



# **Toward Queering the Map 2.0: A Conversation with Michael Brown, Larry Knopp, and Bo Zhao**

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## **Abstract**

Knopp and Brown's "Queering the Map" (2008) article is widely read and taught in GIS and mapping courses, yet there remains a deficit of queer critical GIS work. In conversation with Brown and Knopp, as well as their current collaborator Bo Zhao, this edited conversation presents an intellectual history of the original 2008 "Queering the Map" article, continues to question where mapping knowledge lies, and examines pre-existing tensions and emerging issues related to privacy, representation, and the political economy of geospatial technologies still central in the production of interactive queer maps today. Given the increasing visibility of queerness and the pervasiveness of geographic technologies in everyday life, this conversation envisions what queer cartography might look like in the future by placing queer geographies and critical cartographies in conversation with each other. Since 2008, the combination of technological innovation and the increased impact of the lesbian, gay, bisexual, trans, and queer (LGBTQ) movement have led to the development of several digital projects to document queer spaces, both historical and contemporary. This conversation also builds off and reflects on a public roundtable held with the cartographers of interactive queer historical maps in Spring 2021 with the ONE Archives entitled "Mapping Queer History 2.0." Throughout, we discuss the politics of mapping queer history and envision what critical GIS might look like in the future by centering queer cartography.

## **Keywords**

Mapping, queer geography, LGBTQ, cartography, interactivity, maps 2.0, public history, critical GIS



## Introduction

Published nearly fifteen years ago, “Queering the Map: The Productive Tensions of Colliding Epistemologies,” has become essential reading as an example of queer geography and critical GIS/cartography in action. Larry Knopp and Michael Brown were the first to articulate the particular epistemological tensions and difficulties around creating a map not only with distinctly queer subjects, but also through a queer perspective to refuse binaries, question power, and recognize the fluidity of queerness. Their article has reverberated both within and outside of the discipline, showing the importance of visual, spatial depictions of queer life, and the complexities of geographically rendering the queer. Since the late 2000s, the simultaneous growth of interactive spatial media and geospatial technologies have made the cartographic process open to more individuals, albeit in limited and uneven ways (Barrett and Bosse 2021). Further, the combination of technological innovation and increased LGBTQ visibility—also uneven and subject to other forms of power—led to the development of many digital projects to document queer spaces, both historical and contemporary.

With interest in both queer history and critical GIS and cartography, as authors we believe it is important to document and situate these various digital projects both historically and theoretically. Broadly defined, queer theory refuses binaries, recognizes the fluidity of identities, and accounts for desire and sexuality while identifying and resisting heteronormative and homophobic practices and assumptions. Queer geography, GIS, and cartography then—in conversation with feminist and trans geographies—applies this framework to the study and mapping of spaces and places. With this in mind, we interviewed Brown, Knopp, and their current collaborator Bo Zhao with three goals in mind. First, we wanted to reflect on what has changed since the original publication of “Queering the Map” in this age of ever-burgeoning interactivity, increasing concerns of data privacy, and, as always central to mapping marginalized groups, issues of data access, availability, and personal safety.

Secondly, we wanted to discuss how we might imagine what a Queering the Map 2.0 might look like, which the trio are currently examining in an ongoing National Science Foundation-funded project to map, ground truth, and analyze the longest running series of gay travel guides.

Finally, we were eager to see what insights Brown, Knopp, and Zhao would add to other queer public history maps given the emergence of new geospatial technologies. How has the combination of technological innovation and the increased impact of the LGBTQ movement lead to the development of a number of digital projects to document queer spaces, both historical and contemporary? And what do they think of the impetus toward mapping queer history but the lack of sustained engagement in detailed projects, since interactive queer history maps number less than 20 worldwide that we know of.

On this last point, Jack Swab convened a public roundtable cohosted with the ONE Archive entitled Queering The Map 2.0: A Roundtable About Interactivity, Temporality & Ambiguity in Queer Digital Maps (available for viewing here: <http://bit.ly/qthemap20>). Swab interviewed a panel of cartographers about their interactive maps of queer public history in which Jack Giesecking was a panelist, touching on topics of inspiration for the projects; concerns around design, maintenance, archiving, and representation; and data access, availability, and privacy. A recording of this panel was shared with Brown, Knopp, and Zhao in advance.

Poignantly, the creators of these maps have made *more than a third* of the known, online maps of queer history. In other words, outside of Knopp and Brown's work and a few other publications, queer cartography has suffered a lack of sustained engagement from geographers. Instead, we find there is a more sustained interest from scholars who are more explicitly identified with anthropology, new media studies, LGBTQ studies, and gender and women's studies, or are independent scholars and cartographers (Kirby et al. 2021). What accounts for this deficit? How might we change this? And how can we envision

what a queer cartography might look like in the future? We hope this edited conversation sheds light on these questions, allowing us to better understand an intellectual history of queer GIS while envisioning new uses and connections moving forward.

## The Conversation

### *Situating “Queering the Map”*

**Jack Swab (he/him):** Thanks so much for agreeing to talk with us! Let me do a quick introduction and set the stage for why we are interested in talking with you all. I first read your article in a Queer Geography seminar that I took with Jack Giesecking at the University of Kentucky and it was really quite transformational for me. I never thought sexuality was something I would ever want to study or could ever study in depth academically; I just assumed that was a personal part of who I was. Of course Jack's class changed that for me, and also as somebody who's very interested in cartography, GIS and critical cartography, “Queering the Map” was amazing. Since then, for the past two-and-a-half years, I've been collecting gay travel guides and maps (Swab 2020). So I'm deeply interested in the legacy of these sorts of visual depictions and the critical thinking about them.

**Jack Giesecking (they/them, he/him):** As Jack and I kept talking about these maps, it became clear that we were drawing on your work to think about these interactive maps and how we approach born-digital data. That's what led to the roundtable with the ONE Archives and this conversation with you, so we're so excited to have all three of you here today.

**Bo Zhao (he/him):** Thanks so much for having us!

**Larry Knopp (he/him):** Yes, thanks. It's very flattering. I have to say when I looked at the outline of things you wanted to talk to us about, it's really the first time that I ever heard that that paper has become “a thing.” I've always been proud of this paper, but I didn't know it's used in classes.

**Giesecking:** That's surprising to me. I know people at liberal arts colleges and research universities who teach it, often in digital studies classes and critical GIS courses.

**Swab:** Yes, it's an essential read! So before we get to your new project and your reflections on the state of queer mapping/public history projects that were discussed in the roundtable, we are eager to hear more about how the original “Queering the Map” came to be. What drove both of you to work on it?

**Michael Brown (he/him):** Larry was volunteering with what was then called the Northwest Lesbian and Gay History Museum Project long before I was. But I remember the first time I went to a meeting, someone said, “Oh good, you two are geographers! You guys can revise the map.” And it was like “Okay, why not?”

At the time in the late 1990s/early 2000s, I was getting increasingly uncomfortable with the tensions between the critical and more quantitative branches of the discipline (e.g. Brown 1995a; Gould 2000), and excited by some of the productive conversations between them (Mattingly & Falconer Al-hindi 1995; Kwan 2002b; Pavlovskaya 2006). These conversations echoed divides within my department at Washington that I felt were hardening in unproductive ways which bothered me. I had tenure—so why not go out on a limb and try to learn this GIS thing that everyone talks about so mysteriously like it's a

big black box? If it failed it wasn't going to be a huge cost to my career. There was this huge chasm between the people who have the knowledge and the other people who think that the operationalization of knowledge is problematic, especially around GIS. At the same time, I'd see students comfortably move between the realms and I thought, "Why can't I do that?"

I think it's really important to realize that Larry and I are not technical at all. I was trained in a very post-positivist tradition. As an undergraduate I had manual cartography and something called "automated cartography" but GIS didn't exist in the form it is now. And so I asked some students "Can you show me how this thing works?" or "How do I do this?" They were very generous with their time. But I really came at this quite really sideways—I used some resources and input from the people around me, but I didn't know what I didn't know. In other words, I would stress that we didn't come at this as "queer GIS," that was more serendipity after the fact.

**Knopp:** Michael's absolutely right. Neither of us really see ourselves as a cartographer or a critical GIS scholar. I've done a few panels talking about it, but it's not my expertise. That said, I think my expertise really helps in other areas, to inform the conversations about visualization from a bit more of a distance perspective.

One thing I'd say about the original map that sometimes gets forgotten is that it had a predecessor, which was a hand-drawn map done in the mid-1990s, created by one of the founders of the Northwest Lesbian and Gay History Project (see <http://lgbthistorynw.org/>), Angie McCarroll. So we had some data and an artifact to work with, but it needed updating. Then it sort of became a project of the NWLGBT project to make something a little bit more temporal—or at least cross-temporal—that went from the "then" to the "now" and that could be circulated more widely. I think it's also important to note that our positions as tenured faculty members allowed us a great deal of freedom to pursue this work, allowing us to mix our personal and professional interests in trying out new techniques.

**Brown:** One of the dimensions that's revealed by the map is its documentation of the changes in Seattle's gay district. Historically (from the 1930s through the 1970s), it was a long-standing cluster of venues in Pioneer Square, literally what was called the "Skid Row" area of Seattle. Then there was a spatial shift away from Pioneer Square towards Capitol Hill through the 1970s and 1980s. These sorts of shifts aren't unique to Seattle, but they aren't always remembered locally. A lot of people saw benefits in documenting these spaces.

### ***From LGBTQ Paper Maps to Queer Digital Maps, and Back Again***

**Swab:** Documenting local queer history is so important, it's a big thread of these digital projects, especially some like *The archive* map (see <https://thearchive.com/>) documenting queer spaces across the world or Joseph Hawkins's Queer Terrains map (see <https://one.usc.edu/queer-terrains>) his student's work on Jane Jone's club in Los Angeles. What were the immediate impacts and reactions from the Seattle community to your work? **Brown:** The one critique that I remember most clearly is about format. I remember I was at Seattle Pride and we were at a table doling out the maps. This techie guy came up and said, "Why isn't this digital? Why isn't this online?" This was around 2014. We tried to do that in several attempts later, but we just didn't have the technical ability to do it.

**Knopp:** Now I think the files are such that it would be even more difficult to try that today.

**Brown:** Oh, without a doubt. When we tried to put the map online seven years ago, we came up across a number of issues. You could only have a certain number of points; there were bandwidth limitations on uploading photos; and we didn't know how to manage or maintain the map. Of course, we wanted to make sure that it didn't get hacked. I don't have those skills, so we just kept hitting dead ends.

**Knopp:** Also, the other critique was from people who would look at it and say, “But you missed this!” or “You forgot that!” or “This is wrong!” You know, those sorts of critiques. Obviously, that’s always an issue.

**Giesecking:** I also get suggestions for corrections to my An Everyday Queer New York maps (see <https://jgieseking.org/AQNY/the-maps/>)—this group had the wrong dates, this group didn't do this action this year. But I only have the archival data to rely on. Plus there’s the struggle for a shared understanding of queerness by naming what is (or isn’t) lesbian, gay, bisexual, trans, and others like Two-Spirit, intersex, non-binary, and so on that aren’t in the 2008 map (see Cieri 2003).

**Brown:** Well, I actually think that's really important. I've said it many, many times: we all worry about the exclusions, omissions, and erasures of knowledge production, especially in the creation of a map. But I think that's also a moment of opportunity as well, because the map is never finished. In my experience, unless you show people a map, they're not going to tell you what needs to be on that map.

**Giesecking:** Absolutely! It struck me when you talked about how you wanted to make this map and how you were limited with the tech to move the map online. It reminded me of all of those Google Maps in the early 2010s that said, “Add your story here to record our local LGBTQ history!” Alas and poignantly, they were all just left blank, or there would just be one point on them. I tried to make one of those too about queer New York City. So much has changed over the past years, especially around technology and expertise, and how we think about originality, and the mechanics of running a digital project—all the money, labor, advertising, archiving, security, etc.—that the temporality of these maps make sense (Ferreira & Salvador 2015).

**Brown:** It was so much easier when we were circulating the drafts of the original Claiming Space map to get new data. People would say “You know, there was that dirty bookstore on Union by MLK. The building is still there, but it went out of business.” And someone else said, “No, it was *there!*” Places like that would not have been first and foremost in people's minds. Just having a map at the city scale was really useful for gathering data. So we could get data that way. Far more frequently, we got questions like: “Why isn't this place on the map?” The answer is because the map is never perfect, it's always in process, it's always being made.

**Giesecking:** How do you think that the relationality of the “left off” places was important? In other words, since queer space was being redefined in the moment as participants saw what other people included? That happened in my interviews (Giesecking 2020), where I would have folks say, “Oh, if you're going to count the co-op, then I'm going to count the gym.”

**Brown:** Absolutely! It gets people thinking laterally, and spatially. I remember, at one point in the process, we got interested in documenting lesbian houses. These may or may not have been lesbian and/or feminist separatists. But in the 1970s, they were places where lesbians and women could have domestic space of their own. There was a lot of activism in these homes—and so there was a moment in the data collection process where we were asking lesbians about where the houses were, if they had names, and whatnot.

Interestingly, I don't remember anyone discussing privacy. I understand the concerns that were raised at the Mapping Queer History roundtable regarding born-digital queer maps, but for us there was this sense of, “Well, it's historical, and if someone complains that their house is on a gay map, that should be a point of pride.” Especially when it was 30 or 40 years ago! And in the context of lesbian geographies, how could those places not belong on a map of gay Seattle (Bell and Valentine 1995; Valentine 1993)? Same with cruising areas (Berlant and Warner 1998; Chauncy 1994; Delany 2001). The making of the map itself was organic: it was inductive, it was from the ground up. We really didn't try to police it.

**Gieseeking:** It's wild how quickly things change. Do you think folks were comfortable putting some of those places on the map because it was a paper map made by a historical group? And at a time when putting things online was much less likely?

**Brown:** I think it was just so well-known in the lesbian community that, for example, this house up in Fremont was called the Red Hen and that there were years and years of women living there. It just wasn't ever framed as either, “Well, somebody wouldn't want that revealed about their personal history”, or “What about the people who own or are living at that property now?” It didn't come up—maybe it should have—but it was just much more of a sense of: “It's so hard to get this information and it's so easily lost” that the desire and, more so, need for history outweighed any privacy issues. And that's why it's on the map.

**Swab:** Those critiques about privacy especially came from Megan Springate who was working with the National Park Service when they originally created the LGBTQ HistoryPin project (see <https://www.historypin.org/en/lgbtq-america/geo/37.438179,-96.631589,3/bounds/-5.268259,-136.270261,64.922584,-56.992917/paging/1>). It makes sense that the federal government would tread cautiously regarding privacy and LGBTQ locations given how fractured our politics are and the possibility for bad press. It's interesting to see how the different sponsors of the map influence the data collection—which ultimately impacts the maps' visual depictions and politics.

### ***The Politics of Visual, Spatial Representation Online: Reflections on the Mapping Queer History Roundtable***

**Swab:** This issue of data collection at the national level makes me wonder: did national politics impact the creation of the original “Queering the Map”?

**Knopp:** I'm not sure that the meta-political environment was as important as the political environment within our discipline—and that's the same today. We wrote the original “Queering the Map” paper because of some of the tensions between quantitative and critical geography at the time. I think the political environment in our discipline right now is turning the critical gaze inward to make change from within. Geographers are demanding a more rigorous engagement with a wide range of forms of difference.

**Brown:** I agree with what you said, Larry.

**Swab:** It seems that the colonial, masculinist, cis-gendered, and largely white roots of cartography that are so focused on physically constructing a map are part of that conversation. When we think about how the “giants” that have historically defined the field, they are always cis-gendered men like Arthur Robinson and Erwin Raisz—whose sexuality goes unmentioned. Do you think that there's a need for critically interrogating the technical side of cartography?

**Knopp:** I think it's both. In the roundtable, Jeff Frozoco, the cartographer behind OutGoingNYC (see <https://outgoingnyc.com/>), talked about how most gay bars in NYC were in Greenwich Village. That makes sense. But I hadn't thought—until he mentioned it—that mapping those places would create issues around clustering nodes, whereby some places of queer history would literally overlap and coverup others. Michael and I talked about the clustering issue that was raised in the roundtable and we weren't sure if it was a more technical issue or a critical issue.

**Giesecking:** That resonates with me too. For me, it was about how to show the data. For example, I have nearly 400 points alone at the LGBT Center of New York City! What's lost then is the first meeting of every LGBT organization in NYC happened there: ACT UP, Lesbian Avengers, GLAAD, and so many more. At the same time the LGBT Center was the home to all sorts of other activities there too, like Drag Queen Bingo and AA meetings. I can't show that all on the map because it gets crazy.

**Knopp:** So to some degree that's a scale issue but it's also an issue of clustering: once you try to represent visually that clustering—which is a part of queer life, to make community near one another as much as possible—you lose a lot.

**Swab:** This reminds me of the issue of representation that Lucas LaRochelle brought up that the rendering of their map also came out of a desire to not prioritize the urban over the rural in their well-known Queering the Map website (see <https://www.queeringthemap.com>). Rural areas are going to have so few points that they would all cluster to one area and not allow folks to see the geographic specificity. By not clustering you were able to direct people to actually look at rural areas, because they would say: “Oh what's this tiny little dot in central Arkansas?” Then they would find out that it was actually some gay bar in a small town instead of it being located outside of Memphis. Which, of course, reproduces the assumption that queer *is* urban (Brown and Knopp 2003; Halberstam 2005; Gray 2009; Herring 2010; Eaves 2017).

**Knopp:** Indeed! Some of us are immediately drawn to the anomalies because, to me, outliers of any kind are always interesting to explore. They may say something about trends that are just beginning or going somewhere.

**Giesecking:** A great point, Larry. Also, on my maps those points that look like outliers are often spaces where Black, Latinx, Asian, and/or Indigenous folx met. So they're less anomalous for my maps and more so speak to what and who isn't recorded in the archives as much, what stories of spaces we must yet record.

Going back to our conversation about clustering: from working on the An Everyday Queer New York maps with Rich Donohue (see <https://github.com/rgdonohue>), a fellow University of Kentucky geography professor and the lead coder on the project, we've gone back and forth in designing these Leaflet maps. Either you group everything together

within a certain radius and you keep clicking through to see all the points or, alternatively, everything's one point—there's really no in between with the geospatial design options.

**Zhao:** Well, this is an issue with Leaflet. When we developed a COVID-19 map in early 2020 (Zhao et al. 2020), we also had similar problems in visualizing clusters of confirmed cases across different scales. Our workaround was to hack the code of one of the Leaflet plugins. We were able to cluster cases at different scales ranging from the country, region or state level to city or even district level. The hacked map can automatically update the cluster boundary when switching to different zoom levels and symbolize each cluster as an icon illustrating a group of people along with a number indicating the number of cases in the cluster. When there is only a single case, it will not be clustered and the icon will update to a shape of a single person. So, the open-source plugin for Leaflet allows you to customize the code for specific visual strategies.

**Swab:** It speaks to the level of technical knowledge one needs to get the intended visualization and the need to utilize a platform that allows sufficient control over your visualizations. We didn't talk about it in the panel, but I think that issue does run through these projects: you want a mapping program that can express data in different sorts of ways, but your out-of-the-box ArcGIS Online program doesn't necessarily do that. Then you need to be able to go to Leaflet, but you have to be able to pay for help coding, all sorts of things like that.

**Zhao:** I think you made a really good point in terms of the limitations of what software like ArcGIS Online offers and what the open-source community can offer. When we're designing or picking an online mapping application, it's important to think rigorously about who will be using the map. With these issues in mind, we can better support some of the functions that the community really needs.

**Knopp:** One of the things that I think is often forgotten in these discussions— because we're so eager to have our maps do as much as possible—is that they can never do everything. All representation is partial. I know that everybody knows that, but we forget it in practice. Still, all representation is partial and ruthless decisions have to be made about what's included and what's excluded.

With “Queering the Map”, there was really a tension with a lot of our impulses and desires and pressures to be inclusive in every way. But the fact of the matter is that we are not gods, we never will be, we'll never have a god's eye view (Haraway 1990; Kwan 2002a). So what we produce is always going to be a partial representation. I know we all know that, but I think we forget the profundity of that simple truth.

**Swab:** That makes sense—especially with the contested rise of queer visibility in the past fifty-plus years. Plus there's the long history of marginalization of others within the queer community: we know there was a wider range of sexual and gender identities which were always there but often not recognized or the identities we didn't have the words for yet. There's still lots of work to do to embrace intersectional LGBTQ identities because “queer” is so often reduced to whiteness and middle-classness because it is often lead by white, middle-class people. The politics of leaving some off the map is a real challenge.

**Zhao:** Working with Larry and Michael in our new project is great in this regard. I can definitely offer some GIS perspectives, but Larry and Michael's critical insights on mapping are crucial too. I was trained as a very GIS tech-savvy person in my PhD, and I



realized the critical issues were more around the representation of inconsistent and uncertain geospatial data, which were reinforced for me by reading “Queering the Map.” Larry and Michael's thoughts about the representation of queer community, the mapping process, and the interactive map features have really helped me think about the changes or improvement within the nature of GIS and mapping. It's especially helped me to think about spatial database design in GIS and how we ask questions about how to represent uncertainty, how to store unstructured geographic data, and how to analyze them.

**Giesecking:** I completely agree. And I want to echo what Bo said about reading “Queering the Map” in grad school. For me, it was part of a body of work that legitimated and translated queer geography to a much broader audience.

**Knopp:** That was a goal, and that's why we wanted it to be in the *Annals of the Association of American Geographers* and also why we called it “Queering the Map.”

**Giesecking:** I think the other thing the paper did was communicate to folks what queer geography could be to a much broader audience than where geographies of sexualities normally sat: in social and cultural geography alone. For me, people would gently suggest that I wasn't going to be able to get a job with a dissertation on lesbian and queer geographies.

But when your paper came out in 2008, many geographers said to me, “Oh, this is what you're doing?” I said, “Yeah”—even though it wasn't *exactly* what I was doing. But I knew it helped cis and straight geographers understand my work and how it could be important too. There was so little queer theoretical work in geography in the early 2000s. I also heavily drew on Kath Browne (2006) and Natalie Oswin's (2005, 2008) writings then, but your piece crossed that quantitative/qualitative divide.

**Brown:** That's very kind of you to say. When I did my dissertation on the local response to AIDS in the in the early '90s (Brown 1995a, 1997), my committee had a discussion about “Can Michael get a job if he does this work?” David Ley said, “Well, I don't think Michael would want to work in a department that wouldn't hire him because he does this kind of work.” On the one hand that was easy for him to say, and, on the other hand, I found it very affirming and clarifying as a graduate student.

Another element of this is my interest in the closet, which I wrote about in *Closet Space Geographies of Metaphor from the Body to the Globe* (2000). You make the map, because otherwise stuff gets closeted or recloseted or stays quiet (Brown et al. 2011; Sedgwick 2008). It's a form of visibility. That's why these maps are so powerful. When I was listening to Megan Springate's talk in the roundtable about their deep emotional reaction when they saw how many points were on that map—I know that feeling. I've seen people experience that feeling when I show them the map.

**Giesecking:** Yes! That feeling is so profound. The first participant I showed my draft map to in 2015 started crying. She said it was because “I didn't know we had this much history.” That line has always stayed in my head.

**Brown:** Exactly. I never want to dismiss the critiques of who or what doesn't get mapped or isn't foregrounded and all that. I accept those criticisms, but I keep coming back to the alternative. If the alternative is that you don't make a map, that there's no representation

whatsoever. Nobody seems to have a solution, but especially as we get further and further into our project you can see the absences and you can see the problematic framing and representations and codings and I can't give you clear answers about how we're going to "solve" that. But I'll try.

It's important to know this information or else it's "in the closet" so to speak. And, no, I don't think a perfect map is possible but I think it's worth striving for. A perfect democracy is impossible, but it's worth striving for, and that's true of a lot of our politics.

**Swab:** One aspect that continues to stand out to me is that, Larry and Michael, you don't see yourself as cartographers or GIS folks. That's interesting because your piece gets read in that context as "queer GIS" or "queer cartography." It speaks to the ways in which critical cartography and GIS have been around for a while (Schuurman 2000), but yet has not had its vision fully realized (Giesecking 2018a). Your article is a trailblazer in that regard, but it seems—academically speaking—that the literature hasn't caught up. Yet, at the same point, there's a certain queerness to doing this work and not labeling yourself as such, which I think is tremendously important.

Today we have a number of geographers and cartographers who are doing adjacent work. Amber Bosse and Megan Kelly are articulating new and exciting ideas about feminist cartography, really thinking through fundamental concepts like "What does it mean to call yourself a cartographer?" (Bosse and Kelly 2018; and this issue Kelly 2019). And in the GIS realm Nick Lally and Luke Bergman's "geographic imagination system" and their enfolding software (Bergmann and Lally 2021) (see <https://foldingspace.github.io/enfolding/>) falls well into a queer notion of spatial representation. As Jack Giesecking (2018b) has also written, many digital humanities projects are also making exciting contributions to interactive cartography that really push what and how we map.

So for me, it's really illuminating to learn that you don't see yourself in the cartography or GIS tradition. I think that might have something to do with how it's opened the door for this sort of scholarship to slowly continue to grow.

**Brown:** That's very kind. One thing that I've always said is that when you look at the people who write about a place really, really well, they are rarely geographers. I've always thought that was very ironic, so maybe that's what happened with "Queering the Map." In other words, it was the people who are not cartographers and who don't come from that tradition—they are the people that give it a whirl and it just has an accidental impact.

Again, I was so impressed with the roundtable and what everybody was doing. I couldn't have imagined a lot of those projects, I didn't even know about some of them to be honest!

**Giesecking:** It was a real privilege to talk to one another in the roundtable. Even on Zoom, there was a feeling that we were so happy to meet one another, because we'd known one another through our interfaces only. While I've been lucky to work with others that have pushed my thinking about the map, it meant so much to talk to other queer people about mapping.

### *Queering the Map 2.0*

**Swab:** Can you tell us more about your new project as a trio?

**Knopp:** “Shifting Geographies of LGBTQ Life” is an attempt to examine both the shifting locations and ontologies of LGBTQ space. In other words, we want to examine changes in what has counted as LGBTQ space over time using *Damron Guides* and data from other sources, particularly local experts. The *Damron Guides* are the longest-running gay travel guide, and they are still in business (Knopp and Brown 2021). The *Damron Guides* weren't the first, and they certainly weren't the best source of a truly diverse LGBTQ history, but they are the most long-lasting and consistent source of this sort of information.

Mapping all of the venues listed in the guides, ground-truthing their locations, and spatially analyzing locational changes over time, as well as changes in what the guides recognize as LGBTQ space, will allow us to address some of the questions in the literature that have previously been addressed only through case studies. We know some of what happened in Chicago, in New York, in Atlanta or whichever city—always from case studies. But data on a large, national scale and also over a long time period just does not exist in one place. So many of the more generalized arguments that have been made about gentrification and gayborhoods, and how they relate to race, class, income, education, property values, immigration, and so on, have been based on noticing some commonalities in those case studies (cf. Nero 2005; Oswin 2005; Podmore 2006; Doan and Higgins 2011; Nash 2013; Ghaziani 2014; Johnston 2018; Giesecking 2020). But the whole argument about the decline of the gayborhood is still an open question too. From my perspective, that's a big part of what kind of motivated this project.

**Brown:** Yes, I would just echo what Larry said. I'm sort of at the end of my career, thinking about retirement. And, again, I never thought I would do spatial analysis. I've spent so much of my career critiquing that kind of geography, that I feel a responsibility to see what I can do with it and what I can't do. I think it's important.

**Zhao:** I think, for me, there are three major motivations about why I'm so fascinated by this project. Larry and Michael gave me a lot of inspiration when I was a PhD student, so this was an obvious choice. Although I was more focused on big data analysis, they inspired me to take a critical look at the data quality and uncertainty issues in my own location spoofing studies (Zhao and Sui 2017). During the 2016 AAG I made a presentation entitled “Coming Out of Big Data” where I discussed the potential risks in estimating the distribution of people with a large amount of social media data while ignoring gender differences. To support this argument, I showed the distribution of the gay community in Beijing that was visualized through check-ins from Jack'd, a gay dating app (Zhao et al. 2017). With that in mind, I think the collaboration with Larry and Michael has inspired me to design better and more inclusive interactive maps, geospatial platforms, or spatial databases, so then we can ask more relevant questions like some of the speakers of the roundtable mentioned.

Second, there are some specific technical and analytical components in this project, as Larry and Michael mentioned, like spatial and what I've called “placial analysis” (Gao et al. 2013; Cho and Yuan 2019). Spatial analysis is more common to most of GIScience, as it involves a variety of computational and statistical techniques that analyze spatial structures but placial analysis is a recent movement that GIS scholars have been working on, trying to learn the idea of place from human geographers to capture and understand better the features of place. Undeniably, space and place are two quintessential concepts in geography; a better understanding of them will help GIS scholars to devise placial

analysis and distinguish these two analyses, deal with the context, and difference in people's sense of place (Zhao, 2022). It may even help us think about how to preserve and represent a sense of place digitally.

Third, this project also integrates with the volunteered geographic information (VGI) perspective to call on local experts to improve the geospatial data quality (Elwood 2006). In the *Damron Guides*, a few venues are labelled with wrong addresses. To support spatial or placial analysis, it is necessary to make sure the data are accurate. We think it's possible to invite local experts to help us improve the data quality, similar to the crowdsourcing mechanism adopted by OpenStreetMap. In other words, we can use the information from *Damron Guides* as a foundation, and then invite local experts to help us to improve the quality.

**Brown:** I want to add one bit of context: the reason that we couldn't make it to the roundtable is because Larry and I met Dick Morrill for beer that afternoon. Dick was a doyen of the Quantitative Revolution to be sure, but he is also an intellectual and we have spent lots of time discussing the rifts and currents in the discipline. He's certainly influenced my thinking on this project too.

**Knopp:** Most people don't know this about me but I did my undergrad at the University of Washington, at a time when it was very quantitative. As an undergrad and as a master student, I thought I was going to be a quantitative spatial scientist. Then I discovered critical social theory at a time when the world was changing in geography. Because of my own personal career arc, similar to Michael, this project is sort of coming full circle. I've reconnected with some of my more quantitative spatial roots, which are extraordinarily rusty—which adds to the motivation for the project.

**Swab:** That's a beautiful way to put it. What have some of the challenges been so far?

**Knopp:** As we look at the data as it's coming in, we are already seeing many, many problems with the methodology that we have outlined in our proposal. Some are relatively straightforward ones, like street addresses that no longer exist or have uncertain directional identifiers (making ground truthing challenging if not impossible) to much more complicated issues such as the inconsistent ways in which the guides identify localities. We're going to have to think very carefully about our methods before we can even begin doing some of the spatial and placial analysis.

Our project is a good example of one of the times where it's important to just get a database started. Just getting one started is itself a huge project, but then being able to do something with it is even more exciting.

**Giesekeing:** A total undertaking. The iterations of mapping are another undertaking too! Perhaps in hindsight it's good you have the past LGBTQ Seattle maps that you couldn't make digital to build from. It's always the maps that don't work for me that offer insights into how to shape data to make it accessible in the future. Since we can't see into the future, at least we have the past to build on.

**Knopp:** Exactly! That reminds me that I want to go back to Michael's earlier point about this idea of people needing to have something to look at and respond to. As Bo mentioned, the platform is going to facilitate all kinds of interaction and contributions and updating and editing and so forth. If we are thinking about "Queering the Map" 2.0 these are going to be really crucial features, not just its production, but an ongoing life as an artifact.

**Zhao:** There's also questions about ground truthing the data, and the need to start queering the truth. We might be able to do that by thinking about the life trajectory of the LGBTQ venues in our project, and also who observed and created the data. Who at the Damron company was fine-tuning the data? How have other researchers tried to analyze the data? That said, queering the truth works towards advancing a new truth regime within which people do not accept the truth at its face value, but rather analyze the context of truth as it evolves (Zhang et al. 2021). Moreover, the idea of “maps 2.0” is supposed to facilitate the local experts to queer the “truth”, part of the design of the online platform is a feature to report how confident the contributor is about the data accuracy.

**Brown:** I want to say one more thing about studies of place. For a long time, when I taught my graduate seminar in queer geography, I would use the historians' books, like *Gay Seattle* (Atkins 2003) and *Gay L.A.* (Faderman and Timmons 2009). I would get frustrated because although these historians write about place beautifully, they're not geographers. I think what the folks in the roundtable made visible is that, while not everyone's a geographer, spatiality is much, much more foregrounded in this kind of work. I think that's one of the aspects that “Queering the Map” 2.0 does, it encourages our understanding of spatiality—and placiality—even more. The projects discussed in the roundtable highlighted scale-jumping and transnationalisms, micro-geographies, mobilities, even spectral geographies! The folks at the roundtable are thinking about space and place in quite varied and sophisticated ways. This is all so much more than dots on a map! In other words: yes, we need to preserve history, but we need to preserve geography too.

**Giesecking:** Indeed. You're doing so much in this project and we've mostly been talking about sexuality. How are you navigating race, gender and disability, especially in the context of the *Damron Guides* which classified people extensively? I remember when Jack Swab brought in copies of the older Damrons for me to see, and there were various classifications based on appropriate clothing, entertainment options, food and drink options, etc. But those classifications change, I am especially thinking of “B” for “Blacks predominate” as a classification that shows up in the 1970 guide. It is the only racial code we saw in the guides we had access to—and such a code pointedly implies the rest of the spaces are white, and no other races or ethnicities exist.

**Brown:** I was waiting for you to ask this question, Jack! I don't have an answer yet about how we're going to deal with race or any other axes of difference and identity other than just to constantly try to be mindful of what we might be excluding. Racial categorizations change over time in the guides, but the whiteness is ubiquitous for sure.

I also worry that our focus on race, class, and gender—which have become a sort of holy trinity to define difference—might exclude other power relations *simultaneously*. What about (dis)ability? Neurodivergence? Education? Citizenship and/or country of origin? What about age and generation? Age is coded so heavily in these guides but in ways critical geography hasn't much addressed. Religion is quite prominent in these guides too, but only in certain inequitable ways. And, of course there are multiple sexualities and sexual identities centered in the guides while others are erased or marginalized. We are striving to be reflexive, but our priority now is creating the database in order to make sense of that data.

**Knopp:** The *Damron Guides* did do a little bit of diversifying their data. In the later stages of their existence they started referencing issues around accessibility. But that's how they did it—and that's not what we're doing.

**Brown:** Exactly. I know we're all always struggling with intersectionality and representation. I just try to stay mindful and exercise perpetual reflexivity. And that's really hard because, again, we all always have to leave something out or, rather, something off the map. Now we're not supposed to hierarchize different politics over each other but inevitably we do, because we have to in representation. Do you put race first? Class first? Gender first? These questions are going to be a big part of this project because they have to be. Plus we see these topics play out in other ways too. Is there anyone doing anything with the *Green Books* in Black geographies? That seems to be a perfect parallel to some of our work.

**Giesecking:** There's been some work by geographers (Inwood and Alderman 2014; Bottone 2020), and there've been digital humanities projects such as the New York Public Library's Navigating the *Green Books* (see <http://publicdomain.nypl.org/greenbook-map>). There are so many important guides, stories, and archives of marginalized and oppressed people to yet write, but so much of it depends on hard labor. If I didn't have a small grant to support a student one summer, I doubt my map could have been made. Joseph Ferzoco spoke specifically about labor and how he has had to put his map on the backburner to move onto other projects. But he wasn't the only one: many co-panelists brought up how limited their maps were because of funding to afford labor, maintenance, etc. As we continue to push for interactive, rigorous maps for the public, how are we framing the labor both now and in the future to support those maps long-term use and availability? It seems we need to be mindful of this and of everyone's time and effort.

**Zhao:** I totally agree with the call for mindfulness when mapping the marginalized and underrepresented, and the limitations we face. I consider our new project as a vehicle to better let marginalized people speak. For them to speak and to speak louder is important, especially when we consider that mapping or geovisualization is a way that gives people evidence of their existence. Moreover, from a technical perspective, I'm thinking about how one can archive or store data that changes over time. As Jack Giesecking noted, codes in the *Damron Guide* changed frequently—as GIScientists we need to make better database design to accommodate the differences in meaning and also provide a lookup table to show the internal linkages of the code between the years.

**Giesecking:** I was also thinking, Michael, when you said race, class, and gender as the holy trinity, I agree. And I'm always thinking that “we're the fourth!” By which I mean all of the “other” parts of ourselves—like sexuality, neurodivergence, age, education, relation, immigration/refugee status, and so on—are still peripheral—and race, gender, and class certainly aren't central for everyone! We also know geography has *not* dealt with race until very recently. Laura Pulido (2002) wrote nearly twenty years ago of geography as a “white discipline,” Minelle Mahanti (2014) referred to our field as “toxic geographies” just five years ago, and others continue to today (Bruno and Faiver-Serna 2021).

As queer geographers we're responsible for talking about sex and sexuality, and all other forms of difference too such as age, race, religion, etc. Most people I find in geography are still very nervous to talk about sexuality, but then all too many are also very

uncomfortable talking about race and racism. So thank you all for that idea of constant mindfulness. Intersectional work requires that in every node we place.

**Knopp:** Well, I also think it's a generational difference. It's a different way of doing identity now and to a considerable extent anti-identity, and also certainly intersectional. Many young people are comfortable thinking about the world in these complex and intersectional ways that do not reduce to the categories I came of age with.

**Brown:** True. At the same time, I find myself growing increasingly uncomfortable with the term “queer” as an identity, and it goes back to my kind of postmodern upbringing where queer isn't a thing, it's a transitive verb. It's something that acts on something. That's Natalie Oswin's argument (2005, 2008). I worry that the term feels like it's getting fixed and I'm not always clear what it means as a noun.

**Swab:** There's an interesting relationship there, because I struggle about whether to call the *Damron Guides* either “gay guides” or “queer guides.” In other words, how do you look for difference in something that was created explicitly for one “group” of individuals that has changed over time? It gets at this question of what does queer mean as a noun versus a verb?

**Brown:** You know, the title of “Queering the Map” was very deliberate and it was because what we were trying to talk about were the moments of being unsettled, the moments where there was discomfort in making this map.

**Knopp:** On that note, can I give a shout out to one other piece of our work that doesn't get talked about nearly as much as “Queering the Map” does? It came out in *Population, Space, and Place* and it's called “Places or Polygons?” (2006). I love that piece because it's about how defying the rules of conventional cartography that can help you see things that you wouldn't otherwise see. I guess that seems a simple point but we are so tethered to protocols and rules especially when it comes to technical stuff. In some ways, I see that article as a precursor to the ethos of “Queering the Map”.

**Giesecking:** That paper is incredibly useful! It shocks me how much it's comparatively unremarked upon.

**Brown:** Where we were coming from with “Places or Polygons?” was a critique of using location quotients. As I learned how to use GIS, I realized that the critique was not the interesting part, what was interesting was the limits of all forms of representation.

### ***The Future of Queer Mapping is Coming***

**Swab:** One of the aspects of the roundtable that I thought was remarkable was the balance between qualitative and quantitative concepts and issues. Even though everyone had shades of both, they were able to come together to speak on a common topic in a way that was cognizant of both sides. What do you think that means for future queer maps?

**Knopp:** I have a hunch from my distant perch that whatever “Queering the Map 2.0,” is going to look like, it's going to be much more experiential and less observational—especially when VR (virtual reality) comes into the play. I imagine that the whole process of visualization and representation in cartographic form is going to be a much more interactive experiential process.

**Zhao:** In addition to the experiential perspective, I think our new project will also offer the collective participation perspective. I can see that working with local experts is a way to let them engage in the mapping process, and their participation ask us to recognize them as queer-ers of the map to contribute their understanding about queer space. I think that's another perspective to the experiential aspects we just mentioned.

Moreover, I'm humbled to see all of the ways that GIS is being used innovatively. For example, the exciting development in geovisualizations and recent VR or AR (Augmented Reality) of geographical environments urges us to think deeply about how these approaches have queered the truth, and also the political, social, and economic effects of their work, such as the AR Stonewall Monument was released to commemorate the 50 years of Pride (Fitzgerald 2021).

**Brown:** What was cool for me was this wonderful balance between knowing exactly what people were talking about and then being blown away by some of the other topics. For example, I was familiar with Eric Gonzaga's discussion in the roundtable of the racial formations in the guidebook's coding of venues or Jack Giesecking's discussion about one location having multiple places and how do you represent that. I was like, "Yeah, I understand that." At the same time there were also things I hadn't even considered like Megan's work in historic preservation: I don't think of my work in that context and it was mind blowing to see the work that they did there.

**Zhao:** We know Eric Gonzaga because he is co-developing the Mapping the Gay Guides project (see <http://mappingthegayguides.org/>), which maps the *Damron Guides* from 1965 to 1980—but more so as a project of digital humanities to share the data publicly. When we were corresponding this past year, Eric and I realized we had similar challenges. For example, the two of us have many similar questions about how to respect the raw data even if there are mistakes. How can we still archive those imperfections but also ensure accuracy for spatial analysis? I think that's what we're also thinking about for designing the geospatial platform.

*Fin*

**Giesecking:** Thanks for everything you've shared. Is there anything else you want to add to close us out?

**Brown:** Larry and I were talking earlier about how uncomfortable we were being positioned as leaders or elders. It occurs to me that we should think of ourselves as part of a movement because I'm thinking about retirement soon and Larry's retired, we will only be able to do so much, and we will leave things off because of our positionality. But if there's a cluster of folks working on this, then maybe future generations can build on these efforts. What my undergrads do with StoryMaps is incredible and I just think this is going to be so much more advanced than anything I did with the hardcopy map. What folks are doing nowadays would have been unimaginable to me not so long ago. So just please keep doing what you're doing, it's meta-important.

**Zhao:** Thanks for initiating this conversation. Regarding the next chapter, I think there will be various pathways and possibilities. Among them, I sincerely believe that the spirit of queering the map will last and continue to inspire GIS scholars in queering the trustworthiness of geospatial data and the representation of uncertain geospatial data. No less importantly, the spirit will promote more grassroots efforts in the mapping process,



and call on the marginalized to use map as a vehicle to queer the taken-for-granted geographical world.

**Giesecking:** I've really learned so much. I am always keen to grow my thinking about how queer theory arrived in the field, and where it must yet go, and this conversation has been a gift to those thoughts so often running through my head. I'm also struck by how much this paper was fueled so much by your experiences in the field and in your department, as much as your activism. It's great to account for the whole of what we do, and to make sense of how our work unfolds. I appreciate all that you've shared.

**Swab:** Yes, thanks so much for everything. It's been a pleasure interviewing you!

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