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Disorientations and Disruptions: Innovating First-Year Honors Education through Collaborative Mapping Projects

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Abstract: A series of courses on the Evolution of Ideas introduces interdisciplinary study, develops collaborative discourse, and promotes a sense of community among first-year honors students. The curriculum encourages faculty to use a range of strategies to help students understand an idea and its history while also fostering awareness as to its social, political, economic, and broader contexts. Using the social history of maps as an example, the author demonstrates how disrupting students' understanding of the map itself and, through creative group projects, disorienting emergent understanding of campus spaces, fosters a questioning atmosphere and makes room for growth. Through planned disorientation and disruption, the author observes, students are forced to ask questions about the wider worlds they inhabit and to interrogate social relations that maps typically hide.

Keywords: interdisciplinary education; collective mapping; participatory design; counter-cartography; Purdue University (IN)–Honors College

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INTRODUCTION

At the core of the first-year curriculum for honors college students at Purdue University is a series of two eight-week courses—one in the first half of the fall semester and a second in the first half of the spring semester—aimed at introducing the interdisciplinary classroom, building collaboration skills through creative group projects, and developing a sense of community among first-year honors students. This course series, "The Evolution of Ideas,"

follows a history of ideas model through which individual faculty choose an idea related to their scholarly interests that they trace over time—using whatever timescale they choose—from an interdisciplinary perspective.

While faculty typically repeat topics from year to year, they offer different ideas in the fall and spring semesters each year in case first-year students choose to enroll with the same instructor both semesters or if their class schedules require such. Topics range widely according to the wide spectrum of disciplinary backgrounds of our honors faculty. Some offer related topics in the fall and spring (e.g., "food" in the fall and "water" in the spring), but the content for each course is both unique and self-contained: the spring is not repetitive for students enrolling in both courses, nor are students enrolling in a different instructor's spring course missing foundational material from the fall. In fact, given the complexity of class schedules of more than 600 first-year honors college students, who come from every college on campus, the large majority of students end up with a different instructor in the fall and spring semesters. With a few exceptions (such as the small number who participate in Honors College October Break or Spring Break Study Away programs), the only honors courses first-year students in the college generally take are the two required Evolution of Ideas courses. Students only enroll in these classes during their first year both at Purdue and in the honors college; students who transfer into the honors college in later years, whether from Purdue or other colleges or universities, take a different course introducing them to the college. After the first year, students enroll in honors college courses falling under the broad categories of experiential learning (including study away), interdisciplinary topical seminars, and research-intensive courses.

Faculty members take different approaches to constructing the histories of their ideas, but in general, given the STEM-majority student population of the university and of the honors college, many look to situate technological and scientific advances related to their discipline within broader social contexts and to facilitate both critical thinking and self-reflection around the idea and its life in the world. To give a sense of scale and breadth, in fall 2021, eleven faculty members, each teaching three sections with a different idea, offered a total of thirty-three sections, each capped at 24 students. The range of topics included Capitalism, Empire, Food, Frontiers, Genes, Maps, Nature, Privacy, Selfie, Terrorism, and Vernacular. Evolution of Ideas classes meet twice each week, once for a lecture period and once for a recitation period during which students work in interdisciplinary groups (typically of eight students) on creative projects. In the fall semesters, first-year students are guided by upper-level honors mentors. While the COVID-19 pandemic generally

moved lecture meetings online between fall 2020 and fall 2021, students continued to meet in-person for recitation meetings and projects.

In introducing students to the history of an idea, faculty engage in a range of strategies not only to help students understand the idea and its history but also to make them aware of broader social, political, economic, and other contexts that shape the idea and its evolution. As a cultural and political geographer, I spend much of my time explaining to non-geographers that my discipline is about so much more than maps, so naturally for my fall Evolution of Ideas course, I teach "maps." In doing so, I seek to disrupt students' understanding of "the map" itself and, through creative group projects, to disorient their emerging understandings of campus spaces. Through disorientation and disruption, students are forced to ask broader questions about the worlds they inhabit and to interrogate the social relations maps typically hide.

Throughout this paper, I refer to "maps" and "the map" as the topic of study. As a rule, references to "the map" can be read as "maps" generally; however, "the map" is used commonly within geography and cartographic studies in a singular, definite form, as when centering maps from a particular time and/or place collectively as a topic of study, a genre of visualization, a site of contestation, and so on. "The map" also implies stability around at least some baseline definition of an object over space and time even as that definition is continuously changing and the baseline is continuously debated.

A DISRUPTIVE IDEA

The decision to focus a history of ideas course on maps is rooted in the strengths of critical cartography theory to open up a broad array of questions about not only the map itself but also the contexts in which a map is produced, used, and circulated. While maps are widely assumed to be neutral and objective representations of the earth, critical cartography scholarship demonstrates clearly that maps are anything but that (Crampton 2010; Harley 2001; Pickles 2004; Wood 1992; Wood 2010). Maps are, in fact, produced in particular social and political contexts that inform their structure, appearance, usage, and circulation. Accordingly, for a history of ideas course, the map provides a tangible object through which students can observe many shifting phenomena, e.g., power structures, understandings of truth, social attitudes, political-economic systems, and other forces and ideas at work in societies.

My focus on maps also profits from the availability of tools, practices, and perspectives of counter-mapping and from my membership in the

Counter-Cartographies Collective (3Cs). This counter-mapping collective started at the University of North Carolina at Chapel Hill with a focus on mapping the university and its place within broader knowledge economies and social histories (Counter-Cartographies Collective 2006, 2009). Like other theorists and practitioners of counter-cartography, we "recogniz[e] that maps have power and do work on the world," and in response we "propose alternative types and uses of maps," which may include "protests of existing maps (for example, showing people, places, or features that are excluded from official maps), representations of spatial injustices or inequalities, or proposals for new ways of organizing spatial relations" (Mason-Deese 2020; see also Dalton & Mason-Deese 2012; Wood 2010).

In this vein, our work uses tools and aesthetics of mapping to map the university "from below": guided by our understanding of the map as a site of contestation and struggle, we seek to make visible the ways that the university exercises power in the lives of those who live, work, and study there, and to make visible the institution's entanglements with broader economic and social structures. In addition to smaller projects and collaborative activities with other groups, two "disorientation" guides—so-named in reaction to the university's efforts to orient new students to specific understandings of the institution and its spaces—form the foundation of the collective's work. As one example, these guides counter the university's narrative of the institution as a timeless place of enlightenment and progress through our "People's History" features that highlight histories of social struggles in campus spaces from its foundation until today. While campus tours and university welcome speeches encourage students to embrace and become part of the university's long history, the university has yet to include a racial history of the campus during orientations, which students of color have demanded for decades because that history continues to shape their experiences of campus today. Finally, part of trying to map differently becomes apparent in our attention to process and in our belief that we have to practice the social relations for the world we want to inhabit. To this end, we have emphasized the need to generate our ideas, conduct our research, and create our projects collectively and democratically, a departure from the secretive and profit-driven nature of cartography in recent history.

Given that team- and community-building are hard-wired into the Evolution of Ideas courses, mapping assignments that emphasize critical thinking and mindful collaboration are particularly well-suited to further these objectives. Taken all together, disrupting the assumptions that first-year honors

college students have about maps—most significantly, that maps are neutral and objective representations of the world—provides opportunities to disrupt their assumptions about the spaces that are mapped, whether local, global, or somewhere in between.

DISORIENTING CAMPUS SPACES

I assign four collaborative mapping projects during the eight-week Evolution of Ideas class that uniquely challenge students both to think differently about maps and to explore the openings they provide for interrogating broader social contexts. The first three assignments are projects students complete within either a one- or two-week period while the final assignment stretches over the entire second half (i.e., four weeks) of the course.

For the first (one-week) assignment, students draw and analyze their mental maps of the university. They begin the exercise by individually mapping their perceptions and experiences of campus. Other than the implication that they should be drawing something, they are encouraged to approach the activity with an open mind about what a map is and/or what it must look like. If they are not sure where or how to start, I recommend they start mapping their activities and itineraries through campus for the past few days, which usually works. Although a few students' maps may feature only words plotted out in some relational manner, the majority of the maps tend to feature shapes, lines, and other features that might be expected on maps. Most feature several buildings with whatever names students might remember at this early stage of their college career, with a few of the major roads running through campus, a major landmark or two, and a few social or recreational sites they have visited around campus. Seated already in the groups they will work with for the remainder of the course, students present their maps to the other members of the group, explaining the locations, routes, landmarks, and other items included on their maps. Once they have all presented, the students collectively analyze the similarities, differences, patterns, and outliers across their various maps and respond to a series of questions forcing them to think about the wide range of factors that make their maps different.

Rooted in the idea that we can map a single space a limitless number of ways, this assignment opens up students' understanding of the map as a subjective proposition—a situated knowledge (Haraway 1988)—rather than a necessarily objective document describing definitively what the campus is, where its boundaries are, how it is to be navigated, and so on. This assignment, too, requires students to begin thinking about how social differentiation may

affect differences in their personal maps and then more broadly how race, gender, ability, and other forms of difference can produce different experiences of the same university campus. Finally, with an understanding that, as students on campus for only a couple of weeks at this stage, their mental maps are still in development, students see these maps as dynamic rather than static, contrasting the timelessness they have associated with traditional maps. They acknowledge explicitly that while their mental maps are quite limited now, they expect them to become larger and more complex during their four years at Purdue.

For the second week-long group assignment, students produce together a sea monster map featuring "sea monsters of today" that they identify, draw, describe, and place on a map of their choosing. While they are allowed to use a map at almost any scale—from the campus, to the state of Indiana, to the United States, or even the world—they are required to think about the position from which they are mapping: that is, are they mapping the world's monsters? the nation's monsters? Purdue students' monsters? While most groups choose campus maps in the end, a few choose other geographic scales if, for instance, a group has one or more international students who feel they can more meaningfully contribute to a world map. In selecting their monsters, they are guided only by the requirement that they ponder the roles and purposes of sea monsters on maps from ages past—for example, to depict unknowns, signal dangers, or provide explanations for mysterious events. For most of the campus-focused maps, students tend to submit a simplified map of the Purdue campus, with the monsters that haunt first-year honors students scattered about. For instance, a calculator- or clock-like monster might be popping out of exam buildings to represent fears of first-year engineering exams; another monster may be wrapped around the university bell tower, representing campus myths about stepping on the university seal under the bell and delaying graduation; and yet another monster depicting a Purdue athletic rival might be lurking near a stadium to remind students of the dangers posed by their "enemies." Most recently, maps were also full of coronavirus monsters, reminding the viewer that COVID-19 can attack them just about anywhere.

Through their sea monster map, students take part in a long tradition in cartography while deepening their understanding of maps as social productions that reflect particular social contexts. This understanding of the map as a product embedded in specific contexts challenges one of the most powerful assumptions about maps: that they are universally understood and equally

valued. By linking their choice of geographic scale to the question of whose monsters they are mapping, students are actively positioning the map in a specific social context and thereby denying their map (and its monsters!) universality. Importantly, as the most fun of the course assignments, the process of creating the map is designed for the groups to get to know one another better, to continue exploring the intersections and divergences of their everyday lives on campus, and to learn to work together as they move into the subsequent assignments.

The third and final of the shorter assignments is inspired directly by a map created by the Counter-Cartographies Collective for the first *disOrientation Guide* (see Counter-Cartographies Collective 2006). Students have one or two weeks to complete this project, depending on the semester schedule and when holidays fall. Called "producing our world," this project requires students to map the Purdue University course catalog. Starting with a list provided to them of all course titles with any geographic indicator—i.e., a country/state/city name, a regional signifier, a body of water, or the words "global" or "international"—students are instructed to create geographical classifications, to group courses accordingly, and to analyze the type*s* of courses offered (e.g., language, experiential, cultural, or however they choose to categorize them) within their various geographical classifications. They then produce a map—typically a choropleth or heat map—reflecting both their quantitative and qualitative inventories of the course catalog, supplemented by a group report of their findings and short individual reflections on the implications for their own education. For these maps, students often divide the world into continents or slightly smaller regions and then shade the divisions by color according to the number of courses offered within each. They then create some other signifier—for instance, a series of symbols representing different types of courses they have classified—to communicate the range of courses offered within each geographic division.

When the first-year honors students are introduced to spatial analysis and to processing, classifying, and visualizing data, they discover that their maps reveal the global power structures under which they are studying. Finding large numbers of courses with very detailed subjects pertaining to the United States and much of Europe but a much smaller numbers of courses (if any) with broad, sweeping topics pertaining to much of the Global South, students are confronted with the unevenness of power and resources in today's world and the hierarchies of knowledge forged by five centuries of European and American imperialism. Although not all groups of students articulate this

history so directly in their analysis, most do recognize the unevenness of courses globally and its relationship to wealth and power, and they understand the role of the university as an institution in shaping—and especially narrowing—their perceptions of the world. In turn, some students offer suggestions for how they can learn about those places marginalized in the course catalog, whether through study abroad or independent reading/studying.

In many ways, these one- to two-week assignments prepare students for the final group project, which spans the second half of the course and focuses on subjective geographies of campus. Groups are provided several topic choices of what to create, all in the spirit of counter-mapping, which have varied from semester to semester. Most recently, in fall 2021, students were offered four options:

1. Names Across the Landscape (who is memorialized in campus place names and who is not?),
2. Historical Geographies of Campus (how has academic and social life at Purdue changed over time, and how can those social histories be conveyed through a map?),
3. Producing Our World (an expanded version of the shorter assignment that brings in additional map layers like international student geographies, study abroad sites, research locations, etc.), and
4. Reimagine Campus (how would the campus map look in another historical period we have studied?).

Regardless of topic choice, this full research project requires students to

1. present questions and hypotheses,
2. develop a research plan that includes everything from identifying data sources to establishing a division of labor among group members,
3. collect and process data, and
4. produce a map and final report.

This early introduction to the research process thus serves as an introduction to one of the four pillars of the honors college: undergraduate research.

While students are familiar with receiving information from the maps they use on a regular basis (mostly digital maps and apps), this final project requires them to reverse that flow of information. As a project based on the Purdue campus, it also forces first-semester students to get to know the

campus, in ways they otherwise might not have in their first eight weeks at the university, through virtual or in-person visits to the university archives, for example. Those researching social histories of campus through yearbook and newspaper collections discover the lived experiences of campus spaces over time and the many ways that people have navigated and experienced them, perhaps in ways that complicate—or even disorient—the more official, top-down maps of campus they have been provided in their recent tours and orientations. Others begin to see the ways that the university is connected to the broader world in complex yet also uneven ways. Adding layers to their existing mental maps, students begin understanding campus geographies beyond their own experiences, discovering, for instance, legacies of belonging and exclusion reflected in the built environment and campus landscapes. While adding such layers, however, they are also confronted with the limitations in what the map can and cannot capture about the spaces around them.

CONCLUSION

Taken together, these innovative mapping projects challenge students to rethink what maps are and what they do while also encouraging them to question the worlds they are mapping. By disrupting the assumption that maps are neutral and objective representations of the earth, students are more able to interrogate processes of knowledge production, structures of power, and the particular ways of knowing that have informed maps historically. Through creative and collaborative projects, students in the maps course are expressly mapping their own worlds, which in the view of a counter-cartographer, is the first stage to imagining and mapping different worlds.

NOTE

This paper is based on a panel presentation at the 54th NCHC Annual Conference in New Orleans, LA. The panel closely aligned with the conference theme of "Disrupting Education: Creativity and Innovation in Honors."

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