

Assessment Component 2 – Catherine Lewis

MA Ecology and Spirituality

Schumacher College

Tutor: Dr Andy Lecher

The Feminine voice in Ecology and Spirituality

Introduction

The emerging field of Ecology and Spirituality explores the spiritual aspect of the current ecological crisis and by drawing on our learning in this module I want to explore the female role in influencing and developing this field. In my reflective journal I had a strong reaction to the lack of female presence in the learning materials during our first module on Ecology and Spirituality, particularly within the scientific field. In lectures we openly discussed the extent of western, white, male domination and the colonial oppression still evident in all our lives and in my essay I aim to bring this tension into dialogue with ecofeminist writing and the lives of female scientists. In a learning space encompassing feminism, Gaia, Mother Earth and nature being a 'she', it seems appropriate that the female human voice should be heard and could potentially shed much light on our investigations.

Sociologist Emile Durkheim disputed the notion that education could be an agent of social change asserting that education merely reflects society (Durkheim 1897). In contrast to Durkheim's beliefs my experience at Schumacher College suggests that education can be transformational and has the power to be an instrument for social action. Named after the economist E. F. Schumacher, the college aims to 'sow the seeds of change' (Schumacher College 2018) and offers courses that reflect these ideals. E. F. Schumacher said 'If still more education is to save us, it would have to be education of a different kind: an education that takes us into the depth of things' (Schumacher 1973: 62) which in my experience on the MA in Ecology and Spirituality, is precisely the aim of the college.

In such a progressive atmosphere it could be assumed that gender equality would be evident in the curriculum at Schumacher College, for as philosopher Luce Irigaray states – 'Sexual difference is one of the major philosophical issues, if not the issue, of our age' (1993: 7) Irigaray posits that the discourse of theory, morality and politics are dominated by men and that this issue is not being adequately addressed in philosophy, science or religion. She concludes that a review of society's thoughts and ethics is essential to counter sexual inequality (Irigaray 1993). In the 1970s anthropologist Sherry B. Ortner (1974) asserted that female subordination is universal and present in all social and economic situations and scholar Misha Kavka (2002) explains that throughout the twentieth century feminism has focused on sexual difference and gender to imagine the possibility of a reality emancipated from the effects of sexual inequality. Within this historical context and the progressive environment of Schumacher College it was an unanticipated discovery to find that most of the scientists, activists, poets, philosophers and historians we would study were men.

In our introductory lecture we were informed that the influence of historical figures such as scientist Galileo Galilei, sociologist Max Weber and philosopher René Descartes is central to the study of Ecology and Spirituality as humanity remains under the mathematical and mechanical spell of their great findings. Weber is often considered the founding father of modern social science and Descartes the founder of modern philosophy while Galileo's ideas were a catalyst for the scientific revolution. The ramifications of these scholars' rational and dualistic worldviews has impacted modern life as our lecturer and ecologist, Stephan Harding confirms in his book *Animate Earth*. Harding notes that we are all rational thinkers but that it is vital we embrace 'other ways of knowing' to complement our rational thinking in order to 'truly experience the living intelligence of nature' (2009: 26). Harding asserts that our 'mechanistic world view' (2009: 25) is causing the planetary crisis we are facing and in my reflective journal I ask why understanding this worldview requires studying mainly male perspectives.

For the centuries following the scientific revolution western society has been the dominant, global culture and is shaped by a patriarchal mind-set encouraging competition and economic growth. These centuries also coincided with the intensification of witch hunts reducing women's role in society more than ever and putting fear at the heart of the female existence. When in the 1960s scientist James Lovelock (1967) hypothesised that the Earth was a living being and called our planet Gaia, there was hope that we could reconsider blending a spiritual notion of our planet with the scientific facts. Arriving at Gaia Theory we had travelled from the gender-specific assumptions of the *Malleus Maleficarum* (Kramer 1486) that women are weak in body and mind and need to be subjugated, to the twentieth century scientific revelation that our planet is in fact a magnificent creatress. In my reflective journal I was left wondering, did 'Gaia' reveal herself to a male scientist because she needed the dominant culture to listen?

At first glance, appropriating gender to our planet could appear to be a powerful tool for equality. Paradoxically, labelling earth female can distance men and perhaps perpetuate nature's subjugation. Earth as 'Mother' may also disassociate some women who cannot or do not want to be mothers in the biological sense. The concept also assumes that the essential female qualities are nourishment and care, requited or not. The title 'Gaia' can therefore exclude groups of humans and is not necessarily helping the battle for equality or stemming our planet's predicament. Ecofeminism analyses the connection between the subordination of women and the domination of nature (Ruether 2012). Francoise D'Eaubonne's essay 'Le Féminisme ou la mort' introduced the term Eco-feminism in 1974, with its central belief being that the patriarchal control of women and nature is inextricably linked to environmental destruction. Carolyn Merchant expanded the field of ecofeminism with her book *The Death of Nature* in 1990 connecting the scientific revolution with the suppression of women and sanctioning the 'rape or commercial exploration of the earth' (1990: 41).

The connection with society's male supremacy and destruction of our eco-systems is an important aspect of the MA in Ecology and Spirituality and thus it seemed vital that we understand the female voice of ecology. The lack of female academics mentioned in our lectures, on our booklists or in our recommended papers is evidence of the suppression of women throughout the centuries as our lecturers had so few examples from which to draw upon. However, we were taught that the environmental movement in America was initiated by a woman; Rachel Carson (Hynes 1985). Her ground-breaking book, *Silent Spring* (1962), outlines the destructive nature of the indiscriminate use of pesticides and had an important political and social impact on 1960s America. Biographer, Paul

Brooks (1972: 227), claims Carson's book altered 'the direction of man's thinking' but the fame of *Silent Spring* is matched by the infamous criticisms Carson received, in particular because she was a woman as Margaret Atwood (2012) wrote 'many of the personal attacks on Carson were gender specific'. Carson published *Silent Spring* just before her death, suggesting that when she took on the mighty chemical industry and wrote of 'Man's war against nature' (1962: 24) from a passionate, urgent perspective she did not prioritise her safety or reputation. Biographer, Linda Lear (Introduction to *Silent Spring* 2002), asserts that Carson was writing during a time of 'intense social conformity' to avoid suspicions of communist belief. In his accusations, Government official Ezra Taft Benson concludes Carson was "probably a communist" simply because she was unmarried. Carson clearly ignored warnings and was ready to take risks (Atwood 2012).

Taking societal risks is a central strand running through many female scientists' lives in history. Promoting this formidable approach is criticised in Julie des Jardin's book 'The Madame Curie Complex: The hidden history of women in science' (2010). Jardin acknowledges that competing with patriarchal rules and perspectives was a challenge but she blames both sexes for extolling the virtues of the few women who have succeeded in science – this she calls the 'Madame Curie Complex', suggesting that a focus on extraordinary individuals and using them as role models de-motivates women. Comparing women to men and advocating only those women who are capable of matching men's achievements does not allow for the different ways of perceiving the world. Ecofeminism rejects the dualism of prioritising the role of 'male-identified mind over female-identified body' and argues that this view distorts Western thought and our relationship with nature (Ruether 2012). In 1982 editor of the *New York Times Book Review* Susan Bolotin used the term post-feminism in an article aiming to reaffirm what feminism means to women in modern times. She described her 'years of training that conspired to make me think that men were more crucial to my sense of well-being than women' (1982). The term post-feminism encourages a narrative for modern feminism and attempts to break through gender binary (Adriaens 2009). Without an array of female academic examples, both female and male students will struggle to identify with the role of women in any given discipline. In an academic setting it is thus essential that scholars of both genders are presented to students so that we too can break through the binaries and evaluate a range of perspectives.

A century before Lovelock and Carson German scientist Ernst Haeckel coined the concept of ecology and ecologist, Langenheim (2003), makes a detailed exploration of female ecologists in history reaching back to the time of Haeckel outlining the personal and societal obstacles they had to overcome. One particular ecologist stood out as a candidate for enquiry; Ellen Swallow. In his book *Ellen Swallow: The Woman Who Founded Ecology*, Robert Clarke (1973) claimed that chemist Ellen Swallow Richards, introduced the concept of ecology to the United States. A contemporary of Haeckel, Swallow was the first woman admitted to the Massachusetts Institute of Technology and the college's first female instructor. She was the first woman in America to study in any school of science or technology and the first American woman to receive a degree in Chemistry. Potentially another candidate for Jardin's Marie Curie Complex, but nonetheless an ecological figurehead worthy of study. There is a tension in the definition of ecology first introduced by Haeckel as "the study of the natural environment including the relations of organisms to one another and to their surroundings" (Haeckel 1869). Further exploration of Swallow's career clarified this tension and perhaps the wider problem for women in science. In her 1907 book *Sanitation in Daily Life*, Swallow wrote specifically of 'human ecology'. Merchant (2002) explains that Swallow's human ecology was different to

scientific ecology as the latter separates humans from nature. Hynes (1985) outlines how Swallow's version of ecology was not accepted by male science at the time and was demoted to the area of Home Economics.

Science historian, Margaret W. Rossiter (1993) explains the relegation of female scientists to be the 'Matilda effect'; when female scientists are not acknowledged or misunderstood and their work is credited to male colleagues. This concept was identified by Matilda Joselyn Gage, another contemporary of Swallow. Swallow did not distinguish between the man-made human environment and that of the natural environment and used her scientific knowledge to impact social reform. Her work was holistic, interdisciplinary and did not always align with the linear world of academia. Swallow was a feminist believing that the subjugation of women and the success of capitalism depended on the unpaid work women carried out in the home and Barbara Richardson (2002) believes that Swallow's feminist influence was also instrumental in the field of sociology. Swallow had a formidable influence in her time and would be an interesting scholar to include in our MA module.

Johan Wolfgang von Goethe's phenomenological methods attempted to bridge the gap between the objectivity of the traditional, scientific world and the subjectivity of the human experience. Goethian science requires an intuitive attitude; an approach resonant of Harding's 'other ways of knowing' (2009: 26). Yet, scholar, Sue V. Rosser, (1987) argues that female scientists' findings were sometimes deemed unscientific because women do science differently to men. Scientist Evelyn Fox Keller, writes of Nobel Prize winner Barbara McClintock (1983) that McClintock 'adopted a more feminine or less objective approach towards the object of her study'. In McClintock's Nobel Prize acceptance speech she indeed explains that she communed with the subject of her study – maize - and that she had so much pleasure 'watching its responses' (Keller 1983). This less rational approach and a belief that one can be in relationship with nature concurs with ecologist Val Plumwood's (2001) suggestions of a more reciprocated partnership with nature to protect our planet and be in partnership in a 'more mutual, communicative and responsive' way (2001: 11). This method is not unique to women but as we explored the non-measurable, non-rational elements of science through Goethe's findings my reflections concluded that this was a key opportunity to embrace the work of female scientists.

Central to this essay is the belief that studying Ecology and Spirituality requires a balanced approach to gender, that both male and female academics have tackled the modes of encounter required and that it is vital to present the female voice. There is no doubt that in the period when Haeckel was introducing the term Ecology there were women trapped in the halls of history who were developing ecological lines of thought in common with Gaia theory and echoing Goethian science. Arabella Buckley (1884) for example is remembered as an educator who brought scientific theories to life in her stories. In 'Life and her children' she aims to 'express the family bond uniting all living things' and refers to non-humans in nature as 'companions' (1884: v). Women of Buckley's era are not present in our Ecology and Spirituality studies but I have learnt that they did exist, some are still well known today but for non-scientific reasons. For example, Beatrix Potter is not remembered as a ground-breaking mycologist instead we know her as a children's author, illustrator and naturalist, but she too was fascinated by knowing nature and carried out experiments in her make-shift kitchen laboratory (Lear 2006).

Female scientists face obstacles, experience disadvantages and are open to unfamiliar interdisciplinary styles of research that the male dominated world of science does not always accept. In the past these women often turned to teaching or assisted men in laboratory work remaining unpublished and interestingly very few scientists mentioned in this essay had children. From children's books (McCabe, J. et al. 2001) to school curricula to our MA in Ecology and Spirituality, the absence of women or feminist discourse and the promotion of a few women who aspired to a male-style of achievement rather than women who are approaching their discipline with alternative ways of perceiving the subject, perpetuates male dominance. Feminist historian Max Dashu (2000) claims that 'most history passes over women' when in fact women have always influenced history and culture. She argues that silencing women in this way is demoralising and suppressive, to which I concur and the pioneering Schumacher College is an ideal environment in which to change this narrative.

References

- Adriaens, F. 2009. Post feminism in popular culture: a potential for critical resistance? *Politics and culture. Issue 4: 5* [Online: <https://politicsandculture.org/2009/11/09/post-feminism-in-popular-culture-a-potential-for-critical-resistance/>] (Accessed 24 February 2018)
- Attwood, M. 2012 Margaret Atwood: Rachel Carson's Silent Spring, 50 years on. *The Guardian*, 7 December; [Online: www.theguardian.com/books/2012/dec/07/why-rachel-carson-is-a-saint] (Accessed 10 February 2018)
- Bolotin, S. 1982. Voices from the Post-Feminist Generation. *New York Times*. [Online: <https://www.nytimes.com/1982/10/17/magazine/voices-from-the-post-feminist-generation.html>] (Accessed 4 April 2018)
- Brooks, P. 1972. *The House of Life. Rachel Carson at Work*. Boston: Houghton Mifflin
- Buckley, A. 1884. *Life and Her Children*. London: Edward Stanford [Online: <https://ia802504.us.archive.org/30/items/lifeandherchildr00buckiala/lifeandherchildr00buckiala.pdf>] (Accessed 15 February 2018)
- Carson, R. (1962/2002). *Silent Spring*. Boston: Houghton Mifflin Company
- Clarke, R. 1973. *Ellen Swallow: The Woman Who Founded Ecology*. Illinois: Follett
- Dashu, M. 2000 Restoring Women to Cultural Memory. Available from: <http://www.suppressedhistories.net/articles/articles.html> (Accessed 11 May 2018)
- Durkheim, E. 1897/1951. *Suicide, A study in sociology*. New York: Free Press
- D'Eaubonne, F. 1974. Le Féminisme ou la Mort. *Femmes en Mouvement, Vol. 2*. France: P. Horay
- Haekel, E. 1869 presented by Lecher, A. 2018 Introductory Lecture to MA in Ecology and Spirituality. Schumacher College (7 January 2018)
- Harding, S. 2009. *Animate Earth*. Devon: Green Books Limited

- Hynes, H. P. 1985. Ellen Swallow, Lois Gibbs and Rachel Carson: Catalysts of the American environmental movement. *Women's Studies International Forum Volume 8, Issue 4*: 291-298. England: Elsevier Ltd
- Irigaray, L. 1993. *The Ethics of Sexual Difference*. London: Continuum
- Des Jardins, J. 2010. *The Madame Curie Complex: The Hidden History of Women in Science*. New York: Feminist Press
- Kavka, M. 2002. Feminism, Ethics, and History, or What Is the "Post" in Postfeminism? *Tulsa Studies in Women's Literature, Vol. 21, No. 1*: 29-44. Tulsa: University of Tulsa
- Kramer (Institoris), Heinrich (1486), *Der Hexenhammer: Malleus Maleficarum*, ed. and trans. Wolfgang Behringer and Günter Jerouschek (2000), Munich: Deutscher Taschenbuch Verlag
- Keller, E. 1983: A feeling for the organism: The life and work of Barbara McClintock *Journal of Women in Culture and Society 7 (3)*: 589-602. New York: W.H. Freeman and Co
- Langenheim, J. H. 2003. Early history and progress of women ecologists: Emphasis Upon Research Contributions. *Annual Review of Ecology and Systematics* 1996 27: 1-53. [Online: <https://www.geneseo.edu/~hartvig/eco203/news/womenecologists.pdf>] (Accessed 5 March 2018)
- Lear, L. 2006 *Beatrix Potter: A Life In Nature*. London: Penguin
- Lovelock, J. 1967. Gaia as Seen Through the Atmosphere. Vol. 6. Issue 8: 579-580. England: Elsevier Ltd
- McCabe, J. Fairchild, E. Grauerholz, L. 2001. Gender in Twentieth-Century Children's Books, Patterns of Disparity in Titles and Central Characters. *Sage Journals Vol 25, Issue 2, 2011* [Online: <http://journals.sagepub.com/doi/pdf/10.1177/0891243211398358>] (Accessed 10 May 2018)
- Merchant, C. 1990. *The Death of Nature: Women, Ecology and the Scientific Revolution*. New York: HarperCollins
- Merchant, C. 2002. *The Columbia Guide to American Environmental History*. New York: Columbia University Press
- Merchant, C. (2012) Women and Nature: Responding to the Call. In Joe Bowersox and Karen Arabas, ed., *Is Nature Calling?* Santa Rosa, CA: Polebridge Press [Online: <https://nature.berkeley.edu/departments/espm/env-hist/articles/97.pdf>] (Accessed 11 May 2018)
- Ortner, S. 1974. Is Female to Male as Nature Is to Culture? In Rosaldo, M. Z. and Lamphere L. (eds), *Woman, culture, and society*: 68-87. Stanford, CA: Stanford University Press.
- Plumwood, V. 2001. *Environmental Culture: The Ecological Crisis of Reason*. London: Routledge
- Reuther, R. R. 2012. *Ecofeminism – The Challenge to Theology*. Venice: DEP : Deportate, esuli, profughe. [Online: http://www.unive.it/media/allegato/dep/n20-2012/Ricerche/Riflessione/4_Ruether_Ecofeminism.pdf] (Accessed 4 May 2018)
- Richardson, B. 2002. Ellen Swallow Richards: "Humanistic Oekologist," "Applied Sociologist," and the Founding of Sociology. In *The American Sociologist. Vol. 33, No. 3*: 21-57. New York: Springer

Rossiter, M. W. 1993. "The Matthew Matilda Effect in Science." *Social Studies of Science* 23 (2): 325-41. New York: Sage Publications

Rosser, S. V. 1987. Feminist Scholarship in the Sciences: Where Are We Now and When Can We Expect A Theoretical Breakthrough? *Hypatia* Vol. 2, No. 3, *Feminism & Science*, 1: 5-17. New York: Wiley [Online: <http://www.jstor.org.ezproxy.uwtsd.ac.uk/stable/pdf/3810119.pdf?refreqid=excelsior%3A3666c7793913e8f81140c88ce04c6972>] (Accessed: 15 February 2018)

Schumacher College. 2018. [Online: <https://www.schumachercollege.org.uk/>]

Schumacher, E.F. 1973. *Small is beautiful*. London: Blond and Briggs

Swallow, E. 1907. *Sanitation in Daily Life*. Boston: Whitcomb & Barrows