

Beyond Monoculture:

Humanities and the Root of Land Grant Universities

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As I write, I'm sitting at the edge of a reconstructed prairie near Ames, Iowa, sipping a tart local beer and soaking in the view. Native grasses and wildflowers sway in the breeze. A variety of birds flit about, carrying on whatever important bird business the day requires. When the sun dips down, the sound of frogs and cicadas intensifies. My favorite evenings out here are the ones where the sky turns peach and plum, with cotton candy clouds. Quiet nights at the brewery are perfect for contemplation – especially that essential stage in the writing process known as “staring off into the distance.” Beyond the prairie is a small sustainable farm, and beyond that, larger commercial farmlands. I know that, for those who haven't spent much time in the country, this type of wide-open expanse might, paradoxically, feel suffocating. As someone who grew up in towns and smaller cities throughout the Plains, I had similar



feelings when I was younger. But now, over a decade after I left, I've found myself back in the region, in a small town bordered by farms and prairies, and in a better position to thrive in this environment. Now, situated so close to it, I am struck by how aptly the unique prairie ecosystem serves as a metaphor for the work I do here as a professor of a humanistic discipline at a large state research university.

I currently work at Iowa State University, one of the nation's first land grant universities. I started my position in the Fall of 2019, shortly before the COVID-19 pandemic upended teaching – and the world – as we knew it. Over the course of my first few months, before other serious issues arose, I wrestled with the question of how to understand my role as a humanist at my STEM-focused institution. Iowa State was initially founded as the Iowa Agricultural College and Model Farm in 1858. In 1862, the state of Iowa became the first to accept the provisions of the 1862 Morrill Act, which granted funds (via land sales) to each state to establish public institutions

of higher education. Iowa opted to use Morrill Act funds for the newly established agricultural college. The institution welcomed its first students in 1869, and the first class, consisting of twenty-four men and two women, graduated in 1872. In 1898, the college was renamed Iowa State College of Agriculture and Mechanic Arts; in 1959, the name was changed again to its current official designation, Iowa State University of Science and Technology.

The university's primary emphases are practically-oriented science and tech fields, including agriculture, engineering, chemistry,

biology, physics, and computer sciences. According to *U.S. News and World Report*, Iowa State's highest-ranking graduate programs are Veterinary Medicine, Biological and Agricultural Engineering, Statistics, and Analytical Chemistry. Business, Psychology, and Kinesiology are three of the school's most popular majors. Iowa State is the only university in the country that houses one of the U.S. Department of Energy's laboratories, which were established to advance research related to national priorities including energy, national security, health, and the environment. We are also home to the U.S. Department of Agriculture's National Laboratory for Agriculture and the Environment. Beyond STEM, our College of Design – which might be understood either as the most creative form of engineering, or the most practical manifestation of art – ranks in the top twenty-five among public four-year universities.

As a scholar of American and Indigenous religions, I am not a science and technology person. I am a concepts person. An ideas person. A words, images, emotions, and analyses person. I do history and culture, not STEM. I remember my annoyance as an undergraduate when I had to take classes that didn't align with my interests or majors (Religious Studies and Creative Writing). To fulfill science and math requirements, I begrudgingly enrolled in Unusual Weather and Elements in the Theory of Computation (which, unfortunately for me, still involved numbers). Looking back after I finished the courses, I was able to better appreciate the chance I had to stretch my thinking and learn about things that I didn't even know I didn't know. This is, indeed, the purpose of a college education: to gain a depth and breadth of knowledge.

While my interests lie in the humanities, I do recognize the value of STEM fields, and I understand and respect my university's emphases on these areas. I also see my classes, and other humanities courses, as uniquely valuable to the university. For students in STEM, business, or other non-humanities fields, the types of courses that I teach offer students skills and knowledge that they may not otherwise encounter. They learn how to analyze sources, how knowledge is constructed, how people make

meaning, how identity is formed, and how power operates. What they gain in my classes, ideally, should help them to broaden and deepen their awareness of the world around them, and equip them with insight and capabilities to engage with others they encounter after they graduate. Not everyone sees these types of courses as valuable, though. In recent years, threats to the humanities have increased, Religious Studies programs throughout the nation have been subjected to cuts, and my colleagues and I have increasingly needed to justify our existence.

When I started my position in the fall of 2019, I asked the then-dean of the College of Liberal Arts and Sciences how I might think about my role as a scholar of religion at our STEM-focused campus. Her answer reflected my own thinking on this matter: she replied that students at Iowa State need to learn about the world and other people and ways of knowing, and that this knowledge was essential to their education. There are distribution requirements at Iowa State to help students achieve these goals, and the introductory course I teach each semester – Religion in America – fulfills a U.S. Cultures and Communities requirement. (Due to pressure from Iowa's state legislature, the name of this requirement was recently changed to this from the U.S. Diversity Requirement.) However, a few years after I started my position, the dean announced budget cuts that would primarily affect humanistic departments. Like many of my colleagues around the country, I am uncertain about the future of my program and department. I feel – and my student evaluations indicate – that students are gaining something valuable from my classes. But this does not necessarily translate to support for these programs in the current climate. There seems to be a prevailing sense that courses on religion offer no “practical value.”

As a land grant institution, Iowa State's goal is to “create, share, and apply knowledge to make our students, Iowa, and the world better.” Its vision is to “advance the land-grant ideals of putting science, technology, and human creativity to work.” A main emphasis of Iowa State, and other land grant colleges, is to offer practical training and create knowledge that is useful for industry.

They were also created to provide higher educational opportunities to those who would otherwise not be able to access it – people living in rural areas and from working-class backgrounds, and those without family wealth. Like many American ideals, the lofty goal of the land grant institution had its limits – the lands used to fund these institutions were taken from Native American nations, and people of color were initially excluded from some land grant universities. More work can be done to ensure that historically marginalized students, faculty, and staff – including Indigenous people, people of color, members of the queer community, disabled folks, and others who have historically been marginalized in academic spaces – feel safe and welcome.

Answers to questions of practicality and access become clearer if we examine the legislation that facilitated the creation of land grant universities. According to the 1862 Morrill Act, while land grant universities were to emphasize practical knowledge for the broad public, humanities and social sciences were still expected to be part of the educational program. The act was sponsored by Justin Morrill, a senator from Vermont. It involved the donation of “public lands” – generally, lands that had been taken from Native nations – to support the creation of public institutions for higher education. This wasn’t a straightforward process in which a plot of land was offered up on which a university would then be built. Rather, each state was offered thirty thousand acres of land – not necessarily in that state – and the land was then sold for a profit. Any proceeds (that weren’t subsequently squandered) were put toward public education. Lands in northwestern Iowa were granted to the state, and profits from the sales of those lands enabled the purchase of land in Story County in central Iowa and the construction of the first buildings. Each state was to create “at least one college where the leading subject shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts... in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.” While the emphases of

these institutions were meant to be practical fields, they were not meant to exclude other disciplines. They were meant to create opportunities for Americans to learn and grow, not only gain practical education for professional purposes.¹

Until recently, when driving into Iowa, you’d be welcomed with a sign touting the state’s “fields of opportunities.” Sadly, this motto has recently been retired. It was quite fitting. Approximately 85 percent of the land in Iowa is used for farmland. Even so, 90 percent of the food that Iowans eat is imported from out of state. Most of the state’s farmlands are instead used for industrial farming. Iowa produces mostly corn and soybeans, plus some oats and hay. Industrial farming in the state is primarily monoculture farming – the planting of a single type of crop in a field. There are some immediate economic benefits to monoculture farming. Specialization can lead to increased productivity and efficiency, leading to higher yields and profits. These profits can be invested to create more technological innovations, further streamlining processes. However, there are serious ecological consequences created by monoculture farming, as well. Most obviously, agricultural monoculture leads to decreases in biological diversity. The loss of diversity affects insects and animals that play an important role in the ecosystem. Planting only one type of crop destroys the integrity of the soil. And monoculture crops are more susceptible to pests, resulting in a higher use of pesticides. Runoff can poison lands and waterways. Ultimately, monocropping is meant for economic benefit rather than to feed the surrounding community.

In 2021, Iowa State landscape ecologist Lisa Schulte Moore was awarded a MacArthur “Genius Grant” for her work on “prairie strips.” Prairie strips are fairly self-explanatory: strips of prairie that are interspersed with rows of crops on fields. Prairies once comprised one third of the land in what is now the United States. According to the U.S. National Park Service, the complexity and diversity of the prairie ecosystem is rivaled only by the Amazonian rainforest. The Midwestern region is tallgrass prairie; most of the

flora consists of different types of grasses. This is not the green stuff you see on lawns – tallgrasses have roots that extend over ten feet into the ground. Due to development and farming, prairies in North America have been depleted by 96 percent.

The prairie strips system was designed to mitigate some of the negative ecological impacts of monoculture farming. According to the Prairie Strips team:

Prairie strips are a conservation practice that protects soil and water while providing habitat for wildlife. The STRIPS (Science-based Trails of Rowcrops Integrated with Prairie Strips) team has been conducting research on prairie strips for over ten years and we have shown that integrating small amounts of prairie into strategic locations within corn and soybean fields – in the form of in-field contour buffer strips and edge-of-field filter strips – can yield disproportionate benefits for soil, water, and biodiversity. Prairie strips provide these disproportionate benefits to a greater degree than other perennial vegetation types because of the diversity of native plant species incorporated, their deep and multilayered root systems, and their stiff-stems that hold up in a driving rain. STRIPS research also shows that prairie strips are [sic] one of the most affordable and environmentally

*beneficial agricultural conservation practices available.*²

The benefits of prairie strips mirror, I think, the benefits that humanities courses can offer to students. A diverse educational foundation can nourish students' lives. The academic study of religion is interdisciplinary, drawing on anthropology, sociology,

history, and literature. What religious studies can offer beyond each of these individual disciplines is the focus on the category of religion. While this may not, at first, seem terribly "practical," the study of religion equips students to more actively and thoughtfully engage in the world around them. I want my students to consider many different facets of religion, but they can be narrowed down into two primary categories: meaning and power. We examine the many forms of meaning that religion holds, and the way that it plays a role in power structures within, between, and among many different groups. First, religion provides meaning for groups – their worldviews, practices, identities, laws, and forms of relationality. Second, through direct and indirect means, religion influences hierarchies and power dynamics. Practitioners look to sacred wisdom and offer interpretations of sacred texts and stories that have real-world implications in the structuring of individual relationships, group dynamics, societies, and nation-states. I teach students how to consider religion empathetically and critically, balancing the perspectives of insiders and outsiders.

Many of my students who have never taken a religious studies class think about religion as a deeply personal matter. The goal in my classes is to turn their perspectives outward, to try to better understand the perspectives of others. In my introduction to American religion course, I combine a thematic and historical approach. We begin with a series of units that focus on different aspects of Christianity, covering Catholics, Pilgrims and Puritans, practitioners of Christian New Religious Movements such as Christian Scientists, Millerites, and the Oneida community. We discuss the role of religion in colonialism and the role of the Black Church as a social institution. Through an examination of these Christianities, we consider key moments in United States history: initial contact between Catholics and Native North Americans, the founding of the nation, and debates about slavery and gender in the nineteenth century. During the second half of the course, we focus on non-Christian religions – Judaism, Islam, Hinduism, Buddhism, African diasporic traditions, and Native American traditions. Some of the themes we cover are more serious, including immigration

and assimilation, violence, cultural commodification, and social justice movements. We cover lighter topics as well: technology, fashion, pop culture, music, and comedy. We end with another theory unit on secularism and Civil Religion, examining the latest trends in U.S. religion growth.

Even though my goal is to encourage students to look outward, I do still hope that this class helps them learn more basic skills and enables them to develop socially, intellectually, and personally. Being confronted with new ideas and unfamiliar histories can spur change and reflection. The capacities students develop in my classes encourage analytical thinking. They become sharper readers and writers. They learn how to find sources and analyze them. They learn how to conduct research and how to identify “expertise.” These are all skills that are valuable for other classes, and for their life and work after they graduate.

I have students in my course on American religions complete a short reflection survey at the end of the semester. In it, I ask them about what knowledge and skills they’ve gotten from the class that will be useful for the rest of their college career, their professional life, and their personal life. Students have identified many important elements they’ve gained from the class. Some especially appreciate the knowledge they have gained about different religions or the role of religion in history and culture. The class requires more reading than some of them are required to do in other classes, and many indicate that the course helped them strengthen their ability to read academic texts. Students turn in a final research project at the end of the semester, and some of them mention the value of this project, which helped them to develop their research skills, learn how to find and evaluate sources, gain familiarity with the required citation style, and strengthen their writing skills. They also gain the capacity to work in groups, to give presentations, and to have meaningful conversations with their peers. A major takeaway that is unique to this type of class is students’ mention of their ability to better understand other cultures, perspectives, and points of view; to have nuanced

conversations with others; and to respect others’ opinions.

When exposed to diverse subject matter, students gain knowledge and understanding that can ground them – like the tallgrasses whose roots run deep into the ground. It can help strengthen their understanding and enable them to better engage with others – like the many prairie plants and flowers that create a mutually sustaining ecosystem. And it can enable them to be more resilient – like the sturdy plants that withstand storms and wildfires. Ultimately, through taking these types of courses, students develop intellectual strength, resilience, insight, the capacity for collaboration, and the ability to thrive. What’s more practical than that?

Notes & Bibliography

¹ For more on the Morrill Act, including the text itself, see the U.S. National Archive’s related page, <https://www.archives.gov/milestone-documents/morrill-act>.

² Iowa State University: Science-Based Trials of Rowcrops Integrated with Prairie Strips, “What are Prairie Strips?” <https://www.nrem.iastate.edu/research/STRIPS/content/what-are-prairie-strips>.



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