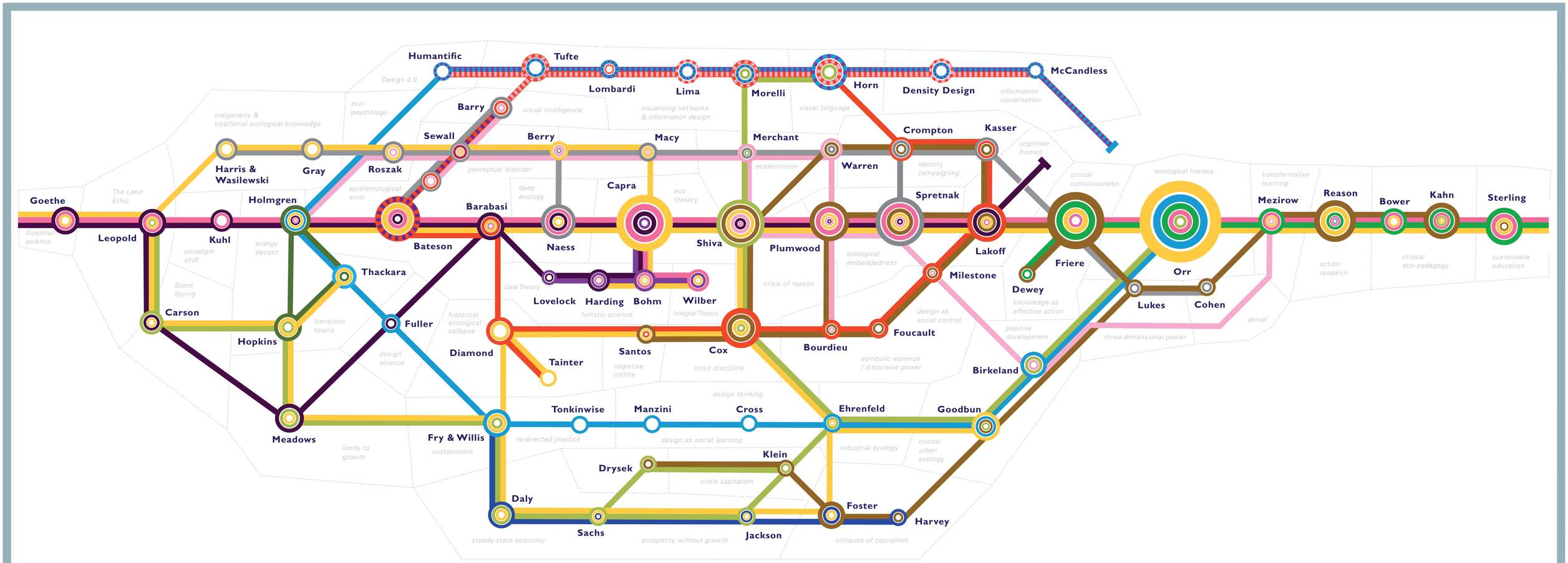
Eco-Literacy Map



Key to lines

- ecological literacy
- sustainable development
- communications
- perception
- visual communication
- graphic design
- design
- feminism / ecofeminism
- philosophy
- critical pedogogy
- critical social theory
- transition movement
- ecological economics
- psychology / ecopsychology
- science
- holistic science

† Failure to become familiar with the major lines during your journey will significantly increase the likelihood of serious environmental damage.

Key to stations

- Johann Wolfgang von Goethe (1749 - 1832) writer, polymath
- Aldo Leopold (1887 - 1948) ecologist, conservationist
- Thomas Samuel Kuhn (1922 - 1996) physicist, philosopher
- Donella 'Dana' Meadows (1941 - 2001) environmental scientist
- Gregory Bateson (1904 - 1980) anthropologist, social scientist
- Rachel Carson (1907 - 1964) biologist, ecologist
- Albert-László Barabási (b.1967) physicist
- Harding, Stephan Dr. (n/a) holistic scientist
- James Lovelock (b.1919) scientist, author
- David Bohm (1917 - 1992) quantum physicist, philosopher
- Ken Wilber (b.1949) author, integral theorist
- Arne Næss (1912 - 2009) philosopher, activist
- Rob Hopkins (b.1970) ecologist, permaculture designer, author
- David Holmgren (b. 1955) ecologist, permaculture designer
- Edward Tufte (b.1942) political scientist, statistician, designer, writer
- Robert E. Horn (n/a) political scientist, information designer
- Joseph A. Tainter (b.1949) is a U.S. anthropologist and historian
- Jared Diamond (b.1937) scientist, geologist, author
- Robert Cox (n/a) professor of rhetorical studies, communications scholar
- Tom Crompton (n/a) change strategist, communications scholar
- Tim Kasser (b.1966) psychologist, communications scholar
- Santos, Boaventura De Sousa (b.1940) professor of sociology
- Marshall McLuhan (1911 – 1980) educator, philosopher
- Ann Marie Barry (n/a) professor of visual perception and communication
- John Bellamy Foster (n/a) sociologist
- David Harvey (b.1935) anthropologist, geographer
- Tim Jackson (n/a) professor of sustainable development
- Herman Daly (b.1938) ecological economist
- Wolfgang Sachs (b.1946) sociologist, social scientist
- Fritjof Capra (b.1939) physicist, systems theorist, author
- Vandana Shiva (b.1952) physicist, philosopher, activist, ecofeminist
- Karen Warren (n/a) ecofeminist, philosopher
- Carolyn Merchant (b.1936) historian of science, ecofeminist
- Val Plumwood (1939 - 2008), ecofeminist activist, philosopher
- Charlene Spretnak (b.1946) ecofeminist activist, philosopher
- David Orr (n/a) environmental and political scientist
- Humantific: Elizabeth Pastor and GK VanPatter (n/a) designers
- David McCandless (n/a) data journalist, information designer
- Mark Lombardi (1951-2000) researcher, information designer, artist
- John Ehrenfeld (n/a) industrial ecologist, author
- Buckminster Fuller (1895 - 1983) engineer, designer, inventor
- Janis Birkeland (n/a) architect, writer, scholar
- Ezio Manzini (n/a) design theorist
- Density Design - Paolo Ciuccarelli & others (n/a) information design
- Manuel Lima (n/a) information architect, visualization designer
- Angela Morelli (n/a) information designer
- John Thackara (n/a) design theorist, director of Doors
- Jon Goodbun (n/a) architect, critical theorist
- Nigel Cross (n/a) professor of design studies.
- Anne-Marie Willis & Tony Fry (n/a) design theorists, designers
- Cameron Tomkinwise (n/a) design theorist
- Naomi Klein (b.1970) author and social activist
- Pierre Bourdieu (1930 - 2002) sociologist, anthropologist, philosopher
- Michel Foucault (1926 – 1984) philosopher, social theorist, historian
- Peter Reason (n/a) action researcher, social theorist, sustainability scholar
- Steven Lukes (b.1941) political and critical social theorist
- Stanley Cohen (n/a) sociologist
- Richard Kahn (n/a) critical theorist, education scholar
- Paulo Freire (1921 –1997) radical educator, critical social theorist
- Stephen Stephen (n/a) education and sustainability scholar
- Jack Mezirow (n/a) education scholar, social theorist
- C.A. Bower (n/a) environmental educator, philosopher
- John Dewey (1859 – 1952) philosopher, educational reformer
- Theodore Roszak (b.1933) professor of history
- Laura Sewall (n/a) visual psychologist
- Joanna Macy (b.1929) author, Buddhist scholar, activist
- Thomas Berry (1914 -2009) cultural historian, ecotheologian
- Leslie Gray (n/a) indigenous educator, clinical psychologist
- La Donna Harris & Jacqueline Wasilewski (n/a) indigenous scholars, activists
- Mary-Catherin Bateson (n/a) writer and cultural anthropologist

The information gathered on this map has been gathered from different sources and is not complete. Version 3.0 - August 2011

Key to Lines: Summary of Disciplinary Lines

Eco-literacy: Ecological literacy (EL) describes a capacity to think in terms of whole systems. Ecological literacy recognizes humankind's embeddedness within the ecological systems and thereby organizes cultural, political, legal and economic systems to reflect interdependence and interconnections.

Sustainable Development: Current models of development based on infinite quantitative economic growth within a finite ecological system are entirely unsustainable. Development must reflect growth in nature where physical growth occurs to maturity then levels off.

Communications mediate the human-nature relationship and thus have a vital role to pay in responding to environmental problems. Visual communication has the unique capacity to communicate context, causality, connections, and complexity thereby facilitating ecological perception.

Design is uniquely positioned to engage in a process of moving from theory to practice and moving between sectors to facilitate transdisciplinary actions and design new ways of living. Design is a problem solving profession with a wide variety of tools and techniques to addresses complex problems.

Graphic Design aims to strategically change human understanding and behavior through the use of visual communication. Graphic design can address the crisis in environmental communications by visualizing complex webs of interdependence helping audiences notice relationships and develop ecological perception.

Science: Ecological literacy has emerged out the movement in modern science away from the Enlightenment tradition characterized by atomism, mechanism, objectivism, anthropocentrism, rationalism and dualism. This shift follows Kuhn's theory of paradigm shifts in science, evolved now to 'post-normal science'.

Philosophy: We have inherented a philosophical tradition based on a radical disconnection with the natural world constituting 'epistemological error' a crisis of reason and ethical rootlessness. Ecological literacy describes a worldview that supports an ecologically embedded ontology, epistemology, rationality and ethic.

Critical Pedagogy is an educational movement that originated from Paulo Freire's educational practices focused on *conscientization* or critical consciousness. These teaching practices have been integral to the profound change witnessed in social movements globally including women's liberation.

Social Theory offers powerful tools of analysis that expose how and why ecological literacy remains marginal by describing how power functions in our culture. Dominant discourses reflect the interests of powerful political interests with concepts such as the 'discursive power' and 'symbolic violence'.

Transition is a social movement and community design practice based on local responses to climate change and peak oil, i.e. depletion of fossil fuel reserves. Transition has its origins in permaculture which developed strategies for the design of systems for local resilience and energy descent.

Ecological Economics is economic theory that recognizes the economic system as embedded within the ecological system, and having to function within the carrying capacity of the earth. It describes quantitative growth as no longer delivering prosperity to rich countries. Instead we must aim for qualitative growth.

Ecopsychology address our psychological relationship with Nature, offering a radical re-visioning of ecological self. Ecopsychology understoods denial as a 'natural' defense mechanism and using practices from addiction therapy to address denial. Eco-psychology is heavily informed by TEK (traditional ecological knowledge).

Ecofeminist analysis asserts that the logic of domination has been used historically to oppress of both women and nature. Feminism is a fundamental building block to the next social transformation – that of enlarging the community of concern to include the wider ecological community.

Holistic Science Holistic science dramatically challenges assumptions and methodological approaches of positivist science. Holistic science unites both quantities and qualities of scientific methodologies, in a paradigm shift in science from physics to the life sciences.

Visual Communication Within the context of an increasingly visual culture, visual communications can potentially facilitate ecological understanding through display of complexity, context, connections, causality and quantity while nurturing qualitative whole systems thinking.

A map based on the literature review of the AHRC funded PhD research, *The Visual Communication of Ecological Literacy* at the University of Brighton.
Graphic No.23 - Version 3.0
Joanna Jody Boehnert
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This poster can be downloaded here:
www.eco-labs.org