in Britain before the Romans invaded, though the crab apple (Malus sylvestris) is native and was highly valued by the Celts. The Romans did introduce their own form of fruit cultivation but after they left little is known of fruit growing in Britain until the Norman invasion apart from a few scattered references to orchards in Monasteries. There is only one reference to an orchard in the Domesday book; however it is thought that this reflects the commonplace nature of

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20 Cooper, J C — Op Cit p14.
21 Ibid.
23 Hull, E — Op Cit p22.
24 Graves, Robert — The White Goddess 3rd edition Faber and Faber 1952 p42.

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1 Berry Wendell — The Broken Ground Cape 1966 p31.
4 Hills L D — Grow Your Own Fruit and Vegetables Faber and Faber 1974 p203.
9 Greenoak F — Forgotten Fruit Andre Deutsch 1983 p3.
fruit growing on an individual basis rather than as a co-operative pursuit.\textsuperscript{10}

Trees have played an important part in the spiritual history of most cultures and trees bearing life-foods were always sacred.\textsuperscript{11} It is probable that humans in an early stage of civilisation, living a hard life close to nature, constructed no definite philosophy of life that could explain all the phenomena or workings of nature with which they came into contact. Their ‘rude’ science thus explained itself largely in satisfying their simple wants and needs in warding off dangers and appeasing the wrath of evil powers.\textsuperscript{12} In such communities the natural world was viewed in anthropomorphic terms, spirits permeated matter, such that the earth was seen as animate,\textsuperscript{13} a living organism and nurturing mother, and this view served as a cultural constraint restricting the exploitative action of humans.\textsuperscript{14} Within such a cosmology, nothing was seen as isolated and apart, but in its relation to the whole of life, of which each object formed an integral part.\textsuperscript{15} Thus, everyday things were invested with a deep symbolism or cosmological significance.\textsuperscript{16} This paganism or animism was to some extent incorporated within Christianity when it arrived in Europe and Britain, but a marked shift did occur with nature being seen as man’s (sic) dominion and thus separate from nature.

One of the most widely known mentions of the Apple in myth is the Christian story of the Garden of Eden in which Adam and Eve partake of the Fruit of the Tree of Knowledge of Good and Evil, which is most commonly seen as the Apple,\textsuperscript{17} and are then cast out of the Garden of Innocence by God into the world of experience. Russell has interpreted this myth, along with similar other ones from other cultures along with anthropological studies of societies in Papua New Guinea, as being connected with Kinship. She arrives at some significant conclusions in connection with fruit trees:

> From evidence about modern societies that practice simple farming, I was able to show that the Fruit tree is the oldest form of property fixed to a place, and the theft of fruit the oldest form of crime in farming societies (the original sin). Moreover, since Fruit trees may last more than a generation, the fruit tree is the oldest form of heritable fixed property. Since it is important that fruit trees be cared for, it becomes important to control and certify kinship succession. Hence the fruit tree gives rise to the family tree. At this stage of cultural evolution, to ensure regular kinship succession, mating regulations begin to be connected with property.\textsuperscript{18}

Thus, in Eden mating regulations are broken, the Tree of Life may be said to represent stable succession of inheritance (immortality), which ensures a kind of eternal life and renewal for the trees and those who succeed in tending them. The story of Eden may therefore be telling of the expulsion of groups who infringed the rules of mating.\textsuperscript{19}

As the classical symbol of youth and renewal the Apple naturally rated high in Greek mythology. The Apple was a bridal sym-