Eco-Aesthetic Dimensions: Herbert Marcuse, Ecology and Art

Malcolm Miles

[an earlier version of this paper, with an extra section, appeared in the on-line Arts and Humanities journal.

Cogent, 21 March 2016; this version was entirely rewritten, August 2018]

Writing on climate change, Bill McKibben warns that realising the 2C target generally taken as the threshold of catastrophic environmental change means, '... you don't get to do drilling or mining in new areas, even if you think it might make you lots of money. The Arctic will have to be completely off limits, as will the Powder River Basin of Montana and Wyoming [...] You've got to stop fracking [...] You have to start installing solar panels and windmills at breakneck speed.'¹ This is unrealistic. Shipping is already using the arctic as the ice breaks up at an unprecedented rate, and oil drilling is increasingly likely as neoliberal deregulation is now U.S. policy, on one side of the hitherto unexploited territory, and Russian claims begin to be made, on the other side. Against all this art might seem irrelevant, a dream-world, a decorative nicety, or another commodity. But is there more to it? I do not think that art can change the world, putting it in such bold (and bald) terms; in any case the world changes all the time, if in ways which are not always obvious; but art might be one among many factors conducive to the change of social, economic and political – and cultural – attitudes required if catastrophic climate change is to be avoided.

My argument is that art intervenes in the conditions of the world's apprehension, in its ways of seeing, and hence, if obliquely, of acting. I draw this from the work of Herbert Marcuse, a member of the Frankfurt school, who also wrote on ecology in the 1970s before it was the prominent issue it is today (although it was prominent for environmental-activist groups

then, such as Earth First! in North America). In *The Aesthetic Dimension*, Marcuse argues that a concern with aesthetics is justified by the 'miserable reality' in which political change as such is unlikely.² In the 1960s to 1970s, the green debate tended to prioritise saving (nice) species such as the whale. Marcuse politicizes the debate by juxtaposing ecology and capitalism as incompatible frameworks. Here, I reconsider these papers, together with *The Aesthetic Dimension*, and look to a recent art work, *Fracking Futures* (2013) by HeHe (Helen Evans and Heiko Hansen), not to see *Fracking Futures* as an illustration of Marcuse's theory – that would be anachronistic – but to ask how art uses means which respond to the agenda of climate change in ways compatible with Marcuse's model of oblique intervention, and his insistence that art remains art, not propaganda.

Ecology and politics

In 1970 interview, in the year of the first Earth Day, Marcuse argues that the environment is dominated by trans-national companies while, 'no decent human and natural environment can be created until the real sources of pollution have been eliminated,' and the, 'mental pollution' of consumerism leads to general inaction.³ The first part of the problem is put in not dissimilar terms, forty years later, by Dylan Trigg: 'Environmentalism realises that progress is a double bind, relying on the advancement of nature-wrecking machines for the sake of overall development. The implication of such destruction is a dehumanised world in which nature is rendered sterile.'⁴ The second part, on the role of consumer culture, is more specific to Marcuse's writing, but no less valid today after neoliberalism and globalisation have wrought vast damage on the environment and on human capacities to prevent the erasure of long-term prospects of well-being in favour of aggressive short-term greed.

Marcuse defines ecology as a natural state of interlinking coexistences, undermined by the competitiveness and built-in obsolescence of consumerism. To regain ecological integrity therefore requires a new economic system: 'Nature in the present capitalist society is [...] material for domination and exploitation,' while in a socialist society, 'nature would exist in its own right' as habitat and as the domain of, 'its own creations.' Meanwhile, a group of environmental activists attempted to save the redwood trees of Northern California by occupying the site, sitting in the branches to prevent logging. 6

Marcuse's two papers on ecology are, 'Ecology and Revolution' (1972) and 'Ecology and the Critique of Modern Society.' (1979)⁷ In the first, he begins by calling student protest, 'a spontaneous movement which organizes itself as best it can, provisionally, on the local level,; which cannot be co-opted by the establishment; and calls the Vietnam war, 'ecocide' — chemical warfare strips the environment of both human and plant life — which shows that contemporary capitalism is a, 'cruel waste of productive resources in the imperialist homeland,' complemented by a, 'cruel waste of destructive forces [...] by the war industry.'⁸ Rachel Carson previously observed in *Silent Spring* that industrialized agriculture regularly uses technologies producing an excess of destruction, while the gas used in the Holocaust was a by-product of the chemical industry's development of a commercial agent for moth extermination in textile warehouses.⁹ Peter Slotterdijk makes the same point in *Terror from the Air*.¹⁰ For Marcuse, Carson and Slotterdijk, the issue is that the destruction caused by capitalism is routine. Marcuse states, in 'Ecology and Revolution',

[...] monopoly capitalism is waging a war against nature – human nature as well as external nature. For the demands on ever more intense exploitation come into conflict with nature itself, since nature is the source and locus of the life instincts which struggle

against the instincts of aggression and destruction. And the demands of exploitation progressively reduce and exhaust resources: the more capitalist productivity increases, the more destructive it becomes. This is one sign of the internal contradictions of capitalism.¹¹

For Marcuse and others on the New Left, the contradictions of capitalism reach beyond production: built-in obsolescence services ever-expanding sales but is inevitably wasteful; innovation leads to more extensive markets via economic colonialism but also to conflicts which expose the counter-revolutionary aspect of a consumerist regime. For Marcuse, then, both economics and politics are suffused with capitalist power-relations:

The process by which nature is subjected to the violence of exploitation and pollution is first of all an economic one (an aspect of the mode of production), but it is a political process as well. The power of capital is extended over the space for release and escape represented by nature. This is the totalitarian tendency of monopoly capitalism: in nature, the individual must find only a repetition of his [sic] own society; a dangerous dimension of escape and contestation must be closed off.¹²

Nature is enclosed – as in the tourist reservation which compensates for alienating toil – but has a potential for cornucopia. This is not a Rousseauesque lost Eden to which innocence humanity should return, but a universal *promesse du Bonheur* which he finds in Charles Baudelaire's poem *Invitation au voyage*, cited in an essay on French literature under the German occupation, written in 1945 but heavily revised in the 1970s.¹³

The term *promesse du Bonheur* alludes to a latent or unconscious but pervasive sense of happiness, an enduring quality of the human psyche in dark times. Its evocation in literature (or art) in such times acts like a safe house, where the dream is more immediate than the

reality, and emphasises that reality's unreality in a wider scheme. It is an immanent rather than imminent revolution, which re-codes perception, revolutionary precisely in its alterity. Coincidentally, Ernst Bloch writes of a, 'Ver Sacrum, the Sacred May when the whole world blossoms;' and, that nature is, 'the architecture for a drama that has not yet been performed [...] not a bygone but a morning land.'14

Marcuse juxtaposes capitalist destructiveness to this promise of happiness (which can be set beside a constitutional right to the pursuit of happiness) which is eroded by capitalism when it is separated as a reserve of leisure in compensation for alienation. That is, consumerism turns nature into commodity, subject only to exchange value, in a pollution of consciousness echoing the material pollution of the environment.

Marcuse's second talk on ecology was delivered to a wilderness class in California after 36 million acres of wild land had been consigned to developers. He begins by saying that there is little wilderness left to preserve; and discusses the destructiveness of the affluent society. He also revisits an argument in his earlier *Eros and Civilization* (1956), that consumerism is an aspect of a destructive state of mind introjected to a point at which it seems normal, thus as if natural, in consumer culture. This normalised state of mind allows increases in military spending, reliance on nuclear weapons, environmental pollution, and a subordination of human rights to the requirements of global strategy to seem uncontentious. ¹⁵ In 'Ecology and the Critique of Modern Society,' he writes,

The primary drive towards destructiveness resides in individuals themselves, as does the other primary drive, Eros. The balance between these two drives also is found within individuals. I refer to the balance between their will and wish to live, and their will and wish to destroy life, the balance between the life instinct and the death instinct. Both

drives, according to Freud, are constantly fused within the individual. [...] any increase in destructive energy in the organism leads [...] to a weakening of Eros. 16

Consumer culture weakens Eros, then, despite its promises of satisfaction, which it never delivers, manufacturing false wants to replace genuine, basic needs, while the system leads consumers to introject those wants as if part of human nature. Similarly, needs presented by normalised systems are internalized in a culture of conformity to be negated only by a 'radical character structure.' Against the drive for profit, Marcuse advances, 'a primary rebellion of mind and body, of consciousness and the unconscious,' and concludes,

The ecology movement reveals itself [...] as a political and psychological movement of liberation. It is political because it confronts the concerted power of big capital, whose vital interests the movement threatens. It is psychological because [...] the pacification of external nature, the protection of the life-environment, will also pacify nature within men and women. A successful environmentalism will, within individuals, subordinate destructive energy to erotic energy.¹⁹

He adds that although protest seems marginal, this becomes its authenticity, an ephemeral but transformative emergence of Eros as an emancipatory force.

Marcuse seems to suppose that consumerism produces resistance, putting this in terms of an emerging new sensibility. But he also sees a vicious circle: revolutionary consciousness is a prerequisite for liberation but emerges within the conditions of revolution.²⁰ There is no exit from this pitfall, only a possibility to shift the ground of the question from a temporal trajectory – liberation after revolution – to a co-presence of liberation and revolution when the means to revolution *enact* liberation. That is my own reading, seeing art as offering a critical distancing when aesthetic experience interrupts routine.

Aesthetics and ecology

Marcuse argues that the ecological revolt is a refusal not only of consumerism but also of the war machine. To that machine he attributes the sentiment, 'It is no longer enough to do away with people living now; life must also be denied to those who aren't even born yet by burning and poisoning the Earth, defoliating the forests, blowing up the dikes.' The psyche of consumerism is counter-revolutionary; but a viable revolution is an aesthetic revolution: a reminder of bliss which realigns consciousness, for which art is a vehicle thus inflecting the conditions in which consciousness is shaped – liberation within revolutionary means. In his 1972 text, extending the ideas of his 1945 essay(cited above), Marcuse says,

The struggle for an expansion of the world of beauty, nonviolence and serenity is a political struggle. The emphasis on these values [...] is not just a romantic, aesthetic, poetic idea which is a matter of concern only to the privileged; today, it is a question of survival. People must learn for themselves that it is essential to change the model of production and consumption, to abandon the industry of war, waste and gadgets, replacing it with the production of those goods and services which are necessary to a life of reduced labour, of creative labour, of enjoyment.²²

The aesthetic image is the world of beauty glimpsed by Baudelaire in his poem *L'Invitation* au voyage in the collection *Fleurs du mal*. For Baudelaire, according to Marcel Raymond, nature is, 'an immense reservoir of analogies,' while sensory perceptions correspond to abstract ideas.²³ Nature is seen in appearances which evoke or correspond to the writer's or reader's state of psyche, differentiating, I suggest, a utopian aesthetic from actual alienation or oppression. But the place to which *L'Invitation au voyage* invites the reader is a dreamworld, although also a reconstruction overlaid on the interior of the poet's Paris apartment.

Marcuse says, 'Sensuality as style, as artistic a priori, expresses the individual protest against the law and order of repression;' and that if sensuality is non-political it still, 'preserves the goal of political action: liberation.'²⁴ Such a play on reality and imagination permeates all of Marcuse's aesthetic theory. Citing Paul Eluard, he writes,

To these political poets [Baudelaire and Eluard] and active communists (Eluard and Louis Aragon] love appears as the artistic a priori which shapes all individual content, first and foremost the political content: the artistic counterblow against the annexation of all political contents by monopolistic society. The artist counteracts by transposing these contents ... to a different sphere of existence, thereby negating their monopolistic form and rescuing their revolutionary form.²⁵

So, Marcuse's literary critique informs his aesthetic theory: the otherness of the promise of happiness becomes art's autonomy, which, 'reflects the unfreedom of individuals in the unfree society. If people were free, then art would be the form and expression of their freedom. Art remains marked by unfreedom; in contradicting it, art achieves its autonomy.' Autonomy is claimed for modern art and literature, denying political agency, and epitomised by the white-walled modern art museum, and yet becomes an oblique means towards a radically other world. Writing on ecology and art in the 1970s, Marcuse assumes this as a base for any aesthetics of the environment. Environmentalism is, after all, one of a number of fields in which capitalism is the source of destruction. Without an end to capitalism there will be no environmental healing, and while the system seems as overwhelming now as then, or more so today under globalisation, the miserable reality as Marcuse calls it (above) can be faced only via aesthetic intervention in the codes, or ways of seeing, by which the destruction of human and non-human habitats is normalised.

Radical aesthetics

In the 1970s, after the failure of revolt in 1968, Marcuse argues that aesthetics is justified by the absence of a prospect for real political change. In *The Aesthetic Dimension*, he begins, as indicated above, 'In a situation where the miserable reality can be changed only through radical political praxis', a concern with aesthetics is justified by despair: real conditions are changed only in the imagination but, 'art as art expresses a truth' which is revolutionary.²⁷ Art interrupts the codes and structures of perception which affirm the social order while beauty fractures its surfaces:

[...] the work of art is beautiful to the degree to which it opposes its own order to that of reality – its non-repressive order ... in the brief moments of fulfilment [...] which arrest the incessant dynamic and disorder, the constant need to do all that which has to be done in order to continue living.²⁸

By juxtaposing different realities, art jars perceptions and transposes the dominant reality into an image of unreality or absurdity. This construct is informed by Marcuse's view that the actually-existing socialism, as it was called, of the East did not actually exist. Rudolf Bahro argues similarly (in East Germany) that the Communist Parties are sub-functions of the industrialisation shaping the West, unlikely to deal with environmental destruction.²⁹ Marcuse knew Bahro's work, and wrote letters seeking Bahro's freedom when he was arrested. Marcuse and Bahro look to a green alternative within, not instead of, socialism, but a socialism of a more fundamental kind. Marcuse sees a contrast between capitalism's *quantitative* excesses and a *qualitative* change: 'quantitative progress militates against qualitative change even if the institutional barriers against radical education and action are surmounted.'³⁰ Capitalism uses nature for its productive ends, looking to quantitative

change, but qualitative change means a re-orientation of attitudes to the environment and an emancipatory re-perception of reality. When a concern for aesthetics is justified by the unchanging political reality, the relation between art as aesthetic experience and political change rests on a reconstitution of individuals' states of psyche at a social scale: 'Art cannot change the world, but it can contribute to changing the consciousness ... of the men and women who could change the world.'³¹ Art is socially produced, a product of its time, but equally a means of standing back – critical distancing – to counter a society's institutions: 'This contradiction is preserved and resolved in the aesthetic form which gives the familiar content and the familiar experience the power of estrangement" leading to the emergence of a new consciousness as well as new perceptions'³² Art offers beautiful illusions but, 'Art's unique truth breaks with both everyday and holiday reality.³³ The following passage sums up Marcuse's late aesthetic theory:

The world intended in art is never and nowhere merely the given world of everyday reality, but neither is it a world of mere fantasy, illusion, and so on. It contains nothing that does not also exist in the given reality, the actions, thoughts, feelings, and dreams of men and women, their potentialities and those of nature. Nevertheless the world of a work of art is 'unreal' in the ordinary sense of this word: it is a fictitious reality. But it is 'unreal' not because it is less, but because it is more as well as qualitatively 'other' than the established reality [...] Only in the 'illusory world' do things appear as what they are and what they can be. By virtue of this truth (which art alone can express in sensuous representation) the world is inverted – it is the given reality, the ordinary world which now appears as untrue, as false, as deceptive reality.³⁴

Of course, it is still there. Oil and gas exploration continues, Fracking is a new threat.

Fracking Futures

In 2013, HeHe occupied the gallery at FACT (Foundation for Art and Creative Technology), Liverpool, to install what looked like a fracking (hydraulic fracturing) site. The work was cocommissioned by The Arts Catalyst, a London-based organization for art-science collaborations, and critical debates on culture, science and society. The context for *Fracking Futures* is a political-economic controversy in which the British government has issued a large number of licences for fracking exploration, including in north-west England where high unemployment is seen cynically as likely to decrease resistance, but also in the more prosperous south — where local opposition has included an anti-fracking camp at Balcombe amid the rolling chalk downs of Sussex which epitomise an English pastoral vision.

To represent fracking in a gallery under these conditions is a political act. HeHe used the gallery at FACT to create, 'a temporary, experimental drilling site for hydraulic fracking [...] making a fracked landscape.'³⁵ To the unsuspecting visitor it may have seemed, plausibly given news coverage at the time, that FACT was trying to become energy self-sufficient by drilling into its floor for shale gas. Tiles were ripped up and a small-scale drilling rig installed. Sudden tremors erupted. Subterranean noises lent foreboding as dirty water bubbled in a pit. Periodically, a sudden, violent shaft of flame signalled a release of gas being flared (as happens in fracking sites). In fact, under British law, FACT would have no legal rights to the space under its property; and fracking is done outdoors. But the installation's pyrotechnics achieved a viable suspension of disbelief akin to that of theatrical performance. Evans says spectators were, 'introduced to the sounds and sensations of hydraulic fracking, allowing them to become more deeply connected to the contentious issues that surround the

process.'³⁶ HeHe were careful not to take a public position on fracking but the theatricality of the installation indicates its critical distancing, in an art-space known for exhibiting work manifesting art-and-technology interfaces and, at times, which has a political edge.



Fracking Futures was part of FACT's tenth anniversary programme. A 6-metre neon sign outside the gallery stated Capitalism Works for Me, inviting passers-by to vote yes or no, by Steve Lambert. Most people said no. Seeing that first, visitors may have anticipated a spoof rather than a real fracking site but I doubt this detracted from the work's provocation. As a visual presence, the installation was evocative in its crashes, bangs and flashes of ethereal light with a disturbing, doom-like soundscape. As a political statement it was intentionally muted as the artists stood back from the issue to enable publics to form their own views (while there is little doubt as to where Evans and Hansen actually stood, and still stand). If,

then, *Fracking Futures* played on believability in a rhetoric which portends government-sanctioned environmental destruction by a global industry, the works unreality – applying Marcuse's critique (above) – is an indicator that fracking should be unimaginable.

If there is a problem, it is that *Fracking Futures* was too exciting; like the disaster movie, it produced adrenalin, which is addictive. The difficulty is that the disaster scenario becomes strangely attractive, or normalized by repetition in media and entertainment. Nonetheless, I would say that the force of *Fracking Futures* is precisely its *play* on the real and the unreal, which destabilizes any narrative, including that of government and industry plans for fracking in Britain. If this touches a new sublime of environmental destruction, I think it does so critically. And that is the crack in routine perceptions through which alternative scenarios can be glimpsed.

Fracking Futures played on semblances to produce critical anticipations; Cone played on semblances to engender critical imaginings of the region's post-industrial future. I cannot say to what extent spectators came away from either project with new ideas. Such projects offer a potential for critical perception, and inflect rather than reverse understandings of a situation. Both projects face political issues indirectly, introducing critiques into everyday situations to bring them into contemporary art – the art-world is a public – as much as to bring art into those situations. Geographer Erik Swyngedouw argues that although there is a consensus on environmental issues, "concern is disavowed to the extent that the facts [...] are elevated" in, "a short-circuiting procedure" as a humanitarian rather than a political cause (2010: 217). He has in mind campaigns to save (nice) species, and images of exotic places under threat, which enforce this consensus. This is not to dismiss such concerns but to assert a vital need for a crack in the surfaces of the problem's presentation, giving rise to

imagination of other ways the world could be. I doubt, too, that Swyngedouw is dismissing the human happiness which, for Marcuse, was a political aim. It is worth recalling that, for Marcuse, a latent memory of bliss and a moment of beauty were *radically other* in face of the dominant reality, putting that reality into the realms of a desired unreality.

Yet theory is luxurious when island communities face obliteration by rising sea levels. My meditations on beauty are at best an indirect response. McKibben says that fossil fuel companies have reserves in the ground which are five times more than can be used if the projected 2C limit of warming is to be met; but, "Left to its own devices, the world is still planning to spend the next decade or two limbering up" while climate disasters recur with increasing regularity. (2015: 29) He sees hope in mass refusal, which is an affirmation of faith until I connect it to Marcuse's idea that capitalism produces resistance, of itself, in its contradictions. I am left with this idea, then, that Eros is a counter-force to capital's counter-revolution. Life reasserts its value in face of continuing denial. What has changed since Marcuse wrote about aesthetic liberation is that art is now less interested in beauty and more in resistance, interruption, contradictions, and the fissures which demonstrate the dominant society's inbuilt failure. I end by re-citing a passage from *The Aesthetic Dimension*:

The world intended in art is never and nowhere merely the given world of everyday reality, but neither is it a world of mere fantasy, illusion, and so on. It contains nothing that does not also exist in the given reality, the actions, thoughts, feelings, and dreams of men and women, their potentialities and those of nature. Nevertheless the world of a work of art is 'unreal' [...] because it is more as well as qualitatively 'other' than the established reality [...] the world is inverted – it is the given reality, the ordinary world which now appears as untrue . (Marcuse, 1978: 54)

REFERENCES

Harvey, F. (2015) "Moment hailed as game-changer" The Guardian, 14 December, p. 7

HeHe (2013) www.hehe.og.free.fr [accessed 21 March 2013]

Lippard, L. (1997) *The Lure of the Local: Senses of Place in a Multicentered Society,* New York, The New Press

Marcuse, H., (2014) interview, *Street Journal*, 17-23 April 1970, in *Marxism, Revolution and Utopia*, Collected papers 6, New York, Routledge, p. 350

Swyngedouw, E. (2010) 'Apocalypse Forever? Post-political Populism and the Spectre of Climate Change', *Theory, Culture & Society*, 27, 2/3, p. 215

¹ McKibben, B., 2015, 'Climate deal: the pistol has fired, so why aren't we running?' The Guardian, 14 December, p. 29

² Marcuse, H., 1978, The Aesthetic Dimension, Boston, Beacon Press, p. 1

³ Marcuse, H., 2014, interview, *Street Journal*, 17-23 April 1970, in *Marxism, Revolution and Utopia*, New York, Routledge, p. 346

⁴ Trigg, D., 2009, The Aesthetics of Decay: Nothingness, Nostalgia and the Absence of Reason, New York, Peter Lang, p. 230

⁵ Marcuse, interview, ibid

⁶ Winslow, C., 2012 'The Albion Nation: Communes on the Mendocino Coast,' Boal, I., Stone, J., Watts, M. and Winslow, C. eds. *West of Eden: Communes and Utopia in Northern California*, Oakland (CA), PM Press, p. 140

⁷ Marcuse, H., [1979] (2011) 'Ecology and the Critique of Modern Society', in *Philosophy, Psychoanalysis and Emancipation*, New York, Routledge, pp. 206-221; [1972] (2005) 'Ecology and Revolution', in *The New Left and the 1960s*, New York, Routledge, pp. 173-177

⁸ Marcuse, 'Ecology and the Critique of Modern Society,' p. 173

⁹ Carson, R., (1962) 2000, Silent Spring, London, Penguin, p. 31

¹⁰ Slotterdijk, P., 2009, Terror from the Air, Los Angeles, Semiotext(e), pp. 42-46

¹¹ Marcuse, 'Ecology and Revolution,' p. 174

¹² Marcuse, 'Ecology and Revolution,' ibid

¹³ Marcuse, H., (1945) 1998, 'Some Remarks on Aragon: Art and Politics in the Totalitarian Era' in *Technology, War and Fascism*, New York, Routledge, pp. 199-214; see also Miles, M., Miles, M., 2011, *Herbert Marcuse: An Aesthetics of Liberation*, London, Pluto, pp. 65-6

¹⁴ Bloch, E. (1959) 1986, The Principle of Hope, vol. 3, Cambridge (MA), MIT, p. 1353

¹⁵ Marcuse, H., 1956, *Eros and Civilization: A Philosophical Inquiry into Freud*, London, Routledge & Kegan Paul

¹⁶ Marcuse, 'Ecology and the Critique of Modern Society, p. 208

¹⁷ Marcuse, 'Ecology and the Critique of Modern Society, p. 210

¹⁸ Marcuse, 'Ecology and the Critique of Modern Society, ibid

¹⁹ Marcuse, 'Ecology and the Critique of Modern Society, p. 212

- ²⁴ Marcuse, 'Some Remarks on Aragon,' p. 204
- ²⁵ Marcuse, 'Some Remarks on Aragon,' p. 205 ²⁶ Marcuse, *The Aesthetic Dimension*, pp. 72-73
- ²⁷ Marcuse, *The Aesthetic Dimension*, p. 1
- ²⁸ Marcuse, *The Aesthetic Dimension*, pp. 64-65
- Bahro, R., 1986, *Building the Green Movement*, London, GMP publishers, p. 23
 Marcuse, H., 1969, *An Essay on Liberation*, Harmondsworth, Penguin, p. 27
- 31 Marcuse, The Aesthetic Dimension, p.33
- ³² Marcuse, The Aesthetic Dimension, p. 41
- ³³ Marcuse, *The Aesthetic Dimension*, p. 49
- ³⁴ Marcuse, *The Aesthetic Dimension*, p. 54
- 35 Evans, H., 2013, 'Fracking Futures: A Taste of What's To Come', New Internationalist, 6

November, p. 117

²⁰ Marcuse, H., 1970, Five Lectures, Harmondsworth, Penguin, p. 80

²¹ Marcuse, 'Ecology and Revolution,' p. 173

²² Marcuse, 'Ecology and Revolution,' p. 175

²³ Raymond, M., (1933) 1970 From Baudelaire to Surrealism, London, Methuen, pp. 30-31

³⁶ Evans, 'Fracking Futures,' ibid