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Child Development, Ecopsychology, and Climate Change: 59303 - CCPX **4199 - 00**

This seminar examines how the physical environment and the mutations of climate change influence child development and mental health. It suggests new applications of psychological theory and science to help us understand how we are shaped by our ecosystems and the potential impacts of change. The readings are meant to draw out, focus, and enhance case studies that will be the focus of class work. Students will be expected to research and analyze published articles related to the course themes and apply them to real-life situations.

Using Interpretive Phenomenological Analysis (see https://www.google.com/books/edition/Interpretative_Phenomenological_Analysis/_-46EAAAQBAJ?hl=en&gbpv=0) the case studies will focus attention on the dynamics of people in everyday lived life as they navigate their ecosystems. Students will complete their own field project examining the psychological processes surrounding a particular ecosystem event.

Learning Goals & Objectives

- Learn to apply ecopsychology to clinical research and practice
- Recognize the interactive effects of hard wiring and the physical environment on identity and mental health
- Define basic assumptions about the psychological relationship between humans and their ecosystems
- Consider the impact of climate change on people and their communities

Class Structure

- Seminar Discussions
- Small Work Groups as needed

Course Policies

- **Readings:** Each week be prepared to discuss one reading thoroughly and familiarize yourself with key concepts and takeaways of all additional readings."
- **Respect:** We aim to create a space in which all members of the class feel comfortable sharing ideas freely. We should cultivate a respectful and friendly environment. Learning to discuss critically and courteously is essential for psychology (& life).
- **Attendance:** The small, discussion-focused nature of this class means everyone's presence is vital to its success. See the religious holiday policy below. Students will lose one point for unexcused missed classes. If you need to miss a class please contact the instructor.

Assignments and Grading

Assignments	Grade Points (out of 100)	Due Dates
Attendance, readings, participation in discussion group	15	Weekly (during class)
Environmental Autobiography	15	September 20 2023
Literature Review	30	October 18 2023
Final Field Study	40	October 25 - December 20 2023

Description of Environmental Autobiography Assignment

Think of an important early childhood place where you have lived. Describe the geography of the landscape (was it rural, or urban). How did people relate to this place? How did the place influence the people who lived there? How did you interact with this place? What aspect of yourself did you identify with this place? What would it be like for you if it changed; or, how did you feel when it already changed?

Literature Review

Choose a theme in one of these areas child development and the environment; adolescent development and the environment; diversity and ecosystems; or, climate change and mental health. Summarize and analyze the published literature on this topic. See this resource for guidance on writing a [literature review](#)

Final Field Study Assignment

Conduct a qualitative investigation of the lived experience of individuals who have been directly affected by a changing ecosystem. Use interviews to gather data. What happened? How were people affected? How many? Were children involved? How were they affected? Using

interviews, published resources, and course materials please write a field analysis of this event. See this resource for guidance [on writing a field analysis](#). This final assignment is a class presentation on your field project.

Course Topics & Reading Schedule

September 6, 2023: Introduction, Overview of Basic Concepts, Environmental Autobiography and Biophilia

Please complete your environmental autobiography. Either visit or remember a place that is meaningful to you. View photographs. Speak to people who shared this meaningful place with you. Draw a map of it. Describe it. Then spend thirty minutes writing about how this place is important to you.

Then upload your work to canvas where it will be visible to all your classmates. This will serve as an introduction to the course and to each other.

We will also consider the biophilia hypothesis, the hypothesized tendency of humans is to be closely related to nature.

Read:

Marcus, C. C. (2014). Environmental Autobiography. *Room One Thousand*, 2. <https://escholarship.org/uc/item/1rr6730h>

[Environmental Autobiography](#)

<https://museumnotes.blogspot.com/2011/05/environmental-autobiographies.html>

View:

 Autobiography to Research

 The power of autobiography: Djola Branner at TEDxHampshireCollege

 Environmental Autobiography

 The Power of a Story to Spark Environmental Change | Carmera Thomas-Wi...

Read:

Khan, P. J. (1997) Developmental Psychology and the Biophilia Hypothesis: Children's Affiliation with Nature. *Developmental Review* Volume 17, Issue 1, March 1997, Pages 1-61, <https://doi.org/10.1006/drev.1996.0430>

Barbiero, G. & Berto, R. (2021) Biophilia as Evolutionary Adaptation: An Onto- and Phylogenetic Framework for Biophilic Design. *Front Psychol*; 12: 700709. doi: 10.3389/fpsyg.2021.700709

Verbeek, P. & de Waal, Frans B. M. (2003) "The Primate Relationship with Nature: Biophilia as a General Pattern" in *Children and Nature*, P. Kahn & Kellert, S. p. 1-29

Lowenthal, D. (1961). Geography, Experience & Imagination: Towards a geographical Epistemology. *Annals of the Association of American Geographers* 51(3) p. 241-260.

View:

- ▢ Bronfenbrenner's Ecological Systems: 5 Forces Impacting Our Lives
- ▢ Psychology and Climate Change 1: Climate Change Happens Slowly

In Class:

Discuss Biophilia Hypothesis

September 13, 2023: The Ecological Underpinnings of Culture, Traditional Environmental Knowledge

Does our culture change how we relate to our ecosystems? Do our ecosystems change our cultures? How is this question answered in non-western contexts? What can we learn from an anthropological perspective?

Read:

INDIGENOUS MĀORI KNOWLEDGE AND PERSPECTIVES OF ECOSYSTEMS Garth R. Harmsworth (Te Arawa, Ngāti Tūwharetoa, Ngāti Raukawa)¹, Shaun Awatere (Ngāti Porou)² ¹ Landcare Research, Private Bag 11052, Palmerston North 4442, New Zealand ² Landcare Research, Hamilton, New Zealand
http://www.mwpress.co.nz/_data/assets/pdf_file/0007/77047/2_1_Harmsworth.pdf

Jonathan Coope (2019) How Might Indigenous Traditional Ecological Knowledge (ITEK) Inform Ecopsychology? *Ecopsychology* 11/3 <http://doi.org/10.1089/eco.2019.0005>

Fischer, R., & Boer, D. (2016). Values: the dynamic nexus between biology, ecology and

culture. *Current Opinion in Psychology*, 8, 155-160.

Readings of Interest :

Mauss, M. (1979). *Seasonal Variations of the Eskimo*. London: Routledge
https://www.google.com/books/edition/Seasonal_Variations_of_the_Eskimo/zRbl6DmN8vkC?hl=en&gbpv=1

Rappaport, R. (1984, orig.1968). *Pigs for the Ancestors: Ritual in the Ecology of a New Guinea People*. Yale University Press: New Haven. Chapters One – Six, p. 1 -243
https://www.google.com/books/edition/Pigs_for_the_Ancestors/sY4bAAAAQBAJ?hl=en&gbpv=1&dq=pigs+for+the+ancestors&pg=PR1&printsec=frontcover

View:

- ▶ Two-Eyed Seeing: Science and Traditional Ecological Knowledge | California Academy o...
- ▶ Modern Science, Native Knowledge
- ▶ Traditional Ecological Knowledge & Place-based Learning Communities

In Class:  **Environmental Influence on Culture**

September 20, 2023: The Ecological Underpinnings of the Mind

Does the physical environment influence neurological organization? Can our minds be considered to be reflections of the physical spaces we inhabit?

Required:

Hartig, T. & Khan, P.H.(2016) Living in Cities, Naturally. *Science*, May 21.

Lin YH, Tsai CC, Sullivan WC, Chang PJ, Chang CY. 2014. Does awareness effect the restorative function and perception of street trees?. *Front Psychol* 5:906, PMID: 25177309, <https://doi.org/10.3389/fpsyg.2014.00906>.

Ming, Xue, and Carly Ray. 2019. "Recognizing the Effect of Ecosystem Disruption on Human Health and Neurodevelopment" *International Journal of Environmental Research and Public Health* 16, no. 24: 4908. <https://doi.org/10.3390/ijerph16244908>

Readings of Interest :

Noë, A. (2009) *Out of our heads: why you are not your brain and other lessons from the biology of consciousness*. New York: Hill and Wang. Chapters One – Four, p.1-97 & epilogue p.183 – 186.

In Class:  **Environmental Affects on Neurodevelopment and Physical Self**

Due to Canvas: Proposal for Field Study

Sign up for Presentation Date and Time:

https://docs.google.com/spreadsheets/d/1bOzUmHbQ9LY0dNJnCp8LwKN0SQThV_rlZNCZjDVRQOk/edit?usp=sharing

September 27, 2023: Ecology and Child Development:

There are many levels at which the environmental world influences child development. We can look at health. We can focus on neurodevelopment. We can look at relationships. Do different spaces affect child development processes differently?

Readings:

Díaz, S. et al (2018). Assessing nature's contributions to people. *Science* 359, 270–272.

Fyfe-Johnson AL, Hazlehurst MF, Perrins SP, et al (2021). Nature and Children's Health: A Systematic Review. *Pediatrics*. 2021;148(4):e2020049155

Kellert, Stephen R. (2002). "Experiencing Nature: Affective, Cognitive and Evaluative Development in Children" in *Children and Nature: Psychological, Sociocultural and Evolutionary Investigations*, Kahn, Jr., P.H. and. Kellert, S.R. eds., MIT Press: Cambridge, London, p.117 – 153.

Nevers, P., Gebhard, U. & Billmann, E. & Mahecha (1997) Patterns of Reasoning Exhibited by Children and Adolescents in Response to Moral Dilemmas Involving Plants, Animals and Ecosystems, *Journal of Moral Education*, 26:2, 169-186, DOI: [10.1080/0305724970260205](https://doi.org/10.1080/0305724970260205)

View:

 Transforming the physical environment that shapes young children's health and develop...

October 4, 2023: Ecology and Adolescent Development:

Adolescence is a unique developmental period when young people begin to encounter their world without the protection of parental influences. In what ways are they impacted by their ecosystems? What do they think about climate change?

Required:

Council on Communications and Media. 2016. Media use in school-aged children and adolescents. *Pediatrics* 138(5):e20162592.

Song C, Joung D, Ikei H, Igarashi M, Aga M, Park BJ, et al. 2013. Physiological and psychological effects of walking on young males in urban parks in winter. *J Physiol Anthropol* 32:18, <https://doi.org/10.1186/1880-6805-32-18>.

Thiering E, Markevych I, Bruske I, Fuertes E, Kratzsch J, Sugiri D, et al. 2016. Associations of residential long-term air pollution exposures and satellite-derived greenness with insulin resistance in German adolescents. *Environ Health Perspect* 124(8):1291–1298, PMID: 26863688, <https://doi.org/10.1289/ehp.1509967>.

Younan D, Tuvblad C, Li L, Wu J, Lurmann F, Franklin M, et al. 2016. Environmental determinants of aggression in adolescents: Role of urban neighborhood green space. *J Am Acad Child Adolesc Psychiatry* 55(7):591–601, PMID: 27343886, <https://doi.org/10.1016/j.jaac.2016.05.002>.

View:

▶ Hoot Movie Trailer

▶ A Beautiful Planet Official Trailer #1 (2016) - Jennifer Lawrence Documentary HD

DUE TO CANVAS: Fieldwork Plan

October 11, 2023: Environments as Object Relationships

How do places become important to us? How do they become meaningful? Why do we attach to them? What is the psychological process by which space becomes a place?

Required:

Andrews, A. (2018). How Cognitive Frames about Nature May Affect Felt Sense of Nature Connectedness. *Ecopsychology*. March 61-71. <http://doi.org/10.1089/eco.2017.0014>

Bodnar, S. et al (2023). Object Relations Theory: A Useful Template for Understanding How People Relate to their Ecosystems. **Ecopsychology**.

Scannell, L. & Gifford, R (2010). The relations between natural and civic place attachment and pro-environmental behavior. *Journal of Environmental Psychology* Volume 30, Issue 3, Pages 289-297.

Touloumakos, A. K., & Barrable, A. (2020). Adverse Childhood Experiences: The Protective and Therapeutic Potential of Nature. *Frontiers in psychology*, 11, 597935.
<https://doi.org/10.3389/fpsyg.2020.597935>

October 18: The Turn, or, Return, to Animals

Animals have been an area of exploration for researchers because they can usher in a return to health - both physical, psychological, and moral.

Read:

Barker SB, Wolen AR. 2008. The benefits of human-companion animal interaction: areview. *J Vet Med Educ* 35(4):487–495, PMID: [19228898](https://pubmed.ncbi.nlm.nih.gov/19228898/),
<https://doi.org/10.3138/jvme.35.4.487>.

8

Kamioka H, Okada S, Tsutani K, Park H, Okuizumi H, Handa S, et al. 2014. Effectiveness of animal-assisted therapy: A systematic review of randomized controlled trials. *Complement Ther Med* 22(2):371–390, PMID: [24731910](https://pubmed.ncbi.nlm.nih.gov/24731910/),
<https://doi.org/10.1016/j.ctim.2013.12.016>.

Pilar Hernandez-Wolfe and Victoria Eugenia Acevedo 2021.Helping Injured Animals Helps the Helper, Too: Vicarious Resilience and the Animal–Human Bond
Ecopsychology. Mar 2021 13(1) 19-26.<http://doi.org/10.1089/eco.2020.0038>

View:

▶ March of the Penguins Official Trailer #1 - (2005) HD

▶ Pet Therapy at Johns Hopkins Hospital

▶ Animal Assisted Therapy: The power of pets?

Readings of Interest: :

Myers Jr., O.E. & Saunders, Carol D. (2002) “Animals as Links Toward Developing Caring Relationships in the World.” *Children and Nature: Psychological, Sociocultural and Evolutionary Investigations*, Kahn, Jr., P.H. and. Kellert , S.R. eds., MIT Press: Cambridge, London, p. 153-179.

Kalof, L. “The Human Self and Animal Other: Exploring Borderland Identities” in *Identity and the Natural Environment*, Clayton, S. & Opatow, S. eds., MIT:Cambridge, London, p. 165-179.

Myers, Jr. , O.E.. (2007). *The significance of children and animals*. Perdue University Press: West Lafayette, Indiana.

In Class:

Inter-related

Due To Canvas October 18 at midnight: Literature Review

October 25, 2023: The Turn to Technology:

The technological turn in our society has negative and positive effects on our psychological functioning and on our relationship with the outside world.

Davidson, T. (2021) The (d)evolution of a technological species: A history and critique of ecopsychology's constructions of science and technology
Journal of the History of Behavioral Science <https://doi.org/10.1002/jhbs.22134>

Huttunen, R. & Kakkori, L. (2021) Heidegger's critique of the technology and the educational ecological imperative. *Educational philosophy and theory*
<https://doi.org/10.1080/00131857.2021.19034>

Kahn, P. H., Jr. (2018). Technological nature and human wellbeing. In M. van den Bosh & W. Bird (Eds), *Oxford Textbook of Nature and Public Health* (pp. 160-164). Oxford, UK: Oxford University Press.

Kaufman, Jason A. and G. David McNay.(2017) At the Intersection of Technology and Nature: The Potential for a Bright Green Future. *Ecopsychology* 9/4 156-161
<http://doi.org/10.1089/eco.2017.0022>

Readings of Interest: :

Heidegger, M. (1977). The question concerning technology and other essays, trans. William Lovitt. New York: Harper. Part I, p. 3 – 49.
https://monoskop.org/images/4/44/Heidegger_Martin_The_Question_Concerning_Technology_and_Other_Essays.pdf

View:

 Ecopsychology: Reinventing the Human-Nature Relationship in the Digital Age, Part 1 - ...

 Technology can save the planet | Rune Westergård | TEDxVasa

📺 The Environmental Implications of Digital Technologies

In Class:

<https://docs.google.com/presentation/d/121l61MhTeRejPs3hxNIJyYT0Ogo5JHkkvNOUxIgpqo/edit?usp=sharing>

Due to Canvas: First Three Presentations

November 1, 8 & 15 2023: Is there a link between climate change and mental health?

Many researchers have demonstrated a specific set of symptoms that can be attributed to climate distress and change.

Read November 1: (TO BE SPLIT UP AMONG SEMINAR MEMBERS)

Albrecht, G., Sartore, G-M., Connor, L., Higginbotham, N., Freeman, S., Kelly, B., Stain, H., Tonna, A., & Pollard, G. (2007). "Solastalgia: the distress caused by environmental change". *Australasian Psychiatry* 15 (1): 95-98.

Albrecht, G. (2005). Solastalgia, a new concept in human health and identity. *Philosophy Activism Nature* 3:41-44.

Albrecht G. (2011) Chronic Environmental Change: Emerging 'Psychoterratic' Syndromes. In: Weissbecker I. (eds) *Climate Change and Human Well-Being. International and Cultural Psychology*. Springer, New York, NY.
https://doi.org/10.1007/978-1-4419-9742-5_3

Bodnar, S. "It's Snowing Less: Narratives of a Transformed Relationship between humans and their environments" in *Vital Signs* N. Totton, ed. Karnac Press.

Clayton, S. (2020) Climate anxiety: Psychological responses to climate change *Journal of Anxiety Disorders* Volume 74, August 2020, 102263

Doherty, T. J., & Clayton, S. (2011). The psychological impacts of global climate change. *American Psychologist*, 66(4), 265–276. <https://doi.org/10.1037/a0023141>

Marks, Elizabeth and Hickman, Caroline and Pihkala, Panu and Clayton, Susan and Lewandowski, Eric R. and Mayall, Elouise E. and Wray, Britt and Mellor, Catriona and van Susteren, Lise, (2021) Young People's Voices on Climate Anxiety, Government Betrayal and Moral Injury: A Global Phenomenon. *The Lancet*.
<https://ssrn.com/abstract=3918955> or <http://dx.doi.org/10.2139/ssrn.3918955>

Van Susteren, L. (2018) The psychological impacts of the climate crisis: a call to action *BJPsych International* , Volume 15 , Issue 2 , May 2018 , pp. 25 - 26 DOI:

<https://doi.org/10.1192/bji.2017.40>

Swim, J. K., Markowitz, E. M., & Bloodhart, B. (2012). Psychology and climate change: Beliefs, impacts, and human contributions. In S. D. Clayton (Ed.), *The Oxford handbook of environmental and conservation psychology* (pp. 645–669). Oxford University Press <https://doi.org/10.1093/oxfordhb/9780199733026.013.0033>

View:

▶ TEDxSydney - Glenn Albrecht - Environment Change, Distress & Human Emotion Sola...

DUE TO CANVAS: Next Three Presentations

Read November 8, 2023 (TO BE SPLIT UP AMONG SEMINAR MEMBERS)

Bodnar, S. (2008) “Wasted and bombed: clinical enactments of a changing relationship to earth”, *Psychoanalytic Dialogues* 18:484-512.

Cunsolo, A., Ellis, N.R. Ecological grief as a mental health response to climate change-related loss. *Nature Clim Change* 8, 275–281 (2018).
<https://doi.org/10.1038/s41558-018-0092-2>

de Vries S, Verheij RA, Groenewegen PP, Spreeuwenberg P. 2003. Natural environments—healthy environments? An exploratory analysis of the relationship between greenspace and health. *Environ Plann A* 35(10):1717–1731, <https://doi.org/10.1068/a35111>.

Groenewegen PP, van den Berg AE, Maas J, Verheij RA, de Vries S. 2012. Is a green residential environment better for health? If so, why?. *Ann Assoc Am Geogr* 102(5):996–1003, <https://doi.org/10.1080/00045608.2012.674899>.

Lachowycz K, Jones AP. 2014. Does walking explain associations between access to greenspace and lower mortality?. *Soc Sci Med* 107:9–17, PMID: [24602966](https://pubmed.ncbi.nlm.nih.gov/24602966/),
<https://doi.org/10.1016/j.socscimed.2014.02.023>.

O'Connor, W.A. (2021). Ecosystems Theory and Clinical Mental Health, *Psychiatric Annals* January 23, 2021 <https://doi.org/10.3928/0048-5713-19770701-08>

DUE TO CANVAS: Next Three Presentations

Read November 15, 2023 (TO BE SPLIT UP AMONG SEMINAR MEMBERS)

Theorists as early as Searles have asserted that the physical environment also affects mental health and development. How do researchers think about this today?

Astell-Burt T, Mitchell R, Hartig T. 2014. The association between green space and mental health varies across the lifecourse. A longitudinal study. *J Epidemiol Community Health* 68:578–583, <https://doi.org/10.1136/jech-2013-203767>.

Bratman, et al (2019). Nature and Mental Health: An Ecosystem Service Perspective, *Science Advances* 5, p. 1-14.

Kahn, P. J. (2002). “Children’s Affiliations with Nature: Structure, Development and the Problem of Generational Amnesia” In *Children and Nature: Psychological, Sociocultural and Evolutionary Investigations*. Kahn, Jr., P.H. and. Kellert, S.R. eds. MIT Press: Cambridge, London, 93 -117.

Phillipsborn, R.P. & Chan, K. (2018). Climate Change and Global Child Health, *Pediatrics* 141 (6) e20173774; DOI: <https://doi.org/10.1542/peds.2017-3774>

Readings of Interest:

Gebhard, U., Nevers, P., Billmann-Mahecha, E. (2003). “Moralizing Trees: Anthropomorphism and Identity in Children’s Relationships to Nature” in *Identity and the Natural Environment*, Clayton, S. & Opatow, S. eds., MIT: Cambridge, London, p.91-113.

Heerwagen, J.H. and Orians, G.H. (2002). The Ecological World of Children” in *Children and Nature: Psychological, Sociocultural and Evolutionary Investigations*. Kahn, Jr., P.H. and. Kellert, S.R. eds. MIT Press: Cambridge, London, p. 29-65

Kahn, P. (2003). “The Development of Environmental Moral Identity” in *Identity and the Natural Environment*, Clayton, S. & Opatow, S. eds MIT: Cambridge, London, p.133-135.

Kals, E. & Ittner, H. (2003). “Children’s Environmental Identity: Indicators and Behavioral Impacts” *Identity and the Natural Environment*, Clayton, S. & Opatow, S. eds., MIT: Cambridge, London, p.135 – 159.

DUE TO CANVAS: Next Three Presentations

November 22, 2023 HAPPY THANKSGIVING

November 29, 2023 Ecosystems in black and brown communities

The impact of ecosystem change affects communities differently; most researchers feel that climate change will disproportionately affect people of color across international boundaries. From a developmental psychological perspective we can observe the impact of environments of the families and communities that children call home.

Read:

Dadvand P, Wright J, Martinez D, Basagaña X, McEachan RRC, Cirach M, et al. 2014. Inequality, green spaces, and pregnant women: roles of ethnicity and individual and neighbourhood socioeconomic status. *Environ Int* 71:101–108, <https://doi.org/10.1016/j.envint.2014.06.010>.

Mitchell, R. et al. (2008) Effect of exposure to natural environment on health inequalities: an observational population study *The Lancet*, Volume 372, Issue 9650, 1655 - 1660
DOI:[https://doi.org/10.1016/S0140-6736\(08\)61689-X](https://doi.org/10.1016/S0140-6736(08)61689-X) DOI:<https://doi.org/10.1016/S0140-6>

View:

- ▶ This is just how unfair climate change is
- ▶ How climate change is making inequality worse - BBC News
- ▶ Climate and Inequality | Robert Reich :
- ▶ Psychology and Climate Change 3: Wildfires

DUE TO CANVAS: Next Three Presentations

December 6, December 13, and December 20: These Last Few Weeks of Class Will focus on: 1) an Analysis of Current Climate Events, 2) the Psychological Response to Them and 3) the Role of Ecotherapy

Read:

Each week we will be reviewing DEWlab interviews and surveys about people's responses to current climate events. Given that this material is confidential, we will be reading and discussing this material together in class. We will also be focusing on ecotherapy and other processes of resilience.

Bodnar, S. (2023) Introduction to the Special Issue: A Collaborative Definition of Ecotherapy. *Ecopsychology* (online ahead of print).

Selections from the Ecopsychology special issue on ecotherapy. *Ecopsychology* (2023 ahead of print) - to be determined upon access.

December 6: Smoke and Fire

[Tracking air Quality in the US](#)

[Tracking global Wildfires](#)

DUE TO CANVAS: Next Three Presentations

December 13: Water and Flooding

[American Geological Sciences Tracking of Flood Events](#)

[Global Flood Monitor](#)

DUE TO CANVAS: Next Three Presentations

December 20: Heat and Hope

[NASA: Tracking Global Temperature Change](#)

[NYTimes Global Heat Tracker](#)

[NYTimes: Tracking Dangerous Heat Across the US](#)

DUE TO CANVAS: Next Three Presentations

Suggested Books

Carson, Rachel. (Steingraber, S. ed.) 2018. *Silent Spring and Other Writings on the Environment*. Library of America, Literary Classics of the United States, New York, New York.

https://www.google.com/books/edition/Rachel_Carson_Silent_Spring_Other_Writin/-6dNEAAAQBAJ?hl=en

Clayton, S. & Opatow, S. eds.(2003) *Identity and the Natural Environment*., MIT:Cambridge, London.

https://www.google.com/books/edition/Identity_and_the_Natural_Environment/Wwf0oVe2rHIC?hl=en&gbpv=1&dq=Opatow+Clayton&pg=PP11&printsec=frontcover

Kahn, P. & Kellert, S. (2003) *Children and Nature*. MIT: Cambridge, London

https://www.google.com/books/edition/Children_and_Nature/RCjdKjI_qIcC?hl=en&gbpv=1&dq=Kahn+and+Kellert+Children+and+nature:+&pg=PR7&printsec=frontcover

Kahn, P. (1999) *The Human Relationship with Nature: Development and Culture*, MIT: Cambridge, London
https://www.google.com/books/edition/The_Human_Relationship_with_Nature/PwLCc4Qzo9EC?hl=en&gbpv=1&dq=The+HUMAN+Relationship+with+Nature&pg=PP13&printsec=frontcover

Rosenblum (2011). *The Meaning of Difference: American Constructions of race, sex and gender, social class, sexual orientation and disability*. McGraw-Hill.

Tuan, Yi-Fu (1977) *Space and Place: The Perspective of Experience* University of Minnesota Press: Minneapolis.
https://www.google.com/books/edition/Space_and_Place/M9SLfxpkscgC?hl=en&gbpv=1&dq=space+and+place+tuan&pg=PP7&printsec=frontcover

Full Reference List

Albrecht, G. (2005). Solastalgia, a new concept in human health and identity. *Philosophy Activism Nature* 3:41-44.

Albrecht, G., Sartore, G-M., Connor, L., Higginbotham, N., Freeman, S., Kelly, B., Stain, H., Tonna, A., & Pollard, G. (2007). "Solastalgia: the distress caused by environmental change". *Australasian Psychiatry* 15 (1): 95-98.

Bateson, G. (1979). *Mind and Nature: A Necessary Unity* (Advances in Systems Theory, Complexity, and the Human Sciences). Hampton Press. Chapter VI – VIII, p.139 – 200.

Bodnar, S. (2008) "Wasted and bombed: clinical enactments of a changing relationship to earth", *Psychoanalytic Dialogues* 18:484-512.

Bodnar, S. "Its Snowing Less: Narratives of a Transformed Relationship between humans and their environments" in *Vital Signs* N. Totton, ed. Karnac Press.

Bronfenbrenner (1979). *The Ecology of Human Development*. Cambridge: Harvard University Press. Preface and Chapter One – Five, p.xi – 105.

Clayton, S. (2003) "Environmental Identity: A Conceptual and Operational Definition" in *Identity and the Natural Environment*, Clayton, S. & Opatow, S. (eds) MIT:Cambridge, London. P. 45 - 67

Frumppkin, et al. (2017) *Nature Contact and Human Health: A Research Agenda*. *Environmental Health Perspective*, July.
<https://doi.org/10.1289/EHP1663>

Heidegger, M. (1977). *The question concerning technology and other essays*, trans. William Lovitt. New York: Harper. Part I, p. 3 – 49.

Kahn, P. (2003) "The Development of Environmental Moral Identity" in *Identity and the Natural Environment*, Clayton, S. & Opatow, S. eds MIT:Cambridge, London, p.133-135.

Kahn PH Jr., Weiss T and Harrington K (2018) Modeling Child–Nature Interaction in a Nature Preschool: A Proof of Concept. *Front. Psychol.* 9:835.
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Teachers College Policies

Reasonable Accommodations: The College will make reasonable accommodations for persons with documented disabilities. Students are encouraged to contact the Office of Access and Services for Individuals with Disabilities (OASID) for information about registration. You can reach OASID by email at oasid@tc.columbia.edu, stop by 163 Thorndike Hall or call

212-678-3689. Services are available only to students who have registered and submitted appropriate documentation. As your instructor, I am happy to discuss specific needs with you as well. Please report any access related concerns about instructional material to OASID and to me as your instructor.

IN (Incomplete) Grade: The grade of Incomplete will be assigned only when the course attendance requirement has been met but, for reasons satisfactory to the instructor, the granting of a final grade has been postponed because certain course assignments are outstanding. If the outstanding assignments are completed within one calendar year from the date of the close of term in which the grade of Incomplete was received and a final grade submitted, the final grade will be recorded on the permanent transcript, replacing the grade of Incomplete, with a transcript notation indicating the date that the grade of Incomplete was replaced by a final grade. If the outstanding work is not completed within one calendar year from the date of the close of term in which the grade of Incomplete was received, the grade will remain as a permanent Incomplete on the transcript. In such instances, if the course is a required course or part of an approved program of study, students will be required to re-enroll in the course including repayment of all tuition and fee charges for the new registration and satisfactorily complete all course requirements. If the required course is not offered in subsequent terms, the student should speak with the faculty advisor or Program Coordinator about their options for fulfilling the degree requirement. Doctoral students with six or more credits with grades of Incomplete included on their program of study will not be allowed to sit for the certification exam.

Communication: Teachers College students have the responsibility for activating the Columbia University Network ID (UNI) and a free TC Gmail account. As official communications from the College – e.g., information on graduation, announcements of closing due to severe storm, flu epidemic, transportation disruption, etc. -- will be sent to the student's TC Gmail account, students are responsible for either reading email there, or, for utilizing the mail forwarding option to forward mail from their account to an email address which they will monitor.

Observance of Religious Holidays: It is the policy of Teachers College to respect its members' observance of their major religious holidays. Students should notify instructors at the beginning of the semester about their wishes to observe holidays on days when class sessions are scheduled. Where academic scheduling conflicts prove unavoidable, no student will be penalized for absence due to religious reasons, and alternative means will be sought for satisfying the academic requirements involved. If a suitable arrangement cannot be worked out between the student and the instructor, students and instructors should consult the appropriate department chair or director. If an additional appeal is needed, it may be taken to the Provost.

Sexual Harassment and Violence Reporting: Teachers College is committed to maintaining a safe environment for students. Because of this commitment and because of federal and state regulations, we must advise you that if you tell any of your instructors about sexual harassment or gender-based misconduct involving a member of the campus community, your instructor is required to report this information to the Title IX Coordinator, Janice Robinson. She will treat this information as private, but will need to follow up with you and possibly look into the matter. The Ombuds officer for Gender-Based Misconduct is a confidential resource

available for students, staff and faculty. “Gender-based misconduct” includes sexual assault, stalking, sexual harassment, dating violence, domestic violence, sexual exploitation, and gender-based harassment. For more information, [visit this link](#).

Academic Integrity: Students who intentionally submit work either not their own or without clear attribution to the original source, fabricate data or other information, engage in cheating, or misrepresentation of academic records may be subject to charges. Sanctions may include dismissal from the college for violation of the TC principles of academic and professional integrity fundamental to the purpose of the College.