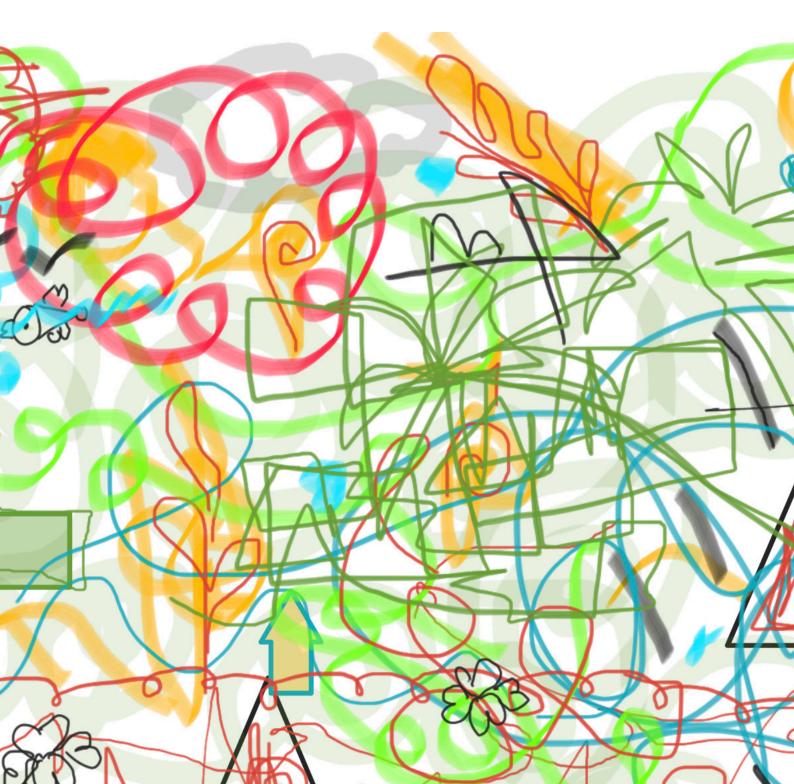
# Looking Back, Looking Forward

materials for engaging with this moment on earth



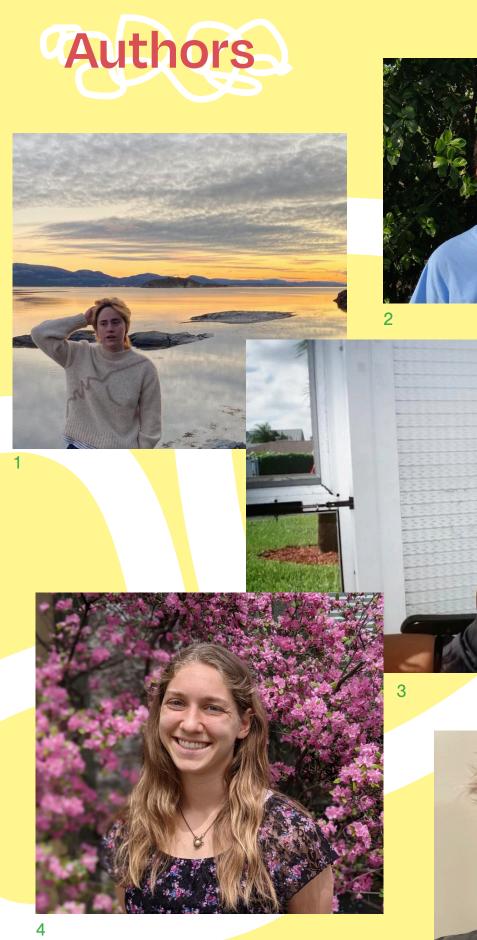


ENVS 091 Capstone Seminar Swarthmore College Spring 2021



This handbook was written on Lenapehoking, the name given to the land by the Lenape people. Lenape means "the original people," which is what they were called by neighboring nations including the Mahican and the Shawnee. The Lenape are made up of four distinct but interconnected communities: The Wolf (Tùkwsit) Clan, the Turtle (Pùkuwànku) Clan, the Turkey (Pële) Clan, and the Nanticoke nation, all of which originally lived near the Chesapeake Bay but moved north after early 1600's colonization. In the 1700s, through a combination of legitimate and illegitimate treaties, colonizers pushed the Lenape off of their land and dispersed them across Turtle Island in a series of forced migrations that continued well into the 1900s. At the time of this writing, there exist federally recognized Lenape nations in Oklahoma (Delaware Nation), Wisconsin (Stockbridge Munsee Nation), and Ontario (Nanticoke Lenni-Lenape Nation). There are also many more non-federally recognized nations in Pennsylvania, New Jersey, and New York. Rather than speaking of the Lenape and of Lenapehoking as existing exclusively in the past, we want to bring to light the ways that the Lenape are still actively engaged with land and community. Lenapehoking is home to a wide diversity of plant and animal life. Kwshatay, or woodland tobacco, is considered a sacred plant as it is for many other Indigenous nations. It can be used ceremonially as an offering to life, or can be used medicinally for toothaches, indigestion, among other uses. Kwhshatay is often mixed with kelelenikanakw, or sumac, which adds an aroma and flavor to the mixture. Kelelenikanawk is also used for teas, and the vibrant red color allows for it to be an effective dye. Winakw, or sassafras, is used for teas and medicines, and the bark can be used for its oils which work as insect repellents and pain relievers. The Lenape, alongside working with this rich biodiversity, are actively working to maintain strong and resurgent communities throughout Turtle Island. In Pennsylvania, the Lenape Nation of Pennsylvania has been engaging in a river journey along the Wihituck (Delaware River) to raise awareness about Lenape culture, to revive spirituality, and to engage in community building with academic institutions and other organizations interested in learning about and supporting Indigenous efforts. We invite you to continue learning about the Lenape through your own research, visiting museums, and engaging in conversations with people. We also invite you to learn more about the people who are indigenous to the land on which you are living and working. Part of this learning must be learning about ways to actively get involved in resurgence work, as well as broader decolonization efforts.

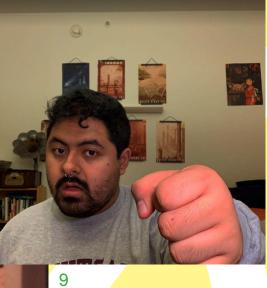
This handbook could not have been written without the immense support and guidance from the professor of the ENVS capstone, Giovanna Di Chiro, and we thank her for dreaming radically. We would also like to thank other members of the ENVS committee for all that they have taught us during our time at Swarthmore, which greatly influenced our perspectives and everything we included in this handbook. Finally, we would like to thank every staff member, faculty member, alumni, and current students that we interviewed and spoke to while creating this handbook. These perspectives coming from the broader community greatly informed the content of the handbook. And to anyone reading this handbook, thank you for your time and commitment to imagining possible futures.















1) Kristina Stallvik '21 is a double major in environmental and gender studies. They are interested in exploring alternative narratives of ecology, traditional photographic techniques, and the practice of archiving zine publications.

2) Declan Murphy '21 is an Environmental Studies and Biology major from Philadelphia. Over the past two years, he has been involved in the Climate Community PSRF project and the Climate Essentials program. He is interested in environmental education and communication, and can't wait to see ENVS at Swat grow!

3) Shani Mahotiere '21: "I always knew in my heart that I wanted to be someone that would help change the world. And environmental studies has helped me slowly grow into the person I always dreamed of being. Now just wait until I've fully bloomed. And don't forget to enjoy the ride along the way."

4) Chelsea Semper '21 is a Biology major with minors in Environmental Studies and English from Northern New Jersey. At Swarthmore, she has been involved with several sustainability related positions such as being a Green Advisor and the Crum Woods PSRF this past year. Chelsea also plays varsity field hockey and club ultimate frisbee for the College and enjoys spending her time reading, hiking, running, cooking, and doing the New York Times crossword puzzle.

5) My name is Lucy Fetterman ('22) and I am a current Junior with a Special Major in Sustainable Communities and a double minor in Spanish and Peace and Conflict Studies. Originally from New York, I am interested in taking seriously what abolition, reparations and decolonization look like at Swat, in my life, and in the context of existing institutions more broadly.

6) Meena Chen '21 is from Westchester, New York and is a recent graduate of Swarthmore, where she studied Environmental Studies, Religion, and Dance. She is a dancer and choreographer and is interested in the intersection of art and social change.

7) Ananya Bhattacharya '21 is an Environmental Studies and Economics major from Massachusetts. She likes to spend time outdoors with her chocolate labrador, play guitar, and eat sushi.

8) Julie Xu '22 is a biology and environmental studies double major. She loves combining the two elements of her specialties together to work with others to find solutions to our current environmental crisis. She also loves to draw, paint and play with her 11 birds!

9) Oswaldo Morales '21 is a recent Engineering and Environmental Studies graduate from Swarthmore who calls his family and community home. He is a Doris Duke Conservation Scholar through Yale's School of the Environment, and is passionate about decolonial work and environmental education, particularly for k-12 students. He really loves hot drinks and soups.



In 1990, through a number of conversations between students and faculty, the Environmental Studies (ENVS) program was launched at Swarthmore College. The new program was committed to interdisciplinary learning and providing students with opportunities for deep engagement in environmental work. At that time, there was no major but rather an environmental studies concentration (which functioned similarly to current academic minors) that was open to students from all disciplines across the College. An ENVS committee was formed with less than ten professors from various departments including Engineering, Philosophy, Biology, Religion, and Economics, and worked closely to support student interests on a host of environmentally-related projects. With a five-course curriculum, this was the only environmental program offered at the College until 2015, when the interdisciplinary ENVS major program was first created, graduating its first class in 2019.

This handbook was co-created by nine ENVS majors at Swarthmore college during the spring of 2021. During this unusual and spatially-scattered virtual term, we find ourselves in a moment of particular historical emergency. Rooting our capstone course in the urgency of intersecting crises such as the pandemic, escalating climate disruption, rising rates of poverty, and racial and gender injustice, we asked the question: how should college students in ENVS learn about and tackle these interwoven issues? While this may seem like a daunting inquiry, it continually grounded us in the importance of situating ENVS practices - teaching, research, policy work, activism, art making, etc... - in a particular temporal and geographic context. Drawing inspiration from Grace Lee Boggs' famous articulation, "What time is it on the clock of the world?," we framed our work together this term as both looking forwards and looking backwards from our current position on her clock. We asked ourselves, how should institutions of higher education, and in particular, ENVS programs, respond to the challenges that the world will face as we negotiate living in the here and now?

In order to formulate our own answers to this question, we began first by looking backwards at the possibility for ENVS to create and draw from an archive of the program's existing knowledge and accomplishments. To do so, we interviewed faculty, staff, current students, and alums with a focus on anecdotal storytelling and envisioning new possibilities for both the program and the world at large. We considered the nuance and limitation of the archive - that is, which ideas and practices are collected, preserved, and archived, and which are overlooked or discounted. Which particular stories come to represent ENVS curricula and engagements? In our archival practice we attempted to generate alternative narratives to both inform the present and transform the future. To these ends, we created the second prong integral to our capstone work: an imaginative zine/syllabus/handbook in which each of us contributed to visioning the future of an ENVS curriculum equipped to respond to this time on the clock of the world. In the following eight chapters we each chose a particular angle from which to absolve normative conceptions of ENVS in favor of radical, just, communal thriving. Rather than being understood as comprehensive, this syllabus should be considered a collection of topics and ideas in which, from our embodied and historically situated positions, we feel passionate about fostering in the next generation of environmental studies.

We think it is imperative that ENVS at Swarthmore - as well as at all educational institutions - can evolve to reflect student interest and respond to the complex social and ecological crises currently unfolding on a global scale. Amidst a multiplicity of transition and tipping points, this

handbook is an attempt to define the boundaries and concerns of ENVS while thinking critically about what an ENVS major should prioritize in its learning objectives. In order to act boldly and usher in just transition in the face of an escalating climate crisis further exacerbating existing inequalities and marginalization, we must start by redefining the very scope, concern, and pedagogical approach of environmental studies.

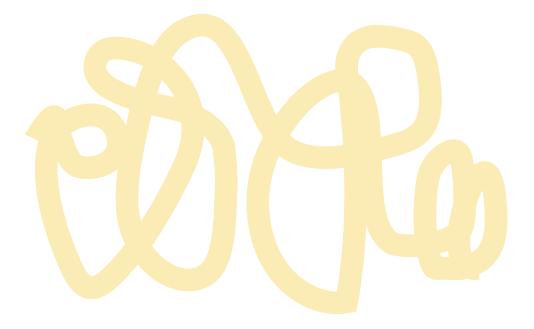
#### 🍉 How to Use This Handbook 🌖

With the potential to be utilized both inside of academic contexts and elsewhere, this handbook is meant to be engaged with at your own pace. Representing a compilation of the interests of ENVS seniors at Swarthmore College as we reflect on our own educational experiences, each chapter delves into a particular theme ranging from economic structures to the power of hip hop. Loosely organized from more abstract, overarching concepts down to particular structures and skills, each section contains keywords, questions, resources, foundational thinkers and activities to help the reader engage with potentially unfamiliar topics and provide avenues for exploration much deeper than the base this zine provides. Utilizing the same internal structure within each chapter allows for connections to easily arise via overlapping keywords and critical questions. Rather than require a certain action or adherence to the flow presented by this handbook, we hope these materials are interacted with freely and creatively - inspiring the practice of speculating possibilities of a future world.



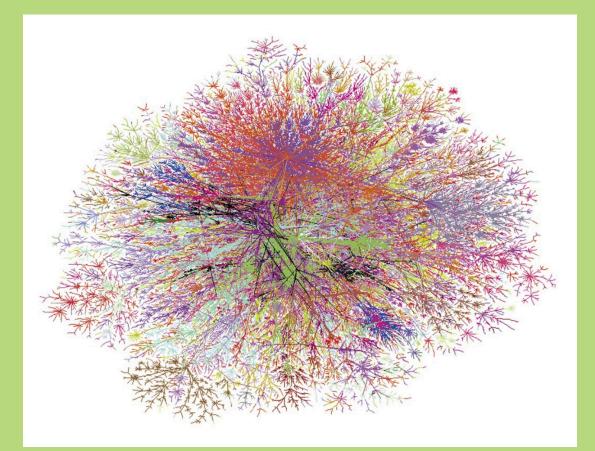


 The Unbound Individual: Entanglement and Environmental Affect
 Challenging the Concept of Nature-Culture Binary & Imagining A Future For Nature Conservation and Conservation Biology
 Decolonial Science and Technology
 Restor(y)ation, Land Reciprocity, and Indigenous Kinship
 Toward a Care-Based Economy
 Radical Rap: Embracing Hip-Hop's Role in Abolition and Environmental Justice
 Creating Community through Environmental Pragmatism and Decolonization: Living our Imagined Futures
 Redefining Education



chapter 1 kristina stallvik

## The Unbound Individual: Entanglement and Environmental Affect



#### Description

This first chapter of our syllabus focuses around the foundational questions: how has the human as an individual been crafted in our cultural consciousness? And how may we need to problematize this basic conception in order to move towards a more just idea of community, reciprocity, and caring for one another? In order to understand the multiplicity of crises we are living through now, it is crucial to first look back at what the human has historically been understood as and what entangled epistemologies have contributed to this understanding. This is an essential topic to include in any environmental studies curriculum because if you look at the ways "sustainability" has been articulated by the non-indigenous West, not only is there an unexamined/naturalized assumption about the power of the "individual," to an even greater detriment, there is an understanding that humans are impermeable, independent beings. With this idea in mind - not understanding ourselves as enmeshed in our surrounding ecosystems we can propose "green" solutions which don't challenge the necessarily exploitative nature of racial capitalism. We can also perpetuate the inability to be emotionally affected by and extend love towards non human nature and human "others." Why should we invest in caring for the environment (including building meaningful relationships with all of its inhabitants) if we cannot love it and cannot see ourselves as inseparable from it?

Colonialism and its legacies are responsible for shaping representations of humanness and a conceptualization of the immutably individual Human. The construction of the Western white, able-bodied, cis, man as the individual most worthy of being considered Human has been so successfully effaced that this figure can naturally stand in for all of humanity. All other embodiments become relegated as "other" - not fully human. What we need is to perform epistemic disobedience; to recognize that this image has in fact been constructed to aid and uphold historical power structures, but is not inherent to existence. As literary critic Walter Mignolo states, "the human is therefore the product of a particular epistemology, yet it appears to be and is accepted as a naturally independent entity existing in the world." The epistemology in question dates back to the Renaissance with imagery such as Leonardo da Vinci's "Vitruvian Man" which cemented a particular racialized, gendered depiction of the Human.

The materials in this chapter aim to unveil the multiple ways in which we can question individuality and the Human in service of extending love and upholding mutual interdependence. On a multitude of levels - anatomic, genetic, developmental, emotional - we cannot be considered "individuals," as such. As biologist Scott Gilbert understands it, "we are all holobionts by birth." This means we are actually a persistent community of symbionts. It's not that we as "humans" are merely permeable to external microbes and beings which support us, but moreso that the very notion of the human is destabilized such that those other microbes are indistinguishable from ourselves. Aside from scientific interventions, I am interested in bringing a deep consideration of emotion into the conversations of environmental studies. One way to do so is to take seriously the modifying power of being affected by relationships. As Judith Butler puts it, through love and through grief we are "undone" by others. The pain and joy we cultivate through kinship exemplifies the existence of a communally entangled emotional world.

Butler also reminds us not to romanticize these interconnections. In ignoring our entangled realities, we cannot address the ways in which fundamental interdependence between living things has the potential to further subjugate marginalized communities. For example, during this pandemic, who is able to stay safe and who is forced to put their life on the line to perform

"essential" work? Covid-19 has rendered our bodily connectivity obvious to even the most privileged, yet this reality exists outside of pandemic circumstances as well. In separating the Human from non-human nature and the human "other," the Human gains a false sense of safety surrounding the climate crises and environmental pollution in the global North. While the pandemic clearly displays which embodiments are seen as worthy of protection, the slow violence of incinerators, power plants, factory farming, etc.. have been sending the same message since the dawn of industrialization. We cannot grapple with these issues if we leave our conception of the individual Human untouched. We cannot hope to envision exciting and creative formulations of community if we don't understand the truly entangled existence of all life and material.

#### **Goals/Objectives/Visions**

- Recognize the constructed nature of epistemologies we take for granted
- Understand how questioning frameworks of individuality is central to engaging with the rest of this syllabus : education, environmental justice, economics, arts, community building, science/technology, etc...
- Imaginatively envision what it could look like to embrace collectivity
- Contemplate how to foster the ability to extend love across species boundaries and towards embodiments not considered fully "human"
- Think about the environment itself as a system of interlocking relationships

#### Keywords E Foundational Thinkers

Holobiont	Sylvia Wynter
Affect	Rosi Braidotti
Boundaries	
Human / Man /	Greta Gaard
the individual	Donna Haraway
Entanglement	Nicole Seymour
Kinship	
Multispecies	Judith Butler
Collectivity	Scott Gilbert
Community	
The "Other"	Karen Barrad
Love	Anna Tsing

### **Critical Questions**

- What is at stake for the goals of environmental justice when we do not privilege a collective holobiont framework?
- What conditions are necessary for us to love and be affected by non-human nature and the human "other"? What barriers currently stand in the way of this?
- What does an educational experience (course, department, institution, etc..) look like that does not center the individual?
- What happens to the intersection of environmental studies + gender and sexuality studies when it incorporates post-human frameworks?
- How does art relate to the practice of building and honoring collectivity?

#### **Materials**

#### Readings

- Nicole Seymour. "The Queerness of Environmental Affect." Affective Ecocriticism. UNP Nebraska, 2018. 235–. Print.
- Greta Gaard. "Posthumanism, Ecofeminism, and Inter-Species Relations." Routledge Handbook of Gender and the Environment. 2017. Print.
- Judith Butler. "Human Traces on the Surface of the World." Contactos Press. 2020.
- Tsing, Anna, et al., editors. "[Introduction, Beyond Individuals]." Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene, University of Minnesota Press, MINNEAPOLIS; LONDON, 2017, pp. 71–72.
- Gilbert, Scott F, and Alfred I Tauber. "Rethinking Individuality: The Dialectics of the Holobiont." Biology & philosophy 31.6 (2016): 839–853
- Syliva Wynter. "Unsettling the Coloniality of Being/Truth/Power/Freedom: Towards the Human, After Man, Its Overrepresentation - An Arguement." The New Centennial Review. 2003. pp 257-337.

#### Viewings

- Donna Haraway, "Storytelling for Earthly Survival." 2018.
- IQECO, "Metamorphosis." 2020. Dis.art

#### Listenings

Cultivar podcast https://cultivar.earth/

"The Cultivar podcast on art and ecology hosted by Zachary Korol-Gold and Matthew Schum brings together artists, curators, farmers, activists, scholars, and others who have an ecological approach. Cultivar asks: Can we imagine collective ecological futures?"

#### Websites

- Experimental ecology blog: https://blog.ecocore.co/
- Digital events centered around art pushing the boundaries of science: https://artlaboratory-berlin.org/events/

#### Organizations

The Institute for Queer Ecology https://queerecology.org/

"The Institute of Queer Ecology (IQECO) is a collaborative organism looking to find and create alternatives. The solutions to environmental degradation are found on the periphery and we seek to bring them to the forefront of public consciousness. Guided by queer and feminist theory and decolonial thinking, we work to undo dangerously destructive human-centric hierarchies—or even flip them—to look at the critical importance of things happening invisibly; underground and out of sight. We seek to democratize the production and reception of artistic research so that marginalized voices are given the space to tell their own stories, and audiences that have been historically excluded from institutions are invited into this one. We pass as an Institute as a means of infiltration: mimicking the academic model to support subversive ideas. Our mission is to make space for collectively imagining an equitable, multispecies future. With interdisciplinary programming that oscillates between curating exhibitions and directly producing artworks/projects, the Institute of Queer Ecology enacts utopia with a goal towards building a future that prioritizes a (bio)diverse world."

CASCO https://casco.art/en/

"The commons can be described as the natural and cultural resources held in common by a community. For example, community gardens, mutual aid networks, and open source software are all examples of the commons. The commons requires a collaborative process, which we call "commoning," based on shared ethics and values such as diversity, equity, pluralism, and sustainability. Art is an imaginative way of doing and being, which connects, heals, opens, and moves people into new social visions. Art is in fact inherent to the commons, as they are shared resources to keep the culture of community alive. In turn, the commons may well sustain art. With art and the commons we can draw a worldview beyond the divides of private and public, to shape together a new paradigm of living together as "we" desire – be it decolonial, post-capitalist, matriarchal, solidarity economies – we name it!"

#### **Classroom Activities**

1) Use the readings/viewings and personal experience to reflect on a time when you felt "entangled" with other people, animals, life forms, environments, etc... This could take many shapes and forms, feel free to be creative and as abstract or literal with your answer as you want! Some questions to consider are: How did this experience shift the boundaries between yourself and others? How did this experience alter your relationship to surrounding environments/spaces? How did your sense of accountability / response-ability become implicated? 2) Use a program such as jamboard to practice communal & simultaneous creation of images, maps, audio visualizations, anything you want! First try making a drawing independently, and then together as one large holobiont, and reflect on the differences in the making process. It's helpful to work with materials that your collective is already familiar with as a group - for example, you could create a drawing together based on a song that everyone has previously discussed/listened to together/connected over.

#### chapter 2 julie xu

Challenging the Concept of Nature-Culture Binary & Imagining A Future For Nature Conservation and Conservation Biology



#### Description

In the current scientific thinking and practice of conservation, we tend to exclude humans as part of the natural environment. This can be seen from the popular understanding that "true" wilderness is often defined as being untouched by humans. However, it is important to think about how we should define nature: do we have to escape to a place surrounded by trees and untouched by humans to enjoy nature? Are lemon trees growing in neighborhoods considered as nature? The emphasis on the separation between humans and nature is very deeply rooted in the American education system, society, and the way many Americans think about wilderness and conservation to this day. This can be seen through practices such as removing populations of people from their homeland for the sake of the creation of national parks or other purposes relative to "conservation." These practices pose important environmental justice concerns because those who were forced to move out of their homes are likely from marginalized communities of minorities. An example is illustrated in Mark Dowie's Conservation refugees: When protecting nature means kicking people out. Therefore, the deeply rooted western notion of nature-culture binary has inevitably envisioned a destructive relationship between humans and the natural world. A new and better future for nature conservation and conservation biology should challenge the western idea of nature/culture binary and envision a more constructive relationship between humans and nature, which means incorporating the idea of how to establish coexistence between humans and the natural environment. We must rethink our definition for nature, and the implications for such definitions in conservation practices and in our vision of the relationships between humans and our surrounding environment. In this case, we will explore the potential of coexistence through the lens of Japanese Shintoism and make connections between the Shinto ideology and how we can re-envision a future of conservation. "essential" work? Covid-19 has rendered our bodily connectivity obvious to even the most privileged, yet this reality exists outside of pandemic circumstances as well. In separating the Human from non-human nature and the human "other," the Human gains a false sense of safety surrounding the climate crises and environmental pollution in the global North. While the pandemic clearly displays which embodiments are seen as worthy of protection, the slow violence of incinerators, power plants, factory farming, etc.. have been sending the same message since the dawn of industrialization. We cannot grapple with these issues if we leave our conception of the individual Human untouched. We cannot hope to envision exciting and creative formulations of community if we don't understand the truly entangled existence of all life and material.

#### **Goals/Objectives/Visions**

- Understand what is Shinto and how does Shinto perceive the relationships between humans and the natural environment
- Explore the potential of coexistence through the lens of Japanese Shintoism
- Understand the current principles and goals of conservation biology
- Understand the current approaches to nature conservation
- Discuss the concerns regarding environmental justice in regards to the popular idea of nature/culture binary

#### Keywords

Shinto, Shintoism, Kami, Colonization, Nature/Culture Binary, Conservation, Nature Conservation, Conservation Biology, Conservation Practices, Principles of Conservation, Biodiversity, Nature.



#### **Critical Questions**

- Compare and contrast the Shinto views on nature vs the western views vs the North American Indigenous views. How do you feel about their perspectives on nature, the environment, and conservation? How did the readings, especially the new concept of Shinto as a nature religion, help broaden your understanding of our relationship with nature and conservation?
- How do you think our view (North America and your own cultural background) on nature and conservation has changed over time? How do we imagine our relationship with nature in a more constructive way than a destructive way?
- What is your own relationship with conservation, both in your lives and at Swarthmore? What is your experience with conservation (either you are part of an effort helping with conservation or you are just supporting/heard of any programs)?
- Do you see trees in our backyards as nature? Why? What is the danger of the separation of nature and culture when looking at our relationship with nature and defining what is "nature" and what is not? If we don't see something as natural, does that mean there is no need for conserving it? These questions arise from the western idea of nature-culture binary in viewing the relationship between humans and the environment.
- Does conservation practices mean we have to kick people out of their land? How do we imagine a future of conservation practices?

#### **Materials**

#### Readings

- William Cronon, "The Trouble with Wilderness: Or Getting Back to the Wrong Nature, in Uncommon Ground: Rethinking the Human Place in Nature (Norton, 1996).
- Aike Rots, Forests of the Gods: Shinto, Nature, and Sacred Space in Contemporary Japan, Ph.D. Dissertation, 2013
- Robin Wall Kimmerer, "Learning the Grammar of Animacy," In, Braiding Sweetgrass (2013)
- Mark Dowie, "Conservation Refugees: When Protecting Nature Means Kicking People Out." Seedling, January 2006: 6-12. (2006).
- Christy Schuetze, "Narrative Fortresses: Crisis Narratives and Conflict in the Conservation of Mount Gorongosa, Mozambique." Conservation and Society 13(2): 141-153 (2015)
- Jensen, C.B. and A. Blok. (2013). Techno-animism in Japan: Shinto Cosmograms, Actor-network Theory, and the Enabling Powers of Non-human Agencies.
- Tessa Morris-Suzuki's 1998 book, Re-Inventing Japan: Nation, Culture, Identity, provides many resources for understanding Shinto-inflected notions of nature.

#### **Classroom Activities**

1) Word Cloud Activity: What word do you think of when we talk about nature and conservation?

2) Break-out room discussion on critical discussion questions

3) Big class discussion on the following big-picture questions:

What do you define as nature? As environment? What has changed your perception of these two concepts?

What is your relationship with conservation?

What examples of reimagined conservation were you able to find?

4) Mini Research Assignment:

Discussion In the context of the broader focus of our Syllabus Project (Looking Back, Looking Forward) and also on today's thematic title: "Challenging the Concept of Nature-Culture Binary & Imagining A New Future For Nature Conservation/Conservation Biology," we would like you to imagine how we can "look forward" and learn from people and groups who are imagining "conservation" otherwise. What are some examples of groups or projects that are putting into action "Imagining a New Future" for conservation? For example, you might take a look at what's happening at Robin Wall Kimmerer's "Center for Native Peoples and the Environment," at SUNY, https://www.esf.edu/nativepeoples/). Do a quick search to find an example of an approach to "conservation" that does not reproduce the Nature/Culture binary - see what you can find.

chapter 3 oswaldo morales

### Decolonial Science and Technology



#### Description

I was particularly interested in this area because I am a student that comes from a heavy science background. Not because I necessarily love science, but because I was taught that it was the most correct, and therefore most important, form of learning to participate in. This creates a situation where science is viewed as the most critical part of "progress" and "advancement". Along with this, science is viewed as concrete and indisputable, and the method through which science is produced is guarded as law. Through my time at Swarthmore, I became increasingly interested in Indigenous studies and Decolonial studies, so much that it became my ENVS focus, and frameworks that guided a lot of the work I did in my courses and beyond. Indigenous and Decolonial studies have not only enriched my understanding of non-western ways of knowing, but have also shown me how interconnected sciences and science research are to upholding violent and colonial powers. In order to break down these powers, we must rethink the ways we approach our sciences.

Again, this chapter aims to focus specifically on natural science by thinking about the ways we interact with it, and how we understand science as 100% truth. To get there, we must understand modernization theory, which Gurminder Bhambra explains in her book Connected Sociologies. Bhambra helps us understand that modernization theory was a method to develop a "framework" for which to "modernize countries", which was created by Western countries during the height of colonialism as a way to justify their violent land seizure. This meant that "modernity" was closely tied to the Western European and United States' identity, which created a reality in which Western definitions of civilization and progress are the only valid definitions.

This is important because progress is shaped by science and technology, as Wendy Bauchspies et. al note in Science, Technology, and Society: A Sociological Approach. This book writes that technology and science are in fact inseparable, and should better be defined as technoscience. Because our own technologies are used to define our science, and our sciences create the technologies we use, these products are better defined simply as technoscience. Recognizing technoscience allows us to see how science is often attempted to be framed as "objective" and "universal" by obscuring away perspective, as is the case with scientific writing. This approached the broader field of science and technology (STS) studies, which aims to show that technoscience is not only inherently subjective, but often discriminatory and works in tandem to support capitalism and colonialism. STS studies understand that technoscience is paid for by interested and wealthy parties interested in advancing "modernity", such as the nation-state or the military, so technoscience is inherently political, tied to social identity, and upholding colonialism.

Something that is important to clarify is that STS studies are not antiscience, and are not attempting to denounce all science that has been written and published. Rather, STS studies are making the case that all science is subjective, there is no "universal objective perspective" that science can lie within, and that means that there are people benefiting from certain technoscience, while others are not. As is often the case, the people benefitting are the elite few, while the majority pay the price for this technoscience.

Finally, we must think critically about how we use this knowledge to incorporate decolonial and STS frameworks into our existing scientific frameworks. Carla Dhillon provides strong foundations for this by speaking to the ways that Indigenous perspectives are often ignored in environmental organizations, even though these perspectives have strong solutions to ongoing climate issues, and have people that are always doing important work due to the proximity of their communities to these issues. Manulalani Meyer also helps think about how to connect these ideas, along with epistemology, to education and the work we do in academic institutions such as Swarthmore.

This chapter continues where the last left off in thinking about non-western understandings of the world and of the environment, and the ways that these perspectives are critical to decolonial futures. My hope is that this chapter is not purely theoretical, and that people walk away with steps towards decolonizing their syllabus, in ways that live up to the definition of decolonization, and begin to incorporate non-western sciences into their courses. This chapter is specifically written for science courses, who often express difficulty finding ways to incorporate Indigenous and Decolonial studies into their syllabi.

#### **Goals/Objectives/Visions**

- Understand the basis for science and technology studies, and its applications to environmental studes
- Analyze how our shaping of "progress and modernity" is formed, and how that develops our understandings of sciences and technologies necessary in our communities
- Connect STS to decolonial studies, and the ways in which we understand "post-colonial futures"
- Consider ways in which we can implement these understandings into environmental curriculum, specifically in the natural science courses within environmental studies (biology, chemistry, etc.)

Keywords	<b>Foundational Thinkers</b>
Postcolonialism	Gurminder Bhambra
Modernization	Wenda Bauchspies
	Kamuela Enos
Science and	Carla Dhillon
Technology	Elizabeth Hoover
	Manulani Meyer
studies	Anne McClintock
Epistemologies	Anibal Quijano

#### **Critical Questions**

- What have been your interactions with science? How do you define science?
- How do you define "modern" and "advanced"? Why may your definitions be different than someone else's?
- In what ways are science and technology inextricably linked?
- How has technoscience evolved to continue upholding capitalism and colonialism?
- In what ways can ENVS better help students learn a well rounded approach to the natural sciences?

#### **Materials**

#### Readings

- Bauchspies, Wenda, Jennifer L. Croissant, and Sal Restivo. 2006. Science, Technology, and Society: A Sociological Approach. Malden, Mass.: Blackwell.
- Bhambra, Gurminder. 2014. Connected Sociologies: Theory for a Global Age. London: Bloomsbury Academic.
- Dhillon, Carla M. 2020. "Indigenous Feminisms: Disturbing Colonialism in Environmental Science Partnerships." Sociology of Race and Ethnicity, February, In Press
- Hoover, Elizabeth. 2017. The River Is in Us: Fighting Toxics in a Mohawk Community. Minneapolis: Univ Of Minnesota Press.
- McClintock, Anne. 1994. "The Angel of Progress: Pitfalls of the Term 'Postcolonialsim.'" In Colonial Discourse and Post-Colonial Theory: A Reader, edited by Patrick Williams and Laura. Chrisman, 291–304. New York: Columbia University Press.
- Tuck, Eve, and K. Wayne Yang. 2012. "Decolonization Is Not a Metaphor." Decolonization: Indigeneity, Education & Society 1 (1): 1–40.

#### Viewings

- "Even the Rain/También la Lluvia". 2012. Image Entertainment. Available on Netflix.
- Sustainability Research Institute. (2016, August 11). Manulani Aluli Meyer Connecting Education and Environment Keynote Address.
- TEDx Talks. (2013, October 28). Working collectively to restore ancestral abundance: Kamuela Enos at TEDxManoa.



#### **Classroom Activities**

1) Write briefly about and discuss the following prompts:

- Do you, or does your family, believe in a certain Creation story? How does that impact the way you interact with land, food, etc.?
- What is a knowledge you learned through family or your community (home remedies, spiritual practices, etc.) that would not be accepted/taken to be true in western science?
- What are the hardest things for you to learn? What are the easiest? How is that influenced by your family, your friends, your community, etc?

2) Find syllabi for natural science courses, and think of ways to fit some of these readings and resources into the syllabi. Break students into groups and have them think specifically about certain subjects such as biology, chemistry, etc. While students are in groups, give them the following prompts:

- What experiences have you had with this subject?
- Are any of the readings or theories used in this course non-western? If not, can you find any that are?
- How would you say students interact with this content who may come from non-western educations or knowledges?
- How can this course actively think about decolonization incorporate it into the syllabus?



In conclusion, it is absolutely necessary that we take time in all of our classes, especially the natural sciences, to address the ways that technoscience is informed and created, and who it does/does not benefit. This is one of the main pillars of the colonial matrix of power, so we cannot work to break down capitalism and colonialism without addressing technoscience's role in justifying violence, land seizure, racial categorization, etc. Informed futures will prioritize community based learning and consensual sciences, and engage in learning and decolonization out of distinctly academic frameworks, in order to understand decolonization is necessary for action and material reparations alongside spiritual ones.

There are many different angles for incorporating these resources into your classes. Whether it is devoting syllabus space and class time to discuss some of these readings, taking time to make sure that existing class resources have non-western and Indigenous perspectives, or simply allowing students more agency in the sciences they utilize in research and projects, the biggest hurdle that this chapter requires is a willingness to accept and appreciate the validity of sciences and perspectives that you may have never considered before. This is hard, and this learning is uncomfortable. If it is not uncomfortable, then it is not sinking in the way that it should. But once you begin to allow for the realization of these sciences into your learning, you will see students prioritizing learning that focuses on hands-on learning, on communication with land, and moves away from attempts to be objective by removing the self from the land. chapter 4 chelsea semper

## Restor(y)ation, Land Reciprocity, and Indigenous Kinship



#### Description

To begin this chapter, I would like to share the story of my relationship with the natural world. I have always been fascinated by nature, obsessed with its beauty, intrigued by the behaviors of its organisms, and simply in awe of the ways in which the land breathes with life. I grew up in a very wooded and hilly area of New Jersey where my childhood afternoons were spent spelunking through the forest and feeling a sense of awe towards this vibrant, green world. I wanted to see more of these beautiful places and travel the world to explore and experience the mysteries and wonders of this planet's incredible landscapes. These interests in nature are what drove me to study Biology and Environmental Studies at Swarthmore, but very quickly I realized the ways these programs caused misgivings to arise within me. To be blunt, their approaches seemed all wrong. Why, I wondered, am I learning about ecology from a textbook when the world I want to observe is right out there? I constantly felt as if I was a yardstick away from whatever I was studying or researching, even if it was directly outside of the windows of the classroom I was sitting in. Our Western world and education system, especially in the "hard sciences", creates distance between humans and the natural world, where what lies beyond our constructed environment of concrete and plastic is something to be observed rather than interacted with. It is this barrier I seek to break through with my proposed curriculum handbook chapter. I deeply value my story and relationship with the land, and the ways in which they bring me solace, joy, inspiration, and intellectual excitement. It is necessary for us to restore, or as Robin Wall Kimmerer indicates, restory our relationship with the land to rewrite it as one based on reciprocity and respect. To accomplish this, it is valuable to learn about Indigenous ways of knowing and legitimize Native Science and Traditional Ecological Knowledge (TEK) as a first step in reconnecting ourselves with the land and striving towards creating equitable relationships with the countless Indigenous groups that have suffered for centuries at the hands of settler colonialism.

There are several key aspects to this topic that are essential to include in the next iteration of the ENVS curriculum, as they will challenge students to rethink and transform the ways they interact with and think about their natural environment. For one, it is critical to understand the process of ecological restoration and how it can be utilized as a tool for us to restore our own relationships with the land and connections to natural spaces. As Robin Wall Kimmerer writes in her book Braiding Sweetgrass, "Restoration offers concrete means by which humans can once again enter into positive, creative relationship with the more-than-human world, meeting responsibilities that are simultaneously material and spiritual." By assisting the recovery of an ecosystem that has been damaged or degraded, often by human activity, through the process of restoration, we can simultaneously rewrite our own stories with the land into one of reciprocity and mutual benefit for humans and the more-than-human world. This concept of land reciprocity is also fundamental to successful restoration as it becomes an exercise in mutual caregiving, where in restoring the land, the land restores us back. Lastly, these sustainable and just ways of interacting with the land are in no way a novel concept, but rather a core aspect of Indigenous cultures and ways of life. The concepts of land reciprocity and a sustainable relationship with the Earth are two of many components of Traditional Ecological Knowledge (TEK) which is a knowledge system passed between generations that encapsulates many aspects of Indigenous cultures and ways of life, and how those are shaped by their relationships with the land. These ways of knowing reveal powerful alternatives for how we can perceive and interact with the land, and students should learn about these Indigneous knowledges so that they can become a part of the new generation that is striving to repair the damages of

of the past and move forwards equitably with Indigneous communities. Overall, the purpose of this handbook chapter is to provide resources and methods for how these concepts can be integrated into the ENVS curriculum and to help articulate how it is a necessity that our society begins to treat the land with reciprocity, rather than extracivist mindsets, in order to create a just and sustainable future for all human and more-than-human beings.

#### **Goals/Objectives/Visions**

- Understand how the norms of Western life has removed our connection with the land, causing us to lose our respect for it
- Learn from Indigenous knowledges how to maintain a reciprocal, respectful, and sustainable relationship with the land
- Learn how we can rewrite our stories with the land through the restoration process
- Eliminate stigmatization of Indigenous ways of knowing and Traditional Ecological Knowledge and legitimize it as its own form of science and way of interacting with the world
- Create curriculums and education systems that value Indigenous knowledges and land reciprocity, and steps away from the colonial and elitist nature of Western science

#### Keywords

Restoration Reciprocity Land Relationship Traditional Ecological Knowledge (TEK) Scientific Ecological Knowledge (SEK) Interspecies Indigenous kinship Indigneous knowledge Stories

#### **Foundational Thinkers**

Robin Wall Kimmerer
Kyle Whyte
Simon Ortiz
Kat Anderson
Melissa Nelson
Dan Shilling
Gregory Cajete

#### **Critical Questions**

- What is your relationship with the land? What are some of the roles and meanings that nature plays in your life?
- How can ecological restoration serve as a conduit for us to restore our own relationship with nature and rewrite our story with the land?
- How can we find compassion and kinship for all organisms? How can we begin to rebuild our relationship with the land into one of reciprocity where we give back as much as we take?
- How can we rethink our education to help remove our distance from the earth or create a shift in our worldviews towards the land?
- What changes or additions need to be made to our curriculums and educational structures to reunite people with the land?

#### **Materials**

#### Readings

- Kimmerer, Robin Wall. Braiding Sweetgrass. Tantor Media, Inc., 2016.
- Nelson, Melissa K. Traditional Ecological Knowledge: Learning from Indigenous Practices for Environmental Sustainability. Cambridge University Press, 2918.
- Whyte, Kyle, et al. "Indigenous Lessons about Sustainability Are Not Just for 'All Humanity.'" Sustainability, 2018, pp. 149–179., doi:10.18574/nyu/9781479894567.003.0007.
- Cook, Katsi. "The Mother's Milk Project." Undivided Rights: Women of Color Organize for Reproductive Justice, by Jael Silliman, Haymarket Books, 2016, pp. 129–147.
- Anderson, Kat. Tending the Wild: Native American Knowledge and the Management of California's Natural Resources. University of California Press, 2013.
- Charles, Cheryl, and Gregory A. Cajete. "Wisdom Traditions, Science and Care for the Earth: Pathways to Responsible Action." Ecopsychology, vol. 12, no. 2, 2020, pp. 65–70., doi:10.1089/eco.2020.0020.

#### Viewings

- "UNM Biodiversity Webinar Series-Indigenous Kinship and Multispecies Justice." You-Tube, YouTube, 20 Nov. 2020, www.youtube.com/watch?v=xz0fxHtNl6g&t=13s.
- "Dialogue 1: Why Reconciling Ways of Knowing?" YouTube, YouTube, 3 Aug. 2020, www. youtube.com/watch?v=GaMTpDbRL9k&t=1s.

#### Listenings

- "The Native Seed Pod Podcast Series." The Native Seed Pod, The Cultural Conservancy, www.nativeseedpod.org/.
- Moody, Kelly. "The Ground Shots Podcast on Apple Podcasts." Apple Podcasts, 4 May 2021, podcasts.apple.com/us/podcast/the-ground-shots-podcast/id1414571967.
- For The Wild Podcast, PodBean, forthewild.podbean.com/.

#### Websites

- "TEK vs Western Science." National Parks Service, U.S. Department of the Interior, www. nps.gov/subjects/tek/tek-vs-western-science.htm.
- "Reference and Reading List Traditional Ecological Knowledge ." National Parks Service, U.S. Department of the Interior, www.nps.gov/subjects/tek/list.htm.

#### **Classroom Activities**

#### 1) Jamboard collages

- Using Jamboard, have each student take 7 to 10 minutes to create a collage of images, key words, website links, drawings, memes, etc. that represent their connection to the natural world. Going one by one, have each student share the significance of the images they placed on their collage and reflect as a class on what everyone's connection to the land is and why these personal stories about natural spaces are important.
- 2) Class tree planting or nature walk in the Crum Woods
- There are several resources on campus who can help students experience and learn about the Crum Woods in interactive ways to create a connection between them and the natural space. A class could coordinate with Jeff Jabco or Lars Rasmussen in the Grounds Department to conduct a small tree planting session in the Crum, or schedule a Crum Woods nature walk with Sue MacQueen from the Arboretum.
- 3) Reflective nature bathing and journaling mini assignment
- Have each student go outside into a natural space and take a moment to breath and be with the other beings around them. While in this space, encourage them to connect with this living world and meditate/reflect on some of the discussion prompts provided in the Critical Questions section above. Students should take note of their thoughts and time outside in some way, whether that be through journaling, creating a mind map, sketching, writing a poem, taking pictures, jotting down song or book titles that you are reminded of, etc. These reflections and creations could be incorporated into a class blog forum post, or kept as a private journal entry.

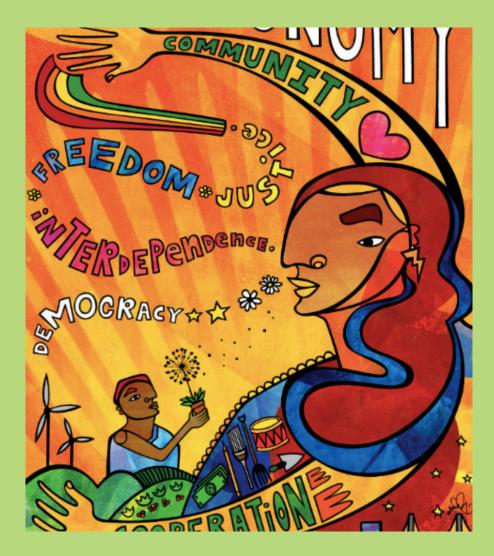


In conclusion, as an institute of higher education, Swarthmore has an obligation to teach students about TEK and Indigenous ways of knowing, and encourage students to restory their relationships with the land in a way that respects and benefits those natural spaces. As a knowledge system derived from millennia of living in reciprocity with the land, TEK has countless invaluable teachings and intimate perspectives of the natural world that modern science lacks. It should be a responsibility for Environmental Studies, and specifically the various fields of Environmental Science, after centuries of invalidation, to legitimize TEK and Native Science as the critical forms of knowledge that they are. To accomplish this and create unions between TEK and Western science, movements towards unity must be led by Indigenous communities, and for these partnerships to thrive and be successful, Western science must become nature-centered and decolonized under the teaching and guidance of Native Science. Swarthmore has the opportunity to be a leader and role model in these endeavours, and pursuing these structural changes begins with altering our curriculum and ways of teaching about ecology and human interactions with the natural world. To quote Robin Wall Kimmerer one final time, "Restoring land without restoring relationships is an empty exercise. It is relationship that will endure and relationship that will sustain the restored land." If Swarthmore students can learn about essentially anything in the various departments of this institution, then why can't the ENVS department teach them how to create these types of reciprocal, personal relationships with the land? At this pivotal moment in time, we need to foster a new generation of scholars and change makers that have an intimate care for the land, and desire to restore the damages human society has wrought upon it. I believe Swarthmore, with its resources of a strong ENVS department and the Crum Woods, is an ideal location to begin this work, and implement significant paradigm shifts in terms of establishing equitable relationships with, or understandings of, Indigenous communities and cultures, and creating students who cherish and fight to protect the land.



chapter 5 ananya bhattacharya

### Towards a Care – Based Economy



#### Description

A reframed Environmental Economics course is essential to include in a next generation Environmental Studies curriculum. The dominant economic system we live in perpetuates environmental injustice and inequality, in the world and in the classroom. Traditional Economics courses focus on cost effectiveness and market efficiency, and imply that the public good is maximized by individual profit and utility-maximization. This encourages runaway consumption and empowers those with the most market power to prioritize private profit over public wellbeing. In this system, pollution and other social injustices are treated as simple market externalities solved through taxation.

When I took the Environmental Economics and Environmental Policy & Politics courses at Swarthmore this year, I learned through my research projects that in reality, these market-based policies are not widely implemented due to political opposition. Even when they are put in place, carbon taxes and cap and trade programs price carbon far lower than its actual social cost on marginalized communities. Additionally, these market-based policies can exacerbate environmental justice issues. Cap and trade programs have sometimes been found to increase local pollutant levels, even while lowering overall carbon emissions. Facilities participating in cap and trade programs are disproportionately sited near marginalized communities of color. Therefore, the localized impacts of these policy systems can specifically impact communities that already lack access to a clean and safe environment.

It is valuable to look to solutions beyond market-based mechanisms and start presenting ideas like care-based economies in our classrooms. Reframing parts of Environmental Economics can help us reimagine our economic system to better serve us in creating just, sustainable, and thriving communities. Solidarity economies, reparative politics, and large scale investment in enforcing environmental policy at the federal level are some ways to conceptualize a reframed, socially just economic system. Solidarity economies reflect interdependence and co-operation through initiatives like worker cooperatives, community land trusts, urban gardens, and community supported agriculture, among many other initiatives. On the local level, these types of systems address many intersecting issues at once, like environmental and social justice, public health, affordable housing, and labor rights. The existence of such systems proves that there are compelling alternatives to the dominant economic paradigm.

Reparative politics and policy is another key concept which provides an alternative to eco-fascism and elitism in our international and domestic environmental policymaking. Reparative politics prioritizes taking responsibility and centering equity in climate policy by holding countries in the Global North responsible for their disproportionate carbon footprint. Reparations are a major part of this framework in various ways; colonizing countries can start paying their debts to the lands they once colonized, while previously colonized countries in the Global South can finally end their debt payments, and domestic reparations are also paid. Nationally, reparative politics prioritizes service and care-based industries in Green New Deal style policy instead of favoring unsustainable manufacturing jobs that reproduce inequalities and environmental issues.

It is valuable to note that there are already economic models that address some of the issues outlined here. The doughnut economic model describes a model of living within planetary boundaries while simultaneously addressing inequality by finding a sweet spot in which society is environmentally safe and socially just. This model is proposed as an alternative for economists who tend to focus on neverending GDP growth as the primary goal of our economic system.

The key piece of thought missing, in my experience, from Economics at Swarthmore is imagination. We are rarely taught about local or non-dominant frameworks, and rarely taught about how to value non-traditional forms of work and welfare. We are taught that policies must be cost-effective and efficient in order to serve us well, but we do not discuss the unintended societal consequences of these policies in the same depth. Ideas related to local networks, mass mobilization, and large scale policy change are usually taught in other Social Sciences courses, even though they arguably belong in Economics. It can be challenging for students to envision a future of collective wellbeing when their courses do not facilitate this kind of thinking. This is especially true for students of color in the field of Economics who do not identify as male. The way we discuss environmental issues and possible solutions is important, not only for envisioning the future, but also for allowing students of non-traditional backgrounds to feel like their work and presence in an Economics classroom matters.

#### **Goals/Objectives/Visions**

- To answer the guiding questions:
- How does our current economic system perpetuate environmental injustice and inequality, in the world and in the classroom? How can we reimagine this system to better serve us in creating just, sustainable, and thriving communities?
- To propose alternatives to the dominant economic system by teaching students about solidarity economies
- To support students in envisioning alternatives in the way we consume, produce, and live in our everyday lives
- To encourage Economics students with non-traditional goals and backgrounds to use their skills and knowledge to create a more visionary, equitable world

#### Keywords

Solidarity economy, Cooperative, Reparative Politics, Reparations, Responsible Production and Consumption, Environmental Justice, Food Justice, Welfare, Planetary Boundaries, Doughnut Economics

#### **Foundational Thinkers**

Naomi Klein

Kate Raworth

**Bernie Sanders** 

Alexandria Ocasio-Cortez

Kate Aronoff

### **Critical Questions**

- How does our current economic system perpetuate environmental injustice and inequality, in the world and in the classroom? How can we reimagine this system to better serve us in creating just, sustainable, and thriving communities?
- In what ways on the local and global level are communities implementing alternatives to the neoliberal economic system?
- How do visioning and imagination fit into Economics and policymaking-in the classroom and in the world?

#### **Materials**

#### Readings

- Klein, Naomi. "Capitalism Killed Our Climate Momentum, not 'Human Nature.'" The Intercept, August 3, 2018. https://theintercept.com/2018/08/03/climate-change-new-yorktimes-magazine/
- "The Solidarity Economy." New Economy Coalition, accessed April 2021. https://neweconomy.net/solidarity-economy/
- Klein, Naomi. "Conclusion: The Leap Years" in This Changes Everything. New York: Simon & Schuster, 2014.
- Aronoff, Kate, Richard Kozul-Wright, Asad Rehman, Thea Riofrancos, and Olufemi Taiwo. "A Reparative Politics for the Climate Crisis: A Roundtable." Dissent Magazine, Spring 2021. https://www.dissentmagazine.org/article/a-reparative-politics-for-the-climate-crisis-a-roundtable
- Nugent, Ciara. "Amsterdam is Embracing a Radical New Economic Theory to Help Save the Environment. Could it Also Replace Capitalism?" Time Magazine, January 22, 2021. https://time.com/5930093/amsterdam-doughnut-economics/
- Raworth, Kate. "Meet the doughnut: the new economic model that could help end inequality." World Economic Forum, April 28, 2017. https://www.weforum.org/agenda/2017/04/ the-new-economic-model-that-could-end-inequality-doughnut/

#### Viewings

- A Message from the Future. Naomi Klein and The Intercept. Youtube. April 17, 2019, 7:35. https://www.youtube.com/watch?v=d9uTH0iprVQ&ab\_channel=TheIntercept
- A Message from the Future II: The Years of Repair. The Leap and The Intercept. Youtube. October 1, 2020, 8:57. https://www.youtube.com/watch?v=2m8YACFJIMg&ab\_channel=TheIntercept
- Doughnut Economics with Kate Raworth. Wired UK. Youtube. January 15, 2021, 15:16. https://www.youtube.com/watch?v=P4i4chaMp0l&ab\_channel=WIREDUK

#### Websites and Organizations

- New Economy Coalition
- Center for Popular Economics
- Doughnut Economics Action Lab
- The Intercept: Environment News
- Sunrise Movement
- Community Organization: Philadelphia Urban Creators

#### **Classroom Activities**

1) Mini Assignment: After exploring the New Economy Coalition's solidarity economy page, find some examples of solidarity economies (in food, energy, labor, art, etc.). You may want to search for terms like community land trusts, community gardens, and co-ops. What examples of solidarity economies can you find? Describe your examples in your blog post for the week.

2) Jamboard Activity: Draw what an ideal society based on care looks like with your breakout group in this Jamboard (in the style of the "A Message from the Future" videos). You can use Google Images, drawings, music, etc. Share your drawings with the class and identify what makes an ideal society.



Swarthmore College and its students and faculty are known for their social justice orientation and background. Many students from different academic disciplines tailor their academic and professional work to addressing injustice. Courses within the Environmental Studies program must allow students to do the same, especially in a time during which multiple ecological and social crises are overlapping. Welfare is a central concern in Economics, yet Economics courses focus on utility maximization and profits. In addition to understanding this definition of welfare, it is valuable to look to other meanings of the word that instead prioritize collective wellbeing. Economics gives students powerful tools and skills to interpret the world around them–it is essential that it gives students the skills to also imagine a better world, beyond the confines of the one we live in today. chapter 6 shani mahotierre

### Radical Rap: Embracing Hip-Hop's Role In Abolition and Environmental Justice

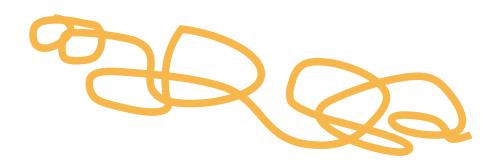


## Description

I look at the ways in which Hip-Hop is incorporated into youth education and community support, both within and outside of the traditional academic setting. Within the classroom, teachers are using Hip-Hop to allow students to draw connections between large community issues that aren't explicitly addressed, such as Environmental Justice, Food Justice, the School-to-Prison Pipeline, etc. And outside of the classroom, Hip-Hop focused programs allow youths to engage in their communities in a positive way while also creating a safe space for free artistic expression. As a Black artist who grew up loving Hip-Hop, I believe there needs to be a greater, general recognition of the personal liberation that's felt when creating art and a specific recognition of Hip-Hop for being a vibrant avenue of artistic expression in poor, Black urban communities and calling for an end to systemic oppression since its inception.

## Keywords

Community Health, Interconnectedness, Cultural Resistance, Liberation, Restorative Justice, Activism



## **Critical Questions**

- In what ways have you felt liberated in your experiences with the arts?
- Why is art, as liberating as it can be, often viewed as non-essential in our society?
   What are the different ways in which you see art, particularly hip-hop, devalued?
- Given that hip-hop gives a voice to the historically voiceless, why is it even more essential that hip-hop centered transformative justice is taught in school class-rooms, in addition to community outreach programs?
- From the readings, how has hip-hop been incorporated into youth education and community support? How can we use these models to propose future ENVS courses that are cross listed with the art departments (music, theater, dance, art/art history)?

## **Materials**

#### Readings

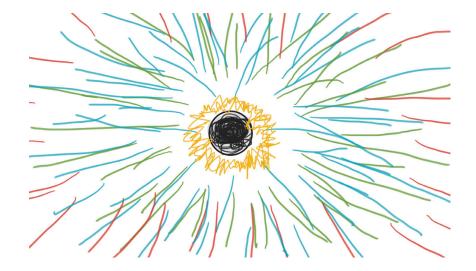
- Undisciplined Environments, "Environmental Justice as a Soundtrack of Freedom". (2019): Environmental Justice as a Soundtrack of Freedom – Undisciplined Environments
- Thomas Easley, "How Hip Hop Can Bring Green Issues to Communities of Color." Yale E360 (2020): How Hip Hop Can Bring Green Issues to Communities of Color Yale E360
- Restorative Justice On The Rise, "Hip Hop and Restorative Justice: Youth Leadership from Circles & Ciphers of Chicago." (2019): Hip Hop and Restorative Justice: Youth Leadership from Circles & Ciphers of Chicago Restorative Justice On The Rise
- Anthony J. Nocella II, "Chapter Thirteen: Transforming Justice and Hip Hop Activism in Action." From From Education to Incarceration: Dismantling the School-to-Prison Pipeline (2014): CHAPTER THIRTEEN: Transforming Justice and Hip Hop Activism in Action on JSTOR (swarthmore.edu)
- Nocella II, Parmar, Sawyer III, and Cermak, "Hip Hop, Food Justice, and Environmental Justice." From Addressing Environmental and Food Justice Towards Dismantling the School-to-Prison Pipeline: Poisoning And Imprisoning Youth (2017): 10.1057/978-1-137-50822-5.pdf (swarthmore.edu)

#### Viewings

• #Film4Climate 1st Prize Short Film Winner - "Three Seconds" (2017): https://vimeo. com/208145716

#### Listenings

• Soundscape: https://open.spotify.com/playlist/16iWQHT3QAdPHAe0gY6Yt5?si=gVgJxT-G9RM-IKxD8uhlscQ



chapter 7 meena chen & lucy fetterman

# Environmental Pragmatism and Decolonization: Living Our Imagined Futures



## Description

We chose this topic in the process of working through pragmatic approaches to just and sustainable environmentalism. Our grounding questions were: What does it look like to build the sustainable world that we talk about? How do we live into just sustainable relationships with ourselves, our communities, the earth? These questions felt especially prudent considering that we both are currently based within an Institution that is fully invested in settler colonialism, capitalism, and white supremacy.

In this chapter, we explore questions of relational decolonial and anti-racist praxis primarily through Grace Lee Boggs, Eve Tuck, K. Wayne Yang, and Vanessa Andreotti. These thinkers, authors and doers present knowledge that is situated in relationality and action. They are situated in actively addressing harms of the past and speak to the role that individuals, communities, and institutions (being interpreted broadly here) can play in supporting relationships and existence during a time of deep undoing.

Each reading highlighted some key phrases or concepts that exist in relationship with one another, highlighting congruity and complexity in our engagement with a liberatory, decolonial path forward. Grace Lee Boggs introduces frameworks of revolution through a praxis oriented lens while centering community and urban gardening. Tuck and Yang introduce settler colonialism, chattel slavery and a decolonization that is "not invested in settler futurity," (Tuck and Yang 2012, 3) Andreotti highlights the need for "visceral responsibility" and "stamina" in order to "dig deeper and relate wider." She talks about a need to disentangle from "colonial pleasures" in order to find "new joys and forms of well being" when addressing problematic patterns of engagement at both individual and institutional levels. In the next few paragraphs discussing themes, we will tie these phrases into one another, exploring their points of overlap and points of tension with the intention of spurring dialogue and attempting to engage transparently about our, in the words of Vanessa Andreotti, " complexities and complicities." (Andreotti 2019)

## **Goals/Objectives/Visions**

- Facilitate the creation of community and collaboration within the department
- Strategize and discuss and begin to collectively and practically live our imagined futures for change
- Center ourselves as people on this planet and confront our stake in environmental issues at Swarthmore, Delco, in our hometowns, in the U.S.
- Include activities, experiences, art projects, and conversations to create
- community and move us along in the process of living out the revolution

## Keywords

Community Trust Souls Nourishment Hope Action Spirit Love Care Individual Systemic Decolonial Agency

## **Foundational Thinkers**

Grace Lee Boggs

Vanessa Andreotti

**Eve Tuck** 

K.Wayne Yang

Arvin Maile

Leanne Betasamosake Simpson

Katherine McKittrick

# **Critical Questions**

- How do we act immediately in response to great suffering and surrounding environmental collapse?
- Reflect on your interpersonal, institutional, and interbeing relationships on this earth. What is your role/what are the complexities of your position within these relationships?
- How does your work / path focus on individual healing?
- What if we slowed down and took our time the way we wanted, instead of treating it like a finite resource?
- What would you do if you could live on your own time?
- What would it look like for us as a college to slow down?
- What would it look like for us to take decolonization seriously within Swarthmore?
- What actions will we take, as an institution and department to collectively grow our souls and community?

## Materials

#### Readings

- Abrahams, Yvette. "Moving Forward to Go Back: Doing Black Feminism in the Time of Climate Change, 2014
- Boggs, Grace Lee, and Scott Kurashige. The Next American Revolution : Sustainable Activism for the Twenty-First Century, University of California Press, 2012.
- Eve Tuck and K. Wayne Yang, "Decolonization is not a Metaphor," Decolonization: Indigeneity, Education & Society Vol. 1, No. 1, 2012, pp. 1- 40.
- Robin Wall Kimmerer, Braiding Sweetgrass (2013)
- Maile, Arvin, et al. "Decolonizing Feminism: Challenging Connections between Settler Colonialism and Heteropatriarchy." Feminist Formations 25, 2013 (1): 8–34.
- Powell, John A. Racing to Justice: Transforming Our Conceptions of Self and Other to Build an Inclusive Society. Indiana University Press, 2015.
- Spade, Dean. "Solidarity Not Charity: Mutual Aid for Mobilization and Survival," Social Text 38(1): 131-151, 2020.

#### Viewings

• Andreotti, Vanessa. Deep Adaptation and Climate Justice 2019: Climate Change and Inequalities. YouTube, YouTube, 11 Oct. 2019, www.youtube.com/watch?v=p\_TgS\_KdaXo&feature=emb\_title&ab\_channel=DecolonialFuturesCollective.

#### Organizations

- Detroit Summer: https://detroitsummer.wordpress.com/
- Decolonial Futures Collective: https://decolonialfutures.net/

## **Classroom Activities**

1) Go outside and observe a plant. If you want, jot down some notes or a little doodle of it. Take this time to chill and reflect on our many relationships, to plants, people, places, beings, and spirits, etc. Feel free to incorporate some thoughts into your Moodle post.

2) Reflect on your interpersonal, institutional, and interbeing relationships on this earth. What is your role/what are the complexities of your position within these relationships?

3) Engage in discussion and then all take part in yoga practice and meditation exercises for peace of mind and growth of the soul.

4) Planting of seeds in class for new beginnings and strengthened community.

chapter 8 declan murphy

# **Redefining Education**



#### Description

I chose this topic because when we talk about the most threatening crises of our time within academia, I believe it is important to also take a critical look at academia itself. It is questionable whether the western education system is preparing students to make meaningful change in the world to address the crises we face at this moment.

The dominant form of schooling is often framed as a cure-all solution to many of the world's problems, and it has been globalized with the aim of "developing" other parts of the world and helping "uneducated" people. Schooling has thus been used to push a flawed agenda of "modernity" around the world. These are the same principles which led the United States to force indigenous people into countless traumatic experiences at re-education schools where they were stripped of their cultures and languages. Bayo Akomolafe and Manish Jain describe the globalization of education as "McDonaldization", referring to the ways in which the concept of education has been packaged into a system designed for efficiency and replicability in order to advance students through schools and into the job market. Education has the potential for so much creativity and imagination, but instead we have chosen this assembly line model which limits students' aspirations to becoming another cog in the capitalist machine. Furthermore, schools usually limit themselves to a curriculum designed under the regimes of white supremacy and settler colonialism, and thereby uphold these oppressive states rather than engaging students in critical thought about the structures of the world around them. Additionally, students are forced to participate in this predetermined curriculum with no room for their ideas. Any step outside of the status quo can be met with threats of emotional or physical violence. Essentially, students must conform to the curriculum or risk being left behind.

The limitations of this system are also evident when examining the grading system. Schools incentivize students to take on an individualistic mindset and compete against one another to earn the best grades, get into the best schools, and score a high-paying job. When students' main focus is advancing their own academic careers rather than existing in a thriving community with their peers, it seems unlikely that these students will enter the world in a mindset to do the work to address issues like the climate crisis. Instead, this system simply encourages students to passively absorb information. Asking questions or making mistakes is often discouraged, leading to a culture where it is often better to say nothing at all or to regurgitate the information provided by the teacher. It is in this fashion that schools limit students to think only within the established status quo. The status quo is further enforced when schools stifle student protests and action, which happens frequently at institutions like Swarthmore College. Many such schools espouse a performative neoliberal worldview, but then suppress the efforts of students to fight for a better and more equitable future.

These points all raise the question of whether our current system of education is compatible with the type of action and transformative change that we will need to see in order to respond to the climate crisis. And, if the answer is no, what type of education system can we collectively imagine that meets the needs of its students (and the planet) at this moment on the clock of the world? These are not easy questions. In the United States, many of us spend the first twenty or so years of our lives going to school. This long period of exposure can make it hard to imagine any other system of education. This is why we need to open our eyes to the new possibilities that are emerging to fill this space. I believe that it is important for an Environmental Studies curriculum to step outside the norms of western education in order to engage its students in ways that deconstruct the status quo which has led us to this point of crisis.

# **Goals/Objectives/Visions**

- Consider whether this system of education can produce sufficient action to respond to the severity of the crises we face
- Analyze the effects of dominant structures of academia, both within and outside of the classroom
- Imagine radically different ways of learning about the world
- Envision ways for education to encourage community rather than individualism and to teach students to think outside the status quo
- Discuss how to teach young learners about difficult issues such as climate change

#### **Keywords** Community Learning Fred Moten Unlearning Academia Action Systems change Critical University studies Decolonial

## **Foundational Thinkers**

Grace Lee Boggs

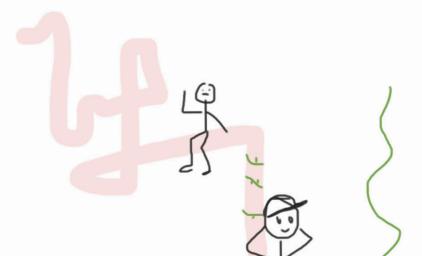
**Bayo Akomolafe** 

Manish Jain

Leanne Betasamosake Simpson

**Roderick Ferguson** 

**Carole Black** 



# **Critical Questions**

- Have you ever had to unlearn something you learned in school?
- What does academia tell us constitutes a "good life"?
- How can academic institutions engage with outside communities in productive and sustainable ways, rather than exploiting them?
- How can we ensure academic knowledge has a meaningful impact?
- How should we engage with young learners about the most difficult issues of our time?
- How can we be "in, but not of" the university?
- How do you envision a version of Swarthmore College which meets the needs of its students (and the Earth) at this moment on the clock of the world? At this imaginary version of Swat, what is different?

## **Materials**

#### Readings

- Akomolafe, Bayo, and Manish Jain. "This Revolution Will Not Be Schooled: How We Are Collectively Improvising a 'New Story' about Learning." Bayo Akomolafe, bayoakomolafe. net/project/this-revolution-will-not-be-schooled-how-we-are-collectively-improvising-a-new-story-about-learning/.
- "Land as Pedagogy." AS WE HAVE ALWAYS DONE: Indigenous Freedom through Radical Resistance, by Leanne Betasamosake Simpson, UNIV OF MINNESOTA PRESS, 2020.
- "Introduction" and "Conclusion." We Demand the University and Student Protests, by Roderick A. Ferguson, University Of California Press, 2017.
- Fasheh, Munir. The Trouble with Knowledge, almoultaqa.com/The\_Trouble\_with\_Knowled-geen.aspx.
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#### Viewings

- "Schooling the World (2010)." Films For Action, www.filmsforaction.org/watch/schooling-the-world-2010/.
- ISECeconofhappiness, director. Manish Jain: Reimagining Education. YouTube, YouTube, 14 Mar. 2019, www.youtube.com/watch?v=t\_IKCUg1gpl.

#### Listenings

• "E39 - Manish Jain on Unschooling, Gift Culture and Deep Localisation // Freedom from the Shackles of Education." The Future Is Beautiful, 16 Nov. 2018, www.thefutureisbeau-tiful.co/2018/11/15/e39-manish-jain-on-unschooling-gift-culture-and-deep-localisation-freedom-from-the-shackles-of-education/.

#### Websites

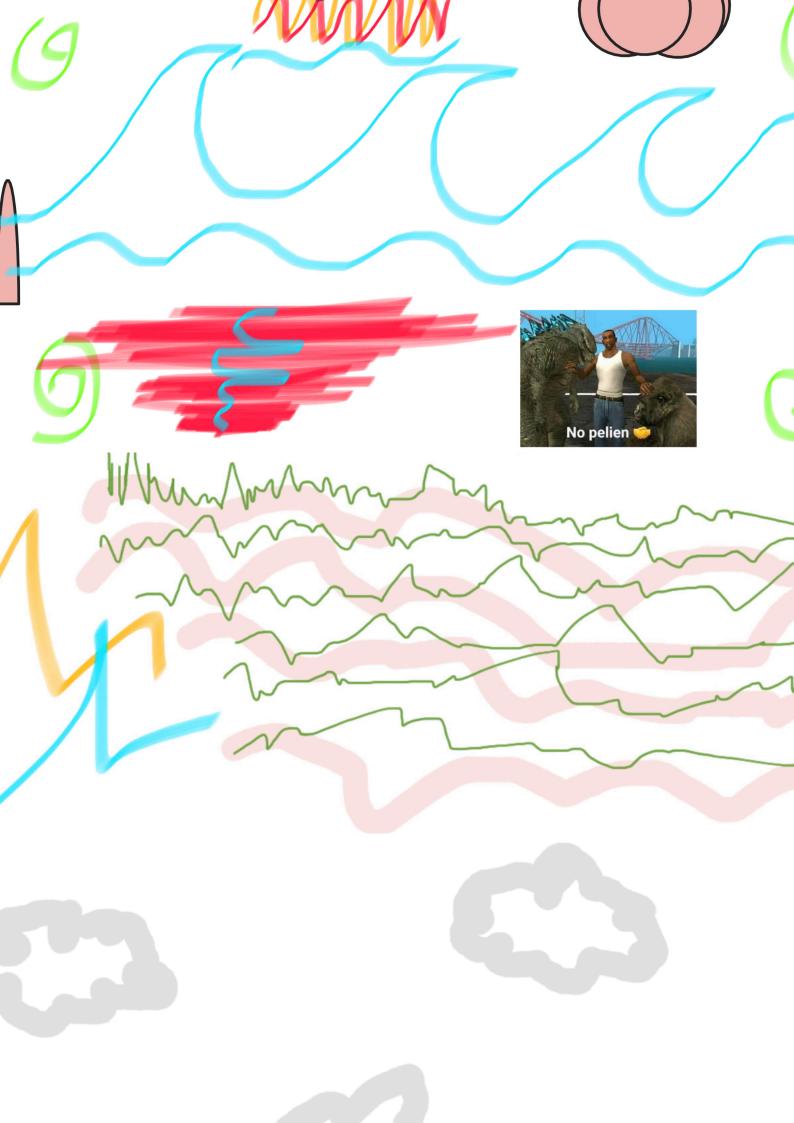
- "Microsyllabus: Critical University Studies." The Abusable Past, 11 July 2019, www.radicalhistoryreview.org/abusablepast/microsyllabus-critical-university-studies/.
- "Home Rethinking Schools." Rethinking Schools, rethinkingschools.org/.

#### **Classroom Activities**

- 1) Design an Earth Day teach-in or a lesson to teach to students
- What is one concept from that you would want to teach about? How would you frame it to the audience? How might this differ based on the age of your audience?
- What ideas could be incorporated as we move from a performative "Earth Day" to a day more similar to CRCQL's "Environmental Justice Day"?
- What should Earth Day mean, and can make it meaningful rather than superficial? How can Earth Day challenge the status quo?



In order to respond to the current state of the world, we need to examine the western education system and its effects. This is not to say that education is bad, or that we should not go to school. Rather, this chapter aims to communicate the importance of critically examining these systems which sometimes seem like the natural functioning of things. Education is an abstract concept which does not have to take place in a school building with an adult teaching young people. If we open our minds to the myriad possibilities of what education could look like in a just and sustainable society, we can make changes to the current system. The status quo of western society has led us to a precarious point in which we face several social and environmental problems. In order to spur action, we must imagine new and creative ways to learn from and with one another.





This handbook was built in an effort to dream new futures, to dream power into spaces that have long been building on the margins and in the cracks. We have aimed in this handbook to reckon with the complexities of Environmental Studies and to see, from that reckoning, what can be envisioned into the future. Through this handbook, members of the Capstone have aimed to critically address several important topics: to meaningfully analyze the false binaries between people and nature whose effect has been to disenfranchise and dominate, to highlight technology through indigenous lenses, to dig deeper into just and care-based economies, to introduce restorative approaches to the biological sciences, to look at Hip-Hop as a tool for abolition and environmental justice, and to consider what environmental pragmatism looks like on individual and institutional scales. The purpose of these chapters is to integrate these concepts into the Environmental Studies curriculum and to help articulate the urgency of beginning to create just and sustainable futures today. Our collective work aims to envision, in its most freeing and truth telling forms, what Environmental Studies could look like. The Capstone course represents some first steps in building the curriculum and engagements that we want to see. As students, we were able to drive the curriculum based on what has called to us or moved us. At this urgent "time on the clock of the world," in the words of Grace Lee Boggs, this handbook aims to inspire critical learning while centering relationality and interconnectivity. We hope that you will engage with, build off of, and expand the visioning activities explored in this handbook.



#### a collective syllabus handbook by swarthmore college ENVS capstone 2021

