# Queering (meta)data ontologies

Blake W. Hawkins University of British Columbia Vancouver, Canada blake.hawkins@alumni.ubc.ca

Rvan Burns University of Calgary Calgary, Canada ryan.burns1@ucalgary.ca

## **ABSTRACT**

Meta/data are not neutral terms and mean various things for different communities and demographics. One such community that lacks much discussion about their ontologies of meta/data are the LGBTQ communities. With current practices of meta/data production, are the opinions of LGBTQ people properly represented? In this paper we position an ongoing project that is trying to understand the opinions of LGBTQ people regarding meta/data. We briefly provide some context to the broader project and also share our study design for the project. From this paper we hope to position how and why this type of work is necessary for LGBTQ people.

## **CCS CONCEPTS**

Human-centered computing → Human computer interaction (HCI)

### **KEYWORDS**

Critical data studies; HCI; Queer Theory

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# 1 INTRODUCTION

"How can we recognize those whose lives and data become attached to the far-rom-groundbreaking framework of "small data"? Specifically, how can marginalized people [especially queer people] who do not have the resources to produce, selfcategorize, analyze, or store "big data" claim their place in the big data debates?" [1]

Various fields that overlap with ICT have experienced debates about the role critical discourse can and should have in the

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field. In the mid 1990s, debates between GIScientists and critical geographers produced evocative insights into about the politics and theory associated with geospatial files, data sets, and algorithms used for mapping [2]. Following these debates, there has been an increase of research critiquing (meta)data from various social-theoretic perspectives [3]. The quote above by [4] highlights that there are barriers in producing big - or any - data for gender/sexual minorities facing ongoing marginalization and stigmatization [5]. The continued presence of these barriers suggests a fundamentally White heteronormative hegemony (i.e., caucasian men) underwriting (meta)data algorithms and ontologies (i.e., perspectives or opinions). Gender and sexual minorities barriers from producing data on their lived stories through (meta)data highlights the hetero White hegemony in the algorithms and ontologies used to produce (meta)data (5).

Notwithstanding existing obstacles and criticisms of the current ontologies of (meta)data, we believe that there is an opportunity to queer (meta)data for ICT research, to produce data on both the lived experiences of queer people and a queer sense of place [1]. In this paper, we describe an ongoing project that is exploring potential queer critiques on (meta)data along with applying the lived experiences of gender/sexual minorities experience with (meta)data. Our long term goal from this project is to trouble current paradigms and produce new interpretations of (meta)data with gender/sexual minority people.

## CRITICAL (META)DATA STUDIES

For this research, we engage a critical data studies theoretical framework. The field of critical data studies emerged in response to transformations in data production and collection that led to claims that "big data" equates with "better data" and deeper insights [6, 7]. Its fundamental insight is that "data are always already 'cooked' and never entirely 'raw'" [8], and that a plethora of ideologies, epistemologies, experiences, and knowledges frame the ways data are captured and represented [9, 10]. While the ideas themselves draw on longstanding traditions in knowledge situatedness and knowledge politics [11, 12, 13], critical data studies encourages us to consider more closely the technical practices surrounding data per se rather than their derivatives like cartographic and analytic outputs, software, or physical infrastructures.

Recently there has been growing interest in the heteronormativity, cisgendering, and sexual-epistemological violence subtending data collection, production, processing, and representation. Gieseking [1] contends that the mythos surrounding "big data" marginalizes (small-data) ways of knowing that have been instrumental in forming LGBTQ communities and identities, an idea that builds on decades of feminist research on GIS [14, 15]. Importantly, research on the topic has translated critical inquiry into actual resistances: [16], for example, excavate the ways critical data and technology studies within geography have always offered insights into the spatial production of sexuality. They take 'code' (i.e., programming language) as a starting metaphor for understanding how data and technologies delimit forms of appropriate social life but also serve as a site to "transgress, disrupt, and distribute the norm" [16]. Gieseking (17) likewise offers reflexive insights into how standard technological practices can be queered to support a range of ways of knowing currently left out of GIS.

### 2 RESEARCH DESIGN

There are three objectives for this research project related to the theoretical and empirical portions of the project. 1) Continuing the theorization and queer critique of (meta)data and how it creates opportunities for novel approaches to better represent gender/sexual minority people. 2) Highlight how gender/sexual minority people perspectives on producing relatable metadata that represents these lived experiences 3) Investigate if gender/sexual minority people experience algorithmic oppression with current mapping data.

To complete the first objective we are collectively completing an extensive literature review on (meta)data and employing queer and other related critical critiques to the data. Furthermore, we are reviewing other scholars interpretations of (meta)data to understand the current dilemma with these issues for gender/sexual minority people. Given much of this research is theoretical, we also want to incorporate empirical research component into this project. We will be completing 25 interviews with gender/sexual minority people from Vancouver, Canada in Fall 2018 - Winter 2019. There will be an interview guide based on the theoretical component of the project. We also plan on sharing examples of current metadata used to create various types of data used to report on gender/sexual minority people. During these interviews we will also be gathering the opinions of gender/sexual minority people regarding the need for queering ontologies of (meta)data. Potentially community participants believe that the current (meta)data represents their experiences and there could be the need for further theoretical interpretations of how we are currently critiquing (meta)data that best represents the communities assumed to be affected.

## 2 CONCLUSION

As we move forward with this project, we hope to make a significant contribution to the growing body of research on critical GIS and data studies by completing this project on queer (meta)data. Currently, there are signifineant theoretical discourses occurring on queer data, coding, and GIS [1, 4, 16] however, none to our awareness include the actual opinions of queer people using these technologies or having their data collected. As Gieseking [1] identified, these communities may not have the means to have big data due to socioeconomic reasons. However,

as technology, through maker spaces or other settings become readily available we believe it is important to already have captured these opinions of the queer community through this project so they data can be properly represented through the used metadata.

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