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Steps Towards an Ecology of Pedagogy: The Art of 'Capable Futures'

Derived from the Ancient Greek word, *oikos*, the English language broadly defines ecology as the branch of biological science that concerns the study of organisms, their relationship to each other and their relationship to their environment. The same etymological route broadly defines economics as a social science concerned with factors that determine the production, distribution, and consumption of goods and services. *Oikos* is generally defined as house or dwelling, but it actually referred to the appropriate relationships between each member of a family, within their house and the position of that house within the city – the correct personal, familial, social and cosmic order.

Another Greek word, *pedagogy*, is often used to mean a draconian or dogmatic style of teaching. However, in Ancient Greece, a *pedagogue* was the family slave, entrusted 'to lead a child by the hand' (not push), to the teacher's house. So, originally, *pedagogy* was more concerned with non-formal knowledge of the world, gained while walking through the city.

This presentation aims to bring together ecology and pedagogy ('eco-pedagogy') to suggest that such an approach is essential for the development of Education for Sustainable Development (ESD), and that ESD is essential for this and future generations of students, teachers and researchers to meet the transformative challenges we face. To coin a third Greek word, *erete*, derived from the Sanskrit word, *rta*, from which we gain the word, 'art', the presentation will consider that the development and delivery of eco-pedagogy with excellence is an art – 'The Art of Capable Futures'.

Suggesting that 'Superconnectivity and Superconductivity' are part of a larger discourse, the presentation focuses on three elements (conceptual, creative, practical) to elucidate the argument for 'Capable Futures'. Conceptually, it touches on the work of philosophers, social and natural scientists including Gregory Bateson, Robert Pirsig, Lewis Hyde, Fritjof Capra, George Lakoff and Mark Johnson, Basarab Nicolescu, Edgar Morin, Felix Guattari, Tim Ingold, Lance H. Gunderson and C. S. Holling. From the creative arts, it draws, briefly, upon the work of James Joyce, Samuel Becket, Marcel Duchamp, John Cage, Eduardo Paolozzi, Joseph Beuys, Helen Mayer Harrison and Newton Harrison. Practically, it features two programmes of psychogeographic, eco-urban, art-walks in Manchester, 'Walk on the Wild Side' and 'Walkabout the City?' (2004-16), and the 'Making Our Futures' (2007-16), interdisciplinary master classes, charettes and units that focused on ecological arts and sustainable design at universities in Barcelona, Guangzhou, Kaohsiung, Beijing and Manchester.

Together these elements form an arts-led proposition to challenge our society's over reliance on empirical evidence, and underlying commercial/political assumptions. It then creatively embraces different knowledge systems and multiple ways of thinking that emphasise equity and the ethical dimensions of holistic integrative systems. This practice-based, psychosocial imperative addresses our transformative challenges, requiring the design and implementation of ecologically adaptive policy and socially just decision-making; the fine arts being a vital component to the process of transdisciplinary resilience.