Eco-Cultural Production

Literature Review

Introduction

This literature review represents the key documents identified by a network of academics, community organisation representatives and arts practitioners in relation to eco-cultural production. The network was brought together as part of a consortium building exercise in response to funding from the Arts and Humanities Research Council (AHRC) Connected Communities Programme Research Development Workshop held in May 2012 entitled Communities, Cultures, Environments and Sustainability. The overall aim for the network was to investigate the opportunities around helping communities to respond to the challenges posed by environmental change and ways of moving towards more sustainable living.

Definition of Eco-Cultural Production

"Eco-cultural production" as co-defined by the academics and community research partners in the AHRC Connected Communities network entails *"the process of creating meanings, experiences, values and objects through the engagement of people and communities with natural environments".*

The underlying rationale for improving our understanding of eco-cultural production is to lead to better decision making on land and resource use that benefit both people and nature (Kareiva et al., 2011).

Health & Wellbeing

The health and wellbeing benefits of natural spaces have been recognised from a social and medical framing (White, Alcock, Wheeler and Depledge, 2013; Rose, 2012; Lawton, Brotherton, Brown and Elphick, 2010; Roe and Aspinall, 2011; Wheeler, White, Stahl-Timmins and Depledge, 2012).

Half of humanity lives in cities. They are spaces subject to rapid change which provides threats and opportunities for natural productive spaces (Kareiva et al., 2011). Eco-cultural production highlights the multiple benefits that such urban develops could bring.

The Ecosystem Service approach and its critique

The National Ecosystem Assessment describes ecosystem cultural services as: "the environmental settings that give rise to the cultural goods and benefits that people obtain from ecosystems. Over millennia these environmental settings have been co-produced by the constant interactions between humans and nature. They are inscribed with not only natural features but also the legacies of past and current societies, technologies, and cultures. The continual change in these settings involves a range of complex cultural practices, such as the development of institutions, the application of capital, and human processes involving memories, emotions, the senses, and aesthetic appreciation."(Church et al., 2011; Fish, Burgess, Church and Turner, 2011; Andrew et al., 2011)

However the approach to this framing of cultural services has been criticised from a variety of aspects.

Cultural ecosystem services (CES) and their measurement (in particular religious and spiritual services and sense of place) do not conform well to economic assumptions, and their assessment is complicated by the properties of intangibility and incommensurability (Hernández-Morcillo, Plieninger and Bieling, 2013).

Accordingly, the process of creation seems almost more important than the resulting measure itself when designing effective cultural services indicators. Development of such measures requires specific stages, from conceptualization to communication that may not be needed for other ecosystem services measures (Hernández-Morcillo, Plieninger and Bieling, 2013).

Recreation and eco-tourism have been disproportionately the focus of current attempts to assess cultural ecosystem services (>50%); **sense of place, cultural heritage and diversity; religious and spiritual; aesthetic; and inspirational** have been **consistently under investigated** (Hernández-Morcillo, Plieninger and Bieling, 2013).

Stakeholder involvement does notably improve the quality of CES indicators (Hernández-Morcillo, Plieninger and Bieling, 2013).

Cultural services are associated with the aesthetic experiences of people's interactions with nature. As such they have been characterised as being co-produced by people and ecosystems (Chan et al., 2011).

Service Contribution to… (experiences)	Place/ Heritage	Activity	Spiritual	inspiration	Knowledge	Existence, Bequest Option	Social capital and Cohesion	Aesthetic	Employment	Identity	Site Substitutability
Subsistence	X	X	X	X	X		X	X	X	X	Varies
Recreation	X	X	X	X	X		X	X	X	X	Depends
Education & Research	X	X	X	X	X	X	X	X	X	X	**Depends**
Artistic	X		X	X	X			X	X	X	**Varies**
'Ceremonial'	X		X	X	X		X	X		X	**Varies**
Site Substitutability	**Low**	High		**Varies**		Depends	High	**Low**	High	**Varies**	

Categories of cultural ecosystem services and associated benefits and the site suitability of each – with one possible mapping of ecosystem service benefits (from (Chan et al., 2011)

Cultural ecosystem services and eco-cultural production

"If we can add how nature contributes to human to human wellbeing to the arguments for conservation, why wouldn't we?" (Kareiva et al., 2011) – Because the full appreciation for how nature contributes to wellbeing cannot come from natural and social sciences alone.

Kareiva et al (Kareiva et al., 2011) call for the need to build the capacity in civil society and institutions to better understand the deep aspects of human belief and behaviour in relation to nature. A&H approaches could contribute significantly by providing meaningful and understandable (communicable) insight and findings on the links between productive spaces and benefits that are currently problematic for decision makers.

Current scenarios (Millennium Ecosystem Assessment, 2005) point towards futures where cultural and spiritual connections to ecosystems and productive landscapes are lost (Technogarden scenario). Eco-cultural production stresses the links and benefits between local production and cultural benefits (more sympathetic to the 'Adapting Mosaic' scenario).

Arts and Humanities (A&H) Dimensions of Eco-Cultural Production

The property of intangibility has been identified as central to cultural services provided by natural systems (Chan et al., 2011). Revealing aspects of these intangible elements is the focus of A&H approaches to eco-cultural production.

Productive species and landscapes have been linked to First Nation groups social cohesion; traditional knowledge exchange; and seen as key cultural traditions (Garibaldi and Turner, 2004). This approach to appreciating and valuing productive spaces for their cultural benefits has not been so well advanced in the European and UK context.

Cultural services are co-produced by ecosystems and people; as such they are deeply affected by social process – at both the production and valuation stage. The role of social processes in the production of cultural services allows positive feedbacks in which service production fosters habits and transfer knowledge that in turn enhance service production. (Chan et al., 2011)

While academic researchers may benefit from categorising cultural benefits through Ecosystem Service and other types of frameworks and typologies, these approaches often don't have relevance or traction with communities or stakeholders (Chan et al., 2011). The use of A&H approaches could be a useful step forward in overcoming this shortfall in community engagement and involvement.

Distinctive A& H Approaches to Forests and Eco-Cultural Production

Introduction

Forests are complex cultural ecosystems composed of people, beings and things that interact through material, experiential and bio-chemical exchange with one another. Collins & Goto are interested in the contribution that arts and humanities research can make to the understanding of eco-cultural services related to forests by embracing a position that is more than human; but one that recognizes the complete life cycle of wood, and the validity of harvest. We are also interested in how land communities are constituted and what it means when people, beings and things have a recognized stake in forestland possession, management and control.

Background

This literature review is based in the visual arts although it includes performative, textual and narrative elements. The work can be described in terms of media relationships such as two dimensional, three-dimensional and time based practices. The work may be best understood within the discourses of public art, social art, environmental art, ecological art and land art with various texts over the past thirty years describing those points of view. (Beardsley, 1984; Lippard, 1983, 1997, 2007; Kastner and Wallis, 1988; Matilsky, 1992; Boettger, 2004, Boetzkes, 2010). This work has also been the focus of a flurry of international curatorial activity over the past ten years with attendant catalogues and critical response.

It is important to note that the research relationship between the arts woodlands and forests is not a history that is well documented or interrogated (with a few projects providing notable exceptions). There is no centralized discourse to be found in a single book, a journal, (or handful of journals) or in a significant museum exhibition. To the best of our knowledge there has not been a significant research network to date that deals with art and forests. Although broadly focused landscape and environment networks have been established in the EU (Cultura21), the UK (Land2, Landscape and Arts Network and eco/art/scot/land) and the USA (Ecoarts Network and the Women Environmental Artists Directory). There is also an international array of programmes that deliver undergraduate and post graduate study in arts and environment subjects, with PhD programmes largely constrained to the UK. In 2010 fourteen 'researching environmental change' networks were established with funding from the Landscape and Ecology programme of the Arts and Humanities Research Council. Three had a focus on the visual arts, performing arts and literature. The latter focused on environmental writing but including many artists in the working group. Relevant programmes included 'Data Landscapes' with Dr Tom Corby at University of Westminster, 'Learning to Live with Water: Flood Histories' with Prof Lindsey Jo McEwen at University of Gloucestershire, 'Reflecting on Environmental Change Through Site-Based Performance', Prof Stephen Bottoms, University of Leeds, and 'Values of Environmental Writing' with Dr Hayden Lorimer at University of Glasgow. Various artist/research efforts were funded from within the AHRC Landscape and Ecology programme, although none of them directly engaged woodlands and forests. Otherwise the forest commission has invested in a number of art oriented PhD's. There are two recently completed doctoral studies that deal with artwork trees and forests in the anthropology department at University of Aberdeen. One looks at an individual artist's response to specific environments; the other looks at the history and processes around public art in forests in Scotland. This work is being conducted in relationship to an anthropology based research group, lead by Prof Tim Ingold who has recently argued for an anthropology of forests based upon lived observation over time that recognizes the limited range of response, but the active shaping of tree-form in relationship to landscape phenomenon (wind, rain, available light); and competition for nutrients. (June 2013). There is also a PhD underway at the Glasgow School of Art that looks at landscape as an archive to be unearthed through creative practice; an artist/theorist with experts at Grizedale Forest supervise the PhD.

Forests, trees and landscape issues have figured prominently in the work of visual artists that have garnered an important place in the international history of art. They include Tim Stead in Scotland, David Nash in Wales, Joseph Beuys and Hermann Prigann in Germany, Helen and Newton Harrison, Agnes Denes and Alan Sonfist in the USA. Collins and Goto conducted ten years of research dealing with aspects of terrestrial ecology and forest cover in relationship to aesthetic and the recovery of post-industrial landscape in Western Pennsylvania between 1996-2006.

1. Art, performance and literature as public art in a forest context that results in products for eco-cultural consumption. This is work primarily authored by singular artists known for work in a specific medium. Normally developed, presented or performed within a forest context. The work can be formally understood through various discussions about the practice and critical reception of public art.

Robert Irwin offered a formal methodological framework of the terms relevant to artistic practice and response to the experiential conditions of site and context in 1985. Suzanne Lacy provided a practitioners view of performative and material practices that seeks to engage a wider set of social and ethical relationships. (1995) Barbara Deutsche wrote about the tension between specific development interests and agonistic artistic approaches to the public realm (1996). Francois Matarasso examines social participation (and impact) through art (1997). Malcolm Miles takes a critical approach to the evolution of artwork in relationship to development and community interests (1997, 2000, 2003 and 2005). Miwon Kwon (2002) re-examines the early ideas about site specificity and creative response considering the evolution of understanding about social inter-relationship with place and the fracturing of ideals related to common experience in particular the understanding of community. Kwon and Miles provide a reasonable bridge to the critical more socially engaged work that follows in item 2.

2. Art, performance and literature as a means of developing critical eco-social inter-relationships, narratives and metaphors that contribute to planning, development, contestation or the interrogation of history. This includes artwork that embraces the past and the present conditions. Artists can also explore future aesthetics and virtues that could shape the eco-cultural imagination and planning for futures.

Following the public art model, this work benefits from new ideas about the social practice of art, the evolution of work from singular authors to collectives and wider social collaborations. The critical theory responding to and informing this work follows on from public art, but sets itself apart by a focus on real social change. Relevant tensions in the field can be simply understood through the running conflict between Grant Kester and Claire Bishop. Kester (2004, 2011) embraces strategic incremental change through art practice and offers a carefully historicized aesthetic that focuses on artistic social exchange and an intellectual framework inspired by Habermas and Baktin. Claire Bishop (2012) argues for a more modernist position that is engaged the social context differently, more fixated on material practice and retaining ideas about artistic autonomy and unreadability as core values. They both agree that projects should advance the agency of participants.

There is also a clear social-political-environmental evolution in this artwork, which is reflected in an evolution of practice, theory and critical response. Exhibitions in the US with titles like Ecovention (2002), Groundworks and Beyond Green (both in 2005) opened up a critical discourse about the artist's role in environmental change, people, policy and planning as well as sustainability. More recently in Copenhagen RETHINK – Contemporary Art and Climate, integrated artwork with an extraordinary depth of ideas, philosophies and theory in its accompanying catalogue (2010). This has been followed by a flurry of activity in the UK, which has attracted the interest of T.J.Demos who has written extensively on art and politics, he has taken an interest in the cultural aspects of the environment. A series of tentative articles about various exhibitions and biennale's culminates with a special edition of Third Text in January 2013.

The various articles examine and interrogate the limitation of current art practice in the face of the scope of the political challenge particularly when considered against theories about the subjective, social and environmental aspects of an integrated ecology. Other aspects include the impact of human and nonhuman collectivities, and the interrogation of vitality and agency amongst all people, beings and things. Informing this critical consideration of art and environment are ideas about vital matter (Latour and Bennett) as well as an ongoing development of ideas in the radical ecologies (Bookchin, Guattari, Haraway, Merchant, Naess and Plumwood) in environmental aesthetics (Berleant, Brady, Carlson, Eaton) and ethics (Light, O'Neil, Ralston, Singer and Shiva). The focal point moves from public art, to the form and function of the public sphere in relationship to expanded subjectivity and ethical responsibility for the more than human conditions of everyday life.

3. Interdisciplinary interventions in the public realm that utilize science informed aesthetic empiricism to contribute to public interest. In this instance positivist (natural) science is inked to subjectivist (artistic) expertise working with citizens to explore 'everyday' aesthetic perception, informed by current knowledge, and secular and non-secular aspects of culture. If described in a Venn diagram, the three aspects: art, community and science would bring expertise to central questions that emerge from relationships between people, places, beings and things. The intention is to leverage expertise away from a discourse about science that leads to matters of fact, reconvening expertise around matters of local concern with short to mid term creative actions and reactions (interventions) and the potential for long range policy impacts. This aspect is about 'strategic knowledge and experience' (what is not part of the discourse that has potential to reshape the discourse at a local level). As well as 'tactical knowing through experience' by many, rather than the singular expertise and authority of science which normally dominates public decision-making. The work has clarity of intent and the potential to enable its participants, to produce new perceptions, values and freedoms for the people, beings and things that interact within forest communities.

A framework for this way of working be found in historic work by artists like Joseph Beuys, Helen Mayer Harrison, Newton Harrison, David Harding, Suzanne Lacey, Buster Simpson and Stephen WIlllats. More recent contributions relative to this way of working have been made by Tania Bruguera, Jeremy Deller, Fritz Haeg, Rick Lowe and artist collectives such as Platform, Superflex, and Wochenklausur. Despite various critical dialogues (some described in item two above) there is little clarity on what it means when artists make work that no longer easily fits into the art world as art. This is clearly reflected in a recent online blog discussion by Tom Finkelpearl, Director of the Queens Museum of Art in New York City. It is also reflected in current discussions about radical planning and service design, as well as an evolving discussion about the value, purpose and form of citizen science, which embrace access, technology and democracy. All of these ideas build on theories and criticism discussed in the last section; but are fundamentally cross-disciplinary and best realized in relationships between positivist and subjectivist interests. (Need more references here…)

While the work may not have the form and function of 'art', various authors have described it as exhibiting - clear objectives, -equitable partnerships, -clear ethics, and -reasonable expectations of empowerment, collective action, or some reasonable impact by all concerned. Critical attention might consider: –the quality of inter-subjective exchange, -indications of empathic insight. -evidence of original thinking, -evidence of unique language, sign, symbol and/or metaphor, -clear subversion of the normative consciousness, and -a sense of shared purpose and connectivity amongst collaborators, participants or viewers.

Forest Related Bibliography

Agarwal, B 2000 *Conceptualising environmental collective action: why gender matters.* Cambridge Journal of Economics *24 283-310.*

Anderson, N M, Williams, K J H & Ford, R M 2013 *Community perceptions of plantation forestry: The association between place meanings and social representations of a contentious rural land use.* Journal of Environmental Psychology *34 121-36.*

Anon 2007 *Reality Check: Evaluation report. report to Cannock Chase District Council, Cannock Chase Primary Care Trust (PCT), The Forestry Commission and Arts Council England West Midlands.*

Anwar McHenry, J 2011 *Rural empowerment through the arts: The role of the arts in civic and social participation in the Mid West region of Western Australia.* Journal of Rural Studies *27 245-53.*

Badham, M, Irwin, K & Van Fossen, R 2013 *Linking Who We Are and Where We Are: Saskatchewan's Legacy of Community and Site-oriented Performance.* Canadian Theatre Review *154 18-25.*

Beer, A R 1991 *Urban design: The growing influence of environmental psychology.* Journal of Environmental Psychology *11 359-71.*

Beringer, A & Martin, P 2003 *On adventure therapy and the natural worlds: Respecting nature's healing.* Journal of Adventure Education & Outdoor Learning *3 29-39.*

Branford, S & Rocha, J 2003 *Another Modernization Is Possible: From Land Conquest to Agro-Ecological Experiment 1.* Science as Culture *12 155-87.*

Burns, C A 2011 *Embodiment and embedment: integrating dance/movement therapy, body psychotherapy, and ecopsychology.* Body, Movement and Dance in Psychotherapy *7 39-54.*

Cantrill, J G 2012 *Amplifiers on the Commons: Using Indicators to Foster Place-Based Sustainability Initiatives.* Environmental Communication: A Journal of Nature and Culture *6 5-22.*

Cantrill, J G, Thompson, J L, Garrett, E & Rochester, G 2007 *Exploring a Sense of Self-in-Place to Explain the Impulse for Urban Sprawl.* Environmental Communication: A Journal of Nature and Culture *1 123-45.*

Carbaugh, D & Cerulli, T 2012 *Cultural Discourses of Dwelling: Investigating Environmental Communication as a Place-based Practice.* Environmental Communication: A Journal of Nature and Culture *7 4-23.*

Chen, B, Nakama, Y & Kurima, G 2008 *The Ryukyu Islands Feng Shui Village Landscape.* World Views: Environment, Culture, Religion *12 25-50.*

Colfer, C & et al 2001 *Assessing People's Perceptions of Forests.*

Conn, S A 1998 *Living in the earth: Ecopsychology, health and psychotherapy.* The Humanistic Psychologist *26 179-98.*

Corazon, S S, Stigsdotter, U K, Moeller, M S & Rasmussen, S M 2012 *Nature as therapist: Integrating permaculture with mindfulness- and acceptance-based therapy in the Danish Healing Forest Garden Nacadia.* European Journal of Psychotherapy & Counselling *14 335-47.*

Custance, P, Hingley, M & Wilcox, D 2011 *Developing a novel health and well-being service: The value of utilising the restorative benefits of nature in the UK.* Journal of Marketing Management *27 386-400.*

Davis, J 1998 *The transpersonal dimensions of ecopsychology: Nature, nonduality, and spiritual practice.* The Humanistic Psychologist *26 69-100.*

Davis, K M & Atkins, S S 2009 *Ecotherapy: Tribalism in the Mountains and Forest.* Journal of Creativity in Mental Health *4 272-82.*

Dickinson, E 2011 *Displaced in Nature: The Cultural Production of (Non-)Place in Place-Based Forest Conservation Pedagogy.* Environmental Communication: A Journal of Nature and Culture *5 300-19.*

Donald Hughes, J 2006 *The Mosaic of Culture and Nature: Organization of Space in an Inhabited Cosmos.* Nature and Culture *1 1-9.*

Foote, B 2007 *The Narrative Interactions of Silent Spring : Bridging Literary Criticism and Ecocriticism.* New Literary History *38 739-53.*

Forestry Commission Scotland 2012 *Arts in Forest Interpretation.* Forestry Commission Scotland, Edinburgh, Scotland.

Gabrys, J & Yusoff, K 2012 *Arts, Sciences and Climate Change: Practices and Politics at the Threshold.* Science as Culture *21 1-24.*

Gardner, R 2009 *Trees as technology: planting shelterbelts on the Great Plains.* History and Technology *25 325-41.*

Gorsevski, E W 2012 *Wangari Maathai's Emplaced Rhetoric: Greening Global Peacebuilding.* Environmental Communication: A Journal of Nature and Culture *6 290-307.*

Hands, K 2008 *Faith Woodlands.* Forestry Commission England.

Henwood, K & Pidgeon, N 2001 *TALK ABOUT WOODS AND TREES: THREAT OF URBANIZATION, STABILITY, AND BIODIVERSITY.* Journal of Environmental Psychology *21 125-47.*

Hinchliffe, S & Whatmore, S 2006 *Living cities: Towards a politics of conviviality.* Science as Culture *15 123-38.*

Hoffman, C 1998 *The hoop and the tree: An ecological model of health.* The Humanistic Psychologist *26 123-54.*

Höhler, S & Ziegler, R 2010 *Nature's Accountability: Stocks and Stories.* Science as Culture *19 417-30.*

Horesh, T 1998 *Discovering and providing for the experience of nature.* The Humanistic Psychologist *26 301-11.*

Hutchins, K & Stormer, N 2013 *Articulating Identity In and Through Maine's North Woods.* Environmental Communication: A Journal of Nature and Culture *7 24-41.*

Jordan, M & Marshall, H 2010 *Taking counselling and psychotherapy outside: Destruction or enrichment of the therapeutic frame?* European Journal of Psychotherapy & Counselling *12 345-59.*

Khong, B S L 2009 *Expanding the Understanding of Mindfulness: Seeing the Tree and the Forest.* The Humanistic Psychologist *37 117-36.*

Kiesling, F M & Manning, C M 2010 *How green is your thumb? Environmental gardening identity and ecological gardening practices.* Journal of Environmental Psychology *30 315-27.*

King, K & Church, A 2013 *'We don't enjoy nature like that': Youth identity and lifestyle in the countryside.* Journal of Rural Studies *31 67-76.*

Kirsch, S & Mitchell, D 2004 *The Nature of Things: Dead Labor, Nonhuman Actors, and the Persistence of Marxism.* Antipode *36 687-705.*

Kyle, G T, Mowen, A J & Tarrant, M 2004 *Linking place preferences with place meaning: An examination of the relationship between place motivation and place attachment.* Journal of Environmental Psychology *24 439-54.*

Leong, K M, McComas, K A & Decker, D J 2008 *Formative Coorientation Research: A Tool to Assist with Environmental Decision Making.* Environmental Communication: A Journal of Nature and Culture *2 257-73.*

Martens, D, Gutscher, H & Bauer, N 2011 *Walking in "wild" and "tended" urban forests: The impact on psychological well-being.* Journal of Environmental Psychology *31 36-44.*

Maspero, I (Ed.) (2013) Year of the Storm: Devastating, transforming, invigorating, *Reforesting Scotland and Centre for Stewardship.*

McMahan, L 2006 *Understanding cultural reasons for the increase in both restoration efforts and gardening with native plants.* Native Plants Journal *7 31-34.*

Milstein, T 2009 *"Somethin' Tells Me It's All Happening at the Zoo": Discourse, Power, and Conservationism1.* Environmental Communication: A Journal of Nature and Culture *3 25-48.*

Nordh, H, Grahn, P & Währborg, P 2009 *Meaningful activities in the forest, a way back from exhaustion and long-term sick leave.* Urban Forestry & Urban Greening *8 207-19.*

Norton, T 2007 *The Structuration of Public Participation: Organizing Environmental Control.* Environmental Communication: A Journal of Nature and Culture *1 146-70.*

Poncelet, E C 2001 *Personal transformation in multistakeholder environmental partnerships.* Policy Sciences *34 273-301.*

Porter, N 2013 *"Single-minded, compelling, and unique": Visual Communications, Landscape, and the Calculated Aesthetic of Place Branding.* Environmental Communication: A Journal of Nature and Culture *7 231-54.*

Pritchard, D 2010 *Artistic Licence: A review of the Forestry Commission's involvements in the arts, and options for the future.* Centre for Contemporary Art and the Natural World report for the Forestry Commission.

Purdue, D A 2000 *Backyard Biodiversity: Seed Tribes in the West of England.* Science as Culture *9 141-66.*

Richardson, M & Hallam, J 2013 *Exploring the Psychological Rewards of a Familiar Semirural Landscape: Connecting to Local Nature through a Mindful Approach.* The Humanistic Psychologist *41 35-53.*

Sackett, C 2010 *Ecotherapy: A Counter to Society's Unhealthy Trend?* Journal of Creativity in Mental Health *5 134-41.*

Savva, A, Trimis, E & Zachariou, A 2004 *Exploring the Links Between Visual Arts and Environmental Education: Experiences of Teachers Participating in an In-Service Training Programme.* International Journal of Art & Design Education *23 246-55.*

Schleifer, D 2010 *Every Breath You Take, Every Move You Make.* Science as Culture *19 393-97.*

Schroeder, H W 2012 *Giving Voice to the Experiential Value of Natural Environments.* The Humanistic Psychologist *40 136-52.*

Shellabarger, R, Peterson, M N, Sills, E & Cubbage, F 2012 *The Influence of Place Meanings on Conservation and Human Rights in the Arizona Sonora Borderlands.* Environmental Communication: A Journal of Nature and Culture *6 383-402.*

Spiegel, J B & Yassi, A 2007 *Theatre of Alliances? Role-play, Representation, and Ecosystem Health in Ecuador.* Theatre Topics *17 129-40.*

Stewart, J & Clark, T 2011 *Lessons from South Park: A Comic Corrective to Environmental Puritanism.* Environmental Communication: A Journal of Nature and Culture *5 320-36.*

Stewart, M 2007 The smell of the rosin, the noise of the saw *Forestry Commission and Touchwood History, Edinburgh.*

Tabbush, P 2008 *Maulden Faith Woodland: An investigation.*

Tabbush, P 2010 *Cultural Values of Trees, Woods and Forests. Forest Research, Farnham, Surrey.*

Ter Mors, E, Weenig, M W H, Ellemers, N & Daamen, D D L 2010 *Effective communication about complex environmental issues: Perceived quality of information about carbon dioxide capture and storage (CCS) depends on stakeholder collaboration.* Journal of Environmental Psychology *30 347-57.*

Thompson, J L & Cantrill, J G 2013 *The Symbolic Transformation of Space.* Environmental Communication: A Journal of Nature and Culture *7 1-3.*

Tom, J H 2009 *<i>Out of the Shadow: Ecopsychology, Story, and Encounters with the Land</i> (review).* MELUS: Multi-Ethnic Literature of the U.S. *34 194-96.*

Townsend, M 2006 *Feel blue? Touch green! Participation in forest/woodland management as a treatment for depression.* Urban Forestry and Urban Greening *5 111-20.*

Tschakert, P, Tutu, R & Alcaro, A 2013 *Embodied experiences of environmental and climatic changes in landscapes of everyday life in Ghana.* Emotion, Space and Society *7 13-25.*

Uggla, Y & Olausson, U 2013 *The Enrollment of Nature in Tourist Information: Framing Urban Nature as "the Other".* Environmental Communication: A Journal of Nature and Culture *7 97-112.*

van Duppen, J & Spierings, B *Retracing trajectories: the embodied experience of cycling, urban sensescapes and the commute between 'neighbourhood' and 'city' in Utrecht, NL.* Journal of Transport Geography.

Walker, G B 2007 *Public Participation as Participatory Communication in Environmental Policy Decision-Making: From Concepts to Structured Conversations.* Environmental Communication: A Journal of Nature and Culture *1 99-110.*

Ward Thompson, C 2013 *Activity, exercise and the planning and design of outdoor spaces.* Journal of Environmental Psychology *34 79-96.*

Westberg, L, Hallgren, L & Setterwall, A 2010 *Communicative Skills Development of Administrators: A Necessary Step for Implementing Participatory Policies in Natural Resource Management.* Environmental Communication: A Journal of Nature and Culture *4 225-36.*

Williams, K & Harvey, D 2001 *TRANSCENDENT EXPERIENCE IN FOREST ENVIRONMENTS.* Journal of Environmental Psychology *21 249-60.*

Withrow-Robinson, B, Broussard, S, Simon-Brown, V, Engle, M & Reed, A S 2002 *Seeing the Forest: Art About Forests and Forestry.* Journal of Forestry *100* 8-14.

Wolfe, D & Russell, K 2010 *Garden/Art: The Nature-Based Sculpture Program of the South Carolina Botanical Garden.* Environmental Communication: A Journal of Nature and Culture *4* 237-49.

Worsfold, K E 2013 *Embodied Reflection in Mindfulness-Based Cognitive Therapy for Depression.* The Humanistic Psychologist *41* 54-69.

Black and Minority Ethnic, Faith and Disadvantaged Groups and Eco-Cultural Production

Woods , Forests & Countryside Access: Issues of the Perceptions and Behaviour of Black and Ethnic Minority Communities

This article explores the perceptions and behaviour of ethnic minorities towards countryside access and the use of forests and woodlands for either leisure or recreation (Ayamba and Rotherham, n.d.).

Community green: Using local spaces to tackle inequality and improve health

The report demonstrates that improving urban green space represents an important and cost- effective opportunity for people to transform their local neighbourhoods and improve their quality of life. Local people are best placed to know the benefits that good-quality green spaces contribute to their community. But they have not always had the opportunity to direct improvements to their local environment(CABE, 2010).

Faith Woodlands: Dec 2006-2007 - The First Phase

The Faith Woodlands project aimed to investigate the involvement of faith communities in developing, designing and using special areas within existing woodland which had meaning to them, which were accessible to all, and which helped to involve and educate those from all sections of society. This case study report is a narrative of what the project achieved and covers the initial development phase of the project (Hand, 2007).

Understanding the role of urban forests for migrants – uses, perception and integrative potential

This paper discusses the results of a qualitative enquiry carried out in Freiburg, Germany, involving migrants from Turkey, the Balkan countries and Russia-Germans. The results point towards many differences in their recreational use patterns and their perception of urban forests, especially between the Turkish interviewees and the other two groups. Furthermore, the results suggest that the emotional attachment to forests can play diverse roles in the identification process of immigrants to their host country. Finally, social interactions were depicted in the interviews as being an important aspect of a forest visit. Nevertheless, social contact between forest visitors seemed to remain mostly on a 'small-talk' level (Jay and Schraml, 2009).

The Forestry Commission Public Forest Estate in England: Social use, value and expectations

This report highlights the findings from research commissioned to understand people's perceptions and expectations of the Forestry Commission Public Forest Estate (PFE) in England, and to compare these with those of woods and forests in other forms of ownership. It summarises the findings of the study based on a review of existing social research and datasets and newly collected data from a specially commissioned public survey and ten group discussions (Lawrence and Carter, 2009).

Everyday (in)justices and ordinary environmentalisms: community gardening in disadvantaged urban neighbourhoods

Studies of poverty in disadvantaged urban neighbourhoods have pointed to the contribution of despoiled local environments to social exclusion. Work in urban political ecology has highlighted the socio- environmental hybridity of injustices in the city, bringing a political dimension to debates on urban sustainability, while research on environmental justice has directed critical attention towards the local and everyday (urban) contexts of socio-ecological forms of injustice. This paper explores the everyday spaces and mundane forms of (in)justice through a case study of community gardening in cities. Drawing on materials derived from a recent study of 18 community gardening projects in disadvantaged urban neighbourhoods in the UK, this paper highlights how these projects are using ordinary forms of environmentalism to produce new socio- ecological spaces of justice within the city (Milbourne, 2012).

Black and Minority Ethnic Groups and Public Open Space: Literature Review

The first section of the literature review addresses the contested nature of the terms ethnicity and exclusion. The second section examines the barriers to participation in public open space faced by black and minority ethnic groups. The final section reviews ways of combating under-representation through strategies for increasing participation, as suggested by the literature (Morris, 2003).

Intercultural Gardens: the Use of Space By Migrants and the Practice of Respect

This papers examination of the experience of intercultural gardens attempts to help us understand how the use of space by migrants can be constitutive of respect and important for the realization of self-respect (Moulin-Doos, 2013).

Education and Eco-Literacy

Ecoliteracy: The challenge for education in the next century

Details a presentation made by Capra in 1999 around the concept of how systems thinking forms an intellectual conceptual framework that allows us to integrate its various components that form Ecoliteracy. These components include: understanding the principles of ecology, experiencing them in nature, and thereby acquiring a sense of place; incorporating the insights from the new understanding of learning, which emphasizes the child's search for patterns and meaning; implementing the principles of ecology to nurture the learning community, facilitating emergence, and sharing leadership; integrating the curriculum through project-based learning (Capra, 1999).

Education for Sustainability Findings from the Evaluation Study

This report presents a summary of the trends found in a two-year evaluation that focused on the experiences and learning patterns of students at Martin Luther King Jr. Middle School after each spent time learning in an Edible School Yard garden and kitchen classroom. These experiences are contrasted with those of students from another Berkeley middle school with no garden or kitchen classroom on its school grounds at the time of this research.

This initial study focused on the holistic pattern of education for sustainability, including: ecological knowledge and understanding; environmental attitudes and behaviours; cooperative school culture (e.g. improvement in self-esteem, interpersonal relationships, and attitude toward school); and sense of place. In addition, the study included children's health by looking at their attitudes, beliefs, and knowledge regarding fruit and vegetables (Murphy, 2003).

Inclusive place-based education for 'Just Sustainability'

This paper identifies an emerging commonality between the professional spheres of planning, education and social or community work constellating around the concept of sustainable development (SD). It explores the contested nature of the concept of SD giving rise to a wide variety of sometimes conflicting 'readings'. It then goes on to advocate a 'strong' reading of SD, namely 'Just Sustainability', which lays particular stress on 'social justice', 'environmental justice' and inclusion. This, in turn, is understood to require a form of education which is empowering and is referred to as 'Education for Just Sustainability' (EJS). A particular focus of such work is the empowerment of local communities to understand and take action in their home localities. Therefore, place-based education is presented as an orientation suited to progressing EJS. A number of illustrative examples are presented to demonstrate the potential for such an educational approach. Finally, some concluding observations are made as to the potential and requirements for place-based EJS in the UK and other contexts (Morgan, 2012).

Learning communities, cities and regions for sustainable development and global citizenship

The broad notion of "learning communities, cities and regions for sustainable development and global citizenship" can be seen as powerful formulation emerging from this convergence characterised by concepts, approaches and tools currently emerging at the interface between participatory approaches to local/regional planning, and place-based education for SD and involving the partnership of a range of "learning stakeholders". This article seeks to outline the nature and potential of these convergences. A number of pointers towards good practice and exemplars are also indicated, notably in terms of emerging Regional Centres for Excellence in Education for sustainable development (Morgan, 2009).

Ethical Mindfulness: Methods for understanding the experiential value of nature

Grounding Ethical Mindfulness for/in Nature: Trees in Their Places

This paper we examines attempts to reframe the ethics of nature–society relations. The paper draws on research conducted on the interconnections between trees and places, and in particular describes three specific tree-places—an urban square, an urban cemetery and an orchard. The paper concludes that notions of intrinsicality, otherness, enchantment and hybridity are helpful in configuring the search for grounded ethical mindfulness, both for and in nature (Cloke and Jones, 2003).

Giving voice to the experiential value of natural environments

People value natural environments in many different ways. In addition to the various tangible products and benefits that can be produced from a natural environment, people may also find value in their immediate experience of the environment while they are in it. This experiential value is an important aspect of quality of life for many people, but it is often not taken into account in making decisions about managing natural environments. In part, this is because the experiential value of the environment can be difficult for people to express in words. The article explores how experiential and phenomenological psychology may help in giving voice to the experiential value of natural environments (Schroeder, 2012).

The felt sense of natural environments

This paper describes approaches aimed at encouraging people to tune into their bodies' subtle, physical responses to the environment. By concentrating on their inner feelings it helps participants to identify and articulate the interaction of environment with their emotional state and wellbeing (Schroeder, 2008).

References

Andrew, C. et al., 2011. Cultural Services. In: *Reports from the UK National Ecosystem Assessment: Technical Sections*. pp.633–692.

Ayamba, M.A. and Rotherham, I.D., n.d. *Woods , Forests & Countryside Access: Issues of the Perceptions and Behaviour of Black and Ethnic Minority Communities*.

CABE, 2010. Community green: Using local spaces to tackle inequality and improve health. *… http://www. cabe. org. uk/publications/community-green*, [online] pp.1–61. Available at: <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Community+green:+Using+local+spaces+to+tackle+inequality+and+improve+health#0> [Accessed 17 Jul. 2013].

Capra, F., 1999. *Ecoliteracy: The challenge for education in the next century*. [online] *Retrieved June*, pp.1–11. Available at: <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Ecoliteracy+:+The+Challenge+for+Education+in+the+Next+Century+Ecoliteracy#0> [Accessed 26 Jul. 2013].

Chan, K.M. a. et al., 2011. Chapter 12: Cultural services and non-use values. In: P. Kareiva et al., eds., *Natural Capital: Theory and Practice of Mapping Ecosystem Services*. Oxford University Press, pp.206–228.

Church, A. et al., 2011. Cultural Services. In: *Reports from the UK National Ecosystem Assessment: Technical Reports*. pp.633–692.

Cloke, P. and Jones, O., 2003. Grounding Ethical Mindfulness for/in Nature: Trees in Their Places. *Ethics, Place & Environment*, [online] 6(3), pp.195–213. Available at: <http://www.tandfonline.com/doi/abs/10.1080/1366879042000200660> [Accessed 26 Jul. 2013].

Fish, R., Burgess, J., Church, A. and Turner, K., 2011. Shared Values for the Contributions Ecosystem Services Make to Human. In: *Reports from the UK National Ecosystem Assessment: Technical Reports*. pp.1183–1194.

Garibaldi, A. and Turner, N., 2004. Cultural keystone species: implications for ecological conservation and restoration. *Ecology and Society*, [online] 9(3), pp.1–18. Available at: <http://www.ecologyandsociety.org/pub/vol9/iss3/art1/main.html> [Accessed 22 May 2013].

Hand, K., 2007. *Faith Woodlands*. pp.1–13.

Hernández-Morcillo, M., Plieninger, T. and Bieling, C., 2013. An empirical review of cultural ecosystem service indicators. *Ecological Indicators*, [online] 29, pp.434–444. Available at: <http://linkinghub.elsevier.com/retrieve/pii/S1470160X13000320> [Accessed 28 Feb. 2013].

Jay, M. and Schraml, U., 2009. Understanding the role of urban forests for migrants – uses, perception and integrative potential. *Urban Forestry & Urban Greening*, [online] 8(4), pp.283–294. Available at: <http://linkinghub.elsevier.com/retrieve/pii/S1618866709000545> [Accessed 25 Jun. 2013].

Kareiva, P. et al. eds., 2011. *Natural Capital: Theory and Practice of Mapping Ecosystem Services*. Oxford University Press, pp.1–366.

Lawrence, A. and Carter, C., 2009. *The Forestry Commission Public Forest Estate in England : Social use , value and expectations Summary report*. pp.1–10.

Lawton, J.H., Brotherton, P.N.M., Brown, V.K. and Elphick, C., 2010. Making Space for Nature: a review of England's wildlife sites and ecological network. *Report to DEFRA*, [online] (September). Available at: <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Making+Space+for+Nature+:+A+review+of+England+?+s+Wildlife+Sites+and+Ecological+Network#0> [Accessed 5 Jul. 2012].

Milbourne, P., 2012. Everyday (in) justices and ordinary environmentalisms: community gardening in disadvantaged urban neighbourhoods. *Local Environment*, [online] (May 2013), pp.37–41. Available at: <http://www.tandfonline.com/doi/abs/10.1080/13549839.2011.607158> [Accessed 25 Jun. 2013].

Millennium Ecosystem Assessment, 2005. *Millennium Ecosystem Assessment, 2005. Ecosystems and Human Well-Being: Biodiversity Synthesis*. [online] *World Resources Institute, Washington DC*, pp.1–100. Available at: <http://www.who.int/entity/globalchange/ecosystems/ecosys.pdf> [Accessed 21 May 2013].

Morgan, A., 2012. Inclusive place-based education for "Just Sustainability." *International Journal of Inclusive Education*, [online] 16(5-6), pp.627–642. Available at: <http://www.tandfonline.com/doi/abs/10.1080/13603116.2012.655499> [Accessed 25 Jun. 2013].

Morgan, A.D., 2009. Learning communities, cities and regions for sustainable development and global citizenship. *Local Environment*, [online] 14(5), pp.443–459. Available at: <http://www.tandfonline.com/doi/abs/10.1080/13549830902903773> [Accessed 25 Jun. 2013].

Morris, N., 2003. *Black and Minority Ethnic Groups and Public Open Space: Literature Review*. pp.1–38.

Moulin-Doos, C., 2013. Intercultural Gardens: the Use of Space By Migrants and the Practice of Respect. *Journal of Urban Affairs*, [online] 00(0), p.n/a–n/a. Available at: <http://doi.wiley.com/10.1111/juaf.12027> [Accessed 6 Jun. 2013].

Murphy, J.M., 2003. *Education for Sustainability Findings from the Evaluation Study*. pp.1–8.

Roe, J. and Aspinall, P., 2011. The restorative benefits of walking in urban and rural settings in adults with good and poor mental health. *Health & place*, [online] 17(1), pp.103–13. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/21094074> [Accessed 12 Mar. 2013].

Rose, E., 2012. Encountering place: a psychoanalytic approach for understanding how therapeutic landscapes benefit health and wellbeing. *Health & place*, [online] 18(6), pp.1381–7. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/22918064> [Accessed 10 Apr. 2013].

Schroeder, H., 2008. The felt sense of natural environments. *The Folio*, [online] pp.63–72. Available at: <http://66.129.68.164/folio/Vol21No12008/FolioTribute2008WEB_r.pdf#page=73> [Accessed 26 Jul. 2013].

Schroeder, H., 2012. Giving voice to the experiential value of natural environments. *The Humanistic Psychologist*, [online] pp.136–152. Available at: <http://www.tandfonline.com/doi/abs/10.1080/08873267.2011.642488> [Accessed 26 Jul. 2013].

Wheeler, B.W., White, M., Stahl-Timmins, W. and Depledge, M.H., 2012. Does living by the coast improve health and wellbeing? *Health & place*, [online] 18(5), pp.1198–201. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/22796370> [Accessed 10 Mar. 2013].

White, M.P., Alcock, I., Wheeler, B.W. and Depledge, M.H., 2013. Would You Be Happier Living in a Greener Urban Area? A Fixed-Effects Analysis of Panel Data. *Psychological Science*, [online] (April). Available at: <http://pss.sagepub.com/lookup/doi/10.1177/0956797612464659> [Accessed 24 Apr. 2013].