

Beyond Land Grab Settler Agriculture:
Toward a Transformative University Agroecology

by
Kase W. Wheatley

A thesis submitted in partial fulfillment of
the requirements for the degree of

Master of Science
(Agroecology)

at the
UNIVERSITY OF WISCONSIN-MADISON

2022

Table of Contents

Abstract.....	ii
Acknowledgements.....	iii
Introduction.....	1
Background: Civilitas Successit Barbarum.....	3
Methodology.....	7
Results	
I.Perceptions of Agroecology at UW–Madison.....	9
II.“The Social”: Contested Engagement with Settler Colonialism and Indigenous Presence.....	20
III.Toward a Transformative University Agroecology.....	29
Discussion.....	39
References.....	45

Abstract

As a practice, agroecology can trace its roots to Indigenous and peasant farmer knowledge developed over centuries, yet as a term, agroecology has existed for over ninety years. The term has become institutionalized through universities like the University of Wisconsin–Madison, a Land Grant University where a number of staff and faculty from different disciplinary backgrounds practice agroecology, often in collaborative efforts. At the same time, through efforts like the High Country News exposé *Land Grab U*, more attention is being brought to the settler colonial origins of Land Grant universities like UW-Madison and the ongoing implications of these origins on research.

Through twenty-one interviews with UW-Madison practitioners affiliated with the Agroecology program and others from the university who work with Indigenous communities, I sought to understand 1) perceptions of agroecology, 2) how settler colonialism and Indigeneity are considered in this work, and 3) what a “transformative university agroecology” could look like. Since its inception as an academic program at UW in the early 2000s, agroecology has steadily embraced a more explicit political orientation challenging individual disciplinary boundaries and the broader “productivist” paradigm of the College of Agriculture and Life Sciences. However, what actually constitutes the broader social context of agroecology was contested among interviewees, especially across disciplinary boundaries. Interviewees from the social sciences and humanities acknowledged settler colonialism more frequently than interviewees. However, among all Agroecology program-affiliated interviewees, the depth to which settler colonialism was integrated into their work was generally limited. Interviewees from outside the agroecology program called upon their colleagues to do more and begin these efforts by building relationships based in collaboration.

Acknowledgements

I would like to extend my gratitude to all of the participants of this study. Thank you for spending another hour of your time over Zoom with me during a global pandemic. Additionally, I would like to thank my committee members for helping to shape this work: Dr. Michael Bell, Dr. Jen Rose Smith, and Dr. Noah Feinstein. I would like to especially thank all of my community here in Madison and those from all of the country who have supported me in this process.

Introduction

“Settler narratives use a linear conception of time to distance themselves from the horrific crimes committed against Indigenous peoples and the land...Indigenous notions of time consider the present to be structured entirely by our past and by our ancestors. There is no separation between past and present, meaning that an alternative future is also determined by our understanding of our past (Estes 2019).”

In March of 2020, just as COVID lockdowns were occurring around the United States, High Country News published the exposé *Land Grab U*. This project pulled back the curtain on the history of the Land Grant Universities (LGUs), the oft celebrated “democratic institutions” of the “common man.” *Land Grab U* reignited a conversation of the role of LGUs in the US settler colonial project, meticulously documenting the nearly 10.8 million acres of land expropriated from almost 250 Indigenous tribes, bands, and communities, and then “granted” to universities by the government as part of the 1862 Morrill Act. The majority of these expropriated lands were sold and functioned as the seed money to establish the endowments of these institutions, “meaning those funds still remain on university ledgers to this day” (Lee and Ahtone 2020).

Meanwhile, agroecology in the United States is a term struggling to find traction. Along with this struggle, has come a debate over what it even means. Recently, agroecology was defined as “an alternative paradigm for agriculture and food systems that is simultaneously: (a) the application of ecological principles to food and farming systems that emerge from specific socioecological and cultural contexts in place-based territories; and (b) a social and political process that centers the knowledge and agency of Indigenous peoples and peasants in determining agri-food system policy and practice.” (Pimbert et al. 2021). While potentially

representative of the global perspective on agroecology, this definition, especially the latter half, is more aspirational in the US settler colonial context.

The term “agroecology” made its first appearance in an academic publication nearly one century ago and was later defined as the “basic science of soil conservation” (Bensin 1928). Since that time, the definition has expanded dramatically. In the past decade, various groups and individuals have eschewed a strict definition in favor of a more inclusive set of principles which leave space for a plurality of epistemologies (Ferguson et al. 2019). With this embrace of the plurality, a multitude of different context-dependent “agroecologies” have arisen (Mendez et al. 2013).

The reasons for this shift are myriad: various practitioners from different geographies, backgrounds, and disciplines have engaged with it; various scales of analysis—from specific crop or field plot to watershed or territory—have been utilized; and the origins of agroecology have been complicated as many of its underlying principles have been identified in Indigenous agriculture and food systems (Wezel et al. 2020). This last point is well established and celebrated in the Global South as many Indigenous and Peasant farmers continue these traditional practices to this day. However, for many in the United States, settler colonial logics of erasure have obfuscated the fact that much “agroecological science and practice is rooted in knowledge developed by Indigenous and peasant farmers in relation to specific territorial contexts (Ferguson et al. 2019).” In other words, these territorial-specific practices—including grazing, agroforestry, and intercropping—developed over centuries in a relational process between human, more-than-human, and the land itself. So, it may not come as a surprise that in the settler colonial context, where people and agricultural practices came from different territorial-contexts, these disconnections persist.

Since that first publication nearly 100 years ago, the focus of scientific work in agroecology has focused upon its ecological dimensions largely in absence of any engagement with its political dimensions (Anderson et al. 2020). This is not to say that social and political critiques of industrial agriculture and the food system do not exist. In fact, they have long been abundant within farmer and farmworker groups as well as other social movements.

Transformative agroecology, which draws upon the field of political ecology, has been put forward as a remedy to the status-quo politics often promoted within academic research in agroecology. The transformative agroecology approach “places current agricultural systems in a historical and geographical context to understand the power relations that give rise to their current dynamics” (Anderson et al. 2020: 23). Through this approach, there is an opportunity to not only expand the boundaries of analysis to include the historical and on-going structure of settler colonialism but also to interrogate and overcome the tendency of “science” to refrain from the overtly “political”.

At the University of Wisconsin-Madison (UW–Madison), agroecology fits with the model of a plural epistemology and is probably best known by the Master’s program which bears the same name. By no means does the academic program and its affiliated faculty have any privileged claim over the term, but they are the most vocal and visibly associated with it on campus. The academic program itself is composed of over forty affiliated faculty members from more than fifteen departments, the majority of whom are within the College of Agriculture and Life Sciences. However, just as there are a multitude of definitions of agroecology, there are plenty of faculty and staff who do not associate themselves with the term or academic program but engage in related work. Through twenty-one semi-structured interviews, I sought to understand 1) the perceptions of agroecology at UW–Madison 2) the contested engagement with

Indigeneity and Settler Colonialism 3) and, therefore, what a “Transformative University Agroecology” could be.

Background: Civitas Successit Barbarum



(Fig. 1). The Great Seal of the Territory of Wisconsin (1838) Courtesy of Wisconsin Historical Society, Image ID: 64629. (Fig. 2). The Great Seal of the State of Wisconsin (1848) Courtesy of Wisconsin Historical Society

The lands of what is now known as Wisconsin have been home to multiple Indigenous Nations, including the Hoocąk (Ho-Chunk), Menominee, and Anishinaabeg, for tens of thousands of years. These peoples did not simply live upon the land but co-produced with it the abundant ecologies that sustained them. Seasonal migrations followed various harvests including manoomin (wild rice), maple sugar, corn grown on raised beds, as well as fruits, nuts, mushrooms, fish, and other game. Today, there are twelve Indigenous Nations within the boundaries of the state, eleven of which are federally recognized.

In 1832, following the Black Hawk War—in which future president Lincoln participated as an officer in the Illinois Militia—the Ho-Chunk Nation was forced by the U.S. government to

cede three million acres; roughly one-third of their ancestral homelands (Mt. Pleasant and Kantrowitz 2021). Within this land cession was the area of Teejop—the Four Lakes region—where UW–Madison and the State’s Capital would eventually come to be located. Four years later, in 1836, the U.S. territory of Wisconsin was established. At that time, the territory was composed of the present-day states of Minnesota, Iowa, Wisconsin, as well as portions of the Dakotas. To retain control over this new territory, in 1837, the US Government forced the Ho-Chunk to cede all their remaining territory East of the Mississippi river and relocated much of their population to a reservation in Nebraska (Mt. Pleasant and Kantrowitz 2021).¹

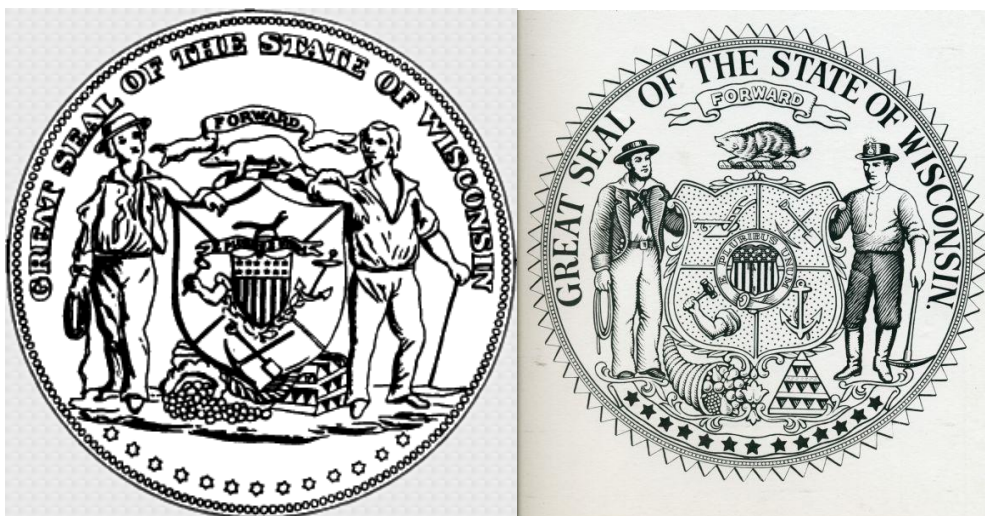
The second Territorial Seal of Wisconsin (Figure 1) was presented in 1838 to the legislature, the same year the first capital building was established in present-day Madison.² The seal was intended to display the various economic activities of the settler territory including mining, agriculture, and commerce. Across the top of the seal, was the motto “Civilitas Successit Barbarum” or Civilization Succeeds Barbarism. This motto clearly indicates that the founders of the territory were not intent on co-existence with the Indigenous peoples of this land. Instead, the settler intended to replace the Native and to reinscribe upon the landscape their own (agro)ecologies—rendering this space as their own.

¹ This process of removal by the Settler State was never complete. “So many Ho-Chunk evaded deportation or quickly returned to their homeland, however, that by the 1870s they compelled the U.S. government to accept them as residents, neighbors, and citizens (Mt. Pleasant and Kantrowitz 2021: 154).”

² The first seal of the Wisconsin Territory depicted a pickaxe next to a pile of lead-ore as mining was an early settler economic activity.

Ten years later in 1848, the Menominee Nation ceded over 4 million acres to the US government, officially establishing all land within the present-day boundaries as under US control. That same year, the State of Wisconsin was established, and UW–Madison was founded, soon to be endowed through the sale of expropriated Indigenous lands. For three years, the official seal of the state remained mostly unchanged, including the motto “Civilitas Successit Barbarum” (see Fig. 2 above).

In 1851, while visiting New York City and sitting on the steps of a Wall Street bank, the then Governor, John Dewey, and future chief justice of the Wisconsin Supreme Court, Edward G. Ryan, drew up a new state seal. Disapproving of what they described as the “pretentious Latin maxim,” Dewey and Ryan replaced it simply with “Forward.” Seen today as an apropos motto representing the state’s progressive history, “Forward” insidiously carries with it the reification of the settler state and the further erasure of Indigenous presence. The state seal that Dewey and Ryan created on the steps of that Wall Street Bank back in 1851 established the basic design on which the current seal is still based (see Figures 3 & 4 below) (Wisconsin State Journal). This 'Forward' sentiment, alive and well today, was foundational to the establishment of the College of Agriculture and Life Sciences at UW–Madison in its mission to support the nascent industry of settler agriculture.



(Fig. 3). The Great Seal of the State of Wisconsin (1851) Courtesy of *The Flag of the United States and of Wisconsin* by Harrison Summers Kerrick, published in 1931 (Fig 4). The Great Seal of the State of Wisconsin (current) Courtesy of Wisconsin Historical Society, Image ID:91654

Methodology

Between February 2021 and February 2022, I conducted twenty-one semi-structured interviews exploring the perceptions of agroecology at the University of Wisconsin–Madison. I selected semi-structured interviews to elicit information as it would allow for a uniformity of initial questions while enabling interviewees to expand in whatever direction made sense to them based on their positionality.

The research was conducted utilizing grounded theory, which is an iterative process involving theoretical sampling. Grounded theory aims to develop theory from the “ground up” (Milliken and Schreiber, 2012). Rather than forming a theory ahead of time based on the researcher’s perspective, grounded theory seeks to understand phenomena based on the interviewees’ own experiences and perspectives. This methodological approach utilizes theoretical sampling which is directed by the emergent themes from the interviews themselves.

This process involves data collection, coding, and analysis as an iterative process throughout the research rather than solely at the end of the data collection phase. In this process, an interview generates data which is then coded and analyzed for emergent themes. The insights gained from the emergent themes thus inform the selection of the next interviewee in order to fill in the gaps of the emerging theory.

According to the methodological purists of grounded theory, a literature review ought to be conducted after the theoretical sampling process in order to avoid preconceived notions (Milliken and Schreiber 2012). In the case of this study, research had to be approved by the UW-Madison Institutional Review Board (IRB) ahead of time; therefore, the purist approach proved to be unrealistic. A basic literature review was thus conducted in advance in order to situate and contextualize the interviews. As new concepts and themes emerged from the interview process, additional literature was reviewed. After the theoretical sampling process concluded, much more literature was reviewed in order to refine and support the theory which emerged.

The grounded theory approach shifted the course of this study dramatically, including the content discussed in the interviews as well as the participants selected to be interviewed. Initially, settler colonialism was not centered in the framing of the interviews. When the research began, the framing was much more focused upon the institutional context of agroecology as a field of study within a Land Grant University. More specifically:

- (1) The socio-economic hurdles that had been constructed through “academic capitalism”—the Neoliberal turn in the University most epitomized by bureaucratization, austerity measures, and the passing of the Bayh-Dole Act in 1980 which enabled the University to market patents to the private sector (Slaughter and Leslie 1999).

(2) The hurdles of interdisciplinary work within a discipline-based departmental structure.

Through the initial interviews, Indigenous communities and food sovereignty were not brought up to any great extent which prompted more thought on settler colonialism. Over time, I added additional interview questions oriented toward understanding “what is the responsibility of agroecology and the land grant university to Native Nations” and “what ought to be the role of agroecology at the university”. Furthermore, I sought out interviews with faculty and staff who work with Indigenous communities.

Results

I. Perceptions of Agroecology at UW-Madison

At UW-Madison, agroecology is not solely one field of research, nor is there an agreed upon definition amongst those involved in it. There are several different faculty and staff (practitioners) who engage in projects, teaching, and research (the work) that utilize the term “agroecology” or “agroecological”. Some of these practitioners are highly collaborative and work with others from the university, some engage in very participatory work with communities and individuals from outside of the university, and some do both while others do neither. Agroecology at the university is not monolithic and, among those practitioners interviewed, there is disagreement about what actually constitutes “the work”.

The term “agroecology” gained traction at UW-Madison in the early 2000s with the creation of the Agroecology MS program and an agroecology faculty cluster hire. However, “the work” of agroecology on-campus predates these events and can be traced back to, at least, soil physicist Franklin Hiram King (F.H. King). In his seminal work *Farmers of Forty Centuries* (1911), F.H. King documented the agricultural practices of peasant farmers in China, Korea, and

Japan who had farmed sustainably on the same land for generations. At UW-Madison, other entities existed on campus during the latter-half of the 1900s including the Land Tenure Center, which focused upon global land inequality, as well as the Program on Agricultural Technology Studies, which focused in its last years on immigrant labor, bioenergy, and organic agriculture. However, both entities are now defunct. Still continuing their work today is the UW Center for Integrated Agricultural Systems, described by one practitioner as, the “program for alternative agriculture” or “at the very least, the storefront for people interested in something besides a very strictly productionist perspective.”

In 2001, discussions began at UW-Madison on the idea of a curriculum on agroecology. Notably, these initial discussions, between soil scientist Dr. Bill Bland and rural sociologist Dr. Fred Buttel, did not commit the program to any particular political orientation—including the transformative approach. What they did agree upon was that the program would be action-oriented, interdisciplinary, and would be an alternative to the “productivist” paradigm promoted by the rest of the College of Agriculture and the Life Sciences (CALs). Furthermore, it would view “agriculture as a human or socially embedded endeavor” (Bland and Buttel 2003). Beyond that, their perspective on the political nature of the program was more ambiguous. As one interviewee familiar with the conversations explained:

“In those early years, there was a real sense that agroecology was a good name for an interdisciplinary science. Really what people had in mind, they were looking for ways to break down barriers in CALs and that was a noble and valuable thing to do. But it was largely in ignorance of the fullness for which the term is being used elsewhere....The scientists at that time were still having trouble embracing the thought that their work has a purpose, whether they consciously intend it or not.”

Within universities in the United States, degree programs in agroecology, or related subjects, are a rather recent phenomenon. Of the twenty-one faculty and staff that I interviewed—sixteen of whom are affiliated with the academic program of agroecology—only six of them actually identified as agroecologists. Of these six practitioners, the majority (four) come from the social sciences. The most common response as to why practitioners didn't identify with the term is that instead they identified with their disciplinary training, e.g., ecology, forestry, entomology, agronomy, or plant breeding. Some even went further in these claims, for example:

“I'm credentialed in the area of plant breeding and in agronomy. I don't think I've earned the right to call myself an agroecologist.”

Academic agroecology is often described as an attempt to integrate the natural sciences, especially the agricultural sciences, with the social sciences and, more recently, the humanities (Pimbert et al. 2021). Framings like this appeared throughout the interviews, but many practitioners described being challenged to expand beyond their traditional disciplinary backgrounds. For many of those from the natural or applied agricultural sciences, the idea of integrating humans, history, social structures, and power into their analyses is almost heretical to their training. As one natural scientist said,

“Working up through the ranks of traditional ecology, you saw people as kind of this external force or agent that you want to omit from the system as much as possible.”

By excluding human beings, or so the story goes, a scientist is able to claim objectivity which elevates their findings to the level of “truth.” However, this view does not situate the work in the historical processes that constructed these disciplines. Nor does it acknowledge that scientific inquiry is a deeply social process involving human beings with different positionalities

and motivations (Latour 1983). Furthermore, it reifies the nature-culture divide or the idea that “humans are separate from nature.” For all of those interviewed, these aforementioned understandings were not something they necessarily subscribed to, but they were perspectives many were trained in and often had to conform based on the discipline in which they worked. According to one natural scientist,

“Whatever early career exposure I had to what science is, pushed the idea that the scientific method was about doing everything you could to eliminate, minimize, [and] tamp down biases. Biases are fundamentally a problem. And that's true within the framework and context of experimental design. But within the context of the way we make decisions in society, it's kind of stupid.”

Agriculture is a process which deeply intertwines humans and the more-than-human world. As a result, humans, behaviors, as well as social and economic structures must also be considered. For many of the practitioners interviewed, this awareness of agriculture as social, economic, and ecological did exist. Still, practitioners' single-discipline backgrounds seemed to impede their engagement with interdisciplinary thinking. One social scientist expressed how limiting various disciplinary perspectives can be:

“I think sometimes the people who come to agroecology come at it much more from an agronomic and an ecological perspective than they do from a well-informed socioeconomic perspective....If we don't understand behavior and really know what landowners and farmers and all the people involved in those decisions are thinking about...then, to me, we're dancing on top of the problem.”

Or from another perspective:

“I think that all of the ecological systems understandings—from soil science and carbon sequestration to plant pathology and agronomy—are really important but like, shit costs money....It’s all good to think about these things, how farmers might be working with the land...but if you can't figure out the socioeconomic relationships...you won’t get the full package.”

Many of these disciplines traditionally have operated within the paradigm that their work is able to avoid bias and therefore inherently contributes to the public good. These disciplines, and other university structures, actively *discipline* practitioners into particular ways of thinking, of framing issues, and of understanding why and how an issue exists in the first place (Foucault 1980). This phenomenon is nothing new in the applied agricultural sciences nor in “science” itself. In fact, it is a phenomenon that interviewees described confronting regularly in their interactions with other practitioners in their departments. As one agricultural scientist explained:

“I came to understand that [faculty members] were doing what they understood to be their job within the context of the agronomy department and agronomic science....You can look at the very productionist oriented people and say, ‘Wow, how are they so narrow-minded, where did they get those blinders?’ But, you know, they were trained in that tradition and they're in an academic department that rewards that tradition. And so, they’re just acting rationally within their context.”

From the early days of agricultural research, these sciences have been viewed by many in positions of power as an “undiluted good...[which] ensured the emergence of truth and social progress (Busch and Lacy 1983: 34).” As a result, early leaders of the land grant universities directed their programs to terraform the landscape and society based upon the application of these supposedly objective agricultural sciences. This unquestioning faith led to increasingly

specialized research inquiries and, as a result, the adoption of the commodity-crop orientation by farmers (Rossiter 1979; Boss 1927, as cited in Busch and Lacy 1983). Rather than working with and adapting to the local ecology, this type of agriculture imposed itself upon the land. This sentiment was summed up by one researcher as such:

“The [dominant] models of agriculture are about one size fits all solutions. You know, we’re going to fertilize the shit out of everything, and we’re going to ignore the ability of that land and its particular aspects.”

In order to reduce variability, applied agricultural research focused upon an increasingly reductionist and simplified approach to farming. Plantation-style monocultures were promoted over more complex polycultures and led to the reduction of biodiversity above and below ground. This imposed “ecological simplification” of the landscape, in turn, resulted in increased pest and disease pressures, as well as the need for synthetic fertilizers (Roossinck and García-Arenal 2015). These research priorities became so fundamental to the very core of agricultural research that issues not directly related to commodity agriculture were underfunded and even abandoned. Over time, this commodity crop orientation of agricultural research became almost “natural” (McCalla 1977, as cited in Busch and Lacy 1983). Many of those interviewed expressed the nuanced ways in which these research priorities are still pressed upon them to this day. As one natural scientist explained:

“Money follows money, you know. I’ve never been told what I can and can’t work on, which is great. We always talk about academic freedom, but man, we’re also told you got to have a big lab and you’ve got to have a lot of papers and you should be funding your research extramurally. And how do you do that? Well, you do it with money. And where does that money

come from? Well, if you have an industry that has political power, they get the government to put money behind it, or they themselves put money behind it.”

Another practitioner framed it this way:

“We have strong organizational habits. And funding mechanisms and expectations for promotion and tenure and everything else that are associated with the practice of science that we’ve come to know over the last 80 years, which reinforces the practice of food systems that have not been the friendliest practices to human health, the ecological health, [and] planetary health.”

Within the departments of CALS, research priorities are not necessarily forced upon faculty and researchers directly, but the expectations that do exist may push some researchers toward commodity agriculture anyway. According to Delonge et al., the money available for agroecological research is a fraction of that for industrial and commodity agriculture: “equivalent to only 0.6–1.5% of the [entire \$2.8 billion] 2014 USDA Research Education and Economics budget (2016).” The belief that applied agricultural research is, in fact, politically neutral and for the undiluted good of society can also motivate researchers to work on issues within industrial and commodity agriculture. Many of those interviewed spoke to this unquestioning faith they perceived in their colleagues. Another agricultural scientist explained it this way:

“One of my colleagues said something to the effect of, ‘Farmers choose what they want to grow. They grow corn because they like it.’ And I was like, ‘Do you really believe that?’ I mean, I literally said, ‘Do you really believe that?’ And he kind of got this, like, ‘Don’t you?’ I mean, this startled him. I said, ‘Have you ever heard of the renewable fuel standard? Are they growing corn because they like it or because the government is creating a market for their

product' and he just got this kind of scared [look]. So, it's not that they're malicious or guilty of malfeasance. Just not being skeptical."

As shown above, the disciplining effects of these applied agricultural disciplines can lead to an almost myopic view of the world. This perspective is often based on the idea of "productivism" or focusing primarily upon yield and labeling all other consequences as simply "externalities." Cropping systems are imposed upon the landscape with limited regard to the local ecology and climatic conditions. Due to the historic belief of agricultural science as an objective force for the "undiluted public good," many within the applied agricultural disciplines continue to operate with the productivist paradigm. For all of those interviewed, there was a general consensus that the productivist perspective—and the logic of externalities—were at the core of the issues with agriculture today. According to one social scientist:

"The productivist ideology—meaning that more is always better, you know, higher yields [are] always better—we're totally still living under that being the dominant mission of the university and [thus] taxpayer money.... There's not even a question if productivism is always [for the] public good."

Or from the perspective of another practitioner:

"At Arlington [agricultural] research station... you can't drink the water because of nitrate contamination.... The research station that is responsible for doing agricultural research to advance the modern agricultural system.... Your own research farm, and you can't even drink the water from the tap."

The perspective that agroecology positioned itself, in some way, in opposition to industrial agriculture and the productivist paradigm was evident in all of the interviews with agroecology practitioners. However, the implications of this understanding varied greatly

amongst the practitioners. For some, this opposition to industrial agriculture simply motivated them to do their research and to promote alternatives. But for others, this was not enough. Many practitioners called upon their colleagues, especially those who identify with agroecology, to go further in their work. They urged them beyond simply stating the issues—like habitat loss, nutrient run-off, or soil erosion—but instead to connect these issues to the underlying socio-political contexts in which they arise from. For example:

“I would say you’re not doing agroecology unless you’re taking it up at least one notch to say, well, why are you growing so much corn? Or, what got us into that situation where you are having this habitat loss? It didn’t just happen. It didn’t just come out of the sky and drop down. It’s the situated understanding of the larger dynamics, which is critical.”

Many of the interviewees agreed that in order to have this situated understanding, the practitioners must question, analyze, and critique the underlying systems that enable the dominant forms of agriculture and food systems to exist. For many, this can be uncomfortable, as it requires them to break from their disciplinary training. It forces them to engage with the larger social, economic, and political context. For many of the practitioners from the applied agricultural sciences, bringing this type of critique to their scholarship is a relatively recent phenomenon or it is not yet something they are comfortable doing. For other practitioners, this hesitancy from their colleagues can be incredibly frustrating:

“No one wants to talk about power. You know, it’s all about goddamn power and it’s like, if you aren’t willing to talk about it, you’re never going to understand it or be able to fix it or improve it.”

Or as another social scientist explained:

“[This tendency towards] a partial ecological transition without social justice. That's something that we're really grappling with on [this agroecological grazing] project. Is it enough if we get grass and we stop sending so much topsoil into the Gulf of Mexico? Is that a partial win or is that a complete fail?”

For many of those from the applied agricultural sciences, engaging in a more holistic interdisciplinary manner means trying to grapple with and understand the socio-economic aspects of agriculture and the food system. In order to do this, practitioners frequently engage with their colleagues whose specialties are within these spheres. However, for many of those from the social sciences, they often feel undervalued, misunderstood, or simply frustrated. One social scientist explained it as such:

“I am often struck by being in meetings on some of these cross-disciplinary projects [with] natural scientists who are doing all these controlled trials and collecting data to then run statistical analysis and things....[It's] great that [they] have figured that out empirically...but like, no farmer's gonna adopt that practice. And then they'll say things like, 'Well, you can't study [farmer behavior and adoption], there's no way to know that. And [I'm] like, 'Well actually, no, there's an entire discipline of people which that's all they do'.”

Or from another social scientist:

“If we're looking at trying to solve the climate change problem with agriculture, we need to look at the entire food system, not just the field level stuff...but you know, farming as an ecosystem within an ecosystem within an ecosystem....I think a lot of people can't do that. And so, it's frustrating for them. They really need to start small, and they really work at this detailed level super well. And getting bigger is so outside their comfort zone, but shit, we don't have time anymore to be codependent with people who can't see the big picture.”

Throughout the interviews, these disconnections between practitioners were described as extending beyond simple disciplinary boundaries but also were based on gender and race. UW–Madison is a Predominantly White Institution (PWI) and that is reflected in the student body as well as the staff and faculty. Some interviewees explained how whiteness has perpetuated itself both within the university and outside of the university, with which populations (white farmers) receive the majority of the research focus. One agricultural scientist explained this phenomenon this way:

“I would say probably the most entrenched colleagues on campus would be within the production ag departments in our college....The departments [and their] faculty choose who they want to hire....As in any system, people hire people who are like themselves.”

This propensity towards whiteness, as well as men, was described frequently by many of the female practitioners and practitioners of color. This white patriarchal orientation however was described as not exclusive to the “productionist” disciplines in CALS but was reflective of those engaged in agroecology work as well. As one practitioner described:

“It’s a very white male dominated environment....I don’t feel valued as a colleague there....It’s just the way people have been used to...there’s an old boys’ club, so it’s always the same people who get invited.”

Furthermore, from another perspective:

“Agroecology [has a] fairly white dude orientation that’s about an alternative set of practices that is carving out alternative economies, and I’m not going to, like, thumb my nose at that. But then there’s another kind of agroecology that’s not as US-based, that’s really global.”

Due to these sometimes shallow connections between the various disciplines, as well as on-going exclusion of practitioners who are outside of the “old boys’ club”, the agroecological

projects that are conducted often take more of a multi-disciplinary dimension rather than true interdisciplinary integration. Though with an agricultural landscape and food system facing increasing consolidation and greater impacts of climate change, it is a welcome sign to see many of these practitioners resisting their disciplinary disciplining and taking on a more political role. However, for many practitioners outside of the agroecology program or for those who felt marginalized within it, this engagement with the “political” may be, as one interviewee previously stated, “dancing on top of the problem.” The problem, many interviewees explained, was the unacknowledged or unaddressed social context in which the work was situated—one in which settler colonialism pervades UW-Madison as an institution and, without concerted engagement, inhibits agroecology from its more transformative potential.

II. “The Social”: Contested Engagement with Settler Colonialism and Indigenous Presence

Throughout the interviews, many practitioners explained how part of their shift into agroecology was from the introduction of the social science perspective, the social movement orientation, and/or framing their work within the broader social context. For others, it was simply the addition of, what they called, “the social.” For example, one natural scientist utilized this framing in their description of agroecology:

“I think it is a way of thinking about the world...it’s that interplay between the ecological and the social, to me that’s agroecology.”

What actually constituted “the social” was sometimes up for debate or simply meant different things to different people, especially for those from different disciplines. For some, “the social” seemed simply to mean including humans, often farmers, in their research. For example, from one agricultural scientist:

“Before I considered myself an agroecologist, I would have considered the people, the social part, as kind of an overlay of the system that, you know, it was either constant or not of particular interest to me.”

For others, engaging with “the social” seemed to go one step further to include an economic analysis in the research. However, as many of these projects were based on collaboration across disciplines, the depth of engagement with economic analysis was described at times as rather superficial. For example, from one economist:

“What people want the economist to do is just be a good accountant. Like ‘help me count up all the shit, so I can say it’s this way or that.’ And I’m like, okay, but counting is not the fun part of economic human behavior, which is the fun part of economics. Right. If you just want somebody who can count it up, you know, don’t bother me.”

Some of the practitioners from the applied agricultural sciences did however incorporate a deeper engagement with social context and this was indeed evident in the interviews. Notably, this subset of practitioners were all female and had experience working internationally. From these experiences in other social contexts, these practitioners placed agroecology within a much broader socio-political project. As one of these agricultural scientists explained:

“Oftentimes agroecology is placed in the context of agriculture and food systems in developing nations because [of] that social component....Looking at equity and food sovereignty and culturally appropriate [approaches to] building a food system is such a critical part of...the [social] movement component that truly addresses agroecology. You can’t separate that social context from...decisions related to the production practices....[They’re] so intertwined with [each] other.”

In advocating for an agroecology that centers equity, food sovereignty, and culturally appropriate food systems, “the social”, referred to here, implicates larger social structures which create asymmetries of power between different identities and across geographies. However, it also lacked an explicit naming of these larger social structures which brought the need for these agroecological food system interventions in the first place. For many of those involved in the applied agricultural sciences, this type, or scale, of analysis is often outside of their disciplinary training. Though for many from the social sciences and humanities, this explicit naming was seen as a necessary step. One practitioner explained it this way:

“Anyone who says that they're doing agroecological work needs to recognize the political economic aspects, the power aspects. You could say that ‘the political or the power aspects can be put in the category of socioeconomic’ but, I want to name the political, the power aspects. And I think at a minimum, anyone who is saying they’re engaged in agroecology should recognize that.”

Though many agroecology practitioners did not, or were hesitant, to name the social structures which perpetuate the asymmetries of power in our world, many of the interviewees did speak of the Movement for Black Lives as an impetus for pushing them further to make broader connections in their work. As one practitioner explained:

“I think the recent social movements around Black Lives Matter and broader issues of inclusion have pushed and pushed our agroecology colleagues more firmly [toward the political]. I mean, there was some activity before, I don’t want to make it sound like we’re at the birth of the universe or something, but there is a palpable, higher energy focused on that now.”

However, even with the growing social consciousness that has emerged over the last few years, many of these descriptions of “the social”, like the one above, still utilized vague

descriptions of broader issues such as “inclusion” or “diversity.” As heuristics, terms like these may in fact be ways to simplify broader social systems. Yet, without naming the issues directly and situating them into broader histories, some interviewees explained that this risks a disconnected understanding of the current moment. One Native scholar explained it this way:

“A mile from where George Floyd was murdered is where [the American Indian Movement (AIM)] was founded....The fact that AIM was started in direct response to police brutality against American Indians, I think speaks volumes to the murder of George Floyd...at the hands of the police. So, it’s all intertwined, absolutely. And I think it’s a really important moment for people that haven’t been as familiar with the Red Power or American Indian movement to look at that longer history right now.”

For many of those interviewees from the social sciences, humanities, and those who work with Indigenous communities, connecting agriculture today to larger historical socio-political processes helped create connections and opened possibilities for change. As one social scientist interviewee explained, agriculture today finds its origins directly from these larger social structures:

“What we call ‘Big Ag’ now really goes back to the plantation system and conquests in the 1500s of the so-called ‘New World.’ Right? So [you can] see the history of capitalism as being the history of agriculture and food.”

“The social” of agriculture is constituted by, not separate from, the history of the United States: slavery, settler colonialism, and accumulation by dispossession. This type of analysis and explicit naming of sociopolitical systems were generally uncommon among the applied agricultural scientists. However, for many of the interviewees not affiliated with the agroecology program, the sentiment above was just the tip of the iceberg. For these interviewees, many of

whom work with Indigenous communities, the specificity of “the social” in the state of Wisconsin included settler colonialism, Indigeneity, and white supremacy. One practitioner explained it this way:

“So, agriculture, it’s the beacon of Wisconsin. We talk about it all the time, but rarely do we mention the thousands of years of tradition of agriculture that predate the creation of the State of Wisconsin and [the settlers] who came into the state. It’s like, man, what profound agriculturalists were in this state. And all of that has just not really been fundamentally acknowledged in any sincere way. [Instead, they’re just] championing the new agriculture of the state which was the terraforming of the state and eradication of the previous ecosystems over here.”

Without understanding these aspects of “the social”—the longer histories and on-going processes of settler colonialism—many of the non-agroecology affiliated interviewees argued that these issues were bound to continue. For many of those interviewees that work with Indigenous communities, the Indigenous and settler colonial aspects of “the social” felt at best grossly under-addressed, or at worse, completely unacknowledged. For example, one Native scholar explained:

“You can even make that connection between what happened in the late 19th century, early 20th century with agriculture and how that has affected the environment today: What sorts of crops that were introduced then have displaced native crops and really remade the landscape; pollution, like agricultural runoff, and how much land is eaten up with agriculture versus grazing for species like bison; or [habitat for] wild rice, how that’s been really affected. So, I think there is this disconnect between what happened over 150 years ago and this kind of resurgence today [with] agroecology by primarily non-Natives.”

However, these disconnects were not entirely unsurprising to many of the interviewees that work with Indigenous communities. They argued this lack of engagement or willful ignorance was by design and served to obfuscate the history of settlers establishing dominion over the land through a genocidal process of land expropriation. For example:

“The organizing principle and goal of all settler colonial societies is replacement. So, replacement of the indigenous societies is a case in point. How do you do that? Eradicate their language and cultures by criminalizing them so they'll go away, and we'll never remember them again. We just won't talk about it anymore as a society.... It's not a coincidence that four out of five US citizens know almost nothing about Native Americans today. It's by design.”

This practitioner's words echo the distinction of Wolfe (2006) that settler colonialism must be understood as a “structure, not an event”, informed by a “logic of elimination” e.g., “*Civilitas Successit Barbarum.*” This understanding of the structure of settler colonialism, informed the analysis of many of the practitioners who work with Indigenous Nations. For many of these interviewees, it was impossible to speak about agroecology at UW-Madison, or any academic discipline at a LGU for that matter, without first situating this work in the longer history and social context which led to the founding of that very institution: land expropriation, Indigenous erasure and cooptation of knowledge.

“So, the colonial regime is like, ‘Oh, look how smart we are, we figured this out.’ The people who had lived there for a hundred thousand years knew it already...[but] that knowledge is often subsumed into the colonizers' worldview and they claim it as their knowledge....So, I think about that, that real challenge for any [academic discipline] to get to the root issue of how much you purposely obscured, because it benefits you to do so versus acknowledging the complexities and Indigenous presence.”

According to John Locke in his *Second Treatise*, “God and his Reason commanded [Man] to subdue the Earth, i.e., improve it for the benefit of Life, and therein lay out something upon it that was his own, his labour” (1978: 20, as quoted in Fanshel 2021). Thus, private property was established through the application of labor to land. According to this logic, which was foundational to US property laws, the ancestral territories of Indigenous Peoples were nothing more than wilderness. As that practitioner continued:

“So within a wilderness, you can’t have robust agricultural systems like what the Ho-Chunk had....They produced 180 tons of corn every year in the Four Lakes [region, present day Madison and surrounding area]. [The] Menominee were farming within the forest of that place. So, all of this large-scale agricultural development can’t happen in a wilderness. So, we just can’t acknowledge it. And we’ve done our best not to acknowledge it until the last five or ten years.”

Wolfe (2006) contends that settler colonialism is best understood not only as a process but a “structuring structure,” one which “creates a foundation of violence (white supremacy, racism, capitalism, and heteropatriarchy) upon which settler states construct all dominant social institutions” (Beardall 2022: 200). This type of analysis informed the way in which many of the interviewees who were not affiliated with the agroecology program in their understanding of the university.

The settler colonial implications go beyond agroecology’s perceived historical appropriation of Indigenous knowledge, as LGUs continue to benefit financially from the displacement of tribes. As described by the *Land Grab U* project, the Morrill Act of 1862 established the Land Grant University system. This act, which established agricultural and mechanical arts colleges, facilitated the development of the epistemological and technological infrastructure for settler colonial terraforming of the US Western Territories. Furthermore, as one

social scientist interviewee explained, the lands which the Morrill Act allocated to the states provided the economic basis of settler colonial expansion for these newly established Land Grant Universities:

“The predominant way of funding them has come from the expropriation of Indigenous land and turning universities into little real estate companies. [They] sell off Indian land and create endowments.”

In total, nearly 10.8 million acres of expropriated land was sold off to fund the endowments of fifty-two Land Grant or “Land Grab” Universities (Lee and Ahtone 2020). These institutions further legitimized the settler colonial transformations of Indigenous ancestral territories emphasizing “that the land was to be devoted to capitalist agriculture, not mercantile or subsistence pursuits, that the settler’s knowledge of soil and climate was decisive; and that changes in the land would be engineered” (Roediger 2021).

The University of Wisconsin–Madison is one of the fifty-two LGUs that received expropriated Indigenous lands through the Morrill Act. UW–Madison had been established less than two decades prior on lands forcibly ceded by the Ho-Chunk Nation—part of the 1832 multi-million acre forced land cession. As part of the Morrill Act, the newly established university received 235,530 acres of land. This vast acreage was divided between 556 parcels that were spread out across the ancestral homelands of the Menominee, Ojibwe, and Dakota peoples (Lee and Ahtone 2020). As the authors of *Land Grab U* explained, with the sale of these expropriated lands, these LGUs were “built not just on Indigenous land, but with Indigenous land (Lee and Ahtone 2020).”

From their inception, UW–Madison and the other LGUs were meant to be “democracy’s colleges” (Ross 1942). However, with the genocide of Indigenous peoples and the expropriation

of their lands, democracy was clearly an exclusive arena. This sentiment is even reified into the Declaration of Independence, the founding document of this nation, where it is stated that “all men are created equal” yet the first inhabitants of this land are but “merciless indian savages” (The Founding Fathers 1776). For one interviewee from the humanities, they summed up democracy’s colleges in this way:

“The idea of a Land Grant institution from the folks that were...expropriating Indigenous land from Indigenous peoples, would say that it was working towards supporting and empowering [the white] working class people.”

This general understanding of the settler colonial origins of the university was shared amongst many of the interviewees but especially by those of whom were not affiliated with the agroecology program. For some of those within the agricultural sciences, much of these aspects of “the social” described above—settler colonialism, Indigeneity, and white supremacy—were largely absent from the interviews. Furthermore, some of their descriptions of the university’s mission contrasted greatly with those from outside of the College of Agriculture. For instance, on speaking to this mission referred to as the “Wisconsin Idea” one agricultural scientist explained it this way:

“I think one of the cool things about UW–Madison is an overall commitment to the Wisconsin Idea, the boundaries of the university being the boundaries of the state. And we’re really working in partnership with communities to build a better place for all of us.”

However, who was and is actually included as part of the commitment of the Wisconsin Idea is contested. Though race-neutral in its language, this, oft-celebrated, guiding principle of the university was never meant to include Indigenous peoples. As one practitioner explained:

“The genesis of the Wisconsin Idea in the late 1800s and the formalization of the Wisconsin Idea in the early 1900s happens entirely when the United States is actually trying to eradicate all indigenous knowledge and culture from planet earth, [in other words] white supremacy efforts, right?... We only did our first listening sessions with Native Nations to learn about their interests in the year 2015. It took us [over 160 years] as an institution to get to the point of listening to Native Americans. Right? So [over 160 years] of institutional history prior to zeroing in and listening.”

For many of the practitioners that work with Indigenous peoples, these historical foundations inform the work they do and the way in which they view the university. For them, the university is not simply a site for the discovery of knowledge but an engine in the co-optation of Indigenous knowledge systems. As one interviewee explained:

“I look at the sustainable management of this compact with nature that the Ho-Chunk have done [and that] the Menominee have done for time immemorial here in the state. And then conservation people come along like Aldo Leopold or Gaylord Nelson, and like, ‘Oh, we came up with these great ideas on sustainability’ and I’m like, ‘No, these people are living these ideas for thousands of years, but for whatever reason you discovered it.’”

As a “structuring structure,” settler colonialism permeates the university and the very process of knowledge production. Being situated at the university, academic agroecology is not somehow divorced from this. There are varied approaches to incorporating “the social” into agroecology research—from the integration of human subjects to advocacy for socially just food systems—but widespread acknowledgement and engagement with settler colonialism, Indigeneity, and white supremacy are limited or just beginning.

III. Toward a Transformative University Agroecology

The transformative agroecology approach has been proposed as a means to transcend the, often, status-quo politics of agricultural research. This approach centers “an understanding of the dynamics of social change and how and why current systems persist” (Anderson et al. 2020: 24). As discussed by interviewees in the previous section, the history and on-going structure of settler colonialism is a foundational aspect of the university and agricultural landscape and thus must be addressed. Without centering this type of analysis and approach, agroecological research risks reinforcing ongoing asymmetries of power—promoting those who have been socially and materially advantaged over those who have been historically marginalized. One practitioner explained that this takes interrogating:

“Who has power, who has access to land, [and] how we treat people....This is a question our whole country is grappling with right now...these race-related questions....I think so much of it goes back to who has the power, who has the resources.”

As explored in previous sections, the university and the academic disciplines actively discipline practitioners to conform to certain paradigms and research agendas. Since those early days of agricultural research, information has generally flowed from the university out to communities—often not taking into account local knowledge, let alone the perspectives of Indigenous communities. To begin to address the settler colonial foundations of the university, many interviewees argued that change needed to occur on the structural level. For instance, one practitioner explained it this way:

“There’s a saying in organization development, that structure drives behavior at all levels....Education alone does not work. We can work really hard at it. We’re an educational institution, so that’s what we do, we educate....But the real change happens at the structural

level....[However,] change is really an emotional thing. So, you have to appeal to emotions in order to create that structural kind of change.”

For many of the interviewees, especially those from the social sciences and humanities, they viewed agroecology at UW–Madison as having a strong leaning towards the agricultural sciences, advancing more reductionist and quantitative science approaches. These types of approaches, some argued, were especially effective for field-level issues but had a more limited effect on the larger landscape and broader social systems. To truly address the structural level, they explained, agroecology practitioners need to shift the way in which people understand the world. As one practitioner explained:

“The [approach] with the least amount of leverage is looking at data...[and] all these people are so focused on that. And there is stuff that can be found there, especially if you can use algorithms to look at big data and see big picture stories emerging from that data. But the greatest point of leverage is developing narratives, particularly multiple narratives, that start to change the way that people see the world.”

For many of the interviewees not affiliated with agroecology, their explanations of what it meant to be at UW-Madison were radically different than many of those of the agroecology-affiliated interviewees. Their relationship to place, first and foremost, centered a responsibility to the ancestral peoples of this land, the Ho-Chunk. For example, one Native interviewee explained:

“I think of myself as a visitor to the land, you know, even as a Native person....These aren't my homelands. I very much think of myself as a visitor and having a responsibility to the Ho-Chunk people here....I'm always encouraging students to be familiar with whose land are you on and to know those communities. So I think that's my responsibility....Even though these

aren't my homelands, my role is to educate folks and to give them the knowledge and the tools to be and do better.”

Or as another non-Native practitioner explained:

“The institution is on Ho-Chunk ancestral territory. The best thing we can do is to resolve, to educate our own and also care for the lands and waters, where we are. To keep up the ethic of stewardship and to do it together with the tribe in ways that they want.”

Many of the interviewees not affiliated with agroecology stated that the beginning of the un-settling process is simply acknowledging the university is on expropriated Indigenous land and was funded through the sale of other expropriated Indigenous lands. But, they reiterated, this is only the beginning. From there, many promoted the idea of working in collaboration with Indigenous nations. However, they also acknowledged that this may be challenging. As one practitioner that works closely with the Tribes in Wisconsin explained, their colleagues need to:

“Visit the tribes, listen-in, and build relationships that are built around shared priorities and expertise, like land and water stewardship, like food systems and like educating our youth. And then we make commitments to build those partnerships and to meet each other as co-experts. I call it listening and responding...it's like bringing your skills, not your agenda to the table. And then collaborate in a real way and listen. Listen, then respond and change what you're doing. And adapt....Committing to working together, it's a long path. It's a long and broad path.”

For other practitioners who work with Indigenous communities, they did acknowledge that some attempts have been made in the past to do this work, but they explained that it hasn't always come from a place of collaboration. The sense of collaboration is crucial, they explained, and must ultimately benefit the tribes themselves. Another practitioner framed it this way:

“How do [these efforts] benefit tribal communities? Because so much of the discussion is focused on how it benefits the university. Until you ask that question and frame it from the perspective of how it benefits the community that you’re working with, it’s not a partnership.”

Or from another perspective:

“Whether it be academics or extension agents, [they] are not as open to that traditional ecological knowledge or willing to listen and really partner. Instead [they’re often] coming in and thinking that they have all the answers and doing that more hierarchical way of extension....To be successful, you need to be engaged and open and willing to listen and think of things differently. And that isn’t always the case when it comes to people working at the university and extension.”

Within Indigenous communities, many of these same practitioners explained that the values and importance placed on the community is much different than that of the university. For these partnerships to actually be collaborative, they argued, these differences must be understood, and practitioners need to approach these projects differently. As one practitioner who works with Indigenous communities explained:

“The university, the institution as a whole, really only cares about two things: prestige and resources....And it’s not going to act unless it really sees how it’s going to benefit from an action. And this is where I think we really run into a problem....For most Native communities, you gain standing by being selfless by putting the community above your own interests, by putting the elders, ahead of yourself. You’re not out there for just your own reputation....Across most tribal nations, that idea of selflessness is fairly universal. This is where we run into one of these clashes, the university is generally not going to act in a selfless way. It’s just not how it’s set up.”

Many of the practitioners who work with tribal communities explained that to do this work required a high level of humility which they understood as not always being a common trait amongst academics and other practitioners at the university. Furthermore, they explained, working with tribal communities required the commitment to building relationships that often go beyond the typical grant cycles. For example, one practitioner put it this way:

“We need to deepen our relationships and build on work, and that’s listening and responding. And it’s hard. It’s difficult in our culture with various demands and short attention spans to choose that long and broad path. It takes a lot of emotional intelligence and it takes a lot of humility and not everybody has that, especially in academia....There’s a lot of letting go of self there. You’re working for a greater good, and you’re not the first fiddle. You’re not the biggest voice in the room. And it can be hard for academics to just shut up and listen.”

Beyond humility and relationship building, many of the interviewees stressed the understanding that there are different types of knowledge and different types of expertise. For agroecology at UW–Madison to better align itself with Indigenous communities, some practitioners argued that the role of epistemology must be interrogated. Furthermore, they questioned how to do this in such a way as to not be appropriative. As one social scientist explained:

“What is the knowledge base that agroecology is using? How is it developing its vision for the future?...It should be Indigenous folk and, you know, all kinds of other folks working together around a range of epistemological foundations to envision a future....I think the way that the conversations sometimes go [is oriented around] incorporating and assimilating people into what’s already happening.”

For many of the practitioners that work with Indigenous communities, they spoke about being intentional with the terms they utilize and the epistemological foundations they engage with. As discussed previously, “agroecological science and practice is rooted in knowledge developed by Indigenous and peasant farmers in relation to specific territorial contexts” (Ferguson et al. 2019). However, the term “agroecology” is not commonly used in the United States outside of the university, and as some interviewees explained, especially not in Indigenous communities. One Native scholar explained it this way:

“The terms that we choose to use are really specific to the audience that we’re speaking to. Whether we choose to use terms like traditional ecological knowledge or even food sovereignty, I think [these can be] really empowering to tribal communities versus almost imposing terms like agroecology on them....Like, ‘Oh, here you need to recognize the Western science aspect of it.’ But we know native peoples have been doing these things for thousands of years.”

Traditional Ecological Knowledge (TEK) and food sovereignty were brought up frequently, in the interviews with non-agroecology affiliated practitioners, as terms that were utilized much more often by Indigenous communities. It was explained that for many Indigenous peoples, relationships with the land were, and for many still are, based on kinship with more-than-human nature. This kinship relationship forms a type of responsibility based on the knowledge learned through relationship with the land. As this knowledge has been learned through relationship, renewal must then be practiced and, thus, is a continual process. Speaking to Traditional Ecological Knowledge and Indigenous relationships with land, one interviewee stated:

“Land is our first teacher, the living world of plants and animals and microscopic beings, are our relatives and teachers. So, we view the living world in this kinship relationship that we’re not above the living world. We are simply part of the living world and that whatever we do, we should encourage health and vitality for all living beings....This kinship relationship...the Menominee called this a ‘compact with nature,’ and they talk about how, in being stupidful creatures that are so reliant on so many other species to survive that, we should, in harvesting other living beings, ensure that they have the same quality of life that we do.”

As mentioned above, food sovereignty came up frequently as a term that was utilized much more frequently with Indigenous communities than that of agroecology. Conversely, the term food sovereignty was much less utilized by agroecology-affiliated interviewees except those that work with Indigenous communities and those from the social sciences. For those already familiar with the concept, food sovereignty was described as having much more cultural resonance with Indigenous communities. One Native interviewee explained food sovereignty as such:

“It is a way for tribal people to reclaim their Indigeneity and their own health, to have control over their own food systems and what they eat, what they grow. Rather than having the agriculture industry really influencing and impacting what their consumption is.”

This concept of food sovereignty was framed as an alternative to the industrial food system, similar in ways to agroecology. These parallels between food sovereignty and agroecology were understood by many but there was hesitancy to use the terms interchangeably as they were oriented towards different communities. As one interviewee described:

“I see agroecology and things like food sovereignty and traditional ecological knowledge [as] different because of the audiences, but I think there is so much overlap.”

Though there is much overlap between the various concepts, some interviewees described a depth to Indigenous efforts for food sovereignty that does not exist in agroecology, at least as it is here at UW–Madison. For many Indigenous communities, the interviewees explained, this concept of food sovereignty was not a new idea. It long predates colonization and, for many, was framed as a form of on-going resistance. However, the legacies and on-going structure of settler colonialism have greatly challenged Indigenous food sovereignty. For many interviewees, this disconnect or lack of acknowledgement of these longer histories was frustrating. As one Indigenous practitioner described:

“All these [academic disciplines] just don’t even acknowledge that these systems existed before colonization or continue to partially exist in colonization. So, food sovereignty, we’re trying to reclaim these food systems that we understood so deeply. And unfortunately, our knowledge has been greatly interrupted by generations of family separation and incarceration.”

Often, interviewees described feeling overwhelmed by their current departmental responsibilities and unable to bridge these divides. In order to build trust and for relationships to be maintained between practitioners engaging in agroecology and those working within the paradigms of TEK and food sovereignty, many interviewees explained that there need to be dedicated people to do this work. Some proposed hiring more staff members for this role. For example:

“Often a lot of the best kind of community relationship building is done, not by tenured professors on campus, but by staff. You know, people in CIAS or [the Intertribal Agriculture Council]. People who have staff positions, where they can spend their time networking with communities.”

However, others suggested changing the very structure of UW–Madison in what they described as “decolonization” work. As another interviewee explained:

“We need to honor and reward community-based scholarship and community-based research, Tribally-led research and projects. We need to reward that with tenure and with job security and with publishing....[We also need to recognize] elder epistemology. These are senior experts to all of us, no matter how educated you are. These are knowledge systems that have endured. And the respect that those need to be given. Another thing we can do to decolonize is to employ tribal experts who don't have degrees and recognize their Traditional, capital T, expertise of their language and their culture. And then we need to employ them, even though they don't have degrees, employ them as instructors in our spaces.”

For agroecology at UW–Madison to transcend the often-status quo politics of LGU agricultural research, many interviewees explained that settler colonialism must be taken into account. For many agroecology practitioners, this may be challenging and force them to not only confront their disciplinary disciplining but also how they view themselves in relation to the land on which they work, both at UW–Madison and in the field. As many interviewees described, the structuring structure of settler colonialism permeates the university and society broadly. Because of this, some of the interviewees argued, there is a responsibility for everyone at the university to address these issues. As one Native scholar explained:

“Dispossession is an ongoing process. It's not something that happens once, right? We are involved in dispossession right now as we speak, because at any moment this land could be given back....It's not something that's just happened once in the 1800s with a treaty...we all have a personal responsibility today.”

Discussion: Summary Results

Through the course of this study, I sought to understand i) the perceptions of agroecology at UW–Madison; ii) the contested engagement with Indigeneity and settler colonialism; iii) and, therefore, what a “Transformative University Agroecology” could be.

Of the twenty-one practitioners interviewed, sixteen of whom are affiliated with the agroecology program, only six actually identify as agroecologists. This fact speaks to the challenges many of the practitioners face in engaging in more interdisciplinary work after being trained in a relatively narrow disciplinary background. Additionally, the term agroecology is not as widely utilized in the United States compared to the conceptually distinct but related terms of organic, sustainable, or regenerative agriculture—terms which some practitioners identified with more strongly.

As explained in the first results section, agroecology at UW–Madison was originally envisioned as an interdisciplinary endeavor that would situate agriculture as socially-embedded and be an alternative to the “productivist” orientation of CALS. Furthermore, it was not explicitly aligned with any particular political orientation. Broadly, the intent of this original vision still holds true today but the degree to which it is actualized varies quite dramatically between different practitioners.

Since Bland and Buttel first discussed creating an agroecology program nearly two decades ago, many of the agroecology practitioners have pressed their colleagues to go further in their work. Often this has meant practitioners, both faculty and staff from the social sciences and humanities, challenging their colleagues in the natural sciences to resist their disciplinary disciplining and to more fully embrace the social and political context of their work. Thus far, these attempts have had mixed results due the epistemic boundaries of the various practitioners,

and their disciplines, but also due to the structure and expectations of the university which create obstacles to collaboration. Furthermore, there are established constellations or communities of collaboration—referred to as “the old boys’ club”—which limit the interactions of practitioners based on race and gender.

Compared to many of their non-agroecological colleagues in CALS, agroecology practitioners generally do take the broader perspective of agriculture as socially-embedded. The Movement for Black Lives was named explicitly as an impetus for an increased engagement with “the social” in recent years, in this case meaning engaging with issues of “diversity” and “inclusion.” However, what generally constituted “the social” varied greatly between practitioners. The most minimal integration of research with “the social” seemed to be an inclusion of humans or farmers whereas the broadest integration involved situating research and the university within the longer histories and on-going structure of settler colonialism.

For those from the social sciences, humanities, and/or those from outside of the agroecology program, it was firmly stressed that this work must engage deeper with asymmetries of power—like the on-going structure of settler colonialism—or else risk further exacerbating or reifying these issues upon the landscape. This “structuring structure” has helped to shape Wisconsin into what it is today through the material and epistemic dispossession of Indigenous Nations. The University of Wisconsin played no small role in this effort as it was created through the sale of expropriated Indigenous’ land for the purpose of supporting settler society in the replacement of those very same Indigenous communities. For all of its “beneficent” rhetoric vis-à-vis the “Wisconsin Idea”, UW–Madison has only recently begun to listen to the Native Nations after over 160 years of extending its influence upon the State.

For many of the interviewees who work with Indigenous communities, they argued that it is necessary for those at the university to orient their work in a way that is accountable to these longer histories and on-going processes of settler colonialism. For those affiliated with the agroecology program—generally, people who work with land that has been dispossessed from Indigenous communities—it was suggested to reorient the way they view themselves in relationship to place. As in, this is Ho-Chunk territory, and we are “guests” or “visitors” upon this land. Furthermore, building relationships with those from the Indigenous Nations and committing to working on shared interests was a recommended path forward. This will be a humble path where ego must be set aside—“you’re not the first fiddle”—and benefits must be oriented toward the Tribes, rather than toward prestige and resources for the university. However, it was also acknowledged that creating relationships may be difficult due to centuries of colonialism and continued mistrust.

The epistemological foundations of agroecology are generally recognized as originating from Indigenous and peasant communities globally. However, here in the United States, and at UW–Madison, this recognition is less acknowledged or understood. Globally, the project of agroecology is intertwined with TEK and movements for food sovereignty but these connections are generally not made here. In Wisconsin, TEK and food sovereignty fall more under the domain of Indigenous communities whereas agroecology is of the university. It was noted that these concepts do overlap, but that they are distinct from one another.

To better bridge the divide between the university and the Tribes, it was argued to hire more staff members, especially Indigenous peoples, focused explicitly upon this goal. Furthermore, the structure of the university ought to be changed to reward community-based

scholarship and Tribally-led projects as well as to employ more Indigenous peoples, including elders, and compensate them as experts regardless of their degree status.

Early in the research process, the literature that I reviewed discussed the strong connections between agroecology and food sovereignty (Anderson et al. 2020; La Vía Campesina 2017). For La Vía Campesina, these concepts must be linked as “agroecology without food sovereignty runs the risk of being a purely technical solution [while] food sovereignty without agroecology is an abstract framework that provides working people with little in terms of tangible strategies for developing alternatives” (La Vía Campesina 2017: 14). Thus, the technical practices of agroecology must be guided by the political vision of food sovereignty.

However, it became evident that in the context of UW–Madison, the practical connections between these two concepts are much more limited. Food sovereignty is a term that originates in the Global South and only in the past decade, or so, has there been more thought published on the concept here in the Global North (Wittman et al, 2010; Higgins, 2015). In the US and Canada, the term more commonly utilized is Indigenous food sovereignty (Mihesuah et al, 2019). It is noteworthy that when La Via Campesina first promoted the concept of “Food Sovereignty” on the global stage—at the World Food Summit in Rome in 1996—no Indigenous groups from the US or Canada were involved (Grey & Patel, 2015).

Through the initial interviews with primarily natural scientists, the concept of food sovereignty rarely was brought up. There were moments in the conversations when connections would be made between agroecology and food sovereignty but this was most often in reference to groups in Latin America or with Indigenous nations in the United States. This idea of the

interwoven projects of agroecology and food sovereignty did not play out in my interviews in general.

As agroecology is practiced primarily by those at a settler institution and food sovereignty is practiced primarily by Indigenous communities, it became clear that the context of the United States as a settler colonial nation is the defining disconnect between agroecology and food sovereignty. Thus, for agroecology, as a set of practices, to be guided by food sovereignty, as a political vision, necessitates practitioners of the former to be guided by practitioners of the latter. Without the political vision of food sovereignty, agroecology risks focusing too heavily on technical practices and further obscuring the socio-political context which gave rise to the ecological issues in the first place (Ferguson 1990). Agroecology in the settler colonial context must engage and support Indigenous food sovereignty or else it runs the risk of furthering settler dominance and territorial control.

UW–Madison is one of dozens of LGUs which benefited from the sale of expropriated Indigenous lands. It is one of many LGUs with an academic program engaged in agroecological work. For all of these institutions and academic programs, these settler colonial histories and ongoing processes must be accounted for. To expand up this research, future studies could look at the ways in which white supremacy, anti-Blackness, and other forms of discrimination are perpetuated within university programs engaged in agroecological work. For example, how many of the farmers, and their farms, that receive support from LGUs today are descendants of recipients of the Homestead Act? Furthermore, studies could look to see ways in which these programs have successfully made partnerships based on collaboration with Indigenous nations and other groups.

At its root, the transformative approach to agroecology is focused upon challenging the underlying social and political systems which perpetuate social inequality, historical injustice, and landscape destruction (Anderson et al. 2021). For agroecology at UW–Madison to adopt this approach and do “transformative university agroecology”, it must further recognize its land grab history and that settler colonialism is not in the past. As one interviewee stated, “dispossession is an on-going process”, therefore “we all have a personal responsibility today.”

References

- Anderson, C. R., Bruil, J., Chappell, J. M., Kiss, C., & Pimbert, M. P., (2020). *Agroecology Now!: Transformations Towards More Just and Sustainable Food Systems*. Springer International Publishing
- Beardall, T. R. (2022). “Settler Simultaneity and Anti-Indigenous Racism at Land-Grant Universities.” *Sociology of Race and Ethnicity*, vol. 8, no. 1, pp. 197–212.
- Bensin, B. M. (1928) *Agroecological characteristics, description and classification of the local corn varieties chorotypes*. Book (Publisher unknown)
- Bland, W., & Buttel, F. (2003). “Introduction: A Framework for Thinking About New Directions in Agroecology Research and Education” in *New Directions in Agroecology Research and Education*. Madison: UW-Madison.
- Busch, L., & Lacy, W. B. (1983). *Science, Agriculture, and the Politics of Research*. Boulder, Colorado: Westview Press
- “Declaration of Independence: A Transcription.” *National Archives*, (2015, November, 1).
<https://www.archives.gov/founding-docs/declaration-transcript>.
- DeLonge, M. S., Miles, A., & Carlisle, L. (2016). “Investing in the Transition to Sustainable Agriculture.” *Environmental Science & Policy*, vol. 55, pp. 266–73.
- Estes, N. (2019). *Our History Is the Future: Standing Rock Versus the Dakota Access Pipeline, and the Long Tradition of Indigenous Resistance*. Verso Books.
- Fanshel, R. Z. (2021). *The Morrill Act as Racial Contract: Settler Colonialism and U.S. Higher Education*. escholarship.org, <https://escholarship.org/uc/item/1cc0c4tw>.

- Ferguson, B. G., Maya, M. A., Giraldo, O., Mier y Terán Giménez Cacho, M., Morales, H., & Rosset, P. (2019). "Special Issue Editorial: What Do We Mean by Agroecological Scaling?" *Agroecology and Sustainable Food Systems*, vol. 43, no. 7–8, pp. 722–23.
- Ferguson, J. (1990). *The Anti-Politics Machine: "Development," Depoliticization, and Bureaucratic Power in Lesotho*. Cambridge, England: Cambridge University Press.
- Foucault, M. (1980). *Power/Knowledge: Selected Interviews and Other Writings, 1972-79*, (Ed. Colin Gordon). New York: Pantheon.
- Grey, S., & Patel R. (2015). "Food Sovereignty as Decolonization: Some Contributions from Indigenous Movements to Food System and Development Politics." *Agriculture and Human Values*, vol. 32, no. 3, pp. 431–44.
- La Via Campesina. (2017). *Toolkit-Peasant Agroecology Schools and the Peasant-to-Peasant Method of Horizontal Learning*.
- Latour, B. (1983). "Give Me a Laboratory and I Will Raise the World." Published originally in Knorr-Cetina, K., & Mulkay, M. (Eds.), *Science Observed: Perspectives on the Social Study of Science*, London and Beverly Hills; SAGE Publications. pp. 141-170.
- Lee, R., & Ahtone, T. (2020, March 30). Land-Grab Universities *High Country News*.
<https://www.hcn.org/issues/52.4/indigenous-affairs-education-land-grab-universities>.
- Milliken, J.P., & Schreiber, R. (2012). "Examining the Nexus between Grounded Theory and Symbolic Interactionism." *International Journal of Qualitative Methods*, vol. 11, no. 5, pp. 684–96.
- Mt. Pleasant, A., & Kantrowitz, S. (2021). "Campuses, Colonialism, and Land Grabs before Morrill." *Native American and Indigenous Studies*, vol. 8, no. 1, pp. 151–56.

- Pimbert, M. P., Moeller, N. I., Singh, J., & Anderson, C. R. (2021). "Agroecology." *Oxford Research Encyclopedia of Anthropology*. Coventry University, University of Vermont Agroecology and Livelihoods Collaborative
- Roediger, D. R. (2021). "Morrill Issues and Academic Liberalism." *Native American and Indigenous Studies*, vol. 8, no. 1, pp. 92–96.
- Roossinck, M. J., & García-Arenal, F. (2015). "Ecosystem Simplification, Biodiversity Loss and Plant Virus Emergence." *Current Opinion in Virology*, vol. 10, pp. 56–62.
- Ross, E. D. (1942) *Democracy's College, The Land-Grant Movement in the Formative Stage*. Iowa State College Press.
- Slaughter, S., & Leslie, L. (1999). *Academic Capitalism: Politics, Policies, and the Entrepreneurial University*. Johns Hopkins University Press.
- Wezel, A., Herren, B.G., Kerr, R.B. et al. (2020). "Agroecological Principles and Elements and Their Implications for Transitioning to Sustainable Food Systems. A Review." *Agronomy for Sustainable Development*, vol. 40, no. 6, p. 40.
- Wisconsin Historical Society (2010, October 12). "Odd Wisconsin: Origin of Wisconsin's 'Forward' Motto." *Wisconsin State Journal*. https://madison.com/wsj/news/local/odd-wisconsin-origin-of-wisconsin-s-forward-motto/article_5aa2bde4-d586-11df-bd79-001cc4c002e0.html
- Wittman, H., Desmarais, A., & Wiebe, N. (2010). *Food Sovereignty: Reconnecting Food, Nature and Community*. Food First Books.