The New Gay Science: Sexuality Knowledge, Demography, and the Politics of Population Measurement

by

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For Zelda Clare Louise

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TABLE OF CONTENTS

DEDICATION ii

ACKNOWLEDGEMENTS iii

LIST OF FIGURES ix

LIST OF APPENDICES xi

LIST OF ACRONYMS xii

ABSTRACT xiv

CHAPTER

1. Introduction: The Social Lives of Sexuality Statistics 1

1.1 Toward a Feminist Epistemology of Demography 3
1.2 The History of Sexuality (Science) 6
1.3 Data=Power: Demography as a Tool for Justice? 9
1.4 Data and Methods 12
1.5 Chapters Overview 16

2. Population Counts: Making Numbers Matter and the Curious Case of Kinsey's Ten Percent 21

2.1 The Legacy of Ten Percent 24
2.2 Population Counts Without Population Science 31
2.3 Population Counts Take Center Stage 34
2.4 Population Counts at Court 38
2.5 Data Activism 48
2.6 Conclusion 59

3. SOGI Subjects: The Making of a Population and Other Social Facts of Sexuality 60

3.1 Historical Context 61
3.2 Surveying the Surveys: What We Ask About When We Ask About Sex 66
3.3 Evolution of a Question 85
3.4 Producing Sexuality Knowledge: What Is New? 92
3.5 Best Practices 100
3.6 Research History and the RDSL Study 115
3.7 Conclusion 121

4. No Differences: Debating Demographic Expertise in the Marriage Equality Cases 123

4.1 Temporal Politics and the Social Science of Sexuality 125
4.2 Responsible Procreation and Optimal Parenting 132
4.3 Methods Education in the Courtroom 136
4.4 Administrative Matters as Biopower 142
4.5 Conclusion: Love Wins 148

5. Conclusion: Capabilities and Criticisms of Our Contemporary *Scientia Sexualis* 149

5.1 Arguments and Implications 155

APPENDICES 157

BIBLIOGRAPHY 184

LIST OF FIGURES

Figure

1.1 Summary of newspaper articles analyzed. 13

1.2 Frequency of mentions of demography, biology, and psychology in newspaper coding. 14

2.1 *Gay & Lesbian Stats* book, published in 1994, depicting activists on the White House lawn holding sign reading "lesbians count, count lesbians." . . 23

2.2 The Kinsey Scale, classifying sexual orientation on a scale from 0=completely heterosexual to 6=completely homosexual. 25

2.3 Current measures of sexual orientation and gender identity in federal surveys (from FIWG 2016a, page 21). 28

2.4 Comparing NSFG with other national surveys (Chandra et al. 2011, page 32). 29

2.5 Sexual behavior in the NSFG (from Copen et al. 2016, page 7). 30

2.6 Sexual attraction in the NSFG (from Copen et al. 2016, page 8). 31

2.7 Sexual orientation in the NSFG (from Copen et al. 2016, page 9). 31

2.8 Excerpt from Justice Scalia's dissenting opinion in the *Windsor* case, highlighting contestation over population counts (page 23 of the published opinion). 48

2.9 Sticker from the National Gay and Lesbian Task Force's Queer the Census campaign held prior to the 2010 Census. 52

3.1 NSFG question wording experiment, comparing language to NHIS question. 67

3.2 NHIS male sexuality flashcard. 68

3.3 NHIS female sexuality flashcard. 68

3.4 NHIS sexuality follow-up questions for respondents who chose "something else" or "I don't know the answer." 69

3.5 Add Health sexuality question, combining the constructs of attraction and orientation. 74

3.6 NSFG question on sexual attraction. 75

3.7 GSS question asking about attitudes toward homosexuality on a scale of how "wrong" the respondent thinks it is has appeared since the 1970s. A more contemporary question about gay marriage uses a bi-directional scale from "right" to "wrong" instead. 78

3.8 GSS questions about attitudes toward homosexuals have existed since the 1970s. 79

3.9 Question order in GSS: an introductory statement about the grave nature of AIDS immediately precedes the sexual orientation question. 81

3.10 Question order in Add Health CASI section combines sensitive topics, including sexual identity, contraceptive nonuse, paid sex, and sexually transmitted infections. 82

3.11 Question from Add Health asking if the respondent has told their parents about their (homo or bi)sexuality. 83

3.12 GSS question asking to whom the respondent has disclosed their (homo)sexuality. 83

3.13 NSFG Cycle 6, male questionnaire, sexual attraction and orientation questions. 87

3.14 NSFG sexuality "something else" option, fill-in-the-blank. 88

3.15 Summary of NSFG back coding of "something else" response option between 2002 and 2006–2008 surveys (Chandra et al. 2011, page 33). 90

3.16 NSFG current sexual identity question, from 2006–2010 questionnaire. . . . 90

3.17 Best practices for measuring three dimensions of sexual orientation outlined in the SMART 2009 report. 110

3.18 New RDSL questions about non-heterosexual behavior, attraction, and identity. 118

5.1 Public opinion polling finds that, for the first time, over half of Americans believe gay people are "born that way." 151

LIST OF APPENDICES

Appendix

A. Methods 158

B. Extended Abstract for RDSL Working Paper 165

C. Surveys 171

D. Interviewee Biographies 179

E. Interview Guide 181

LIST OF ACRONYMS

ACL	Administration for Community Living
ACS	American Community Survey
ACASI	Audio computer-assisted self-interviewing
AddHealth	National Longitudinal Study of Adolescent to Adult Health
AJS	American Journal of Sociology
ASR	American Sociological Review
BLAG	Bipartisan Legal Advisory Committee
BRFSS	Behavioral Risk Factor Surveillance System
BJS	Bureau of Justice Statistics
CAPI	Computer-assisted personal interview
CATI	Computer-assisted telephone interview
CBHSQ	Center for Behavioral Health Statistics and Quality
CDC	Centers for Disease Control and Prevention
CPS	Current Population Survey
DADT	Don't Ask, Don't Tell
DHHS	Department of Health and Human Services
DOJ	Department of Justice
DOMA	Defense of Marriage Act
FDA	Food and Drug Administration
FIWG	Federal Interagency Working Group
GenIUSS	Gender Identity in the U.S. Surveillance
GI	Gender Identity
GLMA	Gay and Lesbian Medical Association
GLSEN	Gay, Lesbian and Straight Education Network

HCPS	Health Center Patient Survey
IOM	Institute of Medicine
JMF	Journal of Marriage and Family
LGBTQ	Lesbian, Gay, Bisexual, Trans, Queer
NATS	National Adult Tobacco Survey
NCHS	National Center for Health Statistics
NFSS	New Family Structures Study
NHANES	National Health and Nutrition Examination Survey
NHIS	National Health Interview Survey
NHSLS	National Health and Social Life Survey
NICHD	National Institute of Child Health and Human Development
NIH	National Institutes of Health
NIMHD	National Institute on Minority Health and Health Disparities
NSDUH	National Survey on Drug Use and Health
NSFG	National Survey of Family Growth
NSOAAP	National Survey of Older Americans Act Participants
NTDS	National Transgender Discrimination Survey
OCSLS	Online College Social Life Survey
OMB	Office of Management and Budget
PAPI	Paper and Pencil Interview
PATH	Population Assessment of Tobacco and Health
RDSL	Relationship Dynamics and Social Life (Study)
RWJ	Robert Wood Johnson (Foundation)
SAMHSA	Substance Abuse and Mental Health Services Administration
SGM	Sexual and Gender Minority
SGMRO	Sexual and Gender Minority Research Office
SMART	Sexual Minority Assessment Research Team
SO	Sexual Orientation
SOGI/E	Sexual Orientation and Gender Identity/Expression
USDHHS	United States Department of Health and Human Services
YRBSS	Youth Risk Behavior Surveillance System

ABSTRACT

This dissertation shows how population science became an important form of sexuality knowledge and, in so doing, shaped contemporary understandings of non-heterosexualities and LGBTQ civil rights claims. I use the tools of feminist science studies to investigate the production and circulation of demographic, survey-based knowledge about non-heterosexualities. Empirically, I investigate how population science came to join psychology and biology as one of the most prominent tools for understanding sexuality and the consequences of this transition for sexual identity, social science, and knowledge politics. Theoretically, the case of demographic sexuality knowledge enables me to address broader issues of how social scientific thinking shapes public discourse and policy debates.

The last decade witnessed an unprecedented prioritization of research on SOGI (sexual orientation and gender identity), with a particular focus on the inclusion of SOGI measures in demographic surveys. This focus follows the legacy of a century of dehumanizing science of homosexuality, but this new gay science holds different kinds of perils and promise. The routine counting of SOGI populations in surveys transformed LGBTQ civil rights claims and fueled data-centered activism ("data=power!"). However, political upheaval and contemporary skepticism toward expertise, coupled with the tensions between demographic research norms and transformations in contemporary sexuality, leaves this sexuality knowledge in a precarious position.

I use comparative-historical and interview methods and diverse but complementary data sources to investigate the sexuality knowledge circulating *out* in the world in public

discourse and policy debates, and to interrogate its technical production *within* social science scholarship. My data include newspaper articles, court documents, survey questionnaires themselves, and interviews with key data activists. I focus specifically on the inclusion of SOGI measures in population surveys in the United States since 2000, the three most recent and pivotal marriage equality cases at the U.S. Supreme Court (2013–2015), and the coverage of these and other sexuality topics covered in the national media during those same years (with comparisons to selected eventful moments dating back to the dawn of the gay liberation movement).

My dissertation has three main findings. First, demography has become part of our *scientia sexualis,* the authorized vocabulary of contemporary LGBTQ sexuality discourse, alongside psychology and biology. In other words, demography is the new gay science. Second, the availability of demographic data and researchers' normative practice of separately measuring sexual behavior, attraction, and identity have generated new sexual theories, types, and research paradigms, but these practices exist in tension with some queer modes of identification. Third, demographic knowledge has engendered powerful claims to representation, as evidenced by the use of social science expertise in pivotal marriage equality court cases and the emergence of data activism. Although quantitative measurement can reproduce inequality by limiting definitions and foreclosing more nuanced understandings of sexuality, population counts are also deployed as tools for progress and justice.

These findings demonstrate the theoretical and empirical value of bringing together survey methodology and feminist STS, as well as the possibilities and limitations of addressing material disparities and sociopolitical marginalization impacting LGBTQ communities through the power of data collection.

CHAPTER 1

Introduction: The Social Lives of Sexuality Statistics

> "This book is decidedly not an effort to reclaim the power of numbers—they have enough power already—but rather seeks to present a fine-grained answer to the deceptively simple question: What's in a number? [...] this book aims to trace the lives of numbers themselves, and the social worlds and persons they produce as they come into being. The book illustrates how producing numbers is a technoscientific endeavor that generates new kinds of knowledge, persons, and politics along the way."
> —Crystal Biruk, PhD, *Cooking Data: Culture & Politics in an African Research World* (2018: 16)

> "...after she gave her talk [in the 1990s] I raised my hand and I said, "well, what can you say about lesbians and breast cancer?" [...] I thought, this is the survey that the government uses to monitor for prevalence of breast cancers. [...] I just pushed nicely and she said, "I don't know who is a lesbian in my sample." I said, "why not?" and people in the audience were getting uncomfortable and angry at me, and someone started booing me. *And that was the moment I thought I'm never going to stop asking this question, ever. It was that moment where I [connected] all the dots: the importance of data, the power of data, the politics of data.*
> —Randall Sell, ScD, Professor, Drexel University School of Public Health

This dissertation is about how population science has joined biology and psychology as one of the dominant ways we make knowledge about sexualities today, and the consequences of demography's rise for public discourse, policy debates, and sexual identity. In other words, it is about how demography is the new gay science.[1] The importance, power, and politics of

[1]My title *The New Gay Science* playfully engages the popular 1960s translation of Friedrich Nietzsche's 1882 *Die Frohlich Wissenschaft* (translated from the German as "the gay science" or occasionally the more literal "the joyous wisdom"). Nietzsche was writing about the technical skills of poetry. The phrase was well–known throughout Europe at the time and was also popularized it its inverted and critical reference

data—as Randall Sell, lifelong academic data activist, describes in the epigraph above—are evidenced by the role that demographic sexuality knowledge has come to play in shaping society. Being counted means material and symbolic representation. LGBTQ people face a range of disparities in this country and data is how we understand and begin to address these inequities. And not just any data: I show how demographic, survey-based data like those Sell questioned have become central to the knowledge claims invoked in debates over civil rights, health, and identity.

In this dissertation, I make three contributions. First, I show that demography has become part of our *scientia sexualis*, the authorized vocabulary (Foucault 1976) of contemporary LGBTQ sexuality discourse, alongside psychology and biology. Second, I document how the availability of demographic data and researchers' normative practice of separately measuring sexual behavior, attraction, and identity have generated new sexual theories, types, and research paradigms, but also how these practices exist in tension with some queer modes of identification. Third and finally, I show how demographic knowledge has engendered powerful claims to representation, as evidenced by the use of social science expertise in pivotal marriage equality court cases and the emergence of data activism. Demography has become a battleground in struggles for LGBTQ rights.

In the remainder of this introduction, I lay out my approach to studying sexuality knowledge, outline existing histories of sexuality knowledge, define demography for the purposes of this study, and summarize debates over the role of LGBTQ data in contemporary political life before turning to an overview of the data & methods and an outline of the chapters of the rest of the dissertation.

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to the emerging discipline of economics as "the dismal science." "The Gay Science," translated from the French "Le Gai Savoir," was also the title of an interview between gay activist Jean Le Bitoux and Michel Foucault in Paris in 1978. I use "the new gay science" to evoke this study of disciplinary technique—not in poetry, as in Nietzche's original, but in my object of study, survey methodology. I also use it quite literally to suggest that demography is our contemporary Foucaudian *scientia sexualis*.

1.1 Toward a Feminist Epistemology of Demography

This dissertation sits in the theoretical space where survey methodology meets feminist epistemology: the former aims to minimize bias in survey design, implementation, and analysis with the goal of producing valid and reliable data (Baumle 2013), while the latter foregrounds knowledge as fundamentally situated (emerging from a specific standpoint rather than a "view from nowhere") and seeks to recognize rather than eliminate power dynamics inherent in all research (Collins 1990; Harding 1987). An STS (Science, Technology, and Society)[2] approach to the production of knowledge allows me bring the two together, with the goal of moving toward a feminist epistemology of survey methodology. What are the relevant conversations happening in these two areas and what do we gain by drawing them together?

My project is broadly informed by the STS approach to the politics of knowledge (Epstein 1996). The interdisciplinary subfield of STS is concerned with how culture (both big C national cultures and small c local knowledge cultures), epistemic values, and research practices shape one another. A central thesis of STS is that all knowledge, including scientific knowledge, is social knowledge. STS grew up around ethnographies of lab sciences that peered into the "black box" of knowledge production to show how the sausage gets made (Latour 1988; Latour & Woolgar 1979; Knorr Cetina 1999, Fausto-Sterling 2000). These "lab ethnographies" center the role of the researcher in scientific endeavors and include calls to be transparent about the researcher's standpoint. Drawing on feminist standpoint theory (Hartsock 1987), one feminist STS perspective identifies this kind of reflexivity as actually making science more, not less, objective (Harding 1991). In other words, if a primary goal of science is the production and accumulation of valid knowledge about the world, these reflexive and critical practices serve to help scientists reach those goals (Harding 1991).

STS research on surveys has often focused on the role of racial categories and the

[2]STS is an interdisciplinary and often humanistic subfield. Within the discipline of sociology, this area is also known as Science, Knowledge, and Technology, SK&T or SKAT, as it is known by section of the American Sociological Association for almost 30 years.

construction of identities more broadly. Social surveys illustrate the construction of identity categories (Morning 2009) and are an influential place where people's lived experience gets translated into categories of knowledge and governance (Hacking 2006; Law 2009). Researchers have shown that the racial categories measured in surveys are shaped by political struggles, and that these categories in turn shape people's lived experiences. I identify similar patterns for LGBTQ categories and identities.

The disciplinary subfield of survey methodology is devoted to the practice, design, implementation, evaluation, and improvement of survey research. Much of this scholarship has focused on the sources of and potential ways to mitigate bias. The conceptualization of bias encompasses the recruitment and retention of a random sample of research participants, myriad issues pertaining to study design and data collection, and the downstream statistical analysis of the resulting data. Sexuality has always been a particularly salient issue for survey methodologists: it is conceptually fuzzy, deeply personal, and subject to profound historical and social change. Beyond the specifics of surveying sexuality, we know that questionnaire design (e.g., question order, word choice, response options) matters and can bias the resulting data (McFarland 1981; Tourangeau et al. 2000), including through "identity priming effects" where group affiliation is foregrounded (Hutchings & Jardina 2009; Sudman et al. 2010). Interviewer characteristics such as race, gender, and age influence how research participants answer questions (Anderson et al. 1988; Davis et al. 2010; Saperstein & Penner 2014). Dynamic sources of "interviewer effects" include social desirability bias and group conformity (Davis & Silver 2003). The mode of data collection also matters: we learn different things when shifting from landlines to cellphones (Dykema et al. 2012; Keeter et al. 2006) to opt-in internet-based surveys (Baker et al. 2010) which may eliminate the possibility for respondents to jot down corrections or clarifications in the margins (McClelland & Holland 2016). These mode effects pertain especially to data collection on "sensitive topics" (Turner et al. 1998), a category which frequently includes sexuality. The survey methodology literature reveals the commitments of the field: researchers' choices are

recognized as sites of potential bias that can impact study outcomes. This recognition is pragmatic; in contrast to feminist epistemology, the survey methodology subfield generally holds that bias can be minimized or eradicated and that by moving toward perfect design surveys can approach a positivistic reflection of the world (a view from nowhere).

Bringing insights from these two approaches together, I use demographic sexuality knowledge as a *case* to understand how social science evidence shapes discourse and politics, and vice versa. In connecting the production of scientific and technological expertise to the social, STS necessarily follows these relationships beyond formal institutional settings such as law and into other public arenas such as politics (Gauchat 2012; Hirschman & Berman 2014; Kovacic 2018), activism (Epstein 1995; Waidzunas 2013), and advocacy (Best 2019). In his 2018 *Sociology Compass* review ("Science, Technology, and Sexuality: New Directions in the Study of Sexual Knowledge"), Stefan Vogler highlights some productive areas of convergence between STS and the sociology of sexualities. Vogler calls for centering the social sources of sexual knowledge. He also points out that although STS and the sociology of sexualities share many of the same theoretical underpinnings and epistemic commitments, their substantive overlap has been largely limited to biomedicine. My project takes up his call for more research on knowledge production about sexuality by focusing on demographic sexuality knowledge, a topic largely separate from biomedicine (though with occasional convergences, a point to which I return in the conclusion). Vogler identifies measurement and classification as an existing area of convergence between STS and the sociology of sexualities. Classification is also one of the thematic touchstones of STS (Bowker & Star 2000) as well as the history of sexology and the medicalization of sexual *types* (see Chapter 3) and connects to a fundamental concern of survey methodologists who must practically navigate different understandings of sexuality to elicit meaningful responses. A related area concerns the transformation of ideas, objects, and people into numbers as a fundamental way of making the world legible (Porter 1995) and governable (Espeland 1997; Rose 1991). Usefully for my project, the STS interest in quantification extends quite specifically to demographic

statistics, including scholarship on the development of health statistics in development research (Biruk 2018), life insurance and demographic understandings of mortality risk (Bouk 2015), and the political ramifications of the construction of the "average American" through surveys (Igo 2008). There is also a substantial literature on how scientific expertise informs legal arguments (and, though less often, *outcomes*). This literature recognized the entanglements between law and science as significant phenomena about three decades ago ("a new paradigm" according to Walker & Monahan 1991), including as an incomparably rich site for STS (Jasanoff 1995). The contemporary literature on *social science expertise* and law focuses on providing evidence and making arguments (Brandmayr 2017; Riske & Borgida 2008) and evaluation by judges (Collins & Martinek 2015; Merlino et al. 2008; Ramsey & Kelly 2004).

In sum, my work identifies demographic sexuality knowledge as a consequential social practice, shaped by the particular standpoints of survey methodologists and the epistemic culture of demography, with the potential to influence public discourse and political outcomes. In the next section, I show how researchers identified biology and psychology as privileged sites for the production of sexuality knowledge in the nineteenth to early twentieth century, but have not yet extended their analyses to include the most recent period and thus have largely missed the rise of demography.

1.2 The History of Sexuality (Science)

Foucault (1976) identified a strong association between science, sexuality, and truth, and sexualities scholarship has traditionally identified psychology and biology as the dominant sciences of sexuality (Vogler 2018). In this dissertation I show how *demography* has joined these other sciences as one of the dominant ways of knowing sexuality over the last twenty years. Long before population science rose to prominence, sexuality and science were already intertwined. The recent rise in SOGI data collection, partially in response to calls from LGBTQ rights activists and perceived as empowering to LGBTQ civil rights claims,

follows a painful legacy of over a century of dehumanizing science of homosexuality.

The modern history of sexuality foregrounds science, especially efforts to define, classify, and measure. In refutation of the "repressive hypothesis" (the claim that sexuality is broadly suppressed and silenced), Foucault recognized the seductive, quiet power of a discourse that controlled life by disciplining sexuality. Foucault argued that sexuality discourse was everywhere, but it followed precise rules. The "authorized vocabulary" of Western modernity was that of *scientia sexualis* (the science of sex) rather than *ars erotica* (the art of the erotic). Foucault locates an explosion of sexuality discourse controlled through the languages of, first, religious confession, and, later, medicine and psychology. By the 19th century, Foucault wrote, the "authorized vocabulary" of sexuality was one of science. This *scientia sexualis* includes the 19th century coining and definition of the term "homosexuality" and the cataloging of paraphilias, early 20th century theories of "inversion" and gendered and racialized phrenology, mid 20th century classifications of homosexuality as mental illness, and the late 20th century search for the etiology of homosexuality including studies of gay brains, bodies, hormones, and genes.

While these threads of the biology or psychology of sexuality reinvent themselves and continue to unfold, I argue that the contemporary *scientia sexualis* is increasingly one of population science. Foucault traces the genealogy of sexuality discourse from its earlier regulation by the Church, at which time the authorized vocabulary of sex emerged through *confession*. I argue that the contemporary confessional tool is the scientific survey. In my interviews with young women research subjects in a longitudinal survey study (presented in more depth in Appendix B), participation in the scientific enterprise was viewed as a responsibility they took seriously. One lesbian interviewee said she carefully followed the literal definition of sexual intercourse when answering questions because she did not want to "ruin" the data, she wants to help the researchers reach their objective of collecting "real, honest, true facts." Even when the survey questions might have been interpreted as exclusionary to bisexual and lesbian women, some research subjects assumed that they must

be "confused" because it was inconceivable that the University or researchers could make such a conceptual mistake. These surveys situated the research subject and the demographer in a similar relationship as the confessor to the religious authority, in Foucault's pre-Victorian model. While the early truth of sexuality ("true facts" as described by my interviewees, see Appendix B) may have been implored through religious confession, it is now explored through scientific enquiry. And increasingly, that science is demography.

Defining Demography

Like any discipline, the boundaries of demography are somewhat porous and shaped by the work of insiders and outsiders to define the contours of the field (Gieryn 1983). Provisionally, I define "demography" to mean the (self-consciously) scientific study of human populations that produces information on the size, vital statistics, and geospatial context of groups with a general commitment to the methodological tool of the quantitative survey (Riley & McCarthy 2003). More recently, demography has expanded from is initial foci on fertility, mortality, and migration to a wide range of *social* demographic topics. Social demography nonetheless holds at its center the same concerns about tracking the characteristics, problems, and progress of populations and remains committed to quantitative survey data. Anthropologist Crystal Biruk explains her position to and definition of the field in a way that so closely resonated with me that I will quote at some length from her 2018 ethnography of AIDS statistics and quantified health data in Malawi:

> What unifies these researchers is their investment in the survey as a key tool in collecting data that will shed light on population dynamics [...] The questionnaire—in its imperative to collect standardized information that can be converted into numbers—is the base of these researchers' future analysis of a clean quantitative data set, to be followed by the dissemination of their results through journal articles, books, conferences, and other venues. [...] I sketch an ideal-type demography that fails to capture the complexity and diversity of persons trained in this discipline, but nonetheless provides a heuristic sense of the general commitments of demographers [...]. While culture(s) are unstable and dynamic, one can nonetheless extract patterns via ethnographic study of a discipline's thought, practices, and products. (Biruk 2018: 11–12).

In this dissertation, my object of study is the knowledge produced by researchers who are reflected in this "ideal-type" heuristic and whose work demonstrates their investment in

the questionnaire as a tool. Because other sites are similarly the targets of activism around SOGI data collection and because there is spillover from demography, I also consider the production and circulation of demographic knowledge in electronic medical records and the Census. These, with national surveys, comprise the "population-based data systems" (Cruz 2016) implicated in the measuring and making of social difference.

1.3 Data=Power: Demography as a Tool for Justice?

My dissertation focuses on the demography of sexuality because this research has become a battleground in debates over LGBTQ civil rights. Activists on all sides turn to demographic knowledge to make claims about LGBTQ people and their worthiness, and data collection itself has become a site of political contestation. The importance, power, and politics of data are exemplified by the role that demographic sexuality knowledge has come to play in shaping society. In the last twenty years, as many scientific social surveys of the American population have begun including questions about sexual orientation for the first time, new areas of inquiry have crystallized around the measurement and definition of SOGI/E—sexual orientation and gender identity/expression. Policy advocates and activists demonstrate the belief that data collection can be a means to equity, or at least is a necessary piece of the puzzle (Mora 2014; Ruberg & Ruelos 2020; see also Data for Black Lives at d4bl.org). The resulting data has been circulated in the media and used in arguments over LGBTQ civil rights. The data has also shaped what we know about LGBTQ people and the ideas we hold about sexuality. Consequently, politicians, activists, and individuals have observed that data is a powerful means of representation, leading to the rise of activism centered on data collection.

For example, on the heels of Trump's presidential inauguration, questions about sexual orientation were removed from the federally-funded National Survey of Older Americans Act Participants (NSOAAP) administered by the U.S. Department of Health and Human Services. Attending the frenzied backlash and disconcerting blend of political and statistical

explanations, the *American Journal of Public Health* published a dossier decrying the "dropping" and "erasure" of "sexual minorities from the survey" as "public health malpractice," a move "tantamount to saying these people literally do not count" (Morabia 2017; Sell 2017a).

The researchers' concerns make sense in light of the striking salience of demographic research in political debates over LGBTQ civil rights. As I document in Chapter 4, arguments central to the 2013–2015 marriage equality cases at the U.S. Supreme Court—such as debates over "responsible procreation" and "optimal parenting" (Ball 2014)—drew heavily on core demographic topics, theories, and data sources, and were bolstered or undermined by estimates of the number of same-sex parents and children impacted. In his 2013 dissenting opinion in *United States v. Windsor*, Justice Scalia chastised the majority's citation of an estimate of how many families were personally impacted by same-sex marriage bans as an "invented" calculation. Scalia's comment is illustrative of a surge in interest in the demography of sexuality (Baumle 2013; Powell et al. 2012): how many people are gay, what do we know about them, and who counts? Our judicial system is premised on individual rights, yet all sides invoke population measurement. *What is demography doing in a place like this?* Beyond the courtroom, *how did demography become so important to contemporary understandings of sexuality?*

Attention to the production and (mis)uses of demographic sexuality knowledge is occurring on several fronts, and a variety of stakeholders acknowledge the need for more and ever better data to address LGBTQ health disparities and social inequities. LGBTQ populations have been formally designated a "health disparity population" for research purposes (see Chapter 3), and the U.S. Department of Health and Human Services' has both identified LGBTQ health as a national research priority in their decennial Healthy People goals for 2020, and mandated the inclusion of SOGI measures in electronic health records. It has gone from being truly taboo, to unusual, to increasingly common to include questions about sexual behavior and identity on federally-funded surveys (Baumle 2013; Gates 2011; Laumann et al. 1994; Powell et al. 2012). Demographers now produce national

statistics on sexual identity and behavior (Black et al. 2000; Gates 2011; Laumann et al. 1994), prompting others to foreground the limitations of current measurement (Westbrook & Saperstein 2015) and recommend best practices for data collection (Badgett 2009). But a multitude of stakeholders still see a lot of work to do to normalize the collection of SOGI data. Congress's proposed LGBT Data Inclusion Act (Grijalva 2016) called on the Census Bureau to ask about sexual orientation, following a decade of grassroots efforts to "Queer the Census" and a crescendoing activist proclamation that "data=power" (Sell 2017b).

The demand for LBGTQ data has also produced a considerable amount of research on how to count sexual minorities and measure sexualities. This area of scholarship is timely and growing. (The *population* might be growing, too: researchers have identified increases in recent cohorts in same-sex partners and bisexual identity (Fitzsimons 2018; Mishel 2019), especially among young people (Friedman et al. 2004) and women (England et al. 2016).) There have been specific federal committees to investigate the state of SOGI/E measurement (FIWG 2016a,b,c; SGMRO 2018), which is something researchers depending on federal datasets have demanded for a long time (Conron et al. 2014; Sell 2017a,b; Sell & Holliday 2014) and tracking for years (Sell 1997, 2007). These reforms are seen as important steps to make LGBTQ families visible on the Census and household surveys (Baumle & Compton 2014). Issues of labels have long been important within LGBT Studies and are at the heart of scholarship about how to conceptualize and measure LGBTQ sexualities (Coleman-Fountain 2014; Friedman et al. 2004). Some publications focus on the way sexualities are measured and LGBTQ people are identified in particular surveys, to make visible this evolving process of data collection and aid analysis (Eliason et al. 2016; Miller & Ryan 2011; Prickett et al. 2016; Silva & Whaley 2018). In this dissertation, I focus primarily on the measurement of sexual orientation, attraction, and identity, which is sometimes related and sometimes aptly split from the measurement of gender identity and expression and trans populations.[3]

[3]Measurement of sex/gender is having its own increase in attention (Bauer et al. 2017; Conron et al. 2014; Hart et al. 2019; Magliozzi et al. 2016; Westbrook & Saperstein 2015), with some focus specifically on implications for trans people (Doan 2016; Harrison–Quintana et al. 2012; Labuski & Keo–Meier 2015) leading to official recommendations and best practices (GenIUSS 2014, 2015; Reisner et al. 2015).

Much as STS scholars and sociologists of race have identified the importance of struggles over racial classifications (Morning 2009), my work shows the political importance of debates over *whether* and *how* to count sexual minorities.

1.4 Data and Methods

Informed by my preliminary engagements with LGBTQ data activism and survey methodology, and using the tools of feminist science studies, I focus my attention on a set of specific empirical questions: Which demographic claims make it into public discourse and policy debates, and why? Who produces that evidence, and how might their methodological and theoretical commitments shape their research? What kind of claims about population counting are made, and how do they circulate? How do these forms of evidence circulate in media coverage and legal battles? These questions contribute to a broad theme: How does this form of social scientific thinking shape public discourse and policy debates?

To answer these questions, I use comparative-historical and interview methods and diverse but complementary data sources to investigate the circulation of sexuality knowledge out in the world, and to interrogate the technical details of the production of this knowledge within social science scholarship. My data sources include: (1) materials from the three most recent pivotal same-sex marriage cases at the U.S. Supreme Court; (2) newspaper articles discussing both science and sexualities in three major national papers covering the years before, during, and after those same-sex marriage cases, with a historical comparison to newspaper coverage of other select eventful moments in gay history; (3) survey materials including questionnaires, codebooks, interviewer instructions, and user guides, and (4) interviews with expert stakeholders who use demographic facts about sexuality in their policy work. At this project's outset, I was interested in sexuality knowledge across the social sciences, including where the social sciences intermingled with biology and medicine. From an early point, I found demography to be a prominent type of evidence to be discussed across these arenas, which prompted me to investigate how population studies might be the new gay science.

(In Chapter 5, I conclude with a look beyond demography and demography-adjacent social science.)

To investigate sexuality knowledge in public discourse, I analyzed newspaper articles to identify the most common knowledge claims about sexuality circulating at the time of the Supreme Court marriage equality cases. I focus on the three U.S. newspapers with the largest circulation: *The New York Times*, *The Wall Street Journal*, and *USA Today*. These papers also nicely capture breadth in types of readership. I focus on the years 2010–2015 to get coverage of all the same-sex marriage cases at the U.S. Supreme Court: my newspaper analysis begins just prior to the *Windsor* filing in 2010 and extends through the *Obergefell* decision in 2015. I followed this examination of contemporary news discourse with a sub-sampling of historical newspaper articles (see Appendix A). The corpus of newspaper articles is summarized below:

	search topic	year	articles analyzed			
			New York Times	*Wall Street Journal*	*USA Today*	total
historical	stonewall	1969	10			
	dsm	1972	1			
	dsm	1973	7			
	dsm	1974	12			
	aids	1982	3			
	aids	1983	103			
	dadt	1994	47			
	dadt	1995	29			
	doma	1996	38			
	doma	1997	13			
contemporary	sexuality+research	2010	204	55	30	289
	sexuality+research	2011	151	30	44	225
	sexuality+research	2012	155	62	51	268
	sexuality+research	2013	154	55	75	284
	sexuality+research	2014	146	39	50	235
	sexuality+research	2015	176	60	41	277
	contemporary total	2010-2015	986	301	291	1578
	historical total	1969-1997	263			

Figure 1.1: Summary of newspaper articles analyzed.

In the newspaper analysis, I coded for discussion of any science. Demography (with 198 coded mentions) was discussed twice as often as biology (with 102 coded mentions), and four times as often as psychology (with 50 coded mentions):

Topic	# mentions of topic (2010-2015)
demography	198
biology	102
psychology	50

Figure 1.2: Frequency of mentions of demography, biology, and psychology in newspaper coding.

To understand the role of social science expertise in legal battles and policy debates, I analyzed how social scientific—and especially demographic—arguments, evidence, and logics came up throughout three pivotal marriage equality cases at the U.S. Supreme Court. Very brief descriptions of the issues and parties in these cases are as follows:[4]

Hollingsworth v. Perry (2013) was ultimately not decided on the merits of the case (arguments about marriage, families, and raising children), but rather jurisdictional issues, but it affirmed a previous decision finding California's voter-initiated ban on same-sex marriage (Proposition 8) to be unconstitutional. This case was widely reported on as being about the "Prop 8" same-sex marriage ban, which became law after a voter-initiated ballot measure passed in 2008. Named Defendant Senator Dennis Hollingsworth led the "Protect Marriage" campaign supporting the Prop 8 ban, and the named Plaintiff Kristin Perry was denied a marriage license because she was in a same-sex partnership.

United States v. Windsor (2013) struck down critical parts of DOMA, the Defense Of Marriage Act, that discriminated against same-sex couples by limiting definitions of marriage to different-sex couples for all federal purposes. This opened the path for federal suits in all districts. The Named Defendant was the Bipartisan Legal Advisory Group (BLAG) of

[4]Excellent summaries with detailed documentation of these and other cases can be found online at Scotus ("Supreme Court of the United States") Blog (www.scotusblog.com). Scotus Blog is a readable and accessible award–winning website written by lawyers and law professors and students and provides comprehensive coverage of cases. For narrative histories of these cases in the context of the broader socio–legal fight for marriage equality, I recommend Kenji Yoshino's (2015) *Speak Now: Marriage Equality on Trial: The Story of Hollingsworth v. Perry* and Carlos Ball's (2014) *Same–Sex Marriage and Children: A Tale of History, Social Science, and Law.*

the U.S. House of Representatives, defending DOMA, and the named Plaintiff was Edith Windsor, the widow and executor of the estate of her late spouse, whose marriage was recognized in her state but not federally, which had significant estate tax ramifications.

Obergefell v. Hodges (2015) ended the circuit split that had created a patchwork of marriage laws across the country, ultimately recognizing the constitutional equality of same-sex marriage nationwide. The Named Plaintiff James Obergefell was a widower wanting to be recognized as his same-sex partner's surviving spouse on the state death certificate, and the named Defendant Richard Hodges was Ohio's health director upholding same-sex marriage bans as one of several states represented by consolidated lower court decisions resulting in the circuit split.

For each of these cases, I collected the following documents, reading and coding them for discussions of social demographic topics, data, and expertise: certiorari stage documents (petitions and briefs in opposition), merit briefs and replies, amicus curiae briefs (not part of the dissertation analysis), oral arguments, majority and dissenting opinions, and lower court decisions.

Having narrowed my focus to *demographic* claims, I collected and analyzed survey materials from a sample of major nationally representative U.S. social surveys fielded in the last 30 years. To choose what surveys to examine, I read abstracts for all articles about sexuality published in select peer-reviewed journals. The main surveys that are highlighted in Chapter 3 include the National Health Interview Survey (NHIS), the National Survey of Family Growth (NSFG), the National Health and Social Life Survey (NHSLS), and the National Longitudinal Study of Adolescent to Adult Health (Add Health). The materials I collected and analyzed included questionnaires, codebooks, interviewer instructions, and user guides. (See Appendix A.)

To deepen my understanding of the events, processes, and topics analyzed in this project (and to check and challenge my findings), I conducted interviews with six expert stakeholders. These interviewees were intentionally selected based on their prominence in

their field and their contributions in generating and circulating survey data about sexualities. I targeted people with expertise in social science as well as a direct role in public policy. Interviews are not meant to be generalizable, and their individual careers and the historical and institutional contexts in which they work are necessary to include. My interviewees agreed to be named; brief biographies are presented in Appendix D. They are proud of their work and deeply invested in making meaningful change in their academic and policy work, and in the lives of LGBTQ people. Naming them here honors their contribution and centers the role of stakeholders in knowledge production.

1.5 Chapters Overview

Sexualities scholarship has traditionally identified psychology and biology as the dominant sciences of sexuality. Foucault identified a strong association between science, sexuality, and truth. In this dissertation I show how *demography* has joined these other sciences as one of the dominant ways of knowing sexuality over the last twenty years. In the chapters that follow, I make the case that population science is the way we know sexuality today by looking at the *production* and *circulation* of demographic knowledge. On the *production* side, I describe the history of scientific social surveys in the post-WWII United States. To tell the stories of what sexuality topics became ripe for demographic analysis and pubic consumption, I draw on my analysis of survey documentation, including questionnaires, codebooks, interviewer instructions, user guides, and other supplementary materials. On the *circulation* side, I present evidence on the use and influence of demographic sexuality knowledge in news media (both contemporary, with a select comparison to historical accounts) and expertise in court cases. The dissertation proceeds as follows.

Chapter 2: "Population Counts: Making Numbers Matter and the Curious Case of Kinsey's Ten Percent." This chapter takes up perhaps the simplest act of population science—counting—to give my story historical roots. I show how demographic research on measuring sexual orientation comes out of other social demographic foci related

to sexuality, such as fertility and family, and why this is relevant background for understanding the demographication of sexualities. An important early scientist studying sexual variation across the population, Alfred Kinsey, is perhaps best remembered for a specific number: the idea that 10% of the population is gay. That he did not actually claim to find that—for Kinsey believed in natural sexual variation but not distinct "types"—is no accident of history: Kinsey's work was appropriated by the early gay liberation movement, which showcases the rising centrality of demographic ways of thinking to LGBTQ politics even before the formal inclusion of such questions in demographic surveys. The legacy of 10% still has staying power that today and organizes some of the strategies of what I call *data activism.* The discursive power of population counts can be seen throughout three marriage equality cases at the Supreme Court and the coverage of these and other sexuality topics in the national media.

Chapter 3: "SOGI Subjects: The Making of a Population and Other Social Facts of Sexuality." From here, I delve more specifically into exactly how non-heterosexualities are measured by demographers. This chapter extends the discussion beyond simple counting to nuanced—and increasingly standardized—measurement of sexual behavior, attraction, and identity and the theories and findings that result from such measures. I "survey the surveys" and analyze how these topics are—and are not—asked about in contemporary population science, drawing on my analysis of survey questionnaires, codebooks, interviewer instructions, and user guides. I argue that it is possible to directly connect demographic measurement norms (such as conceptualizing sexuality along the three dimensions of behavior, attraction, and identity) to the crystallization of new research paradigms and theories, as well as the proliferation and establishment of new sexual types. With this quantified measurement of sexual difference came the definition of LGBTQ people as a *population at risk.* Knowledge about LGBTQ people's life stories, loves and losses, contours of desire and pleasure, and intricacies of identity largely comes out of qualitative research on smaller convenience samples. Coupled with potential queer resistance to answering quanti-

tative social surveys, the knowledge produced by demography on representative populations eclipses topics less amenable to quantified measurement. If this chapter emphasizes the measurement of sexual *difference* (especially for understanding population health disparities and risk), the next chapter emphasizes *no differences* (as the predominant frame used to present families research in court in support of marriage equality).

Chapter 4: "No Differences: Debating Demographic Expertise in the Marriage Equality Cases." This chapter shifts from analyzing the production of demographic sexuality knowledge to its circulation and influence, specifically in the three most recent and definitive marriage equality cases at the Supreme Court. These cases were adjudicating marriage, parenthood, and family so it is no surprise that two of the dominant frames of the cases were *responsible procreation* and *optimal parenting*. Both proponents and opponents of same-sex marriage supported their arguments with social demographic research on these topics. Furthermore, arguments extended beyond the substance of this social science to issues of claiming consensus, appropriate evidence, standards of methodology, and what constituted good science. This chapter demonstrates the continued relevance, contested legitimacy, and sociopolitical influence of sexuality knowledge—as well as the high stakes of social science expertise on the national stage.

Chapter 5: "Conclusion: Capabilities and Criticisms of Our Contemporary *Scientia Sexualis*." In this concluding chapter, I consider the ways in which a *scientia sexualis* of population science might: (1) exert a diffuse control over society, as Foucault imagines, through the use of survey data in administrative governance and bureaucratic oversight, and (2) connect with other scientific disciplines that also strive to *know* sexuality, for example the efforts to locate homosexuality in the body (genes, hormones, neuroanatomical structure). Biologization and geneticization are other forms of the contemporary Foucauldian *scientia sexualis*. Just as with the demographication of sexuality, the "born this way" scientific episteme can be methodologically fraught but politically useful. I also show examples of demographic and "born this way" approaches to sexuality merging,

made possible in part by the addition of biomarker data to major demographic surveys.

Language Note

In the chapters that follow, I have had to make some challenging choices concerning language. I move between different kinds of primary and secondary data sources, quote a diverse set of actors, draw on several decades of history, and am writing for multiple audiences. My language choices reflect these different contexts and constraints. Two terms in particular warrant a deeper consideration:

"LGBTQ." This dissertation focuses on efforts in population science to measure, classify, and count sexual orientation (the first half of the newer term SOGI/E, standing for sexual orientation and gender identity and/or expression). The measurement of gender cannot be fully disentangled and is worthy of its own attention. Terms like "queer" and "LGBT/Q" include trans* people and identities (and sometimes unintentionally and uncritically blur distinctions between sex and gender). I use all of these words depending on context, in addition to other terms that appear in my primary and secondary sources, such as: "same-gender," "sexual minority," "men who have sex with men," and "non-heterosexual." Though I identify as a member of the LGBTQ community, I chose to stylistically write about "them" instead of "us" since the primary data and secondary literatures are not intentionally referring to a group they know includes *me*. I agree with Jaime Grant, who I had the pleasure of interviewing (see Appendix D for interviewee biographies), who argues that there is often a disconnect between the words people use to describe themselves and the words academics use, and her point that some of these terms are othering and the language of oppressors is well-taken. These choices are never easy, and in this dissertation, I use whatever terms are most familiar in that particular context according to with what or whom I am in dialogue. Wherever it is legible to choose my own language, I aim to be inclusive, empowering, and center the humans behind the scientific terms.

"Gay marriage." My primary sources (newspaper articles and interviews) often use the common term "gay marriage" (or "same-sex marriage"). For those on the frontlines

of these legal battles, "gay marriage" serves to reinforce differences and signal that the marriages of lesbians and gay men are not simply the unmarked category of "marriage." "Marriage equality" is often the preferred term of proponents but has also been criticized for obscuring exactly who has historically been excluded. I use all terms depending on context.

I now turn to a specific type of demographic sexuality knowledge that despite its apparent simplicity is at the heart of all of these concerns: population counting.

CHAPTER 2

Population Counts: Making Numbers Matter and the Curious Case of Kinsey's Ten Percent

> "Because it's the first question that every reporter asks, it's the first question that the general public asks, "Well how many LGBTQ people are there?" Because people associate it not just with visibility, but also with political power, and with need for resources. We also use baseline data as comparative data in policy advocacy. So when we talk about women in incarceration, we say LGBTQ people only make up 3 or 4% of the population, but are 40 to 50% of women who are incarcerated. That disparity really shines a light on that there are different drivers to incarceration for queer and trans people than there are for the general public. People want the number, but then they also want the number to be able to see where our community is facing their biggest disparities and problems."
> —Meghan Maury, Policy Director, National LGBTQ Task Force

How many people are gay? This question is garnering an impressive amount of academic research, public scrutiny, and even panic in this political moment in which federal research funding (particularly for "sensitive" topics) is threatened, expertise is summarily disregarded, and "alternative facts" and the politicization of science are hot topics. It is a simple question with a complicated answer, but it is undeniable that people want to know. Consider these article titles from national newspapers and magazines:

– "How Many Americans Are Gay?"[1]

[1]Steinmetz, Katy. 2015. "How Many Americans Are Gay? Government Begins LGBT Population Count." *TIME.com.* Retrieved May 18, 2016 (http://time.com/lgbt–stats/).

– "How Many LGBT Americans There Are Depends On What You Ask"[2]

– "Where Gay Americans Choose to Live and Why" (*The New York Times* 2015)[3]

– "One Gay Player? More Likely Dozens" (*The New York Times* 2015)[4]

– "Gay People Count, so Why Not Count Them Correctly?"[5]

– "Is 10% of the Population Really Gay?"[6]

– "There Aren't As Many Gay People As You Think"[7]

– "Is the Gay Population a Lot Bigger Than Even Kinsey Predicted?"[8]

– "LGBTs Are 10% Of US Population? Wrong, Says Demographer"[9]

There is also media coverage of the average person's mis-estimation of the LGBT population (Ghaziani 2017). Gallup polling in 2011 and 2015 found that only 9% of Americans estimated the size of the gay and lesbian population at less than 5% (the number found and disseminated by high-profile institutes like the Williams Institute), with a full third guessing more than 25% (Ghaziani 2017). It is common for majority populations to over-estimate minority populations for race and religion as well (Overby & Barth 2006). In 2012, *The Atlantic* published an article pointedly titled "American Have No Idea How Few Gay People There Are."

Questions about how many gay people there are have existed in different versions over all the time periods discussed in Foucault's (1976) *History of Sexuality*. However, today's versions of the question are shaped by the recent availability of scientific data, the last century's progression of sexual science, and the enormous shifts in public attitudes

[2]John, Arit. 2014. "How Many LGBT Americans There Are Depends On What You Ask." *The Atlantic,* July 15.

[3]Leonhardt, David, and Claire Cain Miller. 2015. "Where Gay Americans Choose to Live and Why." *The New York Times*, March 22, 12.

[4]Wolfers, Justin. 2015. "Only One Gay Player? More Likely Dozens" (Online Title: "A Gay Baseball Player, in Statistical Perspective"). *The New York Times*, August 21, D2.

[5]Gates, Gary J. 2011. "Gay People Count, so Why Not Count Them Correctly?" *Washington Post*, April 8.

[6]Spiegelhalter, David. 2015. "Is 10% of the Population Really Gay?" *The Guardian*, April 5.

[7]Jacobs, Tom. 2017. "There Aren't as Many Gay People as You Think." *Pacific Standard*, October 18.

[8]Luzer, Daniel. 2013. "Is the Gay Population a Lot Bigger Than Even Kinsey Predicted?" *Pacific Standard*, October 23.

[9]Anon. 2011. "LGBTs Are 10% Of US Population? Wrong, Says Demographer." *NPR.Org.*

toward homosexuality. Researchers are now able to ask the public about sexuality in ways that would have been inconceivable decades ago. In the late nineteenth and early to mid twentieth century, sexual science depended on research subjects presenting themselves to institutions, either for intervention, treatment, or punishment. Knowledge about sexualities was limited to understanding and intervening on individuals identified as deviant. As gay rights gained traction, and especially with the AIDS crisis beginning in the 1980s, it became more acceptable to ask the general public about sexuality and for sexualities to be a topic of research. To make sense of both public statistics and new sexualities research, it became common to inquire about population counts and statistics to make sense of these numbers.

Gay and lesbian statistics were also of interest within the community, as evidenced by the 1994 book called *Gay & Lesbian Stats: A Pocket Guide of Facts and Figures* (pictured below):

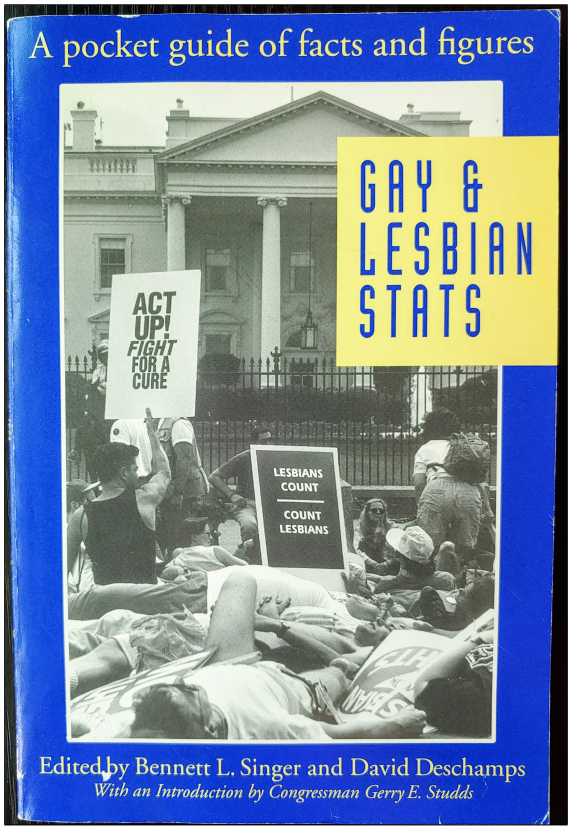


Figure 2.1: *Gay & Lesbian Stats* book, published in 1994, depicting activists on the White House lawn holding sign reading "lesbians count, count lesbians."

The cover image features activists in front of the White House, one holding a sign from the AIDS organization ACT-UP, and the other reading "lesbians count, count lesbians." Two of the four blurbs found on the back cover are from recognizable names in the history of gay rights (Harry Hay of the Mattachine Society and Pat Norman of Stonewall 25). These examples make it clear that reviewers and readers of a book called *Gay and Lesbian Stats* would indeed encompass activists. The book is being marketed to the movement and the community. This book was updated and reprinted as *LGBTQ Stats* in 2017. From at least the original publication through the present, there was a market for general information about a previously hidden population. In the rest of this chapter, I make sense of how the existence—or absence—of "gay and lesbian stats" shaped public discourse and legal battles.

This chapter proceeds in roughly chronological order beginning with early work in the social science of sexualities (as opposed to earlier medical or psychological sexology) and the legacy of Kinsey for this scholastic field and for particular population counts. In my discussion of newspaper articles, I present first what I found about the select historical events and then follow this with my discussion of contemporary media discourse. The second half of this chapter centers on the use of population counts in the same-sex marriage cases at the U.S. Supreme Court and the more general relevance of demographic frames in several types of what I call "data activism."

2.1 The Legacy of Ten Percent

More often than not, contemporary discussions of estimates of the gay population (such as those in the list above) contrast the latest figures with Kinsey's 10%. Echoing the public response to Kinsey's pioneering 1948 *Sexual Behavior in the Human Male*, there has been intense commentary and fascination over survey results that strike the general public as shockingly high—or low. For example, a 2015 YouGov survey in the U.K. found that half of 18–24-year-olds identified as something other than 100% heterosexual (Dahlgreen & Skakespeare 2015), and a 2016 study conducted by the Williams Institute classified over a

quarter of California teens surveyed as "gender non-conforming" (Wilson et al. 2017). These estimates are shocking because they seem high. Elsewhere, estimates are "shocking" because they seem low.

If any number has staying power in the public imagination, it is Kinsey's 10%. This is remarkable because he set out to catalogue broad variation in human sexuality, not to produce population statistics, and he did not believe in the idea of "the homosexual" as a "type" of person. Nonetheless, across his many thousands of sexual life history interviews, he found that 10% of surveyed men "have had more or less exclusively homosexual relations ... for at least 3 years between [ages] 16 and 55." He found much higher rates of lifetime incidence of same-sex sexual experiences, which were more publicized. However, the 10% claim took on a life of its own, coming to stand in for an estimate of the total homosexual population in public parlance and LGBT politics, decades after its origination. Kinsey also came up with a way of classifying sexual orientation on a six-point scale from 0=completely heterosexual to 6=completely homosexual. This also has currency today, used playfully in reference to one's own identity, but also formally as the operationalization of sexuality in research (see Jabbour et al. 2020 for a very recent example).

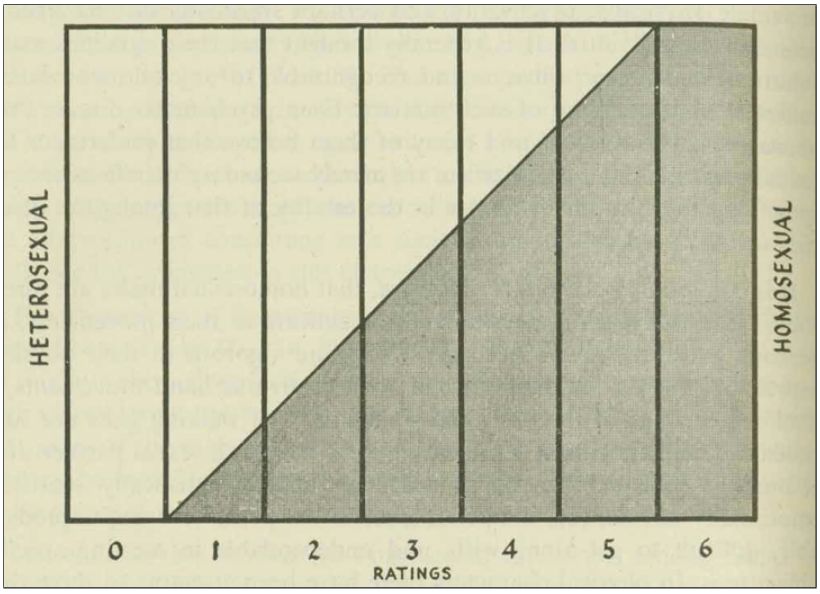


Figure 2.2: The Kinsey Scale, classifying sexual orientation on a scale from 0=completely heterosexual to 6=completely homosexual.

But where did Kinsey's 10%—as cultural shorthand and political strategy—come from? In a 2013 presentation, population scientist Stuart Michaels tells the story of the "co-emergence" of the 10% figure, originating with Harry Hay in the 1950s Mattachine Society (Michaels 2013). Ironically—because Kinsey himself did not believe in "the homosexual" but rather emphasized degrees of attraction and variation in sexual experience—Hay and his contemporaries were influenced by the sociological imagination of what it meant to be a minority in America and took up the 10% figure because it was rhetorically powerful. Not too large or too small, and similar to the number of African Americans at the time, mobilizing 10% became an explicit strategy in the early gay rights movement. Michaels (2013) describes how the founder of the National Gay and Lesbian Task Force, Bruce Voeller, also claims to have "invented" the 10%, his calculation being the average of the figure for men (13%) and women (7%). Michaels was the project director for the National Health and Social Life Survey (NHSLS) that was the basis for the influential 1994 book *The Social Organization of Sexuality* (Laumann et al. 1994). The NHSLS has its own storied history in the annals of the politics of knowledge and provided the next wave of demographic data on non-heterosexuality, predating the inclusion of these kind of measures in other national surveys by about a decade. The NHSLS found a higher prevalence of lifetime same-sex experience, but comparatively low numbers of people identifying as gay and lesbian.[10]

Kellan Baker (federal health policy and data analyst, see Appendix D for interviewee biographies) explained how Kinsey's 10% still had currency today. In our interview, he remembered 10% appearing in LGBTQ discourse:

> There were a number of books, particularly in the '90s, when these issues started to hit more people's radars, particularly for kids. I remember a number of books when I was growing up in the '80s and '90s that were titled "One in Ten." One in ten gay teenagers tell their stories. I'm not surprised that it still has currency.

He also suggested it may be becoming more of an accurate estimate (at least among

[10]The Laumann study generated a huge amount of coverage in the national press, including their investigators' own rehashing of the political history (Laumann et al. 1994b), outsider reflections on the controversies and scholarly critiques (Pollitt 2001) of specific findings generated by the study.

youth) according to demographic population counts:

> I also think we're heading in that direction. If you look at a lot of the data that's been collected lately about the youngest generations of adults, the 18-to-24's or whatever your exact range is, the kids are becoming queerer and queerer and queerer. Maybe among older adults it's still two-to-three percent, but among younger adults, it's anywhere, depending on who you ask, it's anywhere from seven to twenty percent. Or more. I think as notions of the flexibility of identity, nonbinary, queer, all of these different evolutions of our understanding of how people can express gender and sexuality, as more and more people claim those identities and as more and more survey instruments give them the opportunity to share those identities, which is another key part.

Baker describes how the growth of identity categories, the number of people claiming those identities, and the proliferation of survey instruments that ask about these categories all come together to shape our evolution of statistics over time. But the first step is asking:

> That as long as we don't ask, we can pretend like nobody is LGBT. But, once you start asking, sometimes you get the small numbers, sometimes you get 3.4 percent. But, sometimes when you ask, and I think increasingly, you get seven, ten, fifteen, twenty, twenty-five percent of young people who said .... So, I think that it's, you know, the 10% number is probably not that far off in a lot of ways."

What are today's population estimates of the gay population? Today's most authoritative[11] estimates of the size of the LGBT population come from Gary Gates and his colleagues at the UCLA Williams Institute. He started his career making population inferences from Census household rosters, later helped synthesize and make sense of the various numbers coming out of household surveys as these sexuality measures were added, and most recently has conducted his own research, overseen the development of best practices for demographic measurement, was a repeat expert witness in the marriage equality cases, and has long served as a primary public commentator on the demography of the LGBT population. Population counts from the Williams Institute data are much lower than the mythic 10%, and they have had to help the public get used to the new gay science: explicitly referencing his research against the Kinsey statistics, "Brad Sears of the Williams Institute defended

[11] By authoritative, I mean both that the numbers were generated in as scientifically rigorous way as possible (thus satisfying the standards of quantitative social scientists) *and* that the numbers are the ones that tend to be cited and circulated in critical ways (in newspaper articles and court case expertise, for example).

the accuracy of these numbers, suggesting gay leaders "let go" of previous, unrealistic estimates of homosexual orientation." In this transition from using Kinsey's research to more scientifically sophisticated statistics, population counts took on more of a realist cast.

It can be hard to move into the critical analytic space of the new gay science without first grasping what numbers are out there in the first place. Aside from the Kinsey 10% and the specific headlining-catching high and low estimates, what are the official estimates of the gay population? So that we might give ourselves some numbers to grasp onto and then move on, let's look at some recent and authoritative numbers (from the secondary literature, not my own calculations).

The Federal Interagency Working Group on Measuring SOGI in Federal Surveys (hereafter FIWG) compiled the prevalence of sexual orientation among adults found in selected national federal surveys. They looked at the National Health Interview Survey, the National Survey of Family Growth, the National Survey on Drug Use and Health, the National Adult Tobacco Survey, and the National Health and Nutrition Examination Survey. All of these studies were conducted between 2006 and 2013 and surveyed adults over age 18. They found the combined prevalence of gays and lesbians to range between 1.5–2.0%, bisexuals between 0.7–3.4%, gay men between 1.8–2.7%, and lesbian women between 1.2–1.9%.

Table IV.a. Prevalence of Sexual Orientation among Adults in Selected National Federal Surveys

Survey	Age	Data Collection Year	Percent gay or lesbian	Percent bisexual	Percent gay (men)	Percent lesbian (women)
National Health Interview Survey	18 and over	2013	1.6	0.7	1.8	1.4
National Survey on Drug Use and Health	18-44	2013	1.9	3.4	1.9	1.9
National Adult Tobacco Survey	18 and over	2012-2013	2.0	1.7	2.7	1.3
National Health and Nutrition Examination Survey	18-59	2009-2012	1.8	2.6	2.3	1.3
National Survey of Family Growth	18-44	2006-2010	1.5	2.6	1.8	1.2

Figure 2.3: Current measures of sexual orientation and gender identity in federal surveys (from FIWG 2016a, page 21).

These numbers hover around the Williams Institute numbers that are cited most frequently throughout the marriage equality cases. What is notable is that while there are persistent differences between men and women, and between gay and bisexual identification, these patterns are not consistent. Because it was one of the first to collect information on non-heterosexual behavior, identity, and attraction (explored in depth in Chapter 3), the National Survey of Family Growth (NSFG) is frequently used as the point of comparisons to other studies adding these measures over time. The NSFG is also able to report comparatively detailed information on the sexual practices of respondents by other demographic variables, such as age, race, marital status, and education. The *National Health Statistics Reports* provide these data in great detail (see below):

Table 16. Comparison of selected National Survey of Family Growth measures of sexual behavior and sexual identity with selected other nationally representative surveys

Characteristic	NSFG, 2006–2008	NSFG, 2002	NHANES, 1999–2002, 2001–2006, and 2007–2008	NSSHB, 2009	GSS, 2004 and 2008
	Age range of respondents for reported statistics				
	18–44 years	18–44 years	1999–2002: 20–59 years 2001–2006: 18–59 years 2007–2008: 20–44 years	14–94 years	18 years and over
Females					
Sex with opposite-sex partners:					
Median number of male partners in lifetime	3.2	3.3	3.7	. . .	. . .
Percent with two or more male partners in last 12 months[1]	13.0	14.7	10.0	. . .	8.0
Sex with same-sex partners:					
Ever had same-sex sexual contact[2]	12.5	11.2	7.1	. . .	4.3
Sexual identity[3]:					
Homosexual	1.1	1.3	1.5	0.9	1.8
Bisexual	3.5	2.8	4.9	3.6	1.5
Something else	0.6	3.8	0.8	2.3	. . .
Males					
Sex with opposite-sex partners:					
Median number of female partners in lifetime	5.1	5.6	6.8	. . .	. . .
Percent with two or more male partners in last 12 months[1]	18.5	18.9	16.7	. . .	16.7
Sex with same-sex partners:					
Ever had same-sex sexual contact[2]	5.2	6.0	5.2	. . .	5.1
Sexual identity[3]:					
Homosexual	1.7	2.3	2.0	4.2	1.5
Bisexual	1.1	1.8	1.3	2.6	0.7
Something else	0.2	3.9	0.3	1.0	. . .

. . . Data not available.
[1]GSS contains questions that allow the respondent to specify whether sex partners in the last 12 months were exclusively male or female, or both. However, the sex of the partners in the last 12 months was not specified in the report used for this comparative table.
[2]GSS asks about any same-sex partners since age 18.
[3]Sexual identity estimates from NHANES were run using public-use data from 2007–2008.

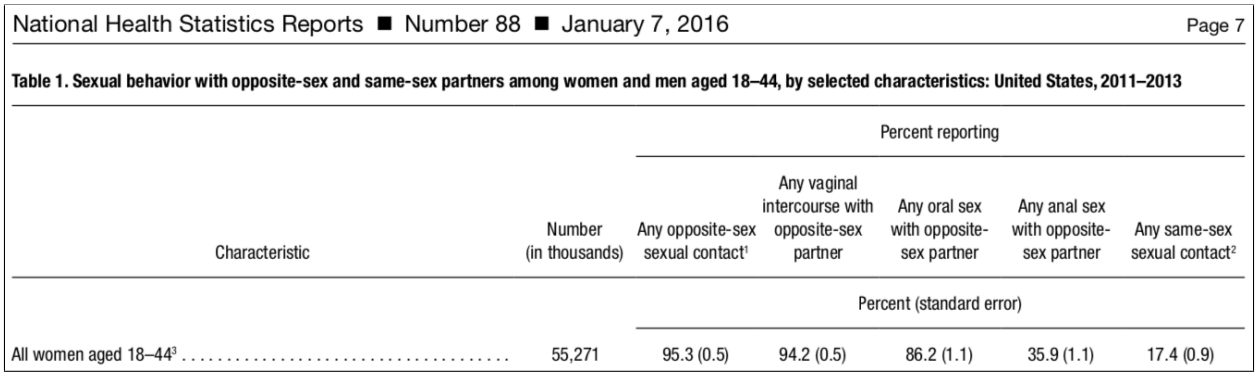
NOTE: NSFG is National Survey of Family Growth; NHANES is National Health and Nutrition Examination Surveys; NSSHB is National Survey of Sexual Health and Behavior; GSS is General Social Survey. See Methods section for description of all NSFG questions on sexual behavior used in this report.

SOURCES: CDC/NCHS, NSFG 2006–2008; CDC/NCHS, NSFG 2002; NHANES references 63–66; NSSHB reference 20; and GSS references 67 and 68.

Figure 2.4: Comparing NSFG with other national surveys (Chandra et al. 2011, page 32).

In the above table, comparisons are made between the NSFG and other select nationally representative surveys. Not all of the same variables are collected in all years and studies, but some general patterns in comparison emerge. A greater number of women report same-sex partners over a lifetime, and women are more likely to identify as bisexual than lesbian. These are observations of same-sex behavior and identification that have become established through many subsequent studies and are today taken for granted as the expected patterns against newer or more finely-grained data should be compared. The NSFG is able to report detailed information on women's sexual behavior with same- and opposite-sex partners (pictured below).

The NSFG finds that it is common for women of all sexual identifications to report sexual behavior with both men and women. The NSFG also finds a rather large percent of women reporting any same-sex sexual experiences (17.4%) and selecting a sexual identity other than "heterosexual or straight." This 7.7%[12] is much closer to Kinsey's 10% than the Williams Institute numbers of same-sex partners living together, or of other federal data collection instruments' measurement of sexual orientation only).



National Health Statistics Reports ■ Number 88 ■ January 7, 2016 Page 7

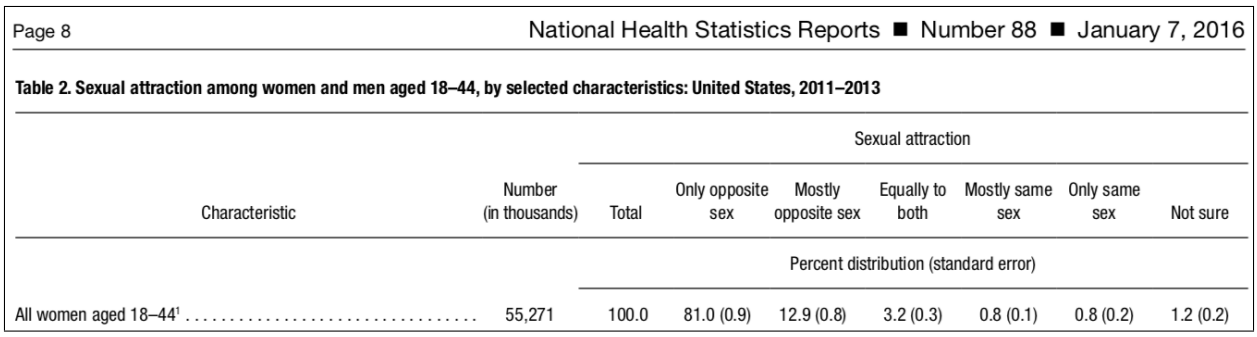
Table 1. Sexual behavior with opposite-sex and same-sex partners among women and men aged 18–44, by selected characteristics: United States, 2011–2013

Characteristic	Number (in thousands)	Percent reporting				
		Any opposite-sex sexual contact[1]	Any vaginal intercourse with opposite-sex partner	Any oral sex with opposite-sex partner	Any anal sex with opposite-sex partner	Any same-sex sexual contact[2]
		Percent (standard error)				
All women aged 18–44[3]	55,271	95.3 (0.5)	94.2 (0.5)	86.2 (1.1)	35.9 (1.1)	17.4 (0.9)

Figure 2.5: Sexual behavior in the NSFG (from Copen et al. 2016, page 7).

All of the statistics that I have just described inform our ideas of sexuality. Where else do these population counts go? Next, I analyze specifically the ways population counts appear in newspaper articles covering sexuality issues and in the same-sex marriage cases.

[12]In my qualitative interviews with non–heterosexual survey respondents, I find that the missing data on this particular question is often meaningful and warrants closer investigation when possible.

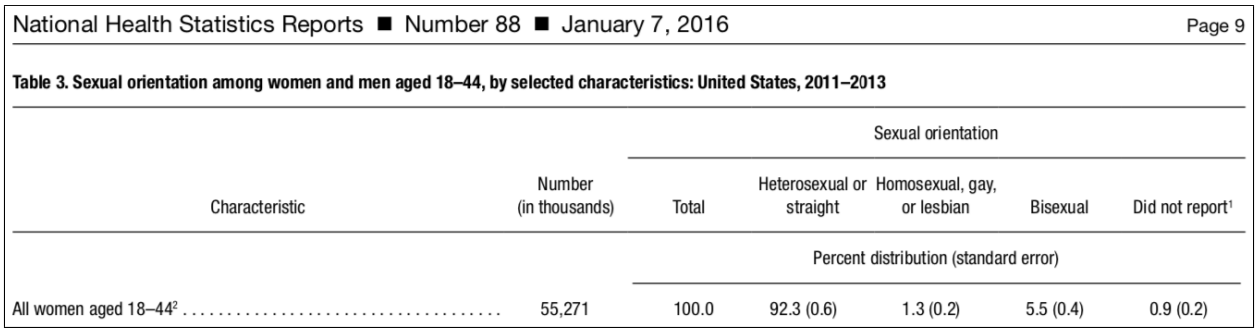


Page 8 National Health Statistics Reports ■ Number 88 ■ January 7, 2016

Table 2. Sexual attraction among women and men aged 18–44, by selected characteristics: United States, 2011–2013

Characteristic	Number (in thousands)	Sexual attraction						
		Total	Only opposite sex	Mostly opposite sex	Equally to both	Mostly same sex	Only same sex	Not sure
		Percent distribution (standard error)						
All women aged 18–44[1]	55,271	100.0	81.0 (0.9)	12.9 (0.8)	3.2 (0.3)	0.8 (0.1)	0.8 (0.2)	1.2 (0.2)

Figure 2.6: Sexual attraction in the NSFG (from Copen et al. 2016, page 8).



National Health Statistics Reports ■ Number 88 ■ January 7, 2016 Page 9

Table 3. Sexual orientation among women and men aged 18–44, by selected characteristics: United States, 2011–2013

Characteristic	Number (in thousands)	Sexual orientation				
		Total	Heterosexual or straight	Homosexual, gay, or lesbian	Bisexual	Did not report[1]
		Percent distribution (standard error)				
All women aged 18–44[2]	55,271	100.0	92.3 (0.6)	1.3 (0.2)	5.5 (0.4)	0.9 (0.2)

Figure 2.7: Sexual orientation in the NSFG (from Copen et al. 2016, page 9).

2.2 Population Counts Without Population Science

How was the demography of sexuality used in public discourse prior to the recent years in my analysis (2010–2015)? What was being cited, and why? To answer these questions, I analyzed a subsample of articles published in *The New York Times* in the years immediately surrounding five moments of national interest and moral panic in LGBTQ issues: the Stonewall riots (or, uprising; 1969), the removal of homosexuality from the DSM, psychiatry's *Diagnostic and Statistical Manual* of mental disorders, (1972–1974), the beginning of the AIDS crisis (1981–1983), DADT (1993–1994), and DOMA (1995–1997). I hypothesized that population counts or descriptions would come up in the context of stating the number of people impacted by national policies, projecting the scope of a disease, or in understanding gay people after the declassification of homosexuality as a mental illness. I found very few citations of demographic information or description of populations in these earlier periods, even where I might have expected to find them. For the earliest eventful

moment I selected, Stonewall, I found none. However, Kinsey's work reverberates through these decades, filling the spaces where demographic knowledge is needed. I think of this reverberation as a kind of "demographic imaginary" or "demographic yearning"—a place explicitly calling for population counts where there are none.

In articles documenting the beginning of the AIDS crisis, nearly every article cites health statistics: the number of AIDS diagnoses and deaths, the percent of victims from the known high-risk populations, the percent from epicenters like New York City, and the observed and projected rates of increase. Connecting observed health statistics to general population counts would be a logical way to project the scope of the growing epidemic, but this line of argument or evidence nearly does not exist. I found only a single article that included population estimates of the gay population in general. In this article, published December 1983,[13] the nearly ubiquitous paragraph summarizing total cases and deaths and proportions of high-risk groups is followed by the following paragraph: "Although there are no census or other official accounts, conservative estimates based on the work of Alfred C. Kinsey put New York's homosexual population at 350,000. City officials say they believe the number is much higher, and homosexual leaders put the figure between 1 million and 1.5 million." The article does not give more information about what numbers, city officials, or "homosexual leaders" are being cited. Based on the population of New York City during these years, these estimations would be dramatic inflations in line with the contemporary overestimates found by political scientists (Overby & Barth 2006). But this paragraph illuminates several of the contours of the state of demographic knowledge on non-heterosexuality: a dearth of research is acknowledged explicitly, estimates are regarding homosexuals specifically, and Kinsey is cited to fill a void.

In articles following the removal of homosexuality from the *DSM*, many articles were published grappling with themes of the nature of and state of research on homosexuality. Given the topic, it is perhaps not surprising that the citation to social science is mostly

[13]Dowd, Maureen. "For Victims of AIDS, Support in a Lonely Siege." *The New York Times* 5 Dec 1983: B1.

limited to psychiatry and psychology and focuses on the development, personal experience, and social functioning of homosexual people. Evidence presented includes case studies, the legacy of Freudian thought, and the latest in the science of sexual orientation. Citations to sociology are more limited, but there is an entire article published May 1974 dedicated to new research out of the Institute for Sex Research pioneered by Kinsey, whom the articles cite as background to a new survey of attitudes and experiences among a self-selected sample of homosexuals.[14] In one article that does cite a population count, the authors write, "Activist organizations representing homosexuals, and a growing number of psychiatrists, have contended that classification of homosexuality as a mental illness is oppressive and discriminatory. The organizations claim that there are about 20 million male and female homosexuals in the United States. Polls indicate that from one million to 15 million people are homosexual by practice, preference or natural tendency." The U.S. population in 1974 was just under 214 million, so the article's estimate is in line with Kinsey's famous figure. The citation to "polls" is not elaborated, but does anticipate the future demographic differentiation and measurement of axes of behavior, attraction, and identity or orientation. In an essay considering a future of gay civil rights following the removal of homosexuality from the *DSM*, the author writes, "To be gay is to be abnormal, whether or not that abnormality extends to one-tenth of the population. To be gay is to be engaged in an activity that both moral absolutists and moral relativists would label "immoral," with both Scripture and sociological statistics on their side."[15] The author is arguing against a psychiatrist he cites who theorizes that in the absence of social taboos humans would be more naturally bisexual. The author is armed with his sociological statistic, and it too comes from Kinsey.

In the newspaper articles from the 1990s, covering the years surrounding the enactment of Don't Ask, Don't Tell (DADT) in 1994 and the Defense of Marriage Act (DOMA) in 1996, some of the arguments are similar to those invoked in reporting from 2010–2015 (i.e., the differentiation of behavior and identity, the concern over optimal parenting), but

[14]Kihss, Peter. "A New Study Urges Homosexual to Speak Out." *The New York Times*, 19 May 1974: 49.
[15]Safire, William. "Don't Slam the Closet Door." *The New York Times* 18 Apr 1974: 41.

other aspects are different. The articles from the 1990s make reference to changing social norms and growing social acceptance, but do not cite public opinion polling data (as the articles from 2010–2015 nearly ubiquitously do). The articles from the 1990s do not include much demographic evidence though it would be helpful in articulating the number of people impacted by such policies. As media accounts tend to do, most articles instead highlighted the stories and plights of individual opponents or proponents of the policies (i.e., gay soldiers, couples, and parents). I carefully coded for all invocation of demographic knowledge about sexuality and, again, Kinsey was there to fill a void: an article profiling a famous lesbian athlete quoted her saying, "The media thinks that if you're a female athlete you're automatically gay. And if you're a male athlete, then obviously you're straight. I happen to be gay, but 90 percent of the women on tour are not."[16] In the contemporary period I examine, we see the same kind of extrapolating from available statistics to challenge stereotypes, and again these statistics appear across the news from the front page to the sports section.

2.3 Population Counts Take Center Stage

One way in which population counts shape public discourse is in the popular imagination of who is gay. Reporting on the first Major League Baseball player to come out as gay, a 2015 *New York Times* article title demonstrates the power of population counts to challenge stereotypes and trigger the reader into considering whether one gay player is truly an anomaly: "Only One Gay Player? More Likely Dozens."[17] (The online version of the article was titled, "A Gay Baseball Player, in Statistical Perspective.") The article playfully marshals population data as evidence to support his claim:

> My colleague Billy Witz has detailed the human interest story here. But baseball is a game with a statistical bent, and I thought it worth putting Denson's decision in that perspective. Estimates of the proportion of American men who identify as gay or bisexual vary. One recent government survey suggested 2.2 percent; in a recent Gallup

[16] McLarin, Kimberly J. "Center–Court Star at Center Stage." *The New York Times* 1 Aug 1993: V4.

[17] Wolfers, Justin. 2015. "Only One Gay Player? More Likely Dozens (Online Title: 'A Gay Baseball Player, in Statistical Perspective')." *The New York Times*, August 21, D2.

> poll, 3.3 percent of adult men were willing to tell an interviewer that they identified as gay, bisexual or transgender. The same survey noted that 4.6 percent of men 18 to 29 identified as gay, bisexual or transgender. There are 30 major league baseball teams, each with 40 men on their roster (all of them active once September callups take place), yet none of these 1,200 players have acknowledged being gay. If baseball players are as likely to be gay as other men their age – let's go with an estimate of 1 in 25 – then the odds that none of these men are gay is one in two sextillion. A sextillion comes after a trillion, quadrillion and quintillion; it is a thousand billion billion. There are a further 46 Class AAA teams, 30 Class AA teams and 82 Class A teams, none with an openly gay athlete on their rosters. If these teams averaged 30 men on their roster (roster size varies by league), there would be nearly 5,000 more minor league players, none of whom have publicly identified as gay. The odds of that might be greater than one in a Googol (one followed by a hundred zeros), but not by much.

This article is clearly having fun with the possibility of extrapolating from existing estimates of the gay population to imagine, all things equal, how unlikely it would be that only a single player in Major League Baseball was gay. The information he is reaching for—evidence that other gay baseball players exist—requires imagination because of stigma and the lack of out gay players, and he uses general population estimates to make his point.

A 2010 article from *The New York Times* (prior to all three of the U.S. Supreme Court cases I examine) discusses the legalization of same-sex marriage in Washington D.C. The article profiles couples directly impacted by the new law (common in media coverage of the issue) but the closing sentences illustrate the way population counts frequently figure in to the coverage: "City officials say the measure will also provide a financial boost to the local economy. A study by the Williams Institute at the University of California, Los Angeles, predicted that more than 14,000 same-sex marriages would occur in the city over the next three years, which would bring in $5 million in new tax revenue and create 700 jobs."[18] This includes a projected count of same-sex marriages that would occur in a specific location. These kinds of figures very disproportionately draw on studies conducted by the Williams Institute, and it is common to connect demographic change to economic progress. Another example of how demographic statistics, geography, and financial information are presented together is in the profiles of changing landscapes of city composition and neighborhood en-

[18] Urbina, Ian. "Nation's Capital Joins 5 States in Legalizing Same–Sex Marriage." *The New York Times* 4 Mar 2010: A20.

claves (the subject of sociologist Amin Ghaziani's 2015 book *There Goes the Gayborhood?*). A 2010 *New York Times* profile of the city of Columbus, Ohio includes descriptions of businesses, restaurants, and urban development alongside a picture social progress for gay and lesbian residents. Columbus is "a gay oasis in progress" and contextualized by demographic comparisons:

> [...] gay men, lesbians and bisexuals make up about 6.7 percent of the population of about 750,000, according to a 2006 study by the UCLA School of Law's Williams Institute. That's a far cry from more than 10 percent in San Francisco, Atlanta, Boston, Minneapolis and Seattle, but it's higher than most Midwestern cities, including Chicago (5.7 percent). And in several Columbus "gayborhoods" – like the Short North, German Village and the lesbian stronghold of Clintonville – the gay quotient is far higher than 6.7 percent.[19]

Social scientific thinking about sexuality and the use of demographic and public health statistics have shaped perceptions of LGBT people as a "population at risk" (see Chapter 3). Many issues that emerged in the 1980s in public discourse around HIV and AIDS are the same today: the continued search for a cure, issues of research funding, disparities among high-risk populations, and implications for public health policies. Between 1981–1983, several news articles covered the ban on blood donation from men who had sex with men. In more recent coverage from 2014, the availability of population data shapes reporting on the scope and effects of the ban:

> While the burden of H.I.V. in the United States falls disproportionately on gay and bisexual men–Mr. Cahill cited estimates from the Centers for Disease Control and Prevention that two-thirds of an estimated 50,000 new H.I.V. infections in the United States each year occur among men who have sex with men–the vast majority of gay and bisexual men are not H.I.V. positive. The 1980s-era policy essentially ignored that fact by counting every single man who had had sex with a man since 1977 as suspect. About 8.5 percent of American men–or about 10 million people–report having had sex at least once with a man since turning 18, according to the Williams Institute at the University of California, Los Angeles. (Blood banks, however, know that donors do not always tell the truth about their sexual activity on questionnaires.) The institute has calculated that the rules change could add about 317,000 pints of blood to the nation's supply annually, an increase of 2 percent to 4 percent. The new policy will exclude the 3.8 percent of American men who report having had a male sexual partner in the past

[19]Murphy, Tim. "Hello, Columbus." *The New York Times* 21 Nov 2010: M2.70.

year, a group that could double the potential new supply, the institute said.[20]

These sort of specific calculations and projections were not available in the early 1980s, not only because they were not part of the surveillance of the AIDS epidemic, but also because there were not sufficient estimates of the number of gay and bisexual men or an authoritative measurement differentiating sexual orientation from same-sex behavior. This example acknowledges a history of mis-measurement, demonstrates the utility of quantifying the scope of an issue following years of unchecked public panic, and presents multiple sources of data (from federal public health surveillance and, again, the Williams Institute).

Ultimately, better population counts enable specific claims about policy effects and economic impacts. The increase in demographic knowledge also means multivariate and subsample analysis becomes possible with larger sample sizes, enabling new types of intersectional analyses that meet some feminist mixed-methodological goals (McCall 2005).

Recent public health surveillance also make intersectional analyses possible for statistics such as this one published in *USA Today* in 2012: "Young gay men – who don't remember when AIDS was a universal death sentence – are the only group in which the rate of new infections is increasing, largely because of an "alarming" growth in the disease among gay black young people. The infection rate climbed 48% among young gay black men from 2003 to 2009, the CDC [Centers for Disease Control] says."[21] This *USA Today* article analyzes of age, race, and gender combine to present unique challenges in HIV prevention. A comparison with my analysis of coverage 1981–1983 shows that the simple unavailability of data like this shapes the framing of the problem and solutions.

Public discourse on the impact of LGBTQ issues and constituents on elections has been significantly shaped by the availability of demographic data. It is common for coverage of support for politicians and political parties to include sexual orientation as basic demographic data: "Democrats have been winning big over Republicans among gay voters,

[20]Tavernise, Sabrina. "FDA Easing Ban on Gays, to Let Some Give Blood." *The New York Times* 24 Dec 2014: A1.

[21]Szabo, Liz. "The AIDS Epidemic: Is it the Beginning of the End?" *USA Today* 18 Jul 2012: D1.

African Americans, Latinos, Asian Americans and Jews. Some of the groups are relatively small, but together they make up about one-third of the electorate, forcing Republicans to capture much of the remaining two-thirds to win elections. By comparison, white evangelical voters, who vote overwhelmingly for Republicans, make up about one-fourth of the electorate, and their numbers are not growing as rapidly."[22] Public discourse in prior decades painted an unspecified picture of gay and lesbian influence on politics, profiling individual activists and groups about their agendas (which included "outing" politicians) in the absence of demographic and public opinion data. This lack of specification likely contributed to the moral panic over an imagined insidious "gay agenda."

2.4 Population Counts at Court

The discipline of demography figured centrally in the marriage equality cases far beyond the use of LGBT population counts. Contemporary social demography charts norms and change in fertility, cohabitation, household composition, contraception use, sexual relationships, parenting, and much more. Social scientific—and specifically demographic—research was presented on all of these topics, particularly in the two central debates: "responsible procreation" and "[statistically] optimal parenting"[23] (adams & Light 2015; Ball 2014) where there was much use and misuse of demographic evidence for knowledge claims about non-heterosexualities (see Chapter 4). However, we first must understand the use of basic population counts and demographic statistics in these cases.

This summary of the case and expert witnesses from the lower court proceedings, as described in the *Obergefell* certiorari stage documents, makes clear the centrality of social science research and demography:

> The bench trial lasted for eight days and *consisted of testimony from sociologists*,

[22] Cohen, Micah. "Gay Support Buoyed Obama, as the Straight Vote Split." *The New York Times* 16 Nov 2012: A21.

[23] "Optimal parenting" was the most common terminology, but "statistically optimal parenting" was occasionally used. This term illustrates the authority and de–politicization of quantitative framing (Porter 1995).

> economists, law professors, a psychologist, a historian, a demographer, and a county clerk. Included in the plaintiffs' *presentation of evidence were statistics regarding the number of children in foster care or awaiting adoption*, as well as testimony regarding the difficulties facing same-sex partners attempting to retain parental influence over children adopted in Michigan. *Gary Gates, a demographer*, and Vivek Sankaran, the director of both the Child Advocacy Law Clinic and the Child Welfare Appellate Clinic at the University of Michigan Law School, together offered testimony painting a grim picture of the plight of foster children and orphans in the state of Michigan. For example, Sankaran noted that just under 14,000 foster children reside in Michigan, with approximately 3,500 of those being legal orphans.[24] [emphasis added]

The primary way authoritative population data on LGBTQ communities shaped the same-sex marriage cases at the U.S. Supreme Court was in making it possible to foreground the number of Americans who would be directly impacted by the laws. For example:

> On the other hand, there is an immediate legal injury or legal – what could be a legal injury, and that's the voice of these children. *There are some 40,000 children in California*, according to the Red Brief, that live with same-sex parents, and they want their parents to have full recognition and full status. *The voice of those children is important in this case, don't you think?*[25] [emphasis added]

These population counts included the number of same-sex partners and parents in different regions, estimates of how many would marry, and the economic impact on municipalities, states, and families. "Optimal parenting" or the "optimal environment" for raising children were central frames in these cases. Population data emphasized the number of children living with two moms or dads, frequently making connections to the financial consequences of their parents not having access to tax breaks and shared health insurance benefits. The federal cases included national estimates, but the lower court cases used state-specific data. The social movement strategies of those supporting national marriage equality drew less on frames of civil rights equity than frames that emphasized the familiarity, love, and deservingness of gay families. Legal disputes necessarily emerge from demonstrations of individual harm, but population data enabled the individual facts of the case to be scaled up and authoritatively applied to large numbers of people.

[24](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 123: 1588 – 124: 829)

[25](Hollingsworth – Oral Arg, P. 20: 522)

Including population estimates (precise counts in some places, glosses on the estimates in others) even in this offhand way (in a mid-sentence clause) is a simple discursive shift, but it shapes the framing of the presentation of reality: proponents of marriage equality frequently highlight that the opposition's arguments are about theoretical harm, while their statistics describe actual individuals and families. The 2013 *Hollingsworth v. Perry* case held that sponsors of the Proposition 8 state ban on same-sex marriage did not have standing to appeal the lower court decision to overturn the ban. While the case was ultimately not decided on the merits, the merit arguments presented in the writ of certiorari are a typical example of how population counts allow for a demonstration of the scope of harm: "The domestic relations laws of California – where tens of thousands of children are being raised by same-sex couples [citation] – refute Petitioners' responsible-procreation justification." A frequently-cited example of a glossing reference to population counts can be found in the majority opinion in the 2013 *United States v. Windsor* case, which found Section III of DOMA, defining marriage as one man and one woman, to be unconstitutional. The passage reads: "This places same-sex couples in an unstable position of being in a second-tier marriage. The differentiation demeans the couple, whose moral and sexual choices the Constitution protects ... And it humiliates tens of thousands of children now being raised by same-sex couples." In an example from the state-level case that became part of the 2013 *Obergefell v. Hodges*, specific population counts are used:

> The State's approach to this case, even posing the question of whether it is a "good idea" for same-sex couples to raise children and marry, ignores the central reality that there are same-sex couples who love and commit to one another, and there are same-sex couples raising children in their families. There are more than 650,000 same-sex couples in the United States, of whom an estimated 125,000 are raising an estimated 220,000 children under the age of 18.[26]

This citation goes on to say, "These families are indistinguishable from others in all ways that matter in terms of this Court's jurisprudence and children's welfare."[27] This allows

[26] Brief for petitioners (DeBoer v. Snyder 2015) on writ of certiorari to the U.S. 6th Circuit Court of Appeals, page 23.

[27] (Obergefell 4. Merit Briefs\Brief for April DeBoer, et al: 37: 421 – 37: 1354)

the reader to further interpret the population count, drawing on the social science research discussed in Chapter 4: it is saying, "see these families, see these many children, they are just like you." Another way demographic change is invoked to make the gay parents at the heart of these cases seem recognizable is to cite the change in public opinion over time: "If twenty-five percent of the population knew someone who was openly gay in 1985, and seventy-five percent knew the same in 2000 [citation] it is fair to wonder how few individuals still have not been forced to think about the matter through the lens of a gay friend or family member. That would be a discrete and insular minority.[28]"

Demographic expertise makes these claims possible. One place this comes up is considering whether marriage bans change numbers of heterosexual marriages: "Moreover, *statistics make clear that heterosexual marriages have not suffered or decreased in number* as a result of states permitting same-sex marriages. In fact, to the contrary, Cott noted that *there exists some evidence that many young people now refuse to enter into heterosexual marriages until their gay or lesbian friends can also* enjoy the legitimacy of state-backed marriages[29] [emphasis added]." Numbers of marriages would come from state and national vital statistics, which are the very numbers tracked by demographers. Another way this came up was in wanting to know a number that demographers could supply, as in Justice Breyer's comments in the *Obergefell* oral arguments: "the fact is that — that X percent, a very high percent of opposite sex people don't have children and everybody knows they can't, and a very — and a high — certain percentage, I'm sure probably pretty of high of those who get married, of same-sex people who get married do have children[30]." Here, Breyer is reaching for the number of heterosexual couples who do not have children, which again, are the kind of vital statistics tracked at state and national levels by demographers. Whether the specific vital statistic is cited or reached for, these numbers serve a purpose to

[28](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 103: 911 – 103: 1477)

[29](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 126: 1544 – 127: 130)

[30](Obergefell 6. Oral Arguments – Argued April 28, 2015\Obergefell oral arguments – question 1: 50: 43 – 50: 409)

help illustrate arguments relevant to the fate of gay parents and their families.

In the earlier *Perry* case, state-specific numbers are used, citing Lee Badgett (lead author of the SMART report on SOGI measurement, see Chapter 3): "According to trial testimony based on *2000 Census data, nearly 40,000 children in California* were being raised by same-sex couples."[31] This makes the issue relevant and personal to Californians. The use of this same count of Californian children is used to passionately argue that marriage bans have the "debilitating consequences" of "pain and indignity": "Indeed, the only *harms demonstrated in this record are the debilitating consequences* Proposition 8 inflicts upon tens of thousands of California families, and the *pain and indignity* that discriminatory law causes the nearly 40,000 California children currently being raised by same-sex couples" [emphasis added].[32] To oppose the marriage bans in court, it would have to be argued that there is a direct and measurable harm. Population counts make harm tangible and help substantiate these claims on a grand scale.

Another example of the use of a statistic that is the standard numbers produced by demographers can be seen in this passage from *Obergefell* oral arguments imagining the consequences of a change in the numbers of opposite-sex couples staying together to raise their children:

> What we're concerned about all the children, children of opposite-sex couples and children of same-sex couples. There are *72 million children in this country.* If this Court ensconces in the Constitution a new definition of marriage and it reduces *the rate that opposite-sex couples stay together*, bound to their children, because of that different understanding, *even a 1 percent change [crosstalk] is many, many children.*[33] [emphasis added]

Statistics on marriage and family structure are a type of demographic sexuality knowledge. Another thing that is happening in this passage is the discursive positioning of small and large numbers against each other to sway the weight of the argument. This is explored

[31](Obergefell 4. Merit Briefs\Brief for April DeBoer, et al: 37: 421 – 37: 1354)
[32](Perry 4. Merit Briefs\Hollingsworth – Brief for Kristin M Perry, Sandra B Stier, Paul: 12: 1282 – 12: 1588)
[33](Obergefell 6. Oral Arguments – Argued April 28, 2015\Obergefell oral arguments – question 1: 50: 771 – 51: 444)

more below. The number of children of same-sex parents is again and again foregrounded to make the harm of marriage bans tangible. Here, in an argument against marriage equality, the number of total children in the country is stated to counteract the weight of the tens of thousands of Californian children or the numbers in the low hundreds of thousands of children nationally being raised by gay moms or dads. This citation goes further than just stating the total number: if the listener does the math while listening, even the 1% change we are asked to imagine effects a larger number than those cited repeatedly by the side in support of marriage equality.

Another way population counts were used in the marriage equality cases was in arguments about whether gay people have political power and adequate representation in society (which was part of arguments over whether gays could be considered a "class" for legal purposes, and in the application of civil rights arguments). For example:

> It is difficult to say whether homosexuals are "under-represented" in positions of power and authority *without knowing their number relative to the heterosexual population.* But it is safe to say that the *seemingly small number* of acknowledged homosexuals so situated is attributable either to a hostility that excludes them or to a hostility that keeps their sexual preference private—which, for our purposes, amounts to much the same thing.[34] [emphasis added]

In this example, it is the lack of numbers that is stated. Here, it is claimed that if we knew "their number relative to the heterosexual population" we would better be able to judge whether they are adequately represented and where "hostility" affects their lives. In this next example, the focus is on the lack of numbers as well:

> In terms of political power is the test whether they have political power at all or is it whether such political power as they may have is diminished by the fact that it is harder to publicly associate or it is unknown how many people have varied sexual preferences.[35]

Here, the question that population counts is imagined to be able to address is not

[34](Windsor 3. Certiorari Stage Documents – Granted December 7, 201\Windsor – Supplemental Brief of United States: 36: 933 – 36: 1389)

[35](Windsor 3. Certiorari Stage Documents – Granted December 7, 201\Windsor – Brief in Opposition of Edith Schlain Windsor, in Her : 29: 713 – 29: 1003)

just whether gays have representation, but also how much political power they get from that representation if they have it at all. Here, the unknown population count is stated a different way—"it is unknown how many people have varied sexual preferences"—as one of two possible theoretical tests to assess representation. This issue of political power based on numbers comes up several times, from both the supporting and opposing sides. It was argued that the large and growing percent of people who support gay marriage was a signal that gays had political power:

> National polling numbers show increased public support, particularly among younger people, for marriage rights for same-sex partners. See CNN/ORC Poll, conducted May 29–31, 2012 (finding that 54% of Americans, and 73% of Americans under age 34, believed in May 2012 that same-sex couples' marriages should be recognized as valid, compared to 44% of Americans in June 2008); 2012 Gallup Values and Beliefs Poll, conducted May 3–6, 2012 (finding that 50% of Americans believe that same-sex marriages should be legally valid).[36]

The citation of public opinion polls was a major way survey statistics were used in both the newspaper coverage of sexuality issues, and in the court cases. Because opinion polling draws on the same professional expertise and tools as more scientific population surveys, it could be considered a sub-type of demographic sexuality knowledge.

In this next example, several types of statistics are placed next to each other in a way that encourages the reader to be left with a sense that gays have adequate social and political power. Population counts, public opinion polling, the percent of states already issuing marriage licenses to same-sex couples, and statistical projections of legislative change are placed side-by-side:

> It cannot be disputed that, nationally, gays and lesbians have garnered significant political power and tremendous public support. One amicus brief filed in support of the petitioners in the Sixth Circuit estimated that *2.5% of Americans identify as LGBT*. Br. of Amicus Curiae Gary J. Gates in Support of Pls., *DeBoer v. Snyder* (6th Cir. 2014), 7. *National polls show support for issuing marriage licenses to same-sex couples at over 50%.* [. . .] And the best indication is that 11 states—more than 20%—already issue marriage licenses to same-sex couples. Further statistical analyses suggest that all states will legislatively adopt the petitioners' marriage view within 10

[36](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Brief in Opposition of City and County of San F: 35: 31 – 35: 799)

> years if the political process is left to run its course. [citation]. This is democracy at work.[37] [emphasis added]

Even though these are all different kinds of statistics, coming from different places, we can quickly ascertain from the three numbers that the number of LGBT people is very small compared to their relative support (50% of people support gay marriage, and 20% of states already issuing marriage licenses). This comes from a brief from the opposition of marriage equality, and discursively uses statistics to justify that gays, as a very small percent of the population having much bigger numbers of support, must have adequate representation in society already. Statistical projections are cited claiming that gay marriage would be adopted gradually through state legislatures and that this would be a more democratic form of progress.

It is a discursive tactic to place two numbers next to each other so the reader is encouraged to draw the conclusion of the argument being set forth. In this example, population percentages are used as justification for majority rule in advertisements for California's Prop 8 same-sex marriage ban:

> The 98% of Californians who are not gay should not have their religious freedoms and freedom of expression be compromised to afford special legal rights for *the 2% of Californians who are gay.*[38] [emphasis added]

The argument here is that since the percent of straight Californians so vastly outnumbers the percent of gay Californians, it would be unfair to give the smaller population "special legal rights." Elsewhere, it is precisely this population comparison that is used to claim gay populations require special *protection.*

So far we have seen examples where population counts are used to substantiate arguments that gays *do* and *do not* have political power and that establishing this is necessary. In this next example, population counts are brought up in the middle of the argument that

[37](Obergefell 4. Merit Briefs\Brief for Richard Snyder, Governor of State of Michigan, et al: 63: 942 – 64: 597)

[38](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 281: 891 – 281: 1228)

this is not necessary to determining whether gay people are a class for legal purposes:

> Other measures of this group's lack of political power are [citation] [. . .] and the underrepresentation of gays and lesbians in political office. [citation] *In Ohio, for instance, only two of 132 members – or 1.5% – of the state legislature identify as gay.* [citation] This lack of political power is caused by a number of factors, including *small population size and dispersion*, the effect of HIV/AIDS on the community, violence against gay and lesbian people, relative invisibility because many gay, lesbian, and bisexual people are not open about their sexual orientation, censorship, public hostility and prejudice, political and social hostility, unreliable allies in the political process, moral and political condemnation, and a powerful, numerous, and well-funded opposition.[39] [emphasis added]

In this example, the "underrepresentation of gays and lesbians in political office" is established on a more personal level, with the exact number and percent of the Ohio state legislature that (publicly) identifies as gay. "[S]mall population size and dispersion" is the first factor listed that leads to a lack of political power. One of the other factors listed is "violence against gay and lesbian people." Tracking the perpetration of violence and hate crimes was one way to make the fuzzy number of gay people very tangible (in other words, we may not known precisely how many people are gay, but the folks we are able to count form the denominator of some startling statistics on hate crimes):

> [O]ver the last five years, there has actually been an increase in violence directed toward gay men and lesbians"; "gays and lesbians are *representing a larger and larger portion of the number of acts of bias* motivated violence" and "are far more likely to experience violence" [. . . citing specific statistics . . .]; "There is simply *no other person in society who endures the likelihood of being harmed as a consequence of their identity* than a gay man or lesbian.")[40] [emphasis added]

A similar statement about Ohio focuses on state-specific numbers (which is a frequently-used discursive tactic to make the legal issues at hand immediately material to the arbiters and other stakeholders in the case):

> In Ohio, the number of hate crimes committed on the basis of sexual orientation increased from 15.8% of total hate crimes reported in 2009 to 25% in 2012. [Citation.]

[39] (Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 245: 1822 – 246: 722)

[40] (Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 318: 7 – 318: 816)

> The total number of reported incidents decreased, but the number of incidents motivated by sexual orientation increased.[41]

To be able to talk about raw numbers of and trends in violence depends upon having population counts as references. In order to make claims about whether violence is increasing or decreasing, or its specific prevalence in subgroups, we would need to know the base number of gay people. In general, references to hate crime statistics illustrate the need for and usefulness of population data.

In closing, I will return to the example presented in the Introduction since it is so specifically relevant to this chapter and the role of population counts in the discourse in the marriage equality cases. In his dissenting opinion in *United States v. Windsor*, Justice Scalia writes that he worries it is "easy (inevitable)" to make substitutions from the majority opinion to apply to state laws that will trample on the religious freedom of those with a "traditional" exclusionary definition of marriage. In one of his examples of these passages he flags as easy to lift and apply elsewhere, he draws attention to a population count: "Consider [this passage]—which does not even require alteration, except as to the invented number: 'And it humiliates tens of thousands of children now being raised by same-sex couples. The law in question makes it even more difficult for the children to understand the integrity and closeness of their own family and its concord with other families in their community and in their daily lives" [strikeout in the original].

It is powerful to see how this appears in the written text (see below).

As this example illustrates, population counts—even though we have more statistically sophisticated and conservative estimates than ever before—are contentious, influential, and powerful.

[41] (Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 246: 965 – 246: 1270)

Or this, from *ante*, at 23—which does not even require alteration, except as to the invented number:

> "And it humiliates ~~tens of~~ thousands of children now being raised by same-sex couples. The law in question makes it even more difficult for the children to understand the integrity and closeness of their own family and its concord with other families in their community and in their daily lives."

Figure 2.8: Excerpt from Justice Scalia's dissenting opinion in the *Windsor* case, highlighting contestation over population counts (page 23 of the published opinion).

2.5 Data Activism

Alongside this interest in how many gay people there are is a rise in *data activism*. I define data activism as efforts to promote or oppose social or political issues based on reforms in research agenda-setting and funding, issues of measurement and definition, and data collection and analysis. That data activism is occurring at all underscores the unsettled nature and high stakes for this type of sexuality knowledge. I identify data activism happening in the following three arenas: social movements (e.g., public engagement around data collection and measurement choices, as in the 2010 "Queer the Census" campaign), policy (e.g., the 2015 federal mandate to collect SOGI data in electronic medical records or the introduction of the 2016 Congressional "LGBT Data Inclusion Act"), and academia (e.g., the gatekeeping and enforcement of symbolic boundaries on display in the *American Journal of Public Health (AJPH)*'s 2017 dossier denouncing the removal of SOGI questions from a federal survey of older adults as "public health malpractice," and the display of attempts to educate arbiters on what makes good social science methodology explored in Chapter 4).

On the social movement front, at the most popular level, celebrities such as transgender activist and actress Laverne Cox have advocated for questions about LGBT communities on the Census, saying at a press conference, "It's a matter of life and death [. . .] LGBT peo-

ple exist, we are a vital part of the fabric of this country and we just want to be counted."[42] On the academic front, scientists and researchers have also come out as data activists. In this chapter's outset, I raised the example of the2017 *AJPH* dossier on the state of national data collection on sexual orientation and gender identity. One author, Randall Sell, has devoted much of his career to the politics of data collection and survey measurement. In his essay, Sell opens with an anecdote about writing "Data = Power" on a piece of paper as a graduate student in 1990, his take on ACT-UP's (AIDS Coalition to Unleash Power) slogan "Silence = Death." Since then, "Data = Power" became his personal motto. He describes making it a habit to ask any academic presenting research based on federal datasets how their findings applied to LGBT people. He wanted to make the point that these questions could not be answered because the data did not exist. He writes,

> I have labeled government's inaction "public health malpractice"; this malpractice clearly continues. At some point, the secretary of Health and Human Services needs to require the collection of sexual orientation and gender identity data in every survey they have jurisdiction over, just as a previous secretary required for race and ethnicity. We should also demand that all research funded by the NIH collect sexual orientation and gender identity data or justify its exclusion. We need legislation like Public Law 103–43, the NIH Revitalization Act of 1993, which put this requirement in place for women and racial/ethnic minorities. (Sell 2017: 843)

The *AJPH* dossier was published amid widespread backlash over the removal of the sexual orientation question from the survey of older Americans conducted by the Administration for Community Living (ACL), part of the U.S. Department of Health and Human Services. The survey is just the type that Sell believes should be mandated to include questions on sexual orientation. Note that the specific questionnaire content up for debate and so vehemently defended here is a simple measure of sexual orientation, not the increasingly common separate measurement of behavior, identity, and attracted that has become recommended as best practice (Badgett 2009). The research scientist that directed the inclusion of the questions, Kathy Greenlee, authored a contribution to the dossier opposing its removal

[42]Hudson, David. 2016. "Laverne Cox Demands US Asks Questions about LGBT Communities on Census." *Gay Star News*. Retrieved June 16, 2016.

and arguing against the claim that the questions were removed apolitically and simply due to low response rates. She writes, "I have seen discussion of the sample size, meaning few LGBT people responded. That is not a good reason to stop asking. A small response rate simply demonstrates we have more work to do. The Older Americans Act is designed for all. Lack of response from the LGBT community is cause for alarm, not an opportunity to stop asking the questions" (Greenlee 1212). In a note from the *AJPH* editor-in-chief, Alfredo Morabia rejects claims the question's removal was unbiased: ." . . . the 'lack of statistical significance' justification given by the ACL is so weak on its face that we are left to wonder whether other political reasons are interfering with accepted research methodology." He hopes the research community will learn more as a result of the Human Rights Campaign's FOIA (Freedom of Information Act) request, but ends his note imploring the government to prove the change is "scientifically and ethically defensible" and stating the "action under the Trump Administration appears as an attempt to set back the improved public health justice achieved in the last decade" (Morabia e1). If the rational truly were scientifically and not politically motivated, he argues, the ACL could very well oversample LGBT Americans, as it does for other minority populations, or pool data collected over time.

In addition to foregrounding the role of politics in data collection, several editorials included in the *AJPH* dossier do something interesting: they equate data with individual people. It is not just questions or survey items being dropped, it is people being dropped. Morabia writes, "If certain populations are not included, especially when they previously were, it is tantamount to saying these people literally do not count, and that they have no place beside the rest of older Americans. The exclusion also implies that these individuals are not entitled to appropriately tailored services for older Americans provided or supported by USDHHS" (Morabia 1203), and later, "Now is not the time to be dropping sexual minorities from the survey) (1204). This is the logic that transformed sampling and recruitment practices in medical research and pharmaceutical studies, mandating the inclusion of women and racial minorities to increase validity of findings meant to generalize to the entire population

as well as to investigate subgroup-specific findings that could lead to targeted treatment and advances in personalized medicine. (Epstein 2009).

Queer the Census

This public attention and backlash regarding data collection is not the first of its kind. It follows a sustained call for sexual orientation questions to be included in the national decennial Census of all Americans. Interest in how the Census might help answer questions about the LGBT population dates back at least to the 1990 Census, when researchers were first able to construct estimates of same-sex partners living together based on household rosters (Baumle & Compton 2009; Black 2000; Gates 2010). These efforts gained considerable traction and there was a national "Queer the Census" campaign led by the National LGBTQ Task Force educating same-sex partners on how to answer questions about their household and encouraging respondents to add their pink "Queer the Census" sticker when they mailed back their form. In 2016, the 114th Congress introduced the failed "LGBT Data Inclusion Act" proposing "To improve Federal population surveys by requiring the collection of voluntary, self-disclosed information on sexual orientation and gender identity in certain surveys, and for other purposes." (The definition of "surveys" includes the decennial Census.)

"Queer the Census" began as a grassroots movement, the idea of then-policy director at the National LGBTQ[43] Task Force, Jaime Grant:

> It was the 2010 [Census] that was coming up [...] And I was talking to young people, as I do all the time, and they were like, "what, you mean, I'm not married, I can't just put gay?" They had no idea. Their expectation and the way they were living as young queers was, "of course I'll be able to put myself on the Census." And I thought, why are we even fighting for this? This is stupid, we need to be visible on the Census regardless. [...] So we bring the Census people in and everything, and we create this collaborative that's basically an education thing that's going to encourage queers to check the boxes and do all the things. In the middle of doing this with them, I realized I don't care about the marriage [question], I care about the individuals. [...] And then I'm in the shower one morning, and it's like, *queer the fucking Census, right?* And I come up with the idea of this campaign. And I just can't even wait to get to work.

The Queer the Census project was a success in that it had a lot of visibility on social

[43] As the sticker demonstrates, the Task Force previously used only "Gay and Lesbian" in its name. I use the current "LGBTQ" throughout.

media and among young queer people, just as Grant intended. Aside from education and visibility, one of the actions of the project was the encourage people to put a sticker on their census envelope when they returned the printed copy through the mail (pictured below):

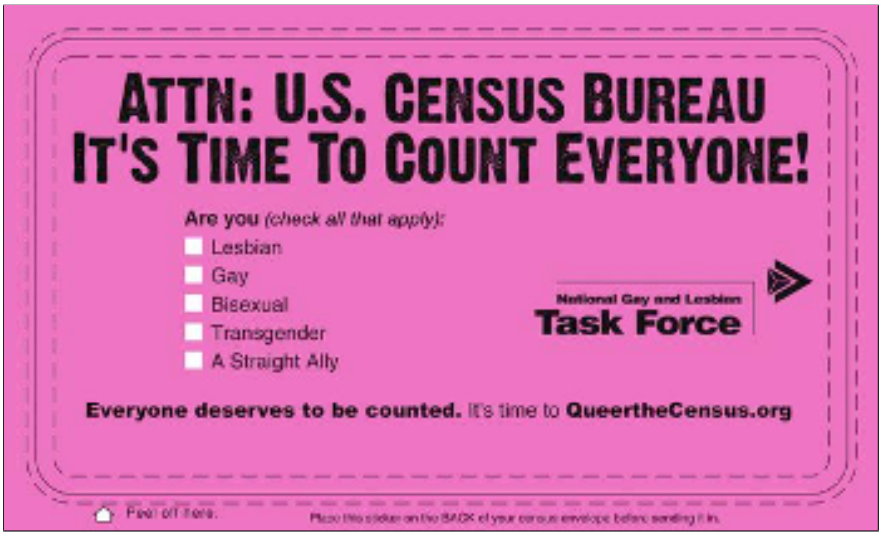


Figure 2.9: Sticker from the National Gay and Lesbian Task Force's Queer the Census campaign held prior to the 2010 Census.

This took the action to a different level: instead of being visible just among queer young people and activists who did not know much about federal data collection, it made the action visible to Census Bureau workers (and postal workers and neighbors, potentially—it was a movement for the proudly *out*).

The demography stakeholders and policy advocates I interviewed were all in agreement that the Queer the Census effort was visible, iconic, and eye-catching. There was some disagreement about the extent to which this was a realistic—or even desirable—goal. Jack Harrison-Quintana (director of Grindr for Equality, see Appendix D for interviewee biographies) was a part of the project at the time and captured this sentiment:

> Did I ever think the Census was the only way we could get counted? No. But I think it is the most visible, the most iconic way [...] that we can count, and so I do think that's partially why we did it. Also, I think that when we started it, I think having a sexual orientation or gender identity question on the Census seemed so distant that it was not the immediate goal.

Though it was not the immediate goal, it has a rather durable legacy. Federal propos-

als in Congress to expand the collection of SOGI data in federal data collection instruments name the Census. Kellan Baker wants this publicity and energy redirected toward the American Community Survey, the longform version of the Census that is collected more often of a sample of the population and thus can ask a greater number and variety of questions. Baker acknowledges this would make a less "sexy" national campaign:

> I get it, that it's not sexy to say, "Queer the American Community Survey." This is an instance in which the buzzword and the slogan has been very useful in raising awareness of the issue of data collection and focusing attention when there are a million other things that people could prioritize or focus on.

One of the things that has frustrated some critics, but not Baker in particular, is that the specific numbers about the gay population enabled by the Census speak only to same-sex couples living together. For Baker, this was a large enough number that he felt it was still politically advantageous to publicize widely, especially because it was such an indisputable and scientific calculation compared to estimates enabled by other modes of data collection:

> What is it, 646,000 same-sex couples in the last Census? That's not huge, but it's large enough [...] I've never felt like sharing that number is doing a disservice to anyone's understanding of who we are as a population and how large we are. That said, I do think it is important for individual queer people to be counted, not just in their couples. Which is why I would like to see the American Community Survey [...] you know, it's the *both and* approach [...] that's why we have the ACS. All of this data, we could get a really good idea of LGBT population statistics overall. And we could get these questions on the ACS and that is where I would like to see our energy going.

Baker referred to the idea that some people do feel that sharing the number of same-sex couples living together does a disservice somehow. Who might feel that way? Grant shares this sentiment with me: "The 3% doesn't describe the community I'm living in. It doesn't even describe my household. You missed half my household if we are using your method." Her perspective is based on her deep commitment to seeing and prioritizing trans, non-binary, and gender nonconforming people, as well as her experience with blended families.

Meghan Maury (Policy Director at the National LGBTQ Task Force, see Appendix

D for interviewee biographies) combines this same criticism of the Census's limited capacity to speak to the LGBTQ population with the broader sentiment that policy efforts should be focused on the ACS:

> I'm much more concerned about having SOGI questions on the American Community Survey than on the Census because I think for the Census the core of it is about apportionment and access to federal funding, and political representation in Congress, and in school boards, and how our school districts are drawn. All of those things are a numerical question. They're about how many people are in your state and how much resources should come to that state. *The ACS is more of what's used for the rich data about our households and our communities*, that tells us how many people are experiencing housing instability. That tells us what people's access to healthcare is. The American Community Survey is going to get us the cross tabs that we care the most about. For me, having detailed sexual orientation and gender identity questions on the ACS is the primary goal. I think part of the reason that I still think it's valuable to have it on the actual Census is more for, well, *I think there's a dignitary purpose.*

This idea that asking SOGI questions is about dignity and extending some basic humanity to the survey respondent was something echoed by several of my interviewees. This was not a side or neutral point: those who expressed this did so with passion based on experiences with the difference it made in people's lives. Maury goes on to explain why this is the case:

> When people think of demographic categories they make associations with the demographic categories that they're asked all the time. They're asked gender, they're asked race and ethnicity, they're asked these demographic questions, and if sexual orientation and gender identity are not in there, it's like you're holding them on a different plane than those other questions. It's like you're saying *those questions are too sensitive*, and these questions are not. So I think there's some *dignitary* reason for having it on the Census. But more than that I think *we know that when people see themselves in a survey they're more likely to go through with filling it out.* If people are filling out the survey and it feels to them [...] like the survey wasn't built for them, that it doesn't represent who they are and they're able to identify where they live and their race ethnicity and their gender and their age, but not their sexual orientation and gender identity, they feel like *there's a piece of them missing on that survey.* I think that leads to bigger undercounts of communities that historically have been undercounted. For both those reasons it's really critical to have sexual orientation and gender identity on the big Census too, but the *data* that I want comes from the ACS.

The experience of participating in a survey, conducting a survey, designing a survey, and analyzing survey data were all stages of the demographic research process that were

made personal in this way. In each of these stages there were reasons to be concerned with representation and inclusion for basic research design and statistical purposes, but each of these stages were also identified with something more personal as well.

When the Personal Gets Political

Too often, available data were not able to specifically address the health issues in LGBTQ communities. It was a glaring and fundamentally inequitable gap. Several of the experts I interviewed brought their own identity to their work on data collection. They were in the right place at the right time to make changes in data collection, and that the surveys and projects they worked on were the ones that would gradually change was not an accident. When it came to bringing activism into the work of federal data collection, the personal would get political.

Kristen Miller (director at the Question Design Research Laboratory, National Center for Health Statistics, CDC, see Appendix D for interviewee biographies) was the architect of the 2013 National Health Interview Survey (NHIS) sexual orientation question, which was thoroughly tested and given a lot of investment. She reflects on that time: "I was getting lots of pressure from the gay community because they saw me as this insider, that I could try to make it happen." Ultimately, she did. But Miller would feel she was caught in the "crossfire" between the demands to be an activist with her power to get new questions on an important federal survey and her professional training to ask questions in a particular tested way that met certain statistical goals (explored more in Chapter 3).

In our interview, Baker agreed that data collection does seem to be an issue that is gaining attention publicly and politically:

> Things like Laverne Cox and her talking about data collection and all of the uproar around the Trump administration's removal, or attempted removal, of questions from agency surveys and other data collection instruments. So it does seem like it's something that has kind of captured the imagination around what are some of the things that we need, in terms of advocacy related to the needs of LGBTQ populations.

Specifically, data collection has become an issue for LGBTQ communities to declare

what we need. In the quote above, Baker refers to the Trump administration's removal of questions from federal agency surveys. Here, he is specifically talking about the removal of sexual orientation questions from the federally-funded National Survey of Older Americans (the story told in the opening pages of this dissertation). In our interview, Sell told me a detailed version of the story he uses to open the piece he wrote for the *AJPH* dossier (see epigraph to Chapter 1):

> I went to a conference [in the 1990s] where someone from the National Health Interview Survey was presenting on the risk factor for breast cancer in African American women, in Black women. After she gave her talk I raised my hand and I said, "well, what can you say about lesbians and breast cancer?" [...] I thought, this is the survey that the government uses to monitor for prevalence of breast cancers. [...] I just pushed nicely and she said, "I don't know who is a lesbian in my sample." And I said, "why not?" And people in the audience were getting uncomfortable and angry at me. And someone started booing me. *And that was the moment I thought I'm never going to stop asking this question, ever. And it was that moment where I [connected] all the dots: the importance of data, the power of data, the politics of data.*

For Sell and most of the expert stakeholders I interviewed, it was particularly egregious that the data collection instruments that were funded by tax-payer dollars that informed every aspect of the federal government's knowledge and intervention into civic life would not ask questions about sexual orientation.

Stories and Statistics

One of the things that data is recognized as doing is making a bridge between stories and statistics. Harrison-Quintana describes the differences and connections between these two levels of data:

> There are audiences who really just want the statistics, that's really what they need to do what they're going to do. But often I think there are also people who the thing that really touches them is the stories. But then there's something about seeing the statistics and seeing that the stories are bigger that just helps them to make that next connection. The statistics themselves might not change their heart, but once their heart is in motion—[...] you can bring them from this individual instance to the broader—[...] and that's, to me, what the statistics can do.

He also considers somewhat cynically that statistics are used as convenient "window dressing" to arguments politicians were going to make anyway (an idea explored more in

relation to evidence in court cases in Chapter 4): "I think that there's a lot of politicians, or mainstream decision makers, who use the statistics. Whether or not it is what pushes them, they use it as cover." In this case, the statistics do effective work for the decision makers. Two other interviewees describe the same thing: decision makers require statistics to get traction on an issue. For issues related to sexuality, it begins with establishing that LGBTQ people exist in the first place. Baker put it this way:

> In the case of the administration saying that there aren't that many people ... there's this *presumption that there just aren't LGBT people and that the population is so small as to be meaningless*. Which doesn't actually hold up when you look at the numbers - even four percent of the US population is almost ten million people. So, I think it's a combination of flagrant disregard and disrespect and a desire to put their head in the sand and just be like, "That's not an issue is it? I don't know, we don't have any of those people. Anyway, there's not that many people."

Statistics establishing that gay people are constituents of political decision makers is the first step toward getting political representation. Baker describes having to move through multiple levels of "disregard and disrespect" that having data can help: establishing the issue is relevant to the politician, that their constituents include gay people, and that their numbers matter. Grant made the same argument in regards to trans populations specifically:

> All of the arguments we'd ever heard about trans people being a small circus population living in LA, San Francisco, and New York, and that it had nothing to do with anybody else in the country [...] *that map* [her new national data on where trans folks lived].We knew we had ended that thing forever, right? We just had to get this out that the day was over when a legislator could say, "we don't have any of these people here. This doesn't mean anything to me." They'd have to come up with another reason.

In other words, the decision makers would have to contend with population data. In some cases, this meant calling attention to "their desire to put their head in the sand" and making politicians' efforts to ignore what is needed to address issues facing the gay community one of explicit discrimination.

Shifting the Conversation

Grant's data from the National Trans Discrimination Survey (NTDS), the first of its

kind, also shifted the conversation away from individual stories to population statistics in a powerful way. In this case, it was to shift attention away from the invasive "obsession" with trans individuals' bodies: "Some of the really big drama: data points were helpful in stopping the obsession—or, starting to turn the tide of the obsession—of trans people's anatomy, and seeing them as full human beings. That was incredible."

It enabled trans spokespeople, like actress Laverne Cox, to redirect the conversation in a way they were previously not able to. Grant explained why this shifting of the narrative was so powerful:

> It shifted the narrative. It pushed other things to the forefront besides everybody's obsessive fetishizing about trans people's bodies and showed how culpable everybody was in the marginalization of trans people and their lives, even big people like Katy [Couric, who had asked Laverne Cox about her genitals in a televised interview]. They had to change their fucking behavior.

Not only did the new data from the NTDS shift the conversation, it gradually did so in a way that made it less acceptable to ask the kind of invasive dehumanizing questions that had been asked of trans people for so long. The NTDS is also an important study in the consideration of social science expertise on SOGI. Grant explains why: "It's the only thing in the IOM [Institute of Medicine 2011] report that's not out of a medical journal. I'm just super proud about that." Despite early dismissal from colleagues in the policy world, Grant also notes that nearly all statistics used about the transgender community from 2011 to 2016 were based on this report.

In sum, the collection of data on LGBTQ communities via population surveys is an issue of immense import recognized by academics, activists, politicians, and the media. The present attention follows a longer history in which the politics and science of sexuality are entangled. The relatively recent availability of good data on LGBTQ populations has fueled a new frame of argument and evidence in public discourse and policy debates: demographic knowledge about non-heterosexuality.

2.6 Conclusion

The presence—or absence—of "gay and lesbian stats" (specifically, population counts) has shaped public discourse and legal debates about LGBTQ communities. I presented a roughly linear story about how these numbers appeared in historical newspaper articles, contemporary newspaper articles, and three same-sex marriage cases before the U.S. Supreme Court. Marriage equality has been a huge civil rights win for lesbian and gay Americans, and I argue that this outcome and the coverage of it in the national media were both influenced and shaped by population counts. This helps make sense of the rise of data activism with a powerful example of how population science is being deployed as a tool for justice and progress.

CHAPTER 3

SOGI Subjects: The Making of a Population and Other Social Facts of Sexuality

How do the specific ways we ask about sexuality in surveys lead to what we know about sexuality today? I call the resulting social facts and theories "sexuality knowledge." In the previous chapter, I focused on the most basic of demographic knowledge derived from surveys: population counts. Here, I expand my focus to some of the more nuanced sexuality knowledge that comes from surveys. I show how the specific histories, contexts, and measurement practices of survey research shaped essential ideas about sexuality. These ideas weave back and forth from surveys to other types of research: sexuality theory based on interviews or ethnographic research (ideally) informs what gets asked in surveys, and survey results support or challenge what we know about sexuality from other modes of inquiry. This feedback loop could continuously generate the puzzles that spark new research.

In this chapter, I analyze the construction of "SOGI subjects," meaning both the topics relevant to the demography of sexuality and also the individual and collective subjectivities that are fostered by the movement of this knowledge through the social world. What are the "SOGI subjects" that are produced through contemporary demographic sexuality knowledge? Where does that knowledge come from? Who produces it, what gets asked, and what does not get asked?

The heart of this chapter is my content analysis of survey questionnaires. I provide a

broader historical context for the sexuality knowledge produced through population surveys by analyzing specific survey content such as questionnaire design, response options, language, and interviewer instructions. I present the process of question refinement over time by closely examining the evolution of one sexual identity survey question. I then connect the claims that can be made with this survey data to the production of contemporary sexuality knowledge, examining what new types of people, theories, and research paradigms are produced. For example, I show how survey research made possible a proliferation of research on the relationships between sexual behavior, attraction, and identity that crystallized into new types of people (such as "MSM," or men-who-have-sex-with-men) and theoretical descriptors (such as concordance versus discordance). At the same time, these measurement norms foreclosed other possibilities outside the triumvirate of behavior, attraction, and identity.

I then turn to current measurement best practices, looking at who the stakeholders are of "SOGI subjects," what the official recommendations are, and what is being done on the frontiers of the field. I conclude this chapter with a genealogy of one specific source of demographic sexuality knowledge: my own research history.

3.1 Historical Context

Survey data both reflect and construct social life (Bowker and Star, 2000; Cruz, 2017; Law, 2009), thus they have a historical context and do change over time. Specifically when it comes to population science on sexuality, the addition of questions on many demographic surveys reflects growing acceptance and recognition of LGBTQ people. The recent availability of scientific population counts as part of the twentieth century's progression in sexual science came together with enormous gains in gay civil rights (as evidenced by marriage equality). This section joins these advances in population science with public attitudes to explain the rise of demographic sexuality knowledge.

The history of surveying sexuality is not strictly limited to population science. Other efforts to collect information on sexual practices, identities, and attitudes were underway

throughout the twentieth century. Most well-known among these was Shere Hite's (1976) sexology reports, nationally published and read, and widely criticized for her methodology: Hite collected thousands of anonymous questionnaires. Her data may not have been randomly collected but it has competing lasting legacies: her striking findings coupled with poor response rates are discussed as an example of the importance of proper sampling in social research classes, and her insights into female orgasm and "sexual dysfunction" have a permanent place in the sexology and sexual health literatures. Hite's work is widely known because she reported on heterosexual relationships. Another influential popular press book was *American Couples: Money, Work, Sex* (Blumstein & Schwartz 1983), which is particularly notable for collecting information about same-sex couples. Other non-scientific surveys were undertaken by members of the gay population, to learn more about individuals' communities and wider context, and to begin to make claims for political representation. Newsletters circulated by ACT-UP, a grassroots coalition founded in 1987 to combat the AIDS epidemic, solicited questionnaire responses, as did issues of *The Advocate*. In our interview, Jaime Grant recalls being at the National LGBTQ Task Force in the early 1990s and taking "out these little ads in gay rags [magazines] all over the country [that] said 'check the unmarried partner box.'" People outside of formal population science also saw themselves as stakeholders in the need for LGBTQ demographic data.

For an enjoyably readable narrative history of surveying sex in the twentieth century, see Ericksen & Steffen's (1999) *Kiss and Tell: Surveying Sex in the Twentieth Century*.[1] The first half of the twentieth century saw just over fifty surveys of sexual behavior, a number that increased to over 100 per decade by 1970 (Ericksen & Steffen 1999: 60). The earliest American surveys that ask questions about sex surveyed male university students and military forces, asking questions related to "social hygiene" such as masturbation, venereal disease, and paid sex (p. 26). The earliest surveys that asked women about sex were conducted at

[1]The following two paragraphs are adapted from early versions of my review in the following working paper: Westbrook, Laurel, Jamie Budnick, and Aliya Saperstein. "Dangerous Data: The Measurement of Sexuality in Social Surveys."

women's colleges and included questions about monthly cycles of sexual desire, contraceptive knowledge, masturbation, and lesbian sex. Worries about declines in American middle-class fertility in the 1930s helped turn attention to the spousal couple and allowed demographers to ask more questions about sex, contraception, fertility, and birth. Sex surveys in the 1960s asked about sexual satisfaction (with a frequency that would only decline over the following decades), motivated by concerns about the growing divorce rate and interested in evaluating psychological theories about foreplay and orgasm. Kinsey conducted his important studies emphasizing the variation in human sexuality in the 1940s. He questioned the centrality of the nuclear family to American social life, which biographers have connected to his puritanical upbringing. Among Kinsey's legacies is the significance of research methods: while he was criticized for non-random sampling, he meticulously developed a complex interview schedule and trained interviewers to collect in-person life histories (p. 78–80).

The first survey to ask a random sample of all Americans about sex stuck to questions about attitudes, rather than behavior (Ericksen & Steffen 1999: 72). The first time NORC (National Opinion Research Center) aided in the collection of sex survey data was for giants in the sociology of sexuality, Simon and Gagnon. In 1965, they launched a study of college students that was the first sex survey to be funded by the NICHD (National Institute of Child Health and Development) and generated foundational sociological theories of "sexual scripts" and the idea that adolescence was a crucial time for sexual development) (p. 80). The availability of contraception and declining fertility among married women shifted attention to teenagers (p. 87). In 1970, the Office of Population Affairs was established at the NICHD as part of the federal war on poverty (p. 79). There, research was conducted with groups not previously studied—black women and teenagers. This research was published frequently by the Guttmacher Institute, then the research arm of Planned Parenthood. Together with the press attention, this research "almost singlehandedly created the social problem of adolescent sexuality and teen pregnancy" (p. 90). When sexual practices were included in early survey studies, they generally reflected contemporary social concerns, both

following and generating moral panics (Bullough 1994; Parker & Gagnon 1994). Moral panics (Best 1990) over reproductive and sexual health, in particular, have fueled the inclusion of sexuality in surveys. Similarly and more recently, the AIDS crisis led to the adoption of questions on sexuality across more surveys and expanded the topics covered (Baumle 2013).

The history of sexuality in surveys has been shaped by constraints faced by social science researchers generally and survey writers and administrators specifically. Challenges existed at every stage of survey research: sampling, recruitment, retention, study design, interviewer training, questionnaire design, research implementation, and analysis. These were problems recognized by survey methodologists but played out in particular ways for those researching sexuality. Random sampling produces statistically generalizable data but might recruit insufficient numbers of the population of interest when it is a minority or closeted to any degree. Researchers needed to learn to train interviewers to standardize their technique and build rapport without building in undue bias. Power dynamics between the interviewer and interviewee impacted responses and comfort-level, as did the survey mode (face-to-face interview, pencil and paper form, computer form). When writing questionnaires, researchers chose language and wrote statements meant to make the participant more comfortable answering candidly. These kinds of introductory statements are now recognized as potentially introducing bias (through priming). Language choices and instructions reflected researcher conceptualizations of sexuality, general social norms, and specific external pressures related to funding and collaboration with institutions such as the federal government. The "authorized vocabulary" of sexuality in surveys was nowhere more apparent than in the storied history of the NHSLS, in which a team of social scientists lost their federal funding amid a media and political frenzy for daring to include questions about non-procreative practices in their survey of sexuality (Laumann et al. 1994a,b). This served as a cautionary tale for the social scientists behind the contemporary National Longitudinal Study of Adolescent to Adult Health (Add Health) whose successful bid for federal funding rode on the effective positioning of a survey of teenage sexuality unequivocally within a health frame (Shiode

2016). This legacy of sanitizing and legitimizing sexuality by positioning it within a safe health frame extends to the present (Epstein & Mamo 2017).

The contemporary focus on LGBTQ sexualities in surveys is on SOGI measures. These are often talked about under the umbrella acronym of SOGI, but constitute two different streams of research and efforts. Respondent sex has been ascertained in a variety of ways since the advent of population surveys. Sex could be part of administrative data collected as part of the sampling process, along with other demographic data such as birth date, full name, age, etc. When sex would be asked of the respondent, it was usually performed as a check to ensure the interview has contacted the correct person, rather than an explicit source of data that could be used to find changes in sex over time. Sometimes, respondent sex was ascertained by the interviewer's judgment of that person's gender presentation, including voice (Lagos 2019). This is frustrating to Randall Sell, who during our interview said, "Here is my pet peeve—[to me:] if you have any influence anywhere with anyone—they still do it with sex. They look at the person, or hear their voice on the phone. Give me a break." Historically on the Census, race was also collected by the interviewer's assessment of the respondent's phenotypic racial presentation (that is, how they looked) (see Snipp 2003 for a full account of Census practices of measuring race through American history). This is no longer done in the Census, and some survey research usefully examines the mismatch between different versions of the same variable where these data are provided by the backend administrative data *and* asked explicitly (Lagos 2019; Saperstein & Penner 2014; Westbrook & Saperstein 2015).

In fact, the demography of the LGBTQ population comes out of this work of looking at mismatch between variables and doing the work of cleaning the raw data that is collected. The first scientific estimates of the United States gay population were based on reports of same-sex partners on the 1990 Census. As Kellan Baker describes it:

> What happened with the Census - there were an unbelievable number of couples that were actually heterosexual, or at least different-gender couples, who erroneously marked themselves as same-gender, and that the Census actually had to go back and do a whole

> recoding and a whole re-release of data. It was such a big drama. It really affected our estimates of the population size. This was at a pretty important moment, as the marriage cases were working their way up through the courts, so it was a big deal to have a handful of straight people throw themselves into the LGBT pool by accident. I am in favor of any strategy that avoids that by soliciting accurate answers.

Indeed, these messy data included both mistakes made by straight couples *and* importantly efforts by same-sex couples to identify themselves when enumerating their household. Ultimately, this provided an unintentional treasure trove of data for demographers of the gay population. (Foundational work with these Census data include work by Gary Gates, Dan Black, Amanda Baumle, and D'Lane Compton.) But, as shown in Baker's comment above, demographers prefer to institute a strategy that "avoids" this "big drama" by "soliciting accurate answers." This is what demographers and other stakeholders are advocating in their establishment of best practices and exploration of the frontiers of better measurement (explored below).

3.2 Surveying the Surveys: What We Ask About When We Ask About Sex

What kind of questions about sexuality[2] are asked in surveys? What topics are left out? What might survey participants learn about sexuality from instructions, question context, and response options? How does all of this shape what we can learn from the data (what I refer to as demographic sexuality knowledge)?

In this section, I present key findings from my analysis of survey content, illustrated with excerpts and examples from the materials I collected and analyzed (see Methods section of Chapter 1 for details on how I selected and analyzed the surveys). This is not an exhaustive overview of sexuality in all surveys, but instead looks at those surveys used as primary data sources in the articles substantively about non-heterosexualities appearing in

[2]I will continue to focus narrowly on LGBTQ sexualities. For a wider–ranging analysis of sexuality in surveys, with a focus on how questions have largely focused on dangerous topics (risky sex, STDs, contraception, pregnancy) to the exclusion of pleasure and desire, see the working paper: Westbrook, Laurel, Jamie Budnick, and Aliya Saperstein. "Dangerous Data: The Measurement of Sexuality in Social Surveys."

select mainstream sociology peer-reviewed journals since 2000. Focusing on federal survey instruments that have used sexual orientation measures for several years, I analyze questionnaire content related to identity, attraction, behavior, attitudes, disclosure, discrimination, introductory statements, and question order.

Identity

The National Health Interview Survey (NHIS)'s sexual orientation question provides insight into the development of a question, with much of this information being publicly available and on the record, and more detail reinforced through my interviews. The architects of the sexuality questions have made an effort to be incredibly transparent about their question's genealogy. I was able to interview question architect Kristen Miller (director at the Question Design Research Laboratory, National Center for Health Statistics, CDC) about this, but it is also documented in publicly available materials (Miller & Ryan 2011). So much work went into this process, in fact, that the NSFG tested the NHIS version against its own in an experiment in the 2015–2017 version by randomizing half the sample into either the NSFG or the NHIS question. This is how this kind of experiment would appear in the final documentation:

```
{ ASKED FOR ALL - USED IN RANDOM HALF SAMPLE OF NSFG RESPONDENTS
ORIENT_A
KK-5a.      Do you think of yourself as ...

            Heterosexual or straight.........1
            Homosexual or gay................2
            Or bisexual .....................3

{ ASKED FOR ALL - USED IN RANDOM HALF SAMPLE OF NSFG RESPONDENTS
ORIENT_B
KK-5b.
            Which of the following best represents how you think of
            yourself?

            Gay..............................1
            Straight, that is, not gay.......2
            Bisexual ........................3
            Something else ..................4
```

Figure 3.1: NSFG question wording experiment, comparing language to NHIS question.

NHIS male respondents were shown a flashcard (pictured below) with the five response options "Gay," "Straight, that is, not gay," "Bisexual," "Something else," and "I don't know the answer."

Figure 3.2: NHIS male sexuality flashcard.

NHIS female respondents were shown a slightly different flashcard (pictured below) that offered the same five response options with slight modifications to options one and two ("Lesbian or gay" and "Straight, that is not lesbian or gay," respectively). This addition of "Lesbian" is the only difference between the two cards, this question was asked of the full NHIS sample.

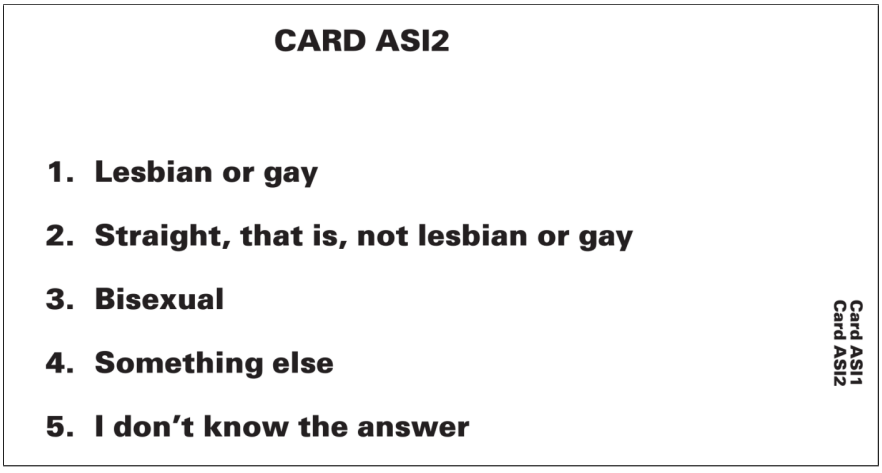


Figure 3.3: NHIS female sexuality flashcard.

Both versions were followed by identical follow-up questions if the respondent selected "something else" or "I don't know the answer." The six response options were: "You are not straight, but identify with another label such as queer, trisexual, omnisexual or pansexual," "You are transgender, transsexual or gender variant," "You have not figured out or are in the process of figuring out your sexuality," "You do not think of yourself as having sexuality," "You do not use labels to identify yourself," and "You mean something else." This also appeared on a flashcard (pictured below).

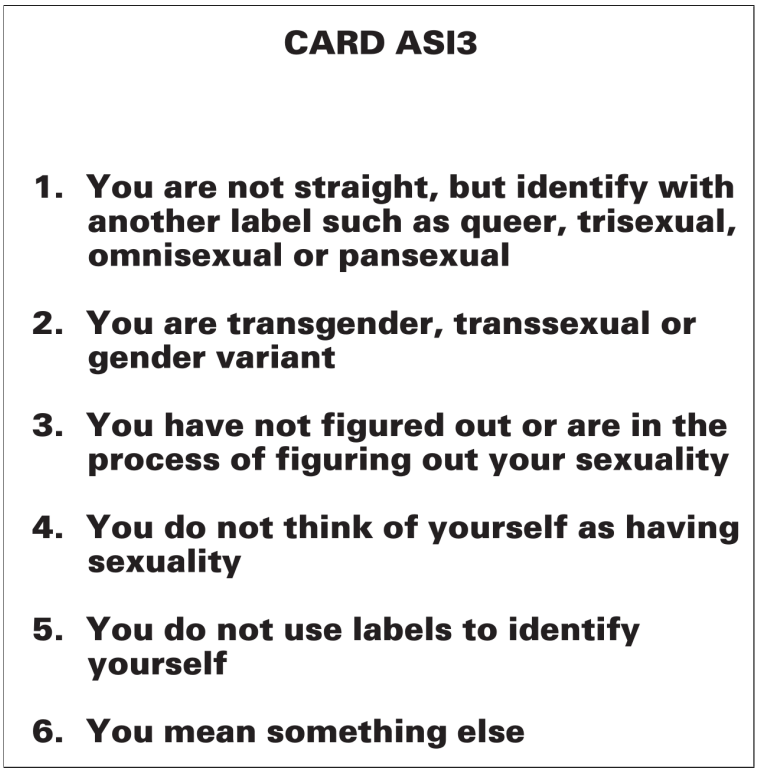


Figure 3.4: NHIS sexuality follow-up questions for respondents who chose "something else" or "I don't know the answer."

Something Miller discussed was how some questions might combine constructs. For example, the NHIS question's follow-up card includes response options that describe gender identity. This is because, in the pre-testing and cognitive interviewing, some respondents themselves pushed to answer the sexual orientation question with an answer about their gender identity. For other respondents, the two constructs are inseparable. Researchers are increasingly trying to ask separate questions about sexual orientation and gender identity,

which together form the umbrella construct of SOGI—this is recommended as best practice (explored below).

The NHIS study documentation includes a description of when and why these measures were added, stating they were motivated by the "tremendous gaps in information about the health status and health care utilization" of LGBT persons, and in particular, the Healthy People objectives to eliminate disparities in this population. In the field manual, the process of arriving at the decision to use flashcards is described, definitions of terms are provided, and detail is provided on the content and order of the response options.

The most notable thing about the NHIS question is the use of the term "not gay" in the response option for "straight." This was in response to pre-testing and cognitive interviews that found heterosexual respondents were unfamiliar with the term "heterosexual." This was something that several of my interviewees discussed. Miller recalls the language came up when they tried to understand why they were getting missing data: "We had done all that cognitive interviewing work and really felt like we understood why we were getting missings [missing data due to nonresponse]. [...] I will never forget sitting at the little table, they were going over it and I was like, 'This word heterosexual just is really creating the problems."" She decided the word heterosexual had to go to solve the problem of the missing data:

> I remember sitting there [thinking], 'This is going to be so controversial to take out the word heterosexual, and I just feel as though we have to do it' and then it had to be, 'that is, not gay' because [...] We also had people who thought of straight as not on drugs. It had to be 'straight, that is, not gay' and I totally remember that. It was funny because I was doing [the question design] with a gay guy too, a gay colleague and we were like, 'Yes, this is what needs to happen so that we get good LGB data.'

Miller and her colleague both felt personally that this change made sense, and they felt validated by their pre-testing work: "We did the huge field test on the NHIS split sample [...] it's just such a high to see how your qualitative work makes a huge difference [...] so I felt, 'Wow, we fixed it.' Then the gay community, from what I had heard, were pissed off about that, saying that it was insulting to say 'not gay.' [...] I didn't think it was going to

be controversial with the gays, I thought it was only going to be the survey people." Though Miller felt validated as a scientist and survey administrator that her wording change would fix the problem of the missing data, she did not anticipate where she would get criticism from. She gave another example in which she got pushback from federal administrators when her team proposed using "Obamacare" instead of "the Affordable Care Act" simply because that's what people know. She anticipated getting the same kind of reluctance from her colleagues, but not from her friends in the gay community. She described feeling caught between the expectations on her from different sides: "I felt like I was in the crosshairs because here I was doing government work and, clearly, the government was being treated as [if] we weren't doing enough, and the government wasn't, but I'm a government worker and I'm also a lesbian who, obviously, cares very much about the community and I was doing everything that I knew to give us good quality data." This connects to my own experience presented below, and the idea that it is crucially important who is in the room. It also reveals a critical tension: striving to improve data collection in the first place can feel like complicity. The comparatively positivist research mode of quantitative survey research can be seen as inherently hostile and fundamentally irreconcilable with queer modes of identification. But this tension does not mean the work of improving survey measurement is not worth doing.

Miller described feeling like she was "in the crosshairs" when trying to balance the demands of her community, pressures to be an advocate, and her job ("I feel as though my obligation is to be a good scientist"). These are not at all incompatible positions: "We don't want to be doing bad science on ourselves. We just had whole centuries of bad science being done to us." For Miller, to do good science was a form of advocating for your community, to ensure the history of dehumanizing science is not repeated. Recognizing history is relevant when looking backward as well as forward. Miller acknowledges the NHIS question might need to be revisited ("it's a real dynamic construct, it's quickly changing"), specifically after gay marriage, which was "like an earthquake ... like a tsunami in making changes in how people understand what sexual identity is." This reinforced my findings (presented in

Chapter 4) that the marriage equality cases indeed provided a way of seeing how perceptions of what sexual identity was were being discussed and established in real time (in the case debates and the media coverage) with influential consequences for civil rights.

Constructing Identity

Statistics help construct the world they are measuring. Waidzunas (2012) uses the example of statistics about gay teen suicide to show how the circulation of these numbers, decontextualized and "black boxed" from how they were created, had positive and negative effects. On the one hand, the circulation of these statistics helped fuel institutional change meant to help at-risk gay young people. On the other hand, it led to the creation of the identity category "gay youth" that was fused with risk of suicide, which was redeployed in both antigay and resilience narratives. Waidzunas' point is that statistics, particularly when "traveling without citation," can lead to "some ironic consequences." To shed light into the particular black box that is statistics on gay youth and suicide, Waidzunas interviews the original author of the frequently cited statistics to trace their development, circulation, and consequences in the world.

I follow Waidzunas' model in my analysis of the NHIS sexual identity question by interviewing Miller. She describes her process of writing the question, the tradeoffs in options she weighed, unexpected criticisms, and the legacy of these choices from the vantage point of a decade. This is an important process to engage in, as sexuality statistics are part of how we "make" the LGBTQ population in the first place. Taylor Cruz (2017) examines efforts by population scientists to understand sexuality as an axis of difference in federal population-based data systems (which include surveys, electronic medical records, and the Census). The black box that Cruz is interested in illuminating is the difficulties inherent in creating distinct populations to compare (specifically, creating LGBTQ populations to compare against heterosexuals to understand health disparities).

Both Waidzunas and Cruz take up specific quantified knowledge about sexuality and show how there is a feedback loop to social problems (here, suicide risk and other health

disparities) and that peering into the black box of these numbers reveals the commitments made during the scientific process that created these statistics. As a lesbian and a scientist, it drove Miller crazy to see the circulation of decontextualized sexuality statistics publicized in ways that felt harmful: "[Another federal survey] had asked a bad sexual identity question. They had all these missings, [...] it made it seem like the gay youths were more likely to do all of these deviant behaviors and it made me crazy. It was on Fox News. I knew that the reason why that was was because it was bad data, I knew it." There is a sort of helplessness that individuals might feel in the face of seeing numbers publicized about your community in harmful ways, but I interviewed two people whose professional positions allowed them to intervene in how sexuality statistics were being (mis)used. Jaime Grant talked about similar statistics finding queer and trans people to be "at risk": "we needed to know the data, but if we got it inside of this larger context [...] it wouldn't be that we were just seeing you as a vector of disease. That we were actually looking at you as a whole person. And that health is a critical part of being a whole person." It was a priority for her to show the respondents to the NTDS that the people asking the questions understood there was a larger social context to their problems, reflecting on the damage that can be done by the way statistics are presented: "This is really important, I think, for young researchers: how you're going to talk about your data. Because if you're just going to put 41 percent tried to kill themselves as the first data point [...] everybody just thinks trans people are inherently depressed and fucked up, and it's tragedy trans, right? There's so much really terrible data in here [...] But the thing that we wanted to show was, it was the gauntlet of discrimination and despair." It was important to show priorities and understanding to the individuals filling out her surveys, and also to display sensitivity about how to contextualize and interpret the resulting data.

Attraction

The question in Add Health Wave III provides a rich site for analysis. This was a rather early question and is particularly notable because it was asked of adolescents and

allows for longitudinal analysis. The Add Health question asks the full sample, "Please choose the description that best fits how you think about yourself." The six response options (in addition to "refused" and "don't know") were: "100% heterosexual (straight)," "mostly heterosexual (straight), but somewhat attracted to people of your own sex," "bisexual that is, attracted to men and women equally," "mostly homosexual (gay), but somewhat attracted to people of the opposite sex," and "100% homosexual (gay)." Nearly 15% of respondents chose something other than "100% heterosexual (straight)." This is the Add Health question:

H4SE31		Num	31. Please choose the description that best fits how you think about yourself
Frequency	Percent	Value	Label
13447	85.64%	1	100% heterosexual (straight)
1526	9.72%	2	mostly heterosexual (straight), but somewhat attracted to people of your own sex
248	1.58%	3	bisexual that is, attracted to men and women equally
131	0.83%	4	mostly homosexual (gay), but somewhat attracted to people of the opposite sex
209	1.33%	5	100% homosexual (gay)
71	0.45%	6	not sexually attracted to either males or females
47	0.30%	96	refused
22	0.14%	98	don't know

Figure 3.5: Add Health sexuality question, combining the constructs of attraction and orientation.

This question combines the constructs of sexual identity and attraction, providing the respondent with definitions for each response option that explicitly connect the two ideas. Notably, it includes a response option for asexuality, which was particularly important because the respondents were adolescents at this wave of the longitudinal study. (Wave III asks "Have you ever had a romantic attraction to a (fe)male?" and Wave IV asks "Are you romantically attracted to (fe)males?" The time frame asked about shifts, with the latter asking about lifetime experience, instead of "ever," which supports a more stable sense of

self, perhaps because of the older age of the respondents by this point in the longitudinal study.) Three of the response options include a definition for the sexual identity label that draw on ideas of attraction. This instructs the respondent (and the downstream researchers) to define, or at least combine, the constructs of sexual identity and attraction.

The introduction to this question in Add Health asked respondents about "the description that best fits how you think about yourself" while the NSFG question (specifically about attraction; pictured below) asks "Which best describes your feelings? Are you..." The six response options are: "Only attracted to females," "Mostly attracted to females," "Equally attracted to females and males," "Mostly attracted to males," "Only attracted to males," and "Not sure." The NSFG question does not include an option for asexuality as defined as no attraction.

```
Which best describes your feelings?  Are you...

Only attracted to females ..........................1
Mostly attracted to females ........................2
Equally attracted to females and males .............3
Mostly attracted to males ..........................4
Only attracted to males ............................5
Not sure ...........................................6
```

Figure 3.6: NSFG question on sexual attraction.

Both Add Health and NHIS use "mostly" and "equally" in their wording for the middle category. That this is may be interpreted as a definition is made explicit in Add Health's version: "bisexual that is, attracted to men and women equally." All survey participants, but especially the youth participants in Add Health, would be receiving important information in this definition of "bisexual." Qualitative research has found that women with attraction to both men and women do not experience their attraction as equal, and this is one of the reasons they may not feel comfortable using the identity label "bisexual" (Tabatabai 2015). Other reasons they gave for rejecting the label "bisexual" are more about negative cultural associations with bisexual women[3] though it is notable that another reason was agreeing

[3]For an analysis of the "bisexual" label by socioeconomic status, see Budnick 2016.

that there was this sense of a fifty-fifty definition that was being explicitly rejected, and it is important that that definition gets reinscribed in our efforts to collect data on bisexuals.

Behavior

Broadly speaking, the most commonly occurring question type about sexuality asks about behavior. Questions about partnerships, cohabitation, fertility, contraception, and family structure can all provide information about sexual behavior. These questions can also include whether the participant is currently or has in the past had sex with men and/or women, what kind of sex they have had, the relationship context (e.g., extramarital, cohabiting partner), contraceptive use, fertility context, and more. Questions on sexual behavior appear widely, and have appeared more over time, than questions about sexual orientation per se, though sometimes the sexual behavior questions collect information about sexual minorities either directly or unintentionally. Estimates of how many people are gay could be derived from asking about same-sex behavior, if that is the specific construct used to define sexual orientation (as opposed to identity, attraction, or some combination of these). The number of people who have had same-gender sexual experiences can be reported from an increasing number of national surveys and can be used to analyze "MSM" (men who have sex with men) even if sexual identity is not asked about.

There is a lot we can learn from the way sexual behavior questions are asked, what topics appear, and what topics are ignored. The questions asked in national population surveys about sexual behavior get at topics related to relationship status and history, fertility, and sexual health risk behaviors. This is important because sexualities scholars (and feminist activists) have for decades called for a balancing of attention to pleasure and danger (Vance 1984), but the survey questions that get asked tend to assume and more narrowly investigate the normative practices that Gayle Rubin (1984) describes as the "charmed circle" of sexuality (heterosexual, married, monogamous, and potentially procreative couplings).[4] When

[4]This is the argument made in my working paper co–authored with Laurel Westbrook and Aliya Saperstein, "Dangerous Data: The Measurement of Sexuality in Social Surveys." The following paragraph sketches our findings based on analysis of questionnaires from nine important U.S. social surveys over fifty years.

non-normative practices outside of the charmed circle are investigated (non-monogamous, non-procreative sex such as anal or oral sex) it is in the context of risk (including planned and unplanned pregnancies, contraceptive use, sexually transmitted infections, paid sex, and intimate partner violence). Data on behaviors that are not related to these outcomes (such as foreplay, orgasm, sex with toys, kissing) are not collected. Sexualities scholars have also historically called for a balancing of attention to the different dimensions of sexuality (identity, desire and attraction, behavior) but these attentions are disproportionately on behaviors—especially behaviors that highlight the dangers rather than the pleasures of sex. This results in an overall atmosphere of collecting sexual data that does not meet these calls for balancing pleasure and danger and the different dimensions of sexuality, as well as generally reifying sex negativity.

Attitudes

Negative attitudes toward sexuality can also be seen in the questions that were asked about homosexuality prior to the contemporary identity and attraction questions. The GSS has asked questions for many decades about opinions and attitudes toward homosexuals.

The question text and response options have remained the same to allow comparisons over time, despite the thinking on the topic evolving which might result in different language being used if the topic was raised anew. For example, the GSS has asked the same question about Americans' opinions about "sexual relations between two adults of the same sex" since the 1970s. The response options are given on a unipolar scale and are: "Always wrong, "Almost always wrong," "Wrong only sometimes," and "Not wrong at all." This presentation frames homosexuality along a possible continuum of "wrongness." Contrast that to the GSS's more recent question asking for opinions on whether "Homosexual couples have the right to marry one another." The response options fall along a bipolar Likert scale: "Strong agree," "Agree," "Neither agree nor disagree," "Disagree," and "Strongly Disagree." In 2006, these two questions appear in order (pictured below).

The keeping of the "wrongness" question reflects inertia but more importantly the

HOMOSEX: Categorical (Single)
What about sexual relations between two adults of the same sex-- do you think it is always wrong, almost always wrong, wrong only sometimes, or not wrong at all?

Categories:

{always_wrong}	Always wrong
{almost_always_wrong}	Almost always wrong
{wrong_only_sometimes}	Wrong only sometimes
{not_wrong_at_all}	Not wrong at all
{dontknow}	DON'T KNOW
{refused}	REFUSED

MARHOMO: Categorical (Single)
Do you agree or disagree with the following statement:

Homosexual couples have the right to marry one another.

Categories:

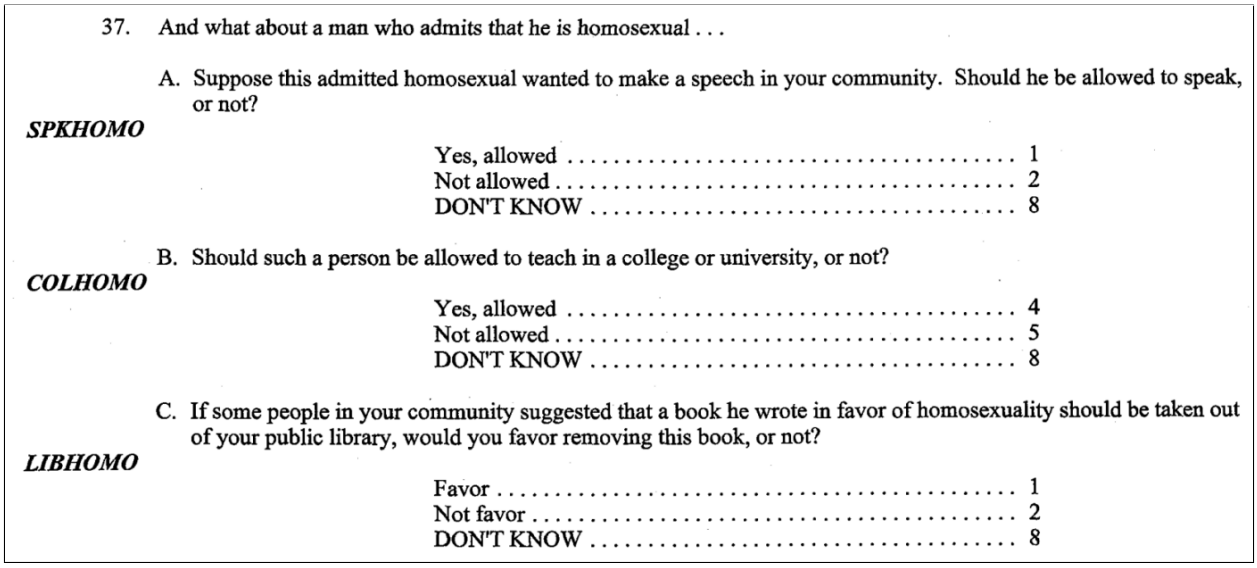
{_1}	1. Strongly agree
{_2}	2. Agree
{_3}	3. Neither agree nor disagree
{_4}	4. Disagree
{_5}	5. Strongly disagree
{dontknow}	DON'T KNOW
{refused}	REFUSED

Figure 3.7: GSS question asking about attitudes toward homosexuality on a scale of how "wrong" the respondent thinks it is has appeared since the 1970s. A more contemporary question about gay marriage uses a bi-directional scale from "right" to "wrong" instead.

population science priority and value of asking the same questions across time and place to allow for comparison. This is also an example where the same question is taken from one survey and asked across others, such as in the one-time NHSLS that strived to ask value-neutral and even sex-positive questions about sexuality, and resulted in the esteemed volume in the sociology of sexualities *The Social Organization of Sexuality* (Laumann et al. 1994a). That the marriage opinion question uses more neutral language and multi-positional response options contrasts sharply with the "(homo)sexual relations" question. A unipolar scale is statistically simpler and easier to interpret, but using a "wrongness" scale preserves and reinforces the idea of homosexuality being wrong, even if survey respondents do choose

the single option that answers it is "not wrong."

Attitude questions help us understand who is the imagined survey respondent. Historically, this was certainly not a gay or lesbian individual. For example, the GSS asked a question about tolerance for "a man who admits that he is a homosexual" for many years (pictured below). Participants are asked if "this admitted homosexual wanted to make a speech in your community" or he should be "allowed" or not, if "such a person" should "be allowed to teach in a college or university" or not, and whether "If some people in your community suggested that a book he wrote in favor of homosexuality should be taken out of your public library" they would "favor removing this book, or not."



37. And what about a man who admits that he *is* homosexual . . .

A. Suppose this admitted homosexual wanted to make a speech in your community. Should he be allowed to speak, or not?

SPKHOMO

Yes, allowed 1
Not allowed 2
DON'T KNOW 8

B. Should such a person be allowed to teach in a college or university, or not?

COLHOMO

Yes, allowed 4
Not allowed 5
DON'T KNOW 8

C. If some people in your community suggested that a book he wrote in favor of homosexuality should be taken out of your public library, would you favor removing this book, or not?

LIBHOMO

Favor 1
Not favor 2
DON'T KNOW 8

Figure 3.8: GSS questions about attitudes toward homosexuals have existed since the 1970s.

The early attitude questions were asked regarding the perspective of the presumed straight respondent to give their opinion on the homosexual other. These examples in the GSS separate the "admitted homosexual" from "your community" and "your public library." This framing serves to exclude sexual minority participants from the imagined study respondent. This is precisely why it is important—if you want to include or at least not exclude certain people—to do mixed-methods data collection (such as pre-testing along with cognitive interviewing) to understand how respondents might interpret and respond to questions (such as the process undertaken by the NHIS). My reading of this example is an application

of the more general criticisms of "tolerance" versus "inclusion" (Walters 2014). Questions about the different constructs of sexuality wherein someone can identify non-heterosexual identity, attraction, and behavior appear much later and are ostensibly include everybody. If gay study participants did not see themselves in the imagined respondent of questions such as these early attitudes questions, this may have impacted not only the results of data collection, but also the subjectivity of sexual minority research participants, and what everybody learns about sexuality after taking the survey and reading subsequent interpretations of the findings. This is part of the discursive shift from collecting "LGBTQ data" to "SOGI" data - as Kellan Baker describes (see Stakeholders section at the end of this chapter), while "LGBTQ" may be othering, "SOGI" foregrounds that the questions can and should be asked over everybody with a sexual orientation and gender identity—that is: everyone.

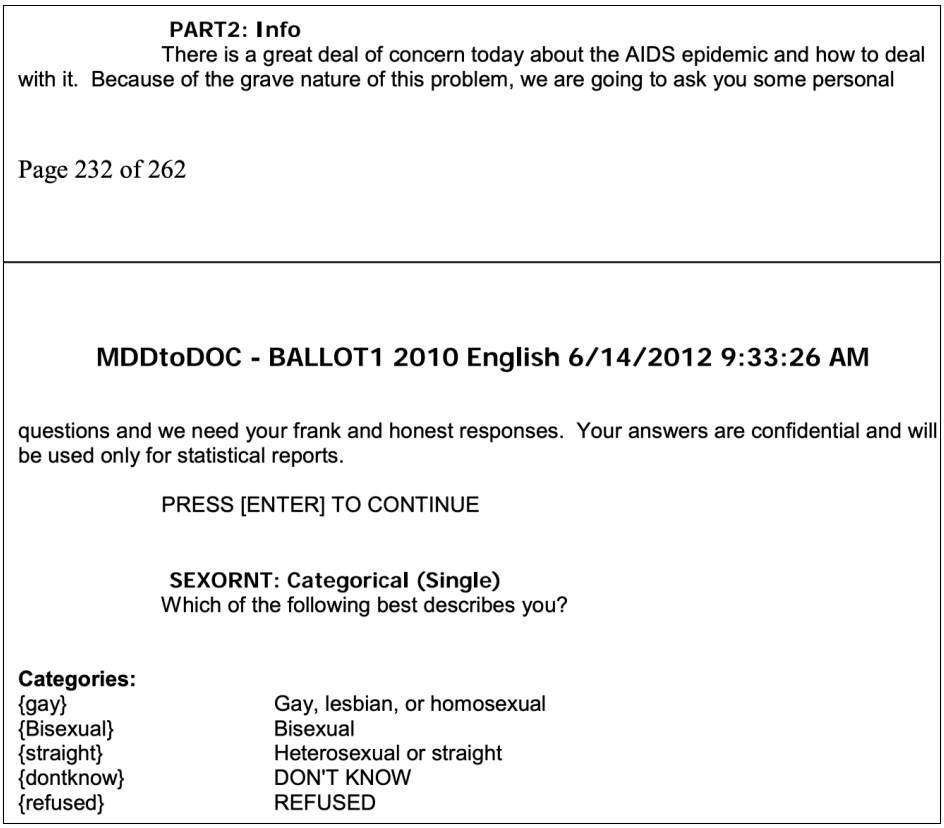
Introductory Statements, Question Order, and Disclosure Questions

Introductory statements can be very instructive, both to the survey respondent and to the downstream researchers and readers who interpret the knowledge produced by the data. Questions about sexuality are often preceded by an introductory statement to encourage honest disclosure and put the respondent at ease with such personal questions.

The NSFG questions on sexuality begin with an introductory statement: "People are different in their sexual attraction to other people." The introductory statement is meant to be a neutral way of encouraging respondents to be comfortable enough to answer truthfully. The response options instruct the respondent on what attraction categories might be available and how they might be defined. Here, we learn that the options are "females and males" (instead of other gender identities, or even perhaps just "women and men"). We are also instructed on how the spectrum of attraction might be broken down (only, mostly, equally).

Another way of using introductory statements is to explain the reason for asking the question in the first place, or the purpose of collecting this sensitive information. The GSS offers a window into how this kind of statement might function. The following statement

immediately precedes the question on sexual orientation (pictured below): "There is a great deal of concern today about the AIDS epidemic and how to deal with it. Because of the grave nature of this problem, we are going to ask you some personal questions and we need your frank and honest responses. Your answers are confidential and will be used only for statistical reports." This specific statement and ordering appeared in 2012, over two decades after the height of AIDS panic, but some kind of statement is common.



PART2: Info
There is a great deal of concern today about the AIDS epidemic and how to deal with it. Because of the grave nature of this problem, we are going to ask you some personal

Page 232 of 262

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questions and we need your frank and honest responses. Your answers are confidential and will be used only for statistical reports.

PRESS [ENTER] TO CONTINUE

SEXORNT: Categorical (Single)
Which of the following best describes you?

Categories:

{gay}	Gay, lesbian, or homosexual
{Bisexual}	Bisexual
{straight}	Heterosexual or straight
{dontknow}	DON'T KNOW
{refused}	REFUSED

Figure 3.9: Question order in GSS: an introductory statement about the grave nature of AIDS immediately precedes the sexual orientation question.

There is a relationship insinuated between the introductory statement and immediately following questions. In the above example, that is that the grave AIDS epidemic is related to your sexual orientation. There are tradeoffs to these kinds of associations. A similar thing happens when all sensitive questions are asked in the same section (often self-administered or a separate more private survey mode). Consider the order of these questions in Add Health, based on how they appear in the table of contents:

10. The most recent time you had vaginal intercourse did {YOU/YOUR PARTNER} use a condom? **H3SE10**
11. Have you ever had a romantic attraction to a female? **H3SE11**
12. Have you ever had a romantic attraction to a male? **H3SE12**
13. Please choose the description that best fits how you think about yourself. **H3SE13**
14. Which of your parents knows ...
[if Q.13 = 3, add:] ... that you are bisexual?
[if Q.13 = 4 or 5, add:] ... about your homosexuality? **H3SE14**
15. Have you ever paid someone to have sex with you? **H3SE15**
16. In the past 12 months, how many times have you paid someone to have sex with you? **H3SE16**
17. Have you ever had sex with someone who paid you to do so? **H3SE17**
18. In the past 12 months, how many times have you had sex with someone who paid you to do so? **H3SE18**
19. Have you ever had sex with someone who takes or shoots street drugs using a needle? **H3SE19**
20. In the past 12 months, how many times have you had sex with someone who takes or shoots street drugs using a needle? **H3SE20**
21. In the past 12 months, have you been told by a doctor or nurse that you had the following sexually transmitted diseases?
chlamydia **H3SE21A**

Figure 3.10: Question order in Add Health CASI section combines sensitive topics, including sexual identity, contraceptive nonuse, paid sex, and sexually transmitted infections.

The questions about same-gender attraction, sexual identity, and coming out appear sandwiched between questions on unprotected sex, paid sex, and sexually transmitted diseases. These Add Health questions appear in a self-administered section called "Suicide, Sexual Experiences, and Sexually Transmitted Diseases." This is a self-administered section. Indeed, for many of the youth respondents all of these topics would feel sensitive and warrant being asked in a separate more private survey mode. It is also important to consider the inadvertent effects of the CASI system.

Disclosure and Discrimination:

Finally, some additional topics that get asked about in these population surveys that help construct ideas of sexuality include questions about disclosure and discrimination. Add Health, again in Wave III which was of a sample of adolescents, asked "Which of your parents knows that you are bisexual" or "... about your homosexuality" (pictured below).

Add Health does not ask "who" knows more generally, the focus is on the nuclear family. It also does not ask about whether the child respondent discussed their sexuality with

H3SE14: S16Q14 PARENT KNOWLDGE OF SEXUALITY-W3

Which of your parents knows [if Q.13 = 3, add:] that you are bisexual? [if Q.13 = 4 or 5, add:] about your homosexuality?

Value	Label	Unweighted Frequency	%
0	(0) Neither parent knows	58	1.2 %
1	(1) Only mother knows	27	0.6 %
2	(2) Only father knows	1	0.0 %
3	(3) Both parents know	50	1.0 %
	Missing Data		
7	(7) Legitimate skip	4745	97.2 %
8	(8) Don't know	1	0.0 %
	Total	**4,882**	**100%**

Based upon 136 valid cases out of 4,882 total cases.

Figure 3.11: Question from Add Health asking if the respondent has told their parents about their (homo or bi)sexuality.

a parent more generally, only bisexuality or homosexuality. If heterosexuality is assumed it does not require disclosure.

The GSS asks a similar question but about coworkers, rather than parents (pictured below). This question follows an introductory statement: "Some people are very open about their sexual orientation while others are not. About how many of your coworkers know that you (are gay)?" The response options are "All of my coworkers, "More than half," "About half," "Less than half," and "None of them."

TOLDWORK: Categorical (Single)

Some people are very open about their sexual orientation while others are not. About how many of your coworkers know that you {response to toldworkinttxt}:

Categories:

{allcoworkers}	All of my coworkers
{morethanhalf}	More than half
{abouthalf}	About half
{lessthanhalf}	Less than half
{none}	None of them
{dontknow}	DON'T KNOW
{refused}	REFUSED

Figure 3.12: GSS question asking to whom the respondent has disclosed their (homo)sexuality.

Employees who have disclosed to a couple or few coworkers would presumably choose "Less than half," so we might expect this option contains considerable variation.

In 2008, the GSS added multiple new questions about same-sex sexuality, asked only of respondents who previously identified themselves as non-heterosexual. These included questions asking "at about what age" the respondent was "first sexually attracted to someone of the same sex," "first told someone that you had sex with someone of the same sex," and "first told someone that you were (gay or bisexual)." Both the GSS question and the Add Health question present disclosure about sexual identity as something relevant for sexual minorities, but not others (though only sexual minority participants would get this instruction because only they were presented with these follow-up questions).

The predominant normative script about disclosure about sexuality regards "coming out," which is typically about the construct of identity, not—as the GSS example includes—about telling someone "that you had sex with someone of the same sex." When asked in the context of having an all-adolescent sample or retrospective accounts of when something first happened, these questions are about disclosure as part of the developmental coming out narrative.

The GSS also asks questions about disclosure in the context of discrimination. The question wording asks whether something happened because someone "believed you to be gay" (which gets to perception or attribution, rather than identity, which is an important distinction). These questions are asked about housing, employment, and harassment. There is also a question about health insurance coverage of spouses and dependents. These questions allow downstream researchers to analyze and present a picture of the level of discrimination gay respondents face, and how much of that could be attributed to sexuality disclosure or perceptions.

3.3 Evolution of a Question

> *"What do you ask, how do you ask it, and—like race—it's always going to be evolving. You may some day have a number that you feel comfortable with, with a bunch of caveats for that day. Tomorrow, that's not the right number. But I would say the same thing about race, and I now would say the same thing about sex or gender."*
> *—Randall Sell*

How we ask questions about identity categories, on surveys or anywhere else in life, is going to evolve as the way we think about identities evolves. These simultaneous evolutions can give insight into each other. In this section, look at the evolution of a single survey question about sexual identity. As new versions are asked over time, we can discern the priorities of the researchers and some of the trade-offs made along the way to the question that gets asked today.

Since 2002, the National Survey of Family Growth (NSFG) has included questions on sexual orientation. This makes it one of the first federal national surveys to do so. This was early among other national surveys, even those specializing in topics related to sex (the NSFG focuses on family, fertility, contraception, sexual and reproductive health, among other topics). Questions about sexual behavior, identity, and attraction are asked separately. The NSFG is a long running study that was repeated in cycles approximately twice per decade since the 1970s. This is especially helpful because not only can researchers compare trends in *responses* over time, we can also look at the evolution of the questions themselves. In fact, the NSFG allows a rich look at the evolution of a question over time. The evolution of this question provides insight into the values and norms of the researchers asking the questions, as well as the statistics produced from the research subjects' responses.

The questions of interest appear in the audio computer-assisted self-interviewing (ACASI) section of the survey. For this part of the study, the interviewer would read an introduction from the screen explaining that the respondent would take over the computer, listen to the questions with headphones on, and input their answers themselves. Respondents are informed that the interviewer will not be able to hear the questions or read their

responses. After completing some practice questions to get familiar with how this section will work, respondents are given the following introduction as the questions turn to the actual content of interest:

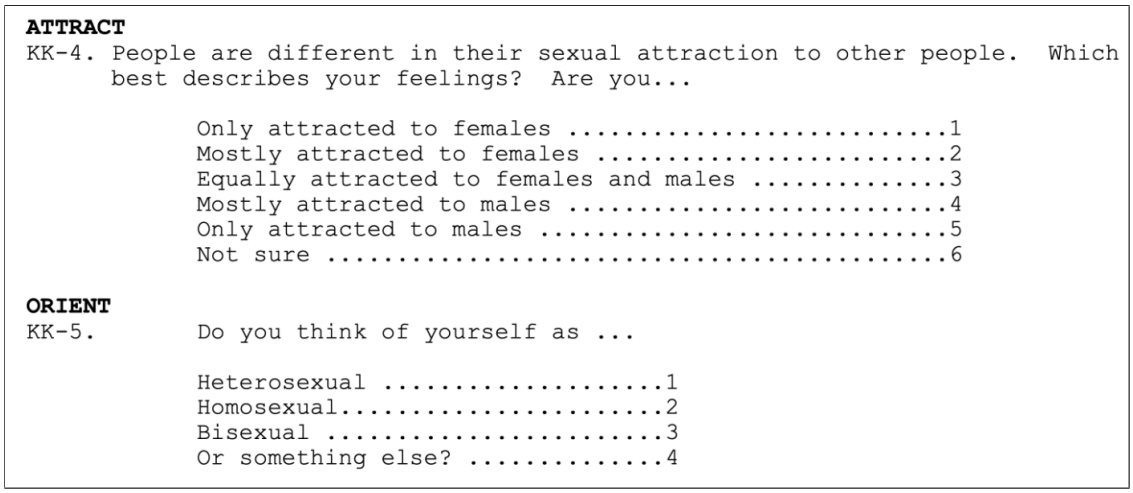
> "Now let's talk about some things that you may have experienced recently in your life. We know that some of our questions are about things that you may not think about or talk about often. These things may be difficult to remember and some are personal. Because this information is very important, please take as much time as you need to read the questions and put your answers into the computer in complete privacy. Your interviewer will never know how you answer and will not ask you any questions about your answers."[5]

This statement prepares the respondent to begin answering sensitive questions, warning them that the content is personal, but very important. This is meant to encourage the respondent to take their time, answer honestly, and rest assured that their answers are private and protected. While this makes good sense from the well-intentioned goal of protecting respondents, we actually do know that asking these sexuality questions in general does not increase attrition or missing data (Badgett 2009). People are generally happier to answer questions about sex than money (Conron et al. 2010). Treating sexuality questions as sensitive is also instructive and performative. It confers the information that the questions are somehow different than the others asked previously (directly with the interviewer), and that it might be expected that the average person would feel and act different toward them.

Sexuality questions are considered "sensitive" by the researchers writing and placing them on the questionnaire, by the officers of the Institutional Review Boards that ensure the safety and protection of human subjects in social science research (by encouraging or mandating that the questions be asked in the ACASI section if that is an option), and by those downstream analyzing the data (these data are typically restricted in the public use files, available only to researchers with institutional affiliation and/or willing to sign use agreements). The responses are occasionally collapsed to protect outliers ("small cell" or "small N" response categories), and verbatim responses are almost never made available.

[5]NSFG Cycle 6 Main Study, Male questionnaire, Section K (KmaleC6CRQ.doc), page 5.

The sexuality questions appear in a section called "Sexual Attraction, Orientation, & Experience with STDs." Respondents are asked several questions about sexual activity, from which is imputed a variable called SAMESEXANY. Next, the attraction question (variable name ATTRACT) is asked, followed by the orientation question (variable name ORIENT). These questions are asked of the full sample, and the question text and response options are the same for everyone (though male and female respondents are given different versions of the questionnaire because some questions do differ). The first version, from 2002, had four response options: heterosexual, homosexual, bisexual, and "something else." This is how the questions appeared the first time they were asked:



ATTRACT
KK-4. People are different in their sexual attraction to other people. Which best describes your feelings? Are you...

Only attracted to females 1
Mostly attracted to females 2
Equally attracted to females and males 3
Mostly attracted to males 4
Only attracted to males 5
Not sure 6

ORIENT
KK-5. Do you think of yourself as ...

Heterosexual 1
Homosexual.....2
Bisexual 3
Or something else? 4

Figure 3.13: NSFG Cycle 6, male questionnaire, sexual attraction and orientation questions.

The attraction question includes another introductory statement: "People are different in their sexual attraction to other people." Attraction is seen as a "feeling" (in other surveys, attraction is not necessarily defined as anything - respondents might simply be asked a version of "who are you attracted to"). This is instructive: attraction is something you *feel*, as opposed to something you *do* (behavior) or something you *are* (orientation). Here, though, orientation is also something cognitive, a way you "think of yourself" rather than something you *are.* This is a rather open and constructionist way of phrasing the orientation question. Taken together, these three NSFG questions measure three individual dimensions of sexuality that can be analyzed separately or together.

Respondents choose whether they are "only," "mostly," or "equally" attracted to males or females.[6] The most common response to the orientation question was "heterosexual." Nearly as many men and women chose "something else" for sexual identity as homosexual and bisexual combined. In other words, the "something else" category was the most popular non-heterosexual response. This statistic aligns with insights from theoretical and qualitative work on sexuality wherein queer folks reject labels, use creative or personal identity labels, or generally find it challenging to check a box to describe their sexuality (Baumle & Compton 2014; Rubin & McClelland 2015). However, it could also have been an artifact of a problem with the question or response options— that is, the labels that were provided, which could be adjusted or fixed. To investigate, there were two major changes made to the subsequent version. The next iteration of the question included a follow-up for anyone who selected this option, asking "When you say "something else," what do you mean? Please type in your answer."

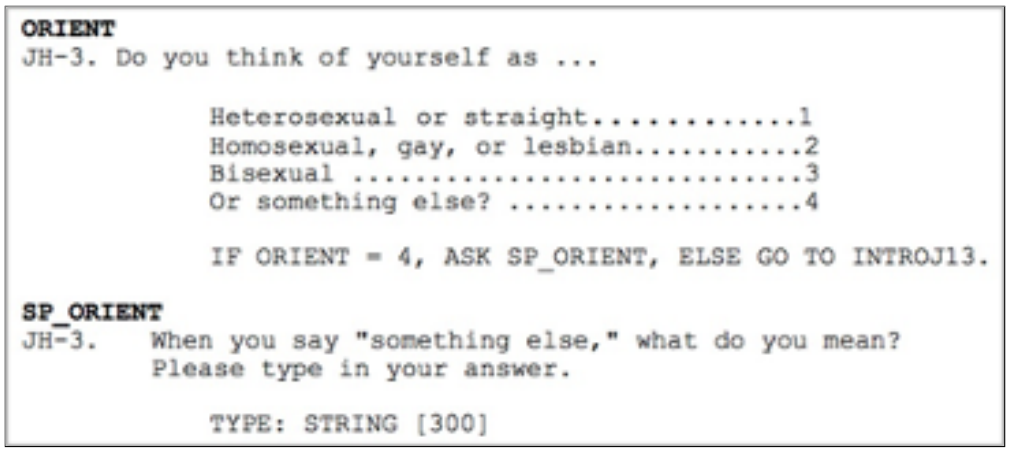


Figure 3.14: NSFG sexuality "something else" option, fill-in-the-blank.

This version also adds the more commonly known vernacular terms into the response options (straight, gay, lesbian) (Chandra et al. 2011: 33). In the National Health Statistics report analyzing the findings and changes (Chandra et al. 2011), it was concluded that "the changes made to the sexual identity question between the 2002 NSFG and the 2006–2008 NSFG appear to have had a significant impact on the percentages reporting "something

[6]Not, notably, "men or women."

else" as well as on the percentages who "did not report" sexual identity. The majority of reduction in "something else" reporting since the 2002 NSFG is attributable to the addition of several commonly known terms to the heterosexual and homosexual response categories for the 2006–2008 NSFG."

Researchers "back-coded" the "something else" verbatim responses into the first three categories whenever possible. This process is described in the report: "The verbatim text they typed in was reviewed by NSFG staff and coded, where possible and unambiguous, into the preexisting categories" (33) and "This back-coding was done conservatively, only editing responses that used words expressly contained in the provided response categories [...] or responses that directly stated the respondent's sexual preference [...]" (34). "A few" of the verbatim responses that were not able to be back-coded contained only blank spaces ("presumably to get past the question") and "the remainder gave ambiguous or unrelated comments that could not be used to code sexual identity" (34). The work of understanding and back-coding the composition of these "something else" responses is summarized in a table in the published *National Health Statistics Report* (see below).

Both the unweighted number and the weighted percentage of respondents choosing "something else" was higher for women than for men. I consider this particularly notable given that women ostensibly had an additional label to choose from (lesbian) in the original response options. Yet, more women either struggled or refused to identify with one of the existing response options. Women are also more likely to identify as bisexual. Does this reflect something about women's sexuality, or with women's engagement with questions about their sexuality? We do not know the answer to this question. We could learn more by adding qualitative investigation to the work of back-coding. What we might learn from that qualitative work would inform both the practice of asking questions and cleaning the data, and the theories we form based on that data.

Ultimately, it was determined that this back coding did not significantly alter the findings, and for this reason in combination with "the survey costs associated with the

Table I. Sexual identity reported as "something else" among women and men aged 18–44 years: United States, 2002 and 2006–2008

NSFG sexual identity variable	Women			Men		
	Unweighted number	Change from original reporting	Weighted percentage	Unweighted number	Change from original reporting	Weighted percentage
2002 NSFG sexual identity variable						
Original reports of "something else"[1]	294	...	3.8	175	...	3.9
2006–2008 NSFG sexual identity variable						
Original reports of "something else"	87	...	1.0	39	...	0.7
Remaining "something else" after coding of verbatim responses[2]	50	...	0.6	19	...	0.2
Original sexual identity variable (before back-coding):						
Heterosexual or straight	6,023	...	92.8	4,997	...	95.0
Homosexual, gay (or lesbian)	93	...	1.0	132	...	1.6
Bisexual	274	...	3.5	69	...	1.1
Something else.	87	...	1.0	39	...	0.6
Not ascertained	28	...	0.8	27	...	0.5
Refused	44	...	0.6	47	...	1.0
Don't know	20	...	0.4	12	...	0.3
Sexual identity variable after back-coding:						
Heterosexual or straight	6,043	20	92.9	5,007	+10	95.2
Homosexual, gay (or lesbian)	97	4	1.1	138	+6	1.7
Bisexual	274	0	3.5	69	0	1.1
Something else.	50	-37	0.6	19	-20	0.2
Not ascertained	28	0	0.8	27	0	0.5
Refused	44	0	0.6	47	0	1.0
Don't know	33	13	0.5	16	+4	0.3

... Category not applicable.
[1]No follow-up question was included for "something else" responses in the 2002 NSFG.
[2]The difference between the original reports and those remaining "something else" consisted of 37 women aged 18–44 and 20 men aged 18–44 who gave information in their verbatim responses that could be used to classify them in one of the preexisting response categories (i.e., back-coding).
NOTE: NSFG is National Survey of Family Growth.
SOURCE: CDC/NCHS, National Survey of Family Growth, 2002 and 2006–2008.

Figure 3.15: Summary of NSFG back coding of "something else" response option between 2002 and 2006–2008 surveys (Chandra et al. 2011, page 33).

follow-up question," the "something else" was deleted altogether. The current version of the question does not include it. In this final version, respondents must choose between these three options, or refuse to answer. This is the version of the question that is still asked today.

```
ORIENT
JH-3. Do you think of yourself as ...

            Heterosexual or straight.............1
            Homosexual, gay, or lesbian...........2
            Bisexual .............................3
```

Figure 3.16: NSFG current sexual identity question, from 2006–2010 questionnaire.

On the one hand, the technical reports about the data are incredibly detailed and illuminating. On the other hand, there is arguably a great degree of "black boxing" the actual processes behind the many tabulations presented. Researchers' decisions and actions

are linguistically presented in a way that obscures the actor ("responses were back-coded") and verbatim responses exemplifying these decisions are cherry-picked—who made these decisions, how, and why? "NSFG staff," to be sure—but were they also members of these categories they were constructing? Why were actual respondents not consulted—as they are in cognitive interviewing, pre-testing, or focus groups? This might reflect how straightforward and unambiguous these back-coded "something else" responses were deemed to be, and the relative significance of the problem presented by so few people. Does it matter? This human element is obscured, and the reader (and end user of the data) has no way of judging for themselves. This is a limitation that renders these data invalid to some non-demographer sexualities scholars (an idea explored in my interviews and presented in my analysis of survey identity measures).

This evolution and erasure of the "something else" response option over time exemplifies some of the norms and challenges in survey research, including: the desire to have mutually exclusive categories, collapsing infrequently occurring responses, the reluctance to invite participants to write in their answer, and the black-boxing of processes to clean and order the data. These practices push against contemporary sexualities theory challenging such neatly-bounded models of sexuality. This matters to some researchers more than others. Some might be quite satisfied after reading the national health statistics reports and user guides that they accept what has been done and analyze and publish from the data meant for the end user. Others might maintain so many questions and objections that they simply refrain from using survey data like these at all. Such different judgments reinforce quantitative/qualitative divides among sexualities scholars. This shows how the culture of demography pushes against making knowledge in the respondents' own terms. It also shows how respondents refused the researchers' categories.

3.4 Producing Sexuality Knowledge: What Is New?

After surveying the surveys—both through the historical and institutional contexts, and my original content analysis—what do we learn? That is, what is the sexuality knowledge that is produced? How is the way we ask about sexuality in surveys constructing the way we know sexuality? In this, I will describe three kinds of specific sexuality knowledge produced through demographic measurement: new *types*, new *theory*, and new *research paradigms*.

New Types: MSM, "Not Straight," and "Bud Sex," Oh My!

Our contemporary demographic sexuality knowledge has led to *new types*: ways of being classified as a sexual type and the resultant (sometimes resistant) sexual subjectivities. These types form analytic categories for researchers as well as identities for individuals and groups.

By allowing the measurement of separate dimensions of sexuality (behavior, attraction, identity), we are able to construct a range of types that emphasize one dimension over another or allow for mismatch and different interplay between the dimensions. An older type produced by population science is the identification on the Kinsey scale, wherein someone could say, "I'm a Kinsey 5" and be understood as falling in a specific place on his particular quantified continuum of sexual attraction and behavior.

Perhaps the best known and most frequently used contemporary example is MSM: public health literatures that focus on sexual risk behaviors write about MSM ("men who have sex with men") as a type of person that can be identified, surveilled, and intervened upon. (For a critical genealogy of these terms see Boellstorff 2011.) MSM is probably the best known example, but other labels and terminology has developed. Named categories based on mismatch between the behavior and identity dimensions of sexual orientation include "not gay" (Ward 2015) and—a term I have used in my research and roundly criticized by Jaime Grant—"non-heterosexual" (Ela & Budnick 2017; Savin-Williams & Vrangalova 2013). The latter is used both as an umbrella term and as a specific type with measurable differences in comparison to other groups. These types can refer to classifications of people or behaviors.

Other examples include "bud sex" (Silva 2017; Silva & Whaley 2018) and "dude sex" (2008), both describing same-sex behavior among white men who do not identify as anything other than straight (class identity and geographical region being major distinguishing factors in these identifications), and "mostly straight" (Thompson & Morgan 2008).

Another important "type" that population science has helped substantiate and produce is sexual orientation as a legal classification. In my analysis of Supreme Court marriage equality cases (detailed in the following chapter), I found demographic topics to be frequently discussed (by both sides) in several debates. First was the technical issue of whether gay people constituted a *class* for the sake of legal definition (having standing to bring suit on behalf of a large group sharing common qualities). In arguing that sexual orientation *is* a class, marriage proponents' cross-examinations of several experts challenged whether people can be categorized based on their sexual orientation. Herek, Meyer, and Badgett responded that "*sexual orientation encompasses behavior, identity and attraction and that most people are able to answer questions about their sexual orientation without formal training.* According to the experts, researchers may focus on one element of sexual orientation depending on the purpose of the research and sexual orientation is not a difficult concept for researchers to apply[7]" [emphasis added]. The same amicus brief was cited by the opposing side, though different conclusions were drawn:

> "sexual orientation" is not a distinguishing characteristic that defines a discrete and insular group. According to the American Psychological Association, sexual orientation [citation] does not refer to a particular characteristic" at all, but rather to "an enduring pattern of emotional, romantic, and/or sexual attractions to men, women, or both sexes." There is "no consensus among scientists" as to why someone develops a particular orientation, nor a consensus as to whether orientation is determined by "genetic, hormonal, developmental, social, [or] cultural influences." And sexual orientation "ranges along a continuum" and is "defined in terms of relationships with others."[8]

Each of these points is addressed in the merit briefs and proceedings. Survey research

[7](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 213: 1473 – 214: 465)

[8](Obergefell 4. Merit Briefs\Brief for Richard Snyder, Governor of State of Michigan, et al: 64: 1447 – 65: 931)

is explicitly cited as determinative expertise. Here, the argument that sexual orientation should be considered a classification rests on the evidence that "most people are able to answer questions about their sexual orientation without formal training." Specifically, they are referring to survey questions on the three dimensions of behavior, identity, and attraction. The "without formal training" refers to the fact that the people answering questions are research participants answering survey questions.

In discussing whether sexual orientation is a "distinguishing characteristic that defines gay and lesbian individuals as a discrete group," there is a reference to the Badgett report: "Badgett: DIX1108 The Williams Institute, Best Practices for Asking Questions about Sexual Orientation on Surveys (Nov. 2009), includes a discussion about methods for conducting surveys; it does not conflict with the substantial evidence demonstrating that sexual orientation is a distinguishing characteristic that defines gay and lesbian individuals as a discrete group."[9] Here again, the observation that survey respondents can answer questions about different dimensions of their sexual orientation is used to support the argument that sexual orientation should be considered a legal classification. In another example, a specific study by social demographers of sexuality is cited: "[Citing Herek:] *Most social science and behavioral research has assessed sexual orientation in terms of attraction, behavior or identity, or some combination thereof.*); [citation] [Citing Herek:] *The Laumann study* [citation] shows that 90 percent of people in Laumann's sample were consistently heterosexual in their behavior, identity and attraction, and a core group of one to two percent of the sample was consistently lesbian, gay or bisexual in their behavior, identity and attraction.)[10]" [emphasis added] The Laumann study is the NHSLS survey discussed previously in this chapter, and a population count (statistic from the NHSLS) of the "core group" who was "consistently lesbian, gay or bisexual" in all three dimensions measured is cited.

The classification arguments often connected biology claims with population claims.

[9](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 281: 136 – 281: 549)

[10](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 279: 262 – 279: 699)

For example: "Because of their sexual orientation—a characteristic with which they were born and which they cannot change—Plaintiffs and hundreds of thousands of gay men and lesbians in California and across the country are being excluded from one of life's most precious relationships.[11]" Here, sexual orientation is referred to as a characteristic you are "born" with and "cannot change" and there are "hundreds of thousands" of people thusly discriminated against. The "hundreds of thousands" of people can be seen as a group because of the shared characteristic they are "born" with. The biology and population count frames support each other.

New Theory: Fluidity and Change Over Time

Our contemporary sexuality knowledge that comes out of population measurement has led to *new theory*: ways of knowing sexualities that have crystallized and been formalized into our working conceptualizations of sexuality. Demographic sexuality knowledge has also lent support to existing theories developed out of qualitative research. For example, the theory of "sexual fluidity"—that sexual attraction and behavior, and especially sexual identification, can change throughout one's lifetime in ways that are complex and context-dependent, and not necessarily indicative of denial or a passing phase (Diamond 2008)—relies on the ability to observe change over time or flexible mismatch between identity, behavior, and attraction. These observations based in the data build theory about the situated and context-depended nature of sexualities. Importantly, work on sexual fluidity has focused almost entirely on young women (Diamond 2008; Silva & Whaley 2018). When the survey data do suggest fluidity among young men, it flies in the face of common knowledge to an extent that it is easier to explain it away instead of reshaping our theory.

Analysis of Add Health data on sexual fluidity illustrates of how common sense ideas about the world get inflected in our scientific theories: when higher-than-expected levels of same-sex attraction and fluctuation over time were found among young women, it lent support to conceptualizing them as having a heightened capacity for "sexual fluidity." But

[11](Perry 4. Merit Briefs\Hollingsworth – Brief for Kristin M Perry, Sandra B Stier, Paul: 62: 1013 – 62: 1310)

when unexpectedly high rates of same-sex attraction were found among adolescent boys (albeit still a small number), it spurned a debate in the journal *Archives of Sexual Behavior* as to whether the survey participants were being mischievous "jokesters" and "pranksters:" playing around and not taking the study seriously (a masculine research subjectivity version of "boys will be boys") (Katz-Wise et al. 2015; Li et al. 2014; Savin-Williams & Joyner 2014; see also Cimpian & Timmer 2020 for an overview). Data on change over time and mismatch between dimensions of sexuality became integral parts in how we conceptualize young women's sexuality, supporting the now widely used theory of sexual fluidity. Add Health provided statistics substantiating this theory among girls. But when a similar pattern (suggesting fluidity) is found among boys—surprising us, rather than supporting the gender stereotypes underlying theories of sexual flexibility—it was assumed to be a data problem. Researchers believed the surprising data to be fabricated and in need of "cleaning"—this conclusion itself reified gender stereotypes about young masculinity. It was not suggested that the boys did not understand the questions or categories, and it was not suggested that the data be used to introduce a theory of male sexual fluidity. Regardless of what the truth is about what the data on the boys sexual change over time means, this is an example of not letting the data speak for themselves, and how data gets cleaned to help the findings match common-sense ideas of sexuality.

New Research Paradigms: Concordance/Discordance, SOGI, and the Making of a Population at Risk

Finally, our contemporary *scientia sexualis* of population knowledge has also led to new *research paradigms.* The ways we ask questions and collect data about sexuality have contributed to the establishment of normative ways of investigating sexuality, complete with its own disciplinary language, assumptions, agenda, and growing body of work. Another way of describing these normative disciplinary methods of investigation is as a cohesive established research program, perhaps even *paradigm.* The three research paradigms I found are: concordance/discordance, SOGI, and population at risk.

I am using *paradigm* here to mean the "universally recognized scientific achievements that, for a time, provide model problems and solutions for a community of practitioners," including the kinds of questions that can be asked and how they are typically asked, and how processes of theorizing, hypothesizing, experimenting, and analyzing are to be conducted (Kuhn 1962). The research paradigm of concordance/discordance comes out of psychology and focuses on how the dimensions of sexual behavior, attraction, and identity match (or not). This relies on the separate measurement of these dimensions, which is both how we see sexuality being measured in the surveys I examine that do ask these questions as well as the recommended best practice (explored in the next subsection). This research program could not exist if surveys only asked about one of the dimensions of sexuality or routinely combined constructs into a single question.

The research paradigm of concordance/discordance *can* look for and measure difference between these dimensions, because the data enables it, which inspires new research about those differences. This leads to a cycle where how we conceptualize sexuality (e.g., as having different dimensions that may or may not match) gets substantiated in the data, which is collected and analyzed that way because of this conceptualization. And so the cycle continues and a new research paradigm grows and strengthens. This research program finds discordance to be related to a range of worse mental and physical health outcomes and concordance to be associated with better wellbeing, acceptance, and intelligibility from others (Savin-Williams & Vrangalova 2013). The normative practices of separately measuring behavior, attraction, and identity have also allowed literatures emphasizing one dimension over another (or certain combinations) to flourish. Subsequently, we know more about some aspects of sexuality in certain populations than others. For example, sexual identity as but one dimension has been more thoroughly investigated among white privileged women, commonly acknowledged as a limitation of sexual identity theory and scholarship (Acosta 2013; Allison & Risman 2014).

The particular form of existing measurement as well as the consensus positions for

what data we need have coalesced into SOGI: the umbrella term for collecting data from everybody about their sexual orientation and gender identity. As Kellan Baker described earlier, this framing (that everybody has these measurable characteristics) shifts the attention from sexual minorities and LGBTQ categories. Just over ten years ago, the SMART report outlining best practices for measuring sexual orientation did not use the term SOGI. The more recent convening in 2016 to evaluate this measurement in federal surveys argues for SOGI to be the established consensus term going forward (and these reports extensively cite the SMART report, which draws a line directly between the early and later recommendations). SOGI measurement is now a definable research program.

Finally, the norms of how we measure non-heterosexualities and the justifications for doing so rely predominantly on health and risk, with the explicit goals of understanding disparities and addressing inequities. This is the language set forth in the Institute of Medicine report, the decennial Healthy People goals, and most recently the official designation of sexual and gender minorities as a "population at risk" for research purposes by the National Institute of Minority Health (Pérez-Stable 2016).

LGBTQ health has been called "a new frontier" as recently as 2013 (Kapadia & Landers 2013), with institutional calls for attention coming from the highest level—the Institute of Medicine and the United States Department of Health and Human Services—only within the last decade (IOM 2011; USDHHS 2010, 2020). These institutional calls recognize that there is not enough data (USDHHS 2010, 2020), and that we need to examine the kinds of data that we have (FIWG 2016a; SGMRO 2018), though enough time has passed that we have some health-specific historical accounts of measurement development (Miller 1995; Laumann et al. 1994b) and recommendations for measurement best practices (Badgett 2009; FIWG 2016b,c; SGMRO 2018; RWJ 2010). Some efforts are focused on the medical field, such as the addition of SOGI questions to electronic health records (Viveiros 2015). All of this attention is because we have established that LGBTQ people experience a range of health disparities. Among adults and adolescents, there is evidence for higher substance

use (Corliss et al. 2010), and mental health issues such as anxiety and depression (Cochran, Sullivan, & Mays 2003; Saewyc 2011; Matthews et al. 2014). Young people experience bullying issues in school (Coker, Austin, & Schuster 2010), and problems with coming out to hostile parents are associated with homelessness (Corliss et al. 2011).

Among women, there are reproductive health disparities (Zaritsky & Dibble 2010). This area extends out of demographic surveillance of population growth, fertility, and family, and today also involves critical reflection of how to measure and conceptualize one of its key constructs, unintended pregnancy (Adler 1992; Petersen & Moos 1997; Santelli 2003). Lesbian and bisexual teenagers were found to have higher rates of unintended pregnancy than their straight peers (Saewyc et al. 2004), which led to research investigating why this might be, focusing on contraception use, access, and education (Charlton et al. 2013; Ela & Budnick 2017). The sexuality of older adults is largely ignored in general (Durso 2017; Eliason et al. 2016), but recently got the spotlight due to removal of questions from a federal survey (Greenlee 2017; Morabia 2017).

All of these disparities further vary according to sexual identity: those with "mono"-sexualities (gay, straight) generally doing better than bisexuals and other queer, "non-hetero," or "something else" categories (Eliason et al. 2016; Fredriksen-Goldsen et al. 2010; Savin-Williams & Vrangalova 2013). In particular, the latter are less likely to disclose sexuality in clinical settings (Durso & Meyer 2013; Makadon 2011; Meckler et al. 2006; St. Pierre 2012). (We also know that all of these disparities further vary by gender identity and presentation, but I am limiting my review to findings specific to sexual orientation.)

This focus on health is an intentional overemphasis, some argue, in response to a pervasively sex-negative culture, including within academia where most types of sex research is considered "dirty work" (Irvine 2014, 2018; Jones 2019). The "sexual health" frame works to *sanitize* and *legitimize* research on sex (Epstein 2006; Epstein & Mamo 2017). Within the health fields, there has been recent guidance on how to frame all of these findings (Klugman 2014; Lee et al. 2017), and critical perspectives on how the health disparities frame constructs

sexual identities (Boellstorff 2011; Holt 2013; Waidzunas 2012; Young & Meyer 2005) and problems (French 2014).

Of course, population measurement alone did not lead to these new types, theories, or research paradigms. Many forces came together, a common thread being the legitimizing and sanitizing frame of health for sexualities research (Epstein & Mamo 2017). What I am arguing (based on what I found in the way sexuality is measured and conceptualized in population surveys and my reading of the secondary literatures) is that this particular *scientia sexualis* of population science—of demographic sexuality knowledge—has enabled and supported the ways we have come to know sexuality in the world.

3.5 Best Practices

A desire for guidance and standardization around measurement has emerged. This follows the establishment that this data collection is important to address a range of inequities, the demonstration that it is possible and frequently advantageous to add these measures to many population surveys, and the rising attention and activism around issues of data collection. Who are the stakeholders that want best practices? Who emerges as the experts to guide these efforts, what do they propose doing, and where do these recommendations end up going? These are the questions that I will address in the last section of this chapter. I will begin by introducing the voices of the stakeholders (both from published professional documents and from my interviews), outline and contextualize the official recommendations, and conclude by considering the frontiers of the best practices—what is left to do, and who are the vanguards calling for more?

What are the recommended SOGI items, and where do they come from? Who is proposing them, and where do they end up? The answer is it all goes back to the SMART (Sexual Minority Assessment Research Team) report, based on the findings over a period of five years from a panel of experts, funded by the Ford Foundation beginning in 2003.

The Williams Institute, a leading authority on LGBT data formerly run by demog-

rapher Gary Gates, recommends that surveys include questions on three dimensions of sexuality: identity, behavior, and attraction. Why is this their recommendation, and how did this come to be? The idea that sexuality has these three major dimensions predates survey measurement and exists in historical and contemporary sexuality theory.

Stakeholders

What individuals, groups, and institutions are invested in the measurement of sexualities? How might who is (and is not) included here shape the goals, agendas, and actions of these actors? The landscape of stakeholders has expanded, diversified, and moved into the mainstream. Prior to the gay liberation movement of the 1960s, critical attention to sexualities was paid by psychologists (certainly, for better and for worse). This broadened to include other social scientific disciplines as sexuality became a topic in social demography and public health. The major stakeholders in the contemporary American sociopolitical landscape in the calls for data on LGBTQ sexualities span the fields of medicine and public health, economics and employment, education, and discrimination and crime.

The Institute of Medicine (2011) published a 367-page report called *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. This was based on the work of the Committee on LGBT Health Issues and Research Gaps and Opportunities, part of the Board on the Health of Select Populations. This document followed a 1999 report, *Lesbian Health*, which was the first IOM report focusing on a sexual minority population. Things have come a long way since then, and the 2011 report has been critical in supporting efforts to target Affordable Care Act and benefits enrollment to LGBT people and their families, expand policy coverage for gender affirming treatment, and include SOGI questions as standard measures on electronic health records. The USDHHS's decennial Healthy People goals establish consensus priorities for improving health and monitoring national progress in data collection, research, and evaluation. The Healthy People 2020 goals include LGBTQ health for the first time (though the topic was extensively reviewed but not included a decade previous). More recently among these health

field advances, the NIH officially designated sexual and gender minorities as a "health disparities population" for research purposes (NIMHHD 2016). Other stakeholders include those experts tracking discrimination in the workplace (hiring, retention, promotion, earnings and pay gaps, work environment, etc.). These issues help track wealth and income gaps that are intersectional with race and gender. There are stakeholders in education as well, who want to address bullying, representation and visibility in the curriculum, facilities and access issues (such as bathrooms), and access to higher education. In all of these instances, population science and SOGI data would help these stakeholders reach their specific aims.

Another stakeholder is the potential respondent. To summarize his position, Randall Sell told me a story that concluded with him declaring, "It's ethical—as a matter of dignity and respect for the individuals—that you ask that question." In this story, Sell fondly recalls the serendipitous results of a field test of a sexual orientation question. "If we could go back to another story I love to tell. I'd been working with an organization that wanted to do a survey where we were going to be asking some sensitive stuff including sexual orientation. And they had a telephone survey firm that they used and the survey firm said we won't ask that question. This was around 2000 and 2001. And they said, 'we won't ask, we can't ask that, we have never done it and we are not going to.'" Eventually it was decided that they would do a phone test to see how the sexual orientation question was received:

> They were sure that it was going to be this disaster [...] So they called, and the first person they get on the phone is someone in Texas, the mythical state, and they ask the person their sexual orientation and the person stops and answers and says they are gay. It's the first person and the person stops and says, 'I'm so glad you asked me that.' It was like what are the odds. [...] It was just sheer luck, you can imagine. And it was someone from Texas, and they said thank you. I thought it really is this dignity of allowing someone to be visible. [...] I've served on IRBs [Institutional Review Boards] and I understand this real importance and desire to protect subjects. But there's this danger of harming. You are causing more danger by not allowing people to identify.

In this example, the researcher and advocate for SOGI data got lucky with the first respondent proving his point that asking does sincerely matter to some research subjects. Why would it be challenging to convince survey administrators, such as the operations

organization that Sell describes above, to add these measures? Aside from the scientific challenges of changing survey instruments, field testing, and knowing what to ask, Sell says there is a simple human explanation: "And with LGBT stuff, they are just so afraid they are going to say—even the most political caring public health people—they don't know what to say about transgender or gay. They are just afraid they are going to offend someone so it's just easier to just not do anything. Even if they understand it's important." The purposes of the best practices reports and recommendations is to break down precisely this challenge, to provide basic guidelines for everyone who cares. But not everyone does care at the outset, and many in the political sphere (where publicly funded research gets attention, for better or for worse) need convincing.

One reason to use SOGI instead of LGBTQ is to get broader buy-in, as Kellan Baker describes:

> Because what we want is for these questions to be asked of everyone. So it has been more important in advocacy when trying to talk to people [...] about the fact that sexual orientation and gender identity are integral parts of every person's identity, whether or not they think about them every day and whether or not they're stigmatized or related to discrimination in some way. Talking to policy makers and saying, for example, data collection on the demographic portion of the health insurance marketplace application, we were very careful to say, this is not LGBT data, this is sexual orientation and gender identity - SOGI - data.

The broad buy-in Baker needs is from straight people. By foregrounding the fact that everyone has a sexual orientation and gender identity, regardless of whether they think about it everyday, makes the question relevant for all survey participants instead of a minority of LGBTQ-identified respondents. Straight people are the imagined respondent in another way: question design needs to accommodate their potential lack of familiarity with terminology and concepts. As Baker described, this was something that "gets frequently overlooked in the work that we do":

> When you're talking about large, general population surveys or things like electronic medical records, which is another area where this comes up a lot, you are not really catering to the needs of the, what, three to six percent of the population, whatever it is, that is LGBT-identified. What you're doing is trying not to confuse the heterosexual,

> cisgendered people, because all you need is a handful of them to erroneously say that they are bisexual, or lesbian, or whatever, and they will screw up all of your data.

It was precisely this kind of erroneous mistakes in the data that led to an inflated estimate of same-sex unmarried spouses in the 1990 Census that led to a lot of the contemporary interest in agreeing on a defensible scientific population count of same-sex households.

There are tradeoffs in asking sensitive questions anywhere, but those tradeoffs become easy to imagine and deeply personal when considering the clinical encounter. Baker is an advocate for collecting SOGI data in electronic health records and says he does not see this as a tradeoff worth making: "I really don't love that purported trade-off between privacy and protection from discrimination and data collection, because we all know perfectly well that nobody's waiting for LGBT people to check a box on an electronic health record, for example, before discriminating against them." He acknowledges that those who can pass may avoid overt discrimination, "But for the most part, it's going to come up. Especially for trans people. There's going to be something that outs you." And for those people, "What documenting it in your record gets you is the ability to complain, the ability to say, 'I experienced discrimination that was related to somebody's looking at my medical record and seeing that I am queer, or trans, or bi, or whatever, and treating me that [way] was as a result.'" Concern for the patient is a common argument against having SOGI measures in electronic health records (St. Pierre 2012), but Baker disagrees that collecting the data is the problem: "having gender identity information in records does not introduce new vulnerabilities, and it introduces two benefits [linking you to nondiscrimination regulations and helping people access health care]. We are living in this moment when anything and everything about us can and will be used against us, and the more we try to push aspects of our identity to the side in hopes that we can avoid things by going unnoticed, I think the weaker that makes our opportunities to fight back when we are being denied rights or being discriminated against because of gender identity or sexual orientation." In other words, the resulting data that is being collected can be used as a catalyst for change and progress.

Stigma and discrimination already exist; collecting the data simply unveils it and makes opportunities to use it in a positive and empowering way.

Survey respondents share this sentiment, according to Jaime Grant. Transgender respondents answering her survey were ready and willing to answer many personal questions because the stakes for them were so high: "I think that's why the study was so powerful—the U.S. Study—because the moment that we were in, we knew from the trans people in our lives and in the room that the outrage about nobody really knowing what the fuck was going on in their lives and the gauntlet of discrimination that they were facing—people were ready to answer seventy questions." Grant's reflection does not undermine the recommendation to only ask explicitly relevant questions or the norm to keep surveys as short and efficient as possible, but it further reflects the higher stakes and transformative potential of data collection for underrepresented populations.

Official Recommendations

The most frequently cited recommendations that came up across my research (discussed in the media and referenced throughout the court cases) were those written by the UCLA Williams Institute: "Best Practices for Asking Questions about Sexual Orientation on Surveys" (they also have a companion report on surveying trans populations and asking questions about gender, but I focus on sexual orientation). This report presents five years of findings from a Ford Foundation funded team made up of economists, psychologists, political scientists, and epidemiologists known as SMART (the Sexual Minority Assessment Research Team). The very first sentence of the report intends to get broad buy-in and foregrounds why this data collection is good for everyone, including heterosexual people: "In 2003 the Ford Foundation began funding a multi-year project that sought to increase the quantity and quality of data on gay, lesbian, and bisexual people, and, by extension, on heterosexual people." In a similar discursive frame, SMART says that this data collection is "necessary for scientific, practical and policy purposes" and "possible [...] without sacrificing data integrity or respondent retention" (3). This similarly skirts around explicit language about

equity and inclusion, favoring neutral scientific justifications. This does not really pack the same punch as later "data activism" would go on to do - including from the same Williams Institute later on, which they became nationally known for during the marriage cases. They do explicitly recognize that "high quality scientific data" contributes to "discussions of civil rights," among other spheres of influence (Badgett 2009: *i*).

What does the SMART report recommend? In regards to the organization of the survey as a whole, the report recommends that these questions appear separately from marital status and household rosters, but that those sections also be sensitive to the changing legal and social forms of families, and include response options that accurately reflect everyone. SMART recommends that questions appear in a self-administered portion of the survey, be that on a handwritten or a computer-assisted survey mode, and that interviewers be trained to respond to questions about these measures and clarify what and why they are being asked. Questions should be tailored and located in a way that meets the objectives of that survey. If the study aims guide what is being asked, this may mean it would be too much of a burden on respondents to include multiple measures. For example, public health surveys interested in HIV-related or reproductive behaviors are advised to include questions about same-sex sexual behavior, and other surveys are advised to include a sexual orientation identity question in the standard demographics section. SMART recommends including questions for behavior, identity, and attraction "for surveys with a strong reason to include multiple measures of sexual orientation" and where they can be included in a self-administered section.

This goes along with what Kellan Baker and Kristen Miller discussed in our interviews in terms of clearly communicating the relevance of the questions and topics to the study participants so they are not perceived as being intrusive into people's private lives. Question placement can also do some work to illustrate why they are being asked in the first place. Miller told me that in her work she has to consider "the ethical issue of collecting data that you cannot use." Baker justified the same perspective on two grounds: first, questions

should be asked everywhere as long as they are tailored and relevant ("I think that this information should be collected everywhere. [...] The distinction ... is between different types of questions. For me, it's about thinking about what is the goal? Why am I collecting this information?") and second, questions shouldn't ask respondents to fill in the blank if researchers cannot meaningfully use all the individual responses: "here I'm a dinosaur, I'm really not in favor of fill-in-the-blanks. Because, first of all, it is unethical to collect data that you are going to be unable to use." This also gets at some important underlying issues of what to do with outlier responses.

In the NTDS, Jaime Grant was struck by the identity label data she and her team collected: "we had 6,500 valid responses, 840 people wrote in their genders, and they gave us 500 distinct terms for their genders." (Grant gave me a printout list of these responses after our interview.) Of these, Grant emphasized not wanting to lose the particular respondents who refused the existing categories and took the time to write in their own:

> People who don't fit in the box. We live in a society that regulates us by box, so it is a justice issue, it's a freedom of expression issue. For me as a researcher, I don't want to create another box, and I also don't want to lose those people. [...] What the government says and what many people will say is when you put all these things [write-in responses] in, you dilute your data, or you chase off the people who get just frustrated with all this. But it's not true. You're much more likely to chase off the people who are really in the crosshairs of the shit you're trying to deal with. And that is definitely what we found.

Having worked on the same study, Baker agrees with who these renegades and rebels on the survey might be: "It might be these people who are pushing it that far and turning it inside out who might be the most discriminated against or oppressed. Those are the last people that we want to delete: our friends." [...] What is the solution? If resources allowed, Baker sees a "both/and" approach: Baker describes some serious tensions here: "I do think there's a lot that can be learned from write-ins. I think that is one of the ways in which our understanding of non-binary identities of genderqueer or queer as a sexual orientation, how all of that has evolved is people writing that stuff in on surveys. [...] Going forward, in my opinion, the way to reflect the diversity and evolution of terminology within our

communities is not to simply have a free-for-all where people are giving information that we can't use." Finally, he suggests "also building in some backend ability to include them within the categories of analysis that makes statistical sense." This is precisely what is being done in some more experimental environments, such as in social media profile options, though the "statistical sense" that is made of the individual answers serves a marketing purpose: everyone is collapsed back into the categories that allow the algorithm to correctly advertise news and products to the platform's users (Bivens 2015).

The SMART report recommends no lead-in to the questions, saying it can "highlight and stigmatize the question" because lead-ins "send the message that this is a sensitive question, or a question that may cause discomfort" (14). Of course, the recommendation to place these questions in the sensitive self-administered section could conceivably do the same thing, thus these two recommendations may work against each other. Similarly, they recommend that care should be taken to not place these questions immediately after questions about sexual violence, yet advice about including it near topics related to the same outcomes or other sensitive questions might prove challenging for the same reason. Note that the recommended item (which, again, replicates the NSFG question) does include a neutral lead-in statement "People are different in their sexual attraction to other people." This is an example of the constraints of implementing carefully theorized recommendations in practice. Here, the priority of replicating previously tested and widely used measures contradicts the recommendation against having any sort of lead-in statement.

The time interval of the question should also be guided by the general study aims. The SMART report cautions that if a lifetime measure of sexual behavior is used, it "captures some respondents who *only experiment* with same-sex sexuality in their adolescent years and go on to engage only in different-sex sexual activity as adults and/or to identify as heterosexual" (10) [emphasis added]. This caution reifies the stereotype of who exactly is experimenting, and what early discordance is in the first place (that it is indeed experimenting or a phase and not something else). This is partly responsible for the problematic

legacy of Kinsey's 10%: his actual measure was a behavior measure with a specified time interval that began in adolescence (age 16) and covered the life course ("have you ever. . . "), but the number that circulated stood in for a population count emphasizing people's current identities ("10% gay") (Kinsey 1948).

What questions does the SMART recommend asking? The self-identification question reads: "Do you consider yourself to be:" with the response options "Heterosexual or straight," "Gay or lesbian," and "Bisexual." The sexual behavior question reads: "In the past (time period e.g. year) who have you had sex with?" with the response options "Men only," "Women only," "both men and women," and "I have not had sex." The sexual attraction question reads: "People are different in their sexual attraction to other people. Which best describes your feelings? Are you:" with the response options "Only attracted to females," "Mostly attracted to females," "Equally attracted to females and males," "Mostly attracted to males," "Only attracted to males," and "Not sure." These items, as they appear in the report, are pictured below.

A thorough treatment of measuring gender is outside the scope of my discussion here, although the measurement of the SO and the GI of SOGI are of course bound up with one another. In the published recommendations (pictured above), there is some language use about sex and gender that should be noted. The SMART report contains no explicit discussion of the use of gender terms: woman and men versus female and male. The SMART report includes both in the recommended items and other acceptable items that use both. They use "men and women" for the recommended behavior question, without giving a definition of "sex." They use "females and males" for the sexual attraction item. They recommend this item because it is what was used in the NSFG. This shows how important the early and influential versions are for setting the stage of what gets asked long term. Deviating from what has been done before has costs and there is a higher bar for doing deviating or changing.

Regarding asking questions about sexual behavior, the SMART report says that "the

- *Self-identification: how one identifies one's sexual orientation (gay, lesbian, bisexual, or heterosexual)*

  Recommended Item: Do you consider yourself to be:
  a) Heterosexual or straight;
  b) Gay or lesbian; or
  c) Bisexual?

- *Sexual behavior: the sex of sex partners (i.e. individuals of the same sex, different sex, or both sexes).*

  Recommended Item: In the past (time period e.g. year) who have you had sex with?
  a) Men only,
  b) Women only,
  c) Both men and women,
  d) I have not had sex

- *Sexual attraction: the sex or gender of individuals that someone feels attracted to.*

  Recommended Item:
  People are different in their sexual attraction to other people. Which best describes your feelings? Are you:
  a) Only attracted to females?
  b) Mostly attracted to females?
  c) Equally attracted to females and males?
  d) Mostly attracted to males?
  e) Only attracted to males?
  f) Not sure?

Figure 3.17: Best practices for measuring three dimensions of sexual orientation outlined in the SMART 2009 report.

general consensus is not to define 'sex,' but to allow respondents to use their own definition" (9). They recognize that respondents would bring a wide range of personal definitions which could result in problems, but "providing a definition is more likely to confuse than help a respondent" (9). The exception is in surveys about specific sexual risk behaviors. This recommendation to *not* provide definitions is the opposite of what I learned from my previous qualitative interviews with research participants and much of what is being recommended by sexualities scholars (see Ford and England 2015; Budnick 2016). Lack of definitions has resulted in some respondents appearing "at risk" in the data when they actually may not be (for example, if a lesbian reports that she is having unprotected sex but wants

to avoid pregnancy; see Appendix B). This is not a neutral consequence. This further stigmatizes certain people and sexual practices that are conceptualized as "discordant" when this problem could be addressed at the stage of data collection (by providing respondents with definitions) and/or the analysis stage (by flagging this as a major limitation).

Also regarding the analysis stage, SMART cautions that "Researchers should never assume that respondents who choose 'I don't know' or 'something else' as an option in a sexual orientation question are gay, lesbian, or bisexual. Most surveys demonstrate that these individuals appear to be primarily heterosexual in terms of attraction and behavior. They may be selecting the 'something else' type of option because they do not understand the question, an outcome that is likely a product of other demographic characteristics including age, language ability, and education level." (39) This is indeed what we can see research scientists doing in their analysis, both of the raw data and in the interpretations that they publish about the study (for example, the National Health Statistics Report on the sexuality data in the NSFG—though the extent to which these intersectional identities might be part of what leads and allows respondents to refuse the interviewers' categories is undertheorized).

I asked Baker his perspective on the SMART reports and he answered:

> I think they hit an appropriate sweet spot between the two. There's no way you can have a document that describes every possible question for every possible scenario. And there's no reason that we would want extreme standardization across all types of data collection trends and all types of fields. The purpose of those two reports is to provide some guidance, some hand rails for the people who are going to go there anyway and to enrich the discussion about, "what do we really mean by SOGI data or LGBT data? How do we think about the different constructs that are involved and how do we think about the different ways in which we can ask for this information." The audience of the reports are study administrators who want to add these measures and need help with where to start, and journalists who need help interpreting findings based on the data that is already out there.

Notably, the now widely-used term "SOGI" does not appear in the earlier SMART report (which was published in 2009). Since then, a new group has been convened to write three related reports and uses both SOGI and SGM (sexual and gender minority) as the normative terms. This first sentence includes a footnote stating they will use SGM instead

of LGBT because "we believe that SGM is more inclusive as it would include persons not specifically referenced by LGBT such as genderqueer, among others" (FIWG 2016a: 3). The first page also includes definitions of sex and gender. The Federal Interagency Working Group on Improving Measurement of Sexual Orientation and Gender Identity in Federal Surveys published three reports on the state of SOGI measurement as of 2016, with a focus on federal surveillance instruments. The first report was on the current state of measurement, the second report evaluated these measures in depth, and the third report proposed a future research agenda based on interviews with federal survey directors and agency sponsors. The FIWG reports draw heavily on and extensively cite the SMART report throughout.

Frontiers

The third and final report in the series proposes future research and practical directions based both on their evaluations of the federal surveys and original interviews. The first priorities are: (1) terminology used in questions and response options about gender identity, (2) proxy reporting (such as collecting household information from one respondent about the others in the household), and (3) translation of SOGI concepts and questions into other languages, especially Spanish, and consideration of translation into other national or cultural contexts. These point the way to what the frontiers of measurement might be.

The development of standards matter, and because of the common value and practice of replicating existing field-tested measures, the *first* versions matter. Survey instruments frequently copy and adapt from each other. This is an epistemological value and strategy. Methodologists initially put a lot of effort (time, money, expertise, testing) into developing as valid a measure as possible, and then replicating it so that comparisons can be made across studies, subgroups, time, and place. For example, this can be seen in how the FIWG reports shows the relationship between the NSFG question (the focus of my above section "Evolution of a Question") and all the federal surveys that came later: "In 2002, NSFG featured different response options (that is, heterosexual, homosexual, bisexual, something else). NSFG has used the current response options starting in 2006. HCPS and NIS are

variants on the NSFG question format. NSDUH has a modified response option, listing the most common response option first. It does not include a "something else" option. In 2013 PATH used the NSFG question (Do you think of yourself as) with modified NHIS follow-up. In 2014–2015, PATH moved to the single NSFG question format without the modified NHIS follow up question. The YRBSS uses a unique question format (that is, "which of the following best describes you?")" (FIWG 2016a, footnote 8 on page 6). This footnote contains important history and context to how we ended up with the common question we currently use across so many federal surveys.

Surveys that are not funded and administered through the federal government can have more leeway to be experimental and ask new questions. This is what we saw happen with the NHSLS (Laumann) study. The questions about sexuality that did not strike conservative critics as being narrowly tied to AIDS became a national hot button issue, and ultimately the NHSLS lost federal funding and proceeded with their wider ranging questions using private funding from foundations (Laumann et al. 1994b). Studies like the Online College Social Life Survey (Armstrong et al. 2012) similarly wrote a range of innovative new questions on sexuality from which a wealth of new sexuality knowledge has been produced by sociologists. Unfortunately, studies with this level of freedom are typically fielded in specific subgroups, such as college student populations. This ultimately limits the extent to which we can generalize our sexuality knowledge. This is a frequently cited limitation in studies analyzing data from surveys like the OCSLS and is widely recognized as something the field of sexualities studies is trying to address.

There is experimental research on new and alternative ways to measure sexuality. Some of these studies field test and compare questions (Grzanka 2016; Magliozzi et al. 2016) while others analyze outlier data collapsed in study reports (Westbrook & Saperstein 2015) and still others seek to deeply understand the interpretative meaning of questions through cognitive interviewing and other qualitative methods (McClelland 2016, 2017; Rubin & McClelland 2015).

A recurrent theme in my stakeholder interviews in discussions of best practices and the frontiers of measurement centered on the importance and significance of language, especially when used to describe identity. In Official Recommendations, above, I discuss Jaime Grant's and Kellan Baker's sense that even the most extreme outliers written into open-ended questions could be meaningful, even be the most discriminated of our "friends" that we are so invested in recruiting and retaining in research. There are comparatively minor language concessions that could be made on surveys that would still be intelligible to the survey population as a whole: "I do prefer the terms that resonate better with the folks in the sample who have traditionally been undercounted or marginalized or not seen themselves on surveys. And so I would prefer to see, for example, 'different-sex' [instead of 'opposite-sex']."

The language used signals to respondents who the survey is for. Grant is critical of how this happens in federal surveys: "But certainly what the government doesn't think about is that the language and how you construct the question is either a welcome [...] and gets people invested, and says, 'I belong in this study.' [...] Or, it's a marginalizer, it's a pusher, an other-er." This radical inclusion was a top priority on the NTDS: "I think the things that we did really well were create an extravagant welcome. We created a series of questions that in the first few questions you could see yourself in. [...] We decided on a big tent. That was a fight, you know. In the beginning, people were like[...] if we open it up to the gender-queers or the androgynous people, the broader [identities outside of 'transgender']... it's going to dilute the data." Grant was emphatic that this is not generally true and it was not what they found in her study.

These are personal and political positions on language that Grant holds far beyond the narrower confines of the NTDS: "Yes, let's redo everything. I couldn't redo everything because I'm working with people who are working on the hill [in Washington D.C.] and we want their stuff to translate. But we could redo a lot of things that are typical of dehumanizing trans people. It's like, don't use the de-humanizers' language. For folks in sociology and other disciplines, this is your work. Don't freaking use the common language

that your discipline uses that is shitty." Here, Grant is speaking directly to me and others like me in academia: "I think you should feel like you can live by your language every day [. . .] academia doesn't love me, I don't love academia. I've been in and out partly because of these reasons. I've never been more interested in getting tenure than serving my community. I would never make a compromise in that way." We specifically discussed the term "non-heterosexual" (a word that appears in the title of an article I published in *Demography*), and her recollection of how painful the compromise was to use "gender rebels" instead of "gender fuckers" (as her respondents did) in the title of an article on NTDS data published in the *LGBTQ Public Policy Journal at the Harvard Kennedy School*. For Grant, soliciting and respecting the words individuals use to identify themselves on surveys transcends debates about scientific method and academic posturing. I conclude this section on the frontiers of best practices with her words:

> One of the things about the answers to question three [the gender identity question] in the study is it's one of the most important places of resistance and passion and creativity and resilience in the study. The terms people are using to name themselves—I don't use 'label', it's not a label for them, it's an identity—it's about community, it's about asserting that even though I have an impossible gender, I'm going to fucking take up space. It's fantastic. The genders and the—I mean it's like the sublime place in the study.

3.6 Research History and the RDSL Study

My own research history and path to this project exemplify how individual actors matter in science and how a look at how the sausage is made can illuminate the knowledge that is produced through a study. For me and for this project, that story begins with my joining the Relationship Dynamics and Social Life (RDSL) study[12] at the University of Michigan, under Principle Investigator Jennifer Barber (longtime mentor for my mixed methods and demographic research). The RDSL is an innovative NICHD-funded longitudinal study that followed 1,000 young women starting when they were 18 and 19 years old

[12]For an introduction to the RDSL study, see Barber et al. 2011; for a recent paper that captures my contributions to the project, see Barber et al. 2018.

for two-and-a-half years. The women were randomly selected from the population and invited, first, to complete a longer baseline survey interview and then, second, to enroll in a short weekly survey that collected real-time information on their relationships, sexual and contraceptive practices, and attitudes toward pregnancy. If a participant experienced an unintended pregnancy (defined by their own reports of pregnancy intention in the weeks leading up to their pregnancy), they were invited to participate in an in-depth in-person interview.

In the first years the RDSL study was in the field, beginning in 2008, my job was to participate in and later supervise the small team that worked daily to collect these weekly surveys (making reminder calls, sending reminder and thank you packets, writing annual updates on the study results) and complete much of the daily administrative tasks related to retention (processing incentive payments, answering questions). Later, I became the main person doing the qualitative interviews about the unintended pregnancies. The RDSL PI, co-PI, project director, and postdoctoral fellows all did at least one of these interviews with me and Barber helped train me in how to do these interviews in the specific context of the ongoing fertility survey study. This was a thorough and excellent education in how a federally-funded mixed-methods demographic study operated on a daily basis.

Over the study period, the RDSL collected cross-sectional data on new and expanded topics than what appeared in the recurring journal questionnaires. These new topics ranged from poverty and financial life, healthcare, ideas about success, personality traits, and more. The second of the three supplemental surveys included new questions on sexual behavior, identity, and attraction. How did they get there? What was asked, and why? What did we learn? How was this new sexuality knowledge utilized as the RDSL study went on? These are the questions that I address by including my personal research story. How does my research history contribute to the larger project of the demography of non-heterosexualities? This is the question that I move to in the rest of this chapter, beginning with broader historical context of population science on sexualities.

As a research assistant for several years, I brought my own interest in LGBTQ sexualities to the project. This was met with encouragement and curiosity from the research team, particularly when I began to keep track of a trickle of comments, questions, and complaints from respondents that pertained to their sexuality. One of my job responsibilities was to keep track of these communications from participants and come up with standardized ways of dealing with them, all of which I documented. Most of these communications involved minor issues related to incentive payments and mailing addresses, though many offered clarifications or context for their responses to that week's survey. Some of these communications that fell into the latter category were about being lesbian or bisexual, or having a same-gender partner. I wanted to know more. Barber and the RDSL leadership were supportive.

I set about preparing to write new survey questions that would identify these non-heterosexual participants for the first time. These questions would appear on a one-time supplement and would provide our first look at sexual identity and same-gender relationships in the study. Just as my interviewees Randall Sell and Kristen Miller describe, it matters who the individuals are on the teams responsible for collecting population data. All three of us identify as members of the queer community and recognize that our personal curiosity and commitments were the spark that initiated conversations on these new data collection efforts. It matters who is in the room.

Writing new questions was a big responsibility, and despite being fresh out of college without much direct experience, I took it seriously. I collected methods sections of books and theses that described writing new questions. As Miller would describe in great detail, field testing and refining new questions was critical, but I had one shot to get it right. The safest thing to do would be replicate questions that had already been tested and approved. I started with the questions asked in the National Longitudinal Survey of Adolescent to Adult Health (Add Health), because they were also asked recently and of a youth population. But there were things I wanted to change in these questions, and I adapted the language and response

options drawing on my background in Women's Studies and my own small qualitative thesis study that found the exact young women we wanted to identify might prefer no labels or very open labels not captured in the given response options. This wasn't going to be a fill-in-the-blank question, there would be time for elaboration later via qualitative interviews. For this one shot, I wanted to cast a wide net and be able to sort people later. I wanted to find everyone who identified as something other than straight and had any same-gender sexual or romantic experience or attraction. This set of new questions, from the codebook with response frequencies, appears below.

H1 **Sexuality Introduction**	These next questions are about your sexuality.			
S2_H2	Have you ever had physical or emotional contact, such as kissing, dating, spending time together, sex, or other activities with a woman?			
Sexual Behavior	1	Yes	166	28.14
	2	No	414	70.17
	.		10	1.69
S2_H3	When I think about who I am romantically and sexually attracted to, it is:			
Sexual Attraction	1	Always women	13	2.20
	2	Usually women, but sometimes men	7	1.19
	3	A person's gender isn't really important when it comes to who I'm attracted to	22	3.73
	4	Usually men, but sometimes women	89	15.08
	5	Always men	448	75.93
	.		11	1.86
S2_H4	Please choose the description that best fits how you think about yourself:			
Sexual Identity	1	Lesbian, gay, or queer	13	2.20
	2	Bisexual	35	5.93
	3	Straight	485	82.20
	4	I don't label myself in this way	48	8.14
	.		9	1.53

Figure 3.18: New RDSL questions about non-heterosexual behavior, attraction, and identity.

Like my Add Health exemplar, I prefaced the section with a neutral introduction statement. Appearing on a new page where all the sexuality questions appeared together, so that a respondent could see the context and go back to their answers if necessary, read, "These next questions are about your sexuality." The behavior question read: "Have you

ever had physical or emotional contact, such as kissing, dating, spending time together, sex, or other activities with a woman?" The response options were "yes" and "no." I wanted to replicate the same open and wide-ranging examples of sexual and romantic experiences described in the standard RDSL question. My only modification was adding "... with a woman" to the end of the question. Did this accurately capture same-gender sexual and romantic experiences, or was it too broad? First, I argued that if the question was phrased broadly when collecting information on presumably heterosexual relationships, then it could be equally broad when collecting information on explicitly marked same-gender relationships. Second, this was indeed born out later in my qualitative interviews. None of the women I interviewed had been confused or mistakenly answered "yes." The RDSL team was surprised to learn 28% of the sample answered "yes." However, as I will explore later in this chapter, this number aligns with findings in the National Survey of Family Growth (NSFG) that reported lifetime prevalence of any same-gender sex by age group. Young women always reported the highest prevalence of same-gender behavior, attraction, and bisexual identification.

The attraction question read: "When I think about who I am romantically and sexually attracted to, it is:" and the response options were: "Always women," "usually women, but sometimes men," "A person's gender isn't really important when it comes to who I'm attracted to," "Usually men, but sometimes women," and "Always men." My innovation was trying to capture label-rejecting folks represented in the sexualities literature on queer youth, but I did so at the expense of including an additional bisexual option. Qualitative research suggests that bisexual identified people typically do not experience their sexual attractions as a stable fifty-fifty split, and I wanted to somehow capture this space of fluidity. I was surprised to find fewer than 4% of respondents chose this option, though over 15% chose the "Usually men, but sometimes women."

The identity question read: "Please choose the description that best fits how you think about yourself:" and the response options were: "Lesbian, gay, or queer," "Bisexual,"

"Straight," and "I don't label myself in this way." My rationale for the latter option was the same as described above: I wanted to capture the label-rejection, openness, and fluidity described in the sexualities literature and in my own previous interviews with queer college women. As the NSFG found in its first attempt at collecting this data (described later in this chapter), the most common non-heterosexual response option was the most open of the options. I wanted to know more about the women who chose this answer: were they more like gay respondents, or more like straight ones? Later, I was able to interview enough to determine these were not mistaken answers, but the answer was more complicated.

This experience and the resulting data sparked new research questions: How do non-heterosexual women experience their ongoing participation in a fertility study? How can their insights and critical engagement help researchers interpret the knowledge produced by the study, and shape future research to advance the demography of sexuality? To begin answering these questions (now a working paper),[13] I collected diverse data from the RDSL: longitudinal survey data (from the ongoing journal), one-time measures (presented in the image above[14]), responses from open-ended survey items, records of comments, questions, and complaints from study participants (sent to the study team and collected in my capacity as the study's research technician), and qualitative interviews. I conducted in-depth interviews with 35 RDSL participants recruited based on their responses to the RDSL sexuality questions (above). In these interviews, I asked participants to fill out a selection of the most commonly repeating measures in the longitudinal RDSL survey and recorded our conversation about how they interpreted the questions and came up with their responses.[15] These diverse data were added throughout the study period, complement each other, and

[13]Budnick, Jamie. "'This Survey Did Not Define It As Sexual Intercourse': Non–Heterosexual Women's Participation in Fertility Research."

[14]For an analysis of how non-heterosexual women's relationships and contraceptive behavior differed from their heterosexual peers', which provides insight into the former's higher rates of unintended pregnancy, see: Ela, Elizabeth J., and Jamie Budnick. 2017. "Non–Heterosexuality, Relationships, and Young Women's Contraceptive Behavior." *Demography* 54(3):887–909.

[15]These qualitative interviews were mostly about sexual identity, with an analytical focus on young mothers. See: Budnick, Jamie. 2016. "'Straight Girls Kissing'? Understanding Same–Gender Sexuality beyond the Elite College Campus." *Gender & Society* 30(5):745–68.

together contribute a rich perspective on the sub-sample of non-heterosexual young women participating in a longitudinal fertility survey.

These reflections on my research history provide a genealogy of the sexuality knowledge gained from the RDSL study. As originally developed, RDSL could not produce knowledge about non-heterosexuality (sex/gender identification was not asked because it was built into the backend sampling frame, and the sex/gender of the partner was not asked about because the key question on "sexual intercourse" did provide a definition, and my qualitative interviews confirmed that this question largely did not erroneously collect same-gender sex, as intended). After my intervention, RDSL was capable—indeed, generative—for producing knowledge on non-heterosexualities. The form that knowledge took was shaped by the specific questions I wrote, which, following the extant questions and norms, conceptualized sexuality in a particular way. I believe that this is a necessary context and an important contribution is supported by the STS and feminist epistemology literatures (see Chapter 1), follows other genealogies of specific sexuality statistics (such as Voeller et al.'s 1990 published story of the Kinsey statistics or Laumann et al.'s 1994 article documenting the protracted political battle to secure funding for the NHSLS), and was reinforced by my interview with NHIS sexuality question architect, Kristen Miller. In Appendix B, I take this one step further and show how this research history led to insights about what population scientists can learn from these sexual minority and outlier participants in the context of fertility surveys.

3.7 Conclusion

In this chapter, I analyzed what makes up what I call "demographic sexuality knowledge" by exploring the social facts and theories built from data in quantitative surveys. I started this chapter by telling my own research history story because something that I learned through experience, reading the secondary literature, and my interviews was that it really does matter who is in the room. The presence (or absence) of stakeholders who are driven by personal and professional commitments make the difference in the early additions

of SOGI data. I then provided some general historical context on the surveying of sexuality in American social demography. Next, I looked at the "evolution of a question" (the NSFG sexual identity question, to be specific) to understand the way a question changed over time in response to the participants' answers and other complex interactions between researcher and research subject. I contend that the changes that are observable in questionnaires and codebooks and are explained in user guides illustrates some of the epistemic norms and researcher commitments behind the emergent social facts of sexuality.

In "Surveying the Surveys," I present and analyze survey questionnaires items on sexual identity, attraction, behavior, attitudes, and disclosure along with introductory statements, question order, and other general issues of survey methodology that influence the knowledge produced by the survey. I argue that the knowledge produced is directly connected to the manifest epistemic norms of survey methodology and that examples of this (such as the measurement of three separate dimensions of sexuality) has led to the production of new types of sexual behinds, new theoretical explanations of sexuality, and new paradigms in the research on sexuality. I conclude this chapter with a review and analysis of contemporary best practices for the measurement of SOGI, contrasting the official recommendations that exist with ideas on the frontiers of measurement.

An important takeaway that I want to highlight is how the normative practices of demographic measurement (mutually exclusive pre-defined response options) do not align with contemporary sexualities theory (open, fluid). National health statistics reports and study user guides present the (cleaned) data, which is analyzed and used to publish research by the end users. Usually this is an uncritical process. This reinforces divides among the diverse scholars who produce knowledge about sexualities. Ultimately the examples presented in this chapter show how the epistemic norms (in other words, the culture) of demography can push against making knowledge in the respondents' own terms (through practices like back coding and eliminating fill-in-the-blank options). At the same time, it highlights how respondents might refuse the researchers' categories.

CHAPTER 4

No Differences: Debating Demographic Expertise in the Marriage Equality Cases

In this chapter, I shift from analyzing the production of demographic sexuality knowledge to focus on its circulation and influence. I analyze the appearance and use of demographic sexuality knowledge in three pivotal same-sex marriage cases at the U.S. Supreme Court on the path to federal marriage equality: *Hollingsworth v. Perry* (2013), *United States v. Windsor* (2013), and *Obergefell v. Hodges* (2015). These cases were adjudicating topics like marriage, parenthood, and family on the national stage. Arguments were rhetorically passionate and thoroughly substantiated by the mobilizing of expertise on both sides. Two of the dominant frames of the cases were *responsible procreation* and *optimal parenting*. Both proponents and opponents of same-sex marriage supported their arguments with social demographic research on these topics. Furthermore, arguments extended beyond the substance of this social science to issues of claiming consensus, appropriate evidence, standards of methodology, and what constituted good science. Ultimately, this chapter demonstrates the continued relevance, contested legitimacy, and sociopolitical influence of sexuality knowledge—as well as the high stakes of social science expertise on the national stage.

Prior to 1990, the United States federal government made no effort to collect information on LGBTQ populations. The 1990 decennial Census included the relationship category

"unmarried partner," and for the first time, it was possible to study same-sex couples and their households on a national scale. No information was collected on sexual identification of individuals, but the new data on couples and families sparked the burgeoning field of the demography of (non-hetero)sexualities (Baumle, Compton, & Poston 2009; Baumle 2013; Black et al. 2000; Gates 2011). It is generally recognized that there is more research on the families of lesbians than gay men (Tasker & Patterson 2007), of which some research focuses on the raced and classed dynamics of lesbian couples raising "stepchildren" from former heterosexual relationships (Moore 2011). A huge area of this research, spilling over from developmental psychology to sociology and public health, is whether the children of same-sex parents are as healthy and well-adjusted as other children (Amato & Fowler 2002; Erich et al. 2005; Potter 2012; Rosenfeld 2010; Tasker 2005; Wainright, Russell, & Patterson 2004). The scientific consensus is that indeed they are. Throughout, it is interesting to note that while we might anticipate and understand how the children of same-sex parents could struggle socially because of pervasive homophobia, discrimination, and exclusion from the material protections legal marriage bestowed (Hull 2006), this is not actually what the literature finds. The scholarly consensus is, simply, *no differences*.

Scholars in the consensus position argue that research finding that children of same-sex parents do worse are artifacts of mismeasurement, typically where intact intentional opposite-sex parented families are compared with divorced parents formerly in heterosexual marriages (as in Regnerus 2012a,b). The latter was hugely contentious in the marriage equality cases, both in the broader public sphere and within social science communities (Gates et al. 2012; Manning, Fettro, & Lamidi 2014; Marks 2011; Powell, Quadlin, & Pizmony-Levy 2015; Rosenfeld 2015). The specifics and fallout of this highly publicized debate was on the state of measurement and definition (Cheng & Powell 2015; Schumm 2016; Sullins 2015). Of particular interest to me is the fact that there is some striking research finding *positive* differences among children raised by lesbian parents: that they may do better across the measures of school performance and behavior (Gartrell & Bos 2010; Perrin, Cohen,

& Caren 2013) or that they are more likely to demonstrate diversity in sexual attraction, behavior, and identity (Gartrell et al. 2019). These findings, particularly the former, might get some coverage in the popular media—a quantified version of homonormativity if there ever was one—but were wholly absent from the social science expertise presented at trial.

The emphasis in this chapter on the importance of *demographic* sexuality knowledge in the marriage equality cases follows the established understanding of the centrality of social science where law and policy intersect with sexuality and families (adams & Light 2015; Ball 2014; Biblarz & Stacey 2010; George 2016; Patterson 1994, 1996, 2009a,b). Population science research has focused on how these partners and families make themselves visible on surveys, which can include some innovative analytical techniques to find them, and some targeted efforts to get families to know how to identify themselves when the forms are not built for them (Baumle & Compton 2014). More broadly, there is the sense that survey measurement must adapt to keep pace with Americans' changing family structures and norms (Gates 2013; Hull & Ortyl 2018; Powell et al. 2012).

4.1 Temporal Politics and the Social Science of Sexuality

One major frame of argument that arose in the treatment of social demographic knowledge in the court cases was *temporal politics*. I extend this theoretical frame from its use in analyzing the "browning of America," that is, how demographic trends are popularly imagined and experienced, specifically the demographic projections of an increasingly non-white American population majority (Rodríguez-Muñiz 2015).[1] I use the concept to

[1]Michael Rodríguez-Muñiz's 2015 dissertation establishes the "temporal politics of the future" as a frame for understanding (and politicizing) the "browning of America" (realized and projected demographic statistics on the growing proportion of non-white Americans). His ethnography begins by establishing demographic change as a specific social fact: that non-white Americans would be the population majority in a few decades' time. Rodríguez-Muñiz's project traces how these statistics shape ethnoracial demographic discourse, white anxiety, and how "demographic trends are popularly imagined and experienced." One of the guiding questions of his research is about how statistics shape, foreclose, or make possible certain forms of raced identity and claimsmaking. "Temporal politics of the future" enabled Latino stakeholders to make claims for sociopolitical recognition based on the demographic projections of a Latino future. His ethnography builds off of and specifies the work on the construction of the Hispanic or Latino identity (from a much fuzzier panethnic set) through the intentional work of activists, bureaucrats, and the media. His forthcoming book

similarly analyze how statistics shape, foreclose, or make possible certain forms of identity and claimsmaking. In the marriage equality cases, both sides drew on ideas about time, history, and imagined futures to discursively paint a picture of why marriage mattered. This frame was a prevalent, passionate, and evocative of what demography can unveil: population change over time. Temporal politics are also important in this sociological story because this rhetoric is connected to demands of social science to be able to account for the effects of population change.

The first way temporal politics came up in the marriage equality cases was in what I will refer to as the "great sweep of time" rhetorical style. Here, language is used that emphasizes the universality of marriage across time and place. This is occasionally used to argue in favor of marriage equality by showing how important marriage is to all members of society, including gay couples, but is by far more often used to argue that the institution of (heterosexual) marriage is timeless and should not be changed. Here is a partial list giving the flavor of this rhetorical style [emphasis added throughout]:

- A marriage equality "experiment" would be "such a profound change to this *age-old, civilizing social institution.*"[2]
- Marriage is: "a norm that our society (like all others) has *accepted for centuries.*"[3]
- "This definition has been *with us for millennia.*[4]"
- "definition has *existed since time immemorial*"[5]

based on this research is *Figures of the Future: Latino Civil Rights and the Politics of Demographic Change.* From these ideas, I find it useful to locate the similar nexus of stakeholders for building a discernible LGBTQ or SGM population. Similarly, the social facts of sexuality are established through statistical claimsmaking and demographic knowledge. Therefore, I was open and sensitive to the possibility that there might be a temporal politics of demographic sexuality knowledge as well. Indeed I found this happening in several ways throughout the marriage equality cases.

[2](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 14: 1264 – 15: 75)

[3](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 82: 433 – 82: 1217)

[4](Obergefell 6. Oral Arguments – Argued April 28, 2015\Obergefell oral arguments – question 1: 6: 859 – 8: 195)

[5](Obergefell 4. Merit Briefs\Brief for Richard Snyder, Governor of State of Michigan, et al: 42: 157 – 42: 584)

- "formed the basis of human society for *millennia*, for the Kalahari Bushmen and the Han Chinese, the Carthaginians and the Aztecs."[6]
- "Traditional marriage has been around for *thousands of years. Same-sex marriage is very new.* I think it was first adopted in The Netherlands in 2000. So there isn't a lot of data about its effect. [...] *"newer than cell phones or the Internet"*[7]
- "I thought that I heard the answer to the question being given in respect to *tradition of 2000 years*, and to the democratic ballot box and so forth was quite simple. What I heard was, one, *marriage is fundamental. I mean, certainly that's true for 10,000 years.*"[8]
- "Besides, "ninety years of discrimination" is enough; "*whether such discrimination existed in Babylon* is neither here nor there.""[9]
- "*The record of human history*"[10] is based on the biological basis of marriage.
- Justice Alito: But there have been cultures that did not frown on homosexuality. That is not a universal opinion throughout history and across all cultures. Ancient Greece is an example. It was — it was well accepted within certain bounds. But did they have same-sex marriage in ancient Greece? [...] People like Plato wrote in favor of that, did he not?[11]
- In just eleven years, nineteen States and a conspicuous District, *accounting for nearly forty-five percent of the population*, have exercised their sovereign powers to expand a *definition of marriage that until recently was universally followed going back to the earliest days of human history.*[12]

This language is passionate, evocative, and moving. It is affective as well as effective. At times it is colorful, such as in the mentions of real and imagined ancient civilizations (e.g., Aztecs, Babylon) or the comparisons to new-fangled technology the arbiters would have been born decades before (e.g., cell phones, Internet). This language establishes the emotional (if not historical) stakes of these arguments over marriage.

[6]Roberts dissenting opinion: (Obergefell 7. Decision – Decided June 26, 2015\Obergefell v. Hodges – Opinions – October 2014: 42: 487 – 42: 828)
[7](Perry 6. Arguments – Argued March 26, 2013\Hollingsworth – Oral Arg: 55: 651 – 56: 579)
[8](Obergefell 6. Oral Arguments – Argued April 28, 2015\Obergefell oral arguments – question 1: 42: 191 – 42: 720)
[9](Windsor 4. Merit Briefs\Windsor – Brief on Merits for Edith Schlain Windsor, in Her Cap: 36: 5 – 36: 565)
[10](Perry 4. Merit Briefs\Hollingsworth – Brief for Dennis Hollingsworth, et al: 50: 1198 – 50: 1624)
[11](Obergefell 6. Oral Arguments – Argued April 28, 2015\Obergefell oral arguments – question 1: 14: 415 – 15: 463)
[12](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 115: 761 – 115: 1062)

In the last example above, this great sweep of time rhetorical style is combined with population counts. Throughout this chapter, I present evidence of my finding that population counts shape the arguments, evidence, and outcomes of these cases. One way that happens is by positioning two contrasting statistics or numbers next (in that example, usually population counts) to each other to encourage the reader to come to the author's conclusion. Without requiring explanation of the individual numbers themselves, their comparison does discursive work. Contrasting numbers are used in that same way in these examples of time, thus I consider these next examples a temporal politics of numbers [emphasis added]:

- "That definition has prevailed for *all but 142 days of California's 162 year history*"[13]
- It is the States doing exactly what every State has been doing for *hundreds of years*: defining marriage as they see it. The only thing that has changed is the willingness of many States *over the last eleven years* to expand the definition of marriage to encompass gay couples.[14]

Placing two measures of time against each other emphasizes the difference, expressing awe over the great sweep of time (e.g., hundreds of years, all but a minimal amount of history) and minimizing the recentness of changing social mores (e.g., mere days).

Comparisons are also made between marriage equality for gay couples to interracial marriage. Opponents of both demanded "caution" and to "go slow" before making changes to traditional marriage:

> "It is also worth remembering that the very same "go slow" argument was made against extending rights to African-Americans."[15] In *Windsor* oral arguments, Kaplan (supporting marriage equality) argues that "times can blind": "I think it was based on an understanding that gay – an incorrect understanding that gay couples were fundamentally different than straight couples, an understanding that I don't think exists today and that's the sense I'm using that times can blind. I think there was – we all can

[13](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 32: 842 – 32: 1099)

[14](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 101: 696 – 101: 977)

[15](Windsor 4. Merit Briefs\Windsor – Brief on Merits for Edith Schlain Windsor, in Her Cap: 71: 74 – 71: 1523)

> understand that people have moved on this, and now understand that there is no such distinction."[16]

and

> ""proceed with caution" seems to be the universal mantra of the opponents" and, on Civil Rights, "*If the Court had listened to the argument, we would, of course, still be waiting*," ends quoting Martin Luther King, Jr.'S "Letter from Birmingham Jail" (1963): "For years now I have heard the word "Wait"! ... [But h]uman progress never rolls in on wheels of inevitability ... [and] time itself becomes an ally of the forces of social stagnation."[17] [emphasis added]

These examples also use a highly affective rhetoric (e.g., quoting powerfully from Martin Luther King, Jr.). Similarly, elsewhere Faulkner is quoted: "But to blind yourself to history is both prideful and unwise. "The past is never dead. It's not even past." W. Faulkner, Requiem for a Nun 92 (1951)."[18] Opponents of marriage equality used temporal rhetoric in their argument: "I think it better for California to *hit the pause button* and *await additional information* from the jurisdictions where this experiment is still maturing"[19] [emphasis added]. This example brings together two other important things that are happen throughout the temporal discourse: referring to marriage equality for gay couples as "laboratories of democracy"[20] or "laboratories of experimentation"[21] that had "an interest in *pausing* at 18,000 married same-sex couples to evaluate"[22] the effects [emphasis added]. In other words, "The long-term consequences of this change are not now known and are unlikely

[16](Windsor 6. Oral Argument – Argued March 27, 2013\Windsor – Oral Arg: 105: 1096 – 106: 922)

[17](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 149: 105 – 149: 1557)

[18](Obergefell 7. Decision – Decided June 26, 2015\Obergefell v. Hodges – Opinions – October 2014: 61: 2018 – 62: 163)

[19](Perry 6. Arguments – Argued March 26, 2013\Hollingsworth – Oral Arg: 18: 1188 – 19: 251)

[20]DOMA permitted states to perform their role as "laboratories of democracy," while at the same time ensuring that no one state's experiment would be imposed on other states or on the federal government. (Windsor 4. Merit Briefs\Windsor – Brief on Merits for the Bipartisan Legal Advisory Gro: 48: 99 – 48: 309)

[21]Yet one of the key insights of federalism is that it permits laboratories of experimentation—accent on the plural—allowing one State to innovate one way, another State another, and a third State to assess the trial and error over time. (Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 82: 433 – 82: 1217)

[22](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 130: 113 – 130: 647)

to be ascertainable for some time to come.[23]"

How might the long-term consequences be ascertainable? The rhetorical style of temporal politics connects this to the logics of social science: "part of wait and see, I suppose, is to ascertain whether the social science, the new studies are accurate."[24] The specific social science studies that we might await include demographic sexuality knowledge: "As sociologists have documented, it sometimes takes decades to document the effects of social changes—like the sharp rise in divorce rates following the advent of no-fault divorce—on children and society."[25] But the science is limited in its ability to predict: "At present, no one—including social scientists, philosophers, and historians—can predict with any certainty what the long-term ramifications of widespread acceptance of same-sex marriage will be.[26]" Proponents of marriage equality, drawing on the dominant frames of optimal parenting, bring together this understanding that social science is how we would ascertain change with the social science claim that there is already expert consensus: "It is also noteworthy that additional large scale research on the topic is highly unlikely, as neither the government nor any large university is likely to fund it in light of the over-whelming social science consensus regarding child outcomes.[27]" Proponents also point out that this social science research has not and will not be conducted simply because it is a front for bare bias: "If caution had been the purpose, the *State might have been expected to compare the effect of marriages among same-sex couples with those among heterosexual couples*[28] [emphasis added]. This example further specifies what kind of demographic knowledge is imagined to be able to ascertain the consequences of change (comparing relationship status between sub-groups of people). The evocative use of contrasting numbers also comes up in discussion of the social science (in oral arguments): "there's substance to the point that *sociological information is new*. We

[23](Windsor 7. Decision – Decided June 26, 2013\Windsor – Opinion: 68: 828 – 68: 1216)
[24](Obergefell 6. Oral Arguments – Argued April 28, 2015\Obergefell oral arguments – question 1: 20: 827 – 20: 1300)
[25](Windsor 7. Decision – Decided June 26, 2013\Windsor – Opinion: 68: 1673 – 68: 2011)
[26](Windsor 7. Decision – Decided June 26, 2013\Windsor – Opinion: 69: 363 – 69: 582)
[27](Obergefell 4. Merit Briefs\Brief for April DeBoer, et al: 58: 1086 – 58: 1409)
[28](Obergefell 4. Merit Briefs\Brief for April DeBoer, et al: 56: 658 – 57: 569)

have *five years of information to weigh against 2,000 years of history* or more[29]" [emphasis added]. What could be the consequences of acting on such new sociological research? "The problem – the problem with the case is that you're really asking, particularly *because of the sociological evidence you cite*, for us to go into uncharted waters, and you can play with that metaphor, there's a wonderful destination, it is a cliff[30]." The answer is given just as colorfully (in oral arguments): uncharted waters, or a cliff.

In these examples, temporal politics intersects with discourse on social science methodologies. Both sides take up this intersection. Opponents of marriage equality say sociology cannot predict the future, and we have to wait for the evidence, while proponents say the state could have asked for certain types of research and meanwhile real harm is happening to children and families who are waiting. For example:

> While the State awaits the day when it can rule out "unknowable effects," Petitioners and others like them urgently await legal protections and relief from the indignities the recognition bans impose. *If left to the State's timetable, the "harm and injuries likely would continue for a time measured in years" if not decades.* [Citation] More children in Ohio will be denied protections for their families, more beloved spouses will die denied the final solace and dignity of recognition of their marriages, and more families will *suffer countless daily harms* from relegation to a second-tier status. "[T]he urgency of this issue for same-sex couples" cannot be ignored [citation]; they *should not be required to wait any longer.*[31] [emphasis added]

Major discursive frames of these cases included temporal politics and evaluating social science expertise. Most of these examples use themes of time, waiting, history, and change in arguments over the meaning of marriage.[32] These come together in Roberts' dissenting opinion in the *Obergefell* case:

[29](Perry 6. Arguments – Argued March 26, 2013\Hollingsworth – Oral Arg: 21: 292 – 21: 518)
[30](Perry 6. Arguments – Argued March 26, 2013\Hollingsworth – Oral Arg: 47: 998 – 47: 1294)
[31](Obergefell 4. Merit Briefs\Brief for James Obergefell and Brittani Henry: 68: 1653 – 69: 672)
[32]There is one last way that these themes came up that presents a contrast. In the *Perry* case, a major legal issue under consideration was what to do with the many marriage licenses issued to same-sex couples during a brief window in between the Prop 8 ban being enacted and the staying of the judicial decision to overturn it while the case worked its way up through the state and federal district courts. In this case, the order of events was a substantive legal issue: "The context matters. Withdrawing from a disfavored group the right to obtain a designation with significant societal consequences is different from declining to extend that designation in the first place, regardless of whether the right was withdrawn after a week, a year, or a decade. The action of changing something suggests a more deliberate purpose than does the inaction of leaving it as it is."

> Nowhere is the majority's extravagant conception of judicial supremacy more evident than in its description—and dismissal—of the public debate regarding same-sex marriage. Yes, the majority concedes, on one side are *thousands of years of human history in every society known to have populated the planet.* But on the other side, there has been "extensive litigation," "many thoughtful District Court decisions," "countless studies, papers, books, and other popular and scholarly writings," and "more than 100" amicus briefs in these cases alone. [citation] What would be the point of allowing the democratic process to go on? It is high time for the Court to decide the meaning of marriage, based on five lawyers' "better informed understanding" of "a liberty that remains urgent in our own era." [citation] The answer is surely there in one of those amicus briefs or studies.[33] [emphasis added]

Here, all possible forms of social science expertise are minimized in the face of the great sweep of time.

I now turn to two other major frames of the cases: responsible procreation and optimal parenting.

4.2 Responsible Procreation and Optimal Parenting

The major social science frames of debate in the marriage equality cases focused on children and families. Though the issue at hand was marriage, the immediate implications concerned parenting, adoption, birth certificates, and family structure. When social science specifically was presented or discussed, it coalesced around two areas of inquiry: *responsible procreation* and *optimal parenting.* The social science data, findings, and theories drew heavily on demography (psychology was the other predominant social science expertise present). There are numerous empirical and moral objections to these arguments, as they relate to gay families as well as the legacy of racism. However, in this chapter, I am most interested in the prominence of these frames precisely because they rested on a scholarly foundation of social demography. This is not to say that the specific studies or demographers cited supported the views their research was used to defend. Often, the individuals behind the data did not support these ideas at all. In the marriage equality trials, the same research (definitely the

[33](Obergefell 7. Decision – Decided June 26, 2015\Obergefell v. Hodges – Opinions – October 2014: 64: 336 – 64: 1320)

same field of social demography and at times the exact studies) were used by both sides in the case. The point is not whether the underlying demography intentionally supported or ultimately proved the views of one side or the other. The use and discussion of demographic sexuality knowledge abounds in the merit briefs, oral arguments, expert witness testimony, and judicial opinions of the marriage equality cases I examined. Thus, my interest is examining the success of the frames themselves and the ways in which the bedrock of social demography was responsible for the frames' success.

Responsible procreation is a frame that claims the most important social function of marriage is to get (biological) parents to commit to each other and their family for the sake of their children. The reason that society encourages and rewards marriage, it follows, is to get parents (especially men) to take responsibility for their offspring. Thus, recognizing same-sex unions as marriage "undermines the institutions primary social function because it awards marital status to couples who cannot procreate" (Ball 2014: 37). By recognizing same-sex marriages, the state would be showing that it can issue marriage licenses without explicitly concerning itself with individuals' procreative potential. The responsible procreation frame, therefore, asserts that society must deny same-sex couples the right to marry in order to preserve this link between marriage and procreation (Ball 2014).

This line of argument existed in the earlier context of American welfare reform, when "mother's pensions" benefits were replaced with widow's survival benefits through Social Security (encouraging and rewarding marriage) and Aid to Dependent Children (sidestepping the role of the mother) (Ball 2014: 40–1). These early changes to welfare with the enactment of new entitlement programs were the first among decades of policy interventions and new laws that shifted the public perception of who was a worthy and deserving family. Families living in poverty with a single parent (especially a single Black mother) were blamed by conservatives for their situation through the rising frame of "irresponsible procreation" (Ball 2014: 45). It stands to follow that opponents of marriage equality who drew on this frame would support their arguments with evidence from social demography. Related topics of

research in this area included birth control, cohabitation, divorce, single-parenting, and the impacts all of these had on parents and children.

Optimal parenting (or, as it was occasionally referred to as *optimal environment* or *family optimality*) is a frame that contends that the best family structure for children is one in which a married mother and father are biologically related to their children (Ball 2014). Since, by definition, same-sex couples lack either a man or woman parent and cannot both be biologically related to their children, the argument follows, the state can deny them marriage. "Such a denial, it is argued, encourages the raising of children in the households that are most likely to promote their welfare" (Ball 2014: 69). This frame was grounded explicitly in the scholarship of population-focused sociologists analyzing decades of data from four national surveys (Ball 2014: 69; McLanahan & Sandefur 1994). Opponents of same-sex marriage started supporting their arguments with this research, even before the issue of marriage equality "exploded onto the national scene" (Ball 2014: 69).

The availability and influence of social science on these topics has developed substantially in the last 30 years. When Congress passed the Defense of Marriage Act (DOMA) in 1996, limiting the definition of "marriage" to male/female spouses for all federal purposes, there was no evidence in these areas. Now, when similar issues are up for debate before the same elected bodies, we demand this evidence. Summarizing this development in the case that ultimately struck down the discriminatory DOMA provision, the *Windsor* merit brief states: "[W]hen it passed DOMA, Congress had before it no evidence on the suitability of gay or straight couples as parents, and it made no factual findings that gay couples are inferior parents. To the contrary, *the overwhelming scientific consensus, based on decades of peer-reviewed scientific research*, shows that children raised by gay parents are just as well adjusted as those raised by straight parents[34]" [emphasis added]. This characterization of the literature as "scientific" and as having reached a "consensus" are the major frames in which the research on optimal parenting and responsible procreation are discussed.

[34](Windsor 4. Merit Briefs\Windsor – Brief on Merits for Edith Schlain Windsor, in Her Cap: 60: 664 – 60: 1349)

Finding Differences

There are a few studies that find differences. These break from the consensus position and are discussed throughout this chapter. Studies purporting to find poorer outcomes for kids of gay parents have been explicitly used or tacitly co-opted to defend marriage and adoption bans. Importantly, what we do not see here is the expectation that negative outcomes reflect discrimination and minority stress. In this case, restricting marriage and exacerbating that discrimination would hardly be the logical outcome.

Another type of research to find any differences reports *positive* differences (especially for children raised by lesbian couples). These were not brought in the court cases—after all they unsettle the no differences consensus. Jaime Grant reflects on this with frustration:

> I'm totally sick of having radical projects that are used to normalize. [...] trying to prove lesbian mothers aren't creating monster, difficult, fucked up kids. [Decades of studies have found] these kids are doing amazing. Better! [...] one of the things that it does is it makes it hard for lots of us lesbians who are raising kids inside of complex situations [...] We already know that lesbians experience domestic violence at higher rates than the general population. [...] I mean that's just completely fucked up and I hate how that data has been used.

Grant is criticizing the homonormative way these statistics have been used and is also raising a criticism based on the demographics of intimate partner violence

Some types of positive differences that are not cited are those that might be *threatening* to the more homonormative proponents of marriage equality, not to mention the opponents. For example, some studies analyzing data from the U.S. National Longitudinal Lesbian Family Study report children of lesbian moms do *better* on some measured outcomes like school performance and behavior (Gartrell & Bos 2010) and are more likely to demonstrate diversity in sexual attraction, identity, and expression (Gartrell et al. 2019). Grant's point above and the fact that these types of positive research findings about difference are missing from the record altogether reflects homonormativity (the privileging and transplantation of heterosexual constructs onto LGBTQ identities, relationships, and cultures).

4.3 Methods Education in the Courtroom

How, then, is expertise that supposedly *does* meet the standards of methodology and consensus supposed to survive this level of scrutiny? One way is to discursively foreground how scientific the research, as in the above examples. Another way is to *explicitly educate* the arbiters on what makes good social science so that they share the same evaluative standard. Anticipating the debate surely to follow the accelerated review and publication of specific contentious studies social scientists authoring amicus briefs explicitly invoked lessons on methodology. The APA and ASA write about what makes social science "rigorous," valid, or reliable (such as sample selection/size, representatively, generalizability, peer review, significance, and their field's consensus position). There is a lot of boundary-marking around these issues (such as gratuitously referring to studies as "nationally representative" and describing what constitutes a generalizable theory or replicable finding). These criteria elevate demography as the gold standard of authoritative and objective social science, again—even though sexuality is notoriously difficult to study with these methods, and dedicated sexualities scholars employ methods that are devalued here, such as ethnography, interviews, and other qualitative or comparative historical methods. We see these kinds of explicit attempts to educate on evaluating methodology and professional debates in the amicus briefs by social scientists.

The most prevalent and important type of methods education occurring in the courtroom was the establishment of consensus, or the sowing of doubt to argue that a consensus did not exist among experts on a given topic. If the issue of consensus was sufficiently contentious, it might be reasonable to conclude that robust scientific debate is still occurring over the facts. In these cases, claims to a consensus among experts and in the literature primarily concerned the wellbeing of children. Thus, claims to consensus went right to the heart of the cases. Here is a strong example of statements establishing professional consensus:

> Of particular relevance to this case, in Obergefell this Court analyzed and roundly rejected any claimed government justifications based on a preference for procreation

> or childrearing by heterosexual couples. 962 F. Supp. 2d at 994. This Court further concluded that **the overwhelming scientific consensus, based on decades of peer-reviewed scientific research, shows unequivocally that children raised by same-sex couples are just as well adjusted as those raised by heterosexual couples**.[35] [emphasis in original]

Again and again, the research on the no differences thesis is powerfully presented as consensus: it is the "overwhelming, well-documented social science consensus"[36] based on "an abundance of evidence and research" including "More than thirty years of scholarship resulting in over fifty peer-reviewed empirical reports."[37] Even in the most recent oral arguments, in *Obergefell*, this is raised in the same way: "These issues have been aired repeatedly, and there is, as you all have heard, a social science consensus. . . "[38]

Furthermore, "[t]he research supporting this conclusion is accepted *beyond serious debate* in the field of developmental psychology[39]" [emphasis added]. Studies to the contrary are thus not "serious" and relegated to the fringe perspectives of that professional field. This characterization of studies finding differences between family structures as *fringe* is part of how social science experts attempt to educate the arbiters on their field's *professional consensus* and *standards of social science methodology*.

Again and again, the research on the no differences thesis is powerfully presented as consensus: it is the "overwhelming, well-documented social science consensus"[40] based on "an abundance of evidence and research" including "More than thirty years of scholarship resulting in over fifty peer-reviewed empirical reports."[41] Even in the most recent oral arguments, in *Obergefell*, this is raised in the same way: "These issues have been aired repeatedly,

[35](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 192: 0 – 192: 522)
[36](Obergefell 4. Merit Briefs\Brief for April DeBoer, et al: 34: 261 – 34: 608)
[37](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 256: 1521 – 256: 2108)
[38](Obergefell 6. Oral Arguments – Argued April 28, 2015\Obergefell oral arguments – question 1: 21: 251 – 21: 798)
[39](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 314: 603 – 314: 1062)
[40](Obergefell 4. Merit Briefs\Brief for April DeBoer, et al: 34: 261 – 34: 608)
[41](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 256: 1521 – 256: 2108)

and there is, as you all have heard, a social science consensus. . . "[42]

Furthermore, "[t]he research supporting this conclusion is accepted *beyond serious debate* in the field of developmental psychology[43]" [emphasis added]. Studies to the contrary are thus not "serious" and relegated to the fringe perspectives of that professional field. This characterization of studies finding differences between family structures as *fringe* is part of how social science experts attempt to educate the arbiters on their field's *professional consensus* and *standards of social science methodology.*

The summary of David Brodzinsky's expertise, a key witness and academic and clinical psychologist (supporting marriage equality), emphasizes both qualities:

> The remainder of his testimony was devoted to a *systematic, statistic-based debunking of studies intimating* that children raised in gay or lesbian families, ipso facto, are less well-adjusted than children raised by heterosexual couples. Brodzinsky conceded that marriage brings societal legitimatization and stability to children but noted that he *found no statistically significant differences* in general characteristics or in development between children raised in same-sex households and children raised in opposite-sex households, and that the psychological well-being, educational development, and peer relationships were the same in children raised in gay, lesbian, or heterosexual homes. [. . .] He testified that *those studies presuming to show* that children raised in gay and lesbian families exhibited more adjustment problems and decreased educational achievement were *seriously flawed, simply because they relied on statistics concerning children who had come from families experiencing a prior traumatic breakup* of a failed heterosexual relationship.[44] [emphasis added]

The brief describes how Brodzinsky presented the consensus finding that there are no differences between children raised by same-sex and different sex parents and rejects conflicting studies by describing them as merely "intimating" or "presuming to show" that children of gay parents do worse. Any studies finding something that contradicted this consensus position are not even described as that actually found something different, they rather "presum[ed]" to find it. To defend these conclusions, it is important that Brodzinsky's assessment be upheld as methodologically superior, thus his process is described as

[42](Obergefell 6. Oral Arguments – Argued April 28, 2015\Obergefell oral arguments – question 1: 21: 251 – 21: 798)

[43](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 314: 603 – 314: 1062)

[44](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 125)

"a systematic, statistic-based debunking" and his assessment of their data "found no statistically significant differences." The emphasis on a statistical approach positions the more demographic of the studies to be methodologically and substantively superior. This is contrasted with the presentation of non-demographic evidence. For example, the description of evidence submitted by Michael Rosenfeld, a sociologist at Stanford University, emphasizes the knowledge and methods of social demography: "the *break-up rates of same-sex couples* not living in a state-recognized relationship *approximated the break-up rate of heterosexual couples cohabiting* without marriage. Rosenfeld also *criticized the methodology* of studies advanced by the defendants that disagreed with his conclusions"[45] [emphasis added]. Rosenfeld also includes a logical outcome used rhetorically to demonstrate the theoretical ridiculousness of the opposition's arguments about optimal parenting, based on the raw demographic data: "arguments to the contrary that failed to control for such differences, taken to their extreme, would lead to the conclusion that only high-income individuals of Asian descent who earned advanced degrees and lived in suburban areas should be allowed to marry."[46] This rhetorical point is made stronger with each additional variable that is included (e.g., income, race, degree, region) to make the point that showing whoever comes out on top in multivariate statistical analysis without interpretation or context is a ridiculous way of using demographic evidence.

Brodzinsky is introduced as a professor with a PhD and his work as peer-reviewed. Blankenhorn is described as holding "no degree in sociology, psychology or anthropology despite the importance of those fields to the subjects of marriage, fatherhood and family structure," which he wrote about based on his clinical and community work but had not "been subject to a traditional peer-review process."[47] What follows is a lengthy citation of case precedent about what constitutes appropriate evidence and expertise (citing Federal Rule of Evidence 702). This statement begins by conceding that "formal training in the

[45](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 125)
[46](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 125)
[47](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 236: 986 – 239: 1182)

relevant disciplines and peer-reviewed publications are not dispositive of expertise" and then quotes what "factors are relevant to an expert's reliability," a list that includes "whether [a method] can be (and has been) tested, "whether the [method] has been subjected to peer review and publication," "the known or potential rate of error,""the existence and maintenance of standards controlling the [method's] operation," and a degree of acceptance of the method in relevant communities. These all emphasize the importance of methodology, and specifically the ways in which Blankenhorn's testimony and scholarship does not reach the standards of social science expertise. The conclusion is that "None of Blankenhorn's opinions is reliable."[48] This conclusion is substantiated because "His opinion lacks reliability, as there is simply too great an *analytical gap between the data and the opinion* Blankenhorn proffered"[49] [emphasis added]. Again, methods is emphasized, and what Blankenhorn offers is discursively minimized by referring to it as an "opinion" rather than his "finding" (a word reserved for scientific evidence). Summarizing all of this in the later *Obergefell* certiorari stage documents, these witnesses were rejected on these bases: "Presented with the admitted biases and *methodological shortcomings prevalent in the studie*s performed by the defendant's experts, the district court found those witnesses 'largely unbelievable' and not credible[50]" [emphasis added] and, elsewhere, ultimately "unreliable and entitled to essentially no weight[51]." Experts who do not meet the standards of methodology or consensus are dismissed.

Merchants of Doubt

However, the presence of outlier evidence, even if there were strong attempts to position it as fringe, nonetheless did important work as "merchants of doubt" (Oreskes & Conway 2011). Consider the case of Mark Regnerus's New Family Structures Study (NFSS),

[48](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 236: 986 – 239: 1182)
[49](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 246: 1150 – 246: 1552)
[50](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 127: 133 – 130: 1265)
[51](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 248: 8 – 248: 297)

which purported to find negative outcomes for children of same-sex parents and thus ignited a firestorm of controversy, particularly intense among his professional colleagues and widely covered in the media (see Oppenheimer 2012 for coverage in *The New York Times* that raises the larger scholarly issues). Amicus briefs filed by the American Sociological Association and the American Psychological Association (in the *Obergefell* and *Windsor* cases) disavowed the research as "fringe science" and castigated the author for "flawed" methodology and blatant anti-LGBT bias.

Here is how the study was discussed and contextualized in the *Windsor* merit briefs: "BLAG does not dispute this scientific consensus, although its amici argue that - *one recent study has now created a scientific debate* about the outcomes for children raised by gay and lesbian couples. That study, however, does nothing to disturb the longstanding consensus that children raised by committed gay couples are as well adjusted as children raised by committed straight couples[52]" [emphasis added]. As described, indeed the presence of this one recent study created scientific debate. In evaluating its role in the *Obergefell* merit briefs, it was described thusly: "After a nine-day trial, the district court concluded that the Plaintiffs' experts were credible but that he "was unable to accord the testimony of " any of the State's experts "any significant weight," as they "*clearly represent a fringe viewpoint that is rejected by the vast majority of their colleagues across a variety of social science fields*[53]" [emphasis added]. Though it was a single study, the NFSS had to be reckoned with. Discussion in the *Obergefell* merit briefs summarized the situation:

> Regnerus conceded, moreover, that his own department took the highly unusual step of issuing the following statement on the university website in response to the release of the study: [Dr. Regnerus's opinions] do not reflect the views of the sociology department of the University of Texas at Austin. Nor do they reflect the views of the American Sociological Association which takes the position that the conclusions he draws from his study of gay parenting are fundamentally flawed on conceptual and methodological grounds and that the findings from Dr. Regnerus'[s] work have been cited inappropriately in efforts to diminish the civil rights and legitimacy of LBGTQ

[52](Windsor 4. Merit Briefs\Windsor – Brief on Merits for Edith Schlain Windsor, in Her Cap: 61: 5 – 61: 431)

[53](Obergefell 4. Merit Briefs\Brief for April DeBoer, et al: 29: 108 – 29: 951)

partners and their families.[54]

Nonetheless, the mere existence of this contrary evidence was enough for the arbiters to conclude claims to scholarly consensus were "contradicted." In oral arguments in the *Perry* case, Justice Scalia says:

> Mr. Cooper, let me – let me give you one – one concrete thing. I don't know why you don't mention some concrete things. If you redefine marriage to include same-sex couples, you must – you must permit adoption by same-sex couples, and *there's -there's considerable disagreement among – among sociologists as to what the consequences of raising a child* in a – in a single-sex family, whether that is harmful to the child or not. Some States do not – do not permit adoption by same-sex couples for that reason.[55] [emphasis added]

At a discursive level, it does not seem to matter whether there is a research consensus. It seems that the mere existence of contradictory evidence (no matter its standing or acceptance among peer researchers) is sufficient to claim the question remains unsettled (this comes up in both oral arguments and in the dissenting opinions, presented in this and Chapter 2). In short, the outlier study was stunningly successful in manufacturing doubt.

4.4 Administrative Matters as Biopower

Demographic knowledge formally influences many areas of public life—from the stories we follow on the news, to decisions that impact our work and schools, to the recommendations we follow from public health experts. The primary tool of demography—the quantitative survey—has an influence beyond these: we check boxes identifying aspects about ourselves and our identities on a multitude of forms and questionnaires in everyday life. There are significant personal costs and public consequences of compelled to participate in rendering our lives into data (Bivens 2015; Rubin & McClelland 2015; Meadow 2010). In our interview, Kellan Baker identified administrative data as one of four distinguishable areas the federal government had a stake in and for which SOGI data was relevant:

[54](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 127: 133 – 130: 1265)

[55](Perry 6. Arguments – Argued March 26, 2013\Hollingsworth – Oral Arg: 19: 255 – 19: 803)

> There is, however, a difference between the different types of data that you would want to collect in different areas. So one of the things that I try to focus on in my writing is to break down four different broad areas. This is within health, but it's relatively the same for other fields as well. Four different spheres of data collection. One is research. Another is population surveys... A third is electronic health records and is specific to health. And then a fourth is administrative data.

The others have been discussed in the previous pages of this dissertation. This fourth and last category of administrative data has been hinted at as illustrating the high stakes of collecting appropriate data on SOGI. In my discussion of amicus evidence in Chapter 4, one of the ways that the social science evidence disseminates beyond the final court judgment is through federal regulation and other administrative arenas. This was made explicit in the marriage equality cases. Indeed, the *Windsor* case was fought over a federal regulation (DOMA restricting the definition of "marriage"—which was hugely materially and symbolically consequential). The reaches of DOMA went beyond marriage:

> In addition to variations in marriage eligibility from state to state, the federal government routinely incorporates state-law definitions of other family law terms such as "child" into federal law [citation], and deals with far greater complexities in administering benefits programs that use a functional definition of family or "household" (many of which actually recognize same-sex couples for purposes of determining income eligibility).[56]

DOMA had far-reaching consequences at every level of family life. The banal matters of administrative documentation thus was a site of the enactment of biopower, control over and management of the population.

Administrative matters are a relevant consequence for my story because they depend on demographic knowledge as an informative source of expertise. They also demand classification and categorization, often through surveys, that is reinforced through demographic measurement practices. The shared traits of administrative, legal, and demographic classification are made apparent when one of the plaintiffs from the lower court testify about filling out forms and checking appropriate boxes:

[56](Footnote; Windsor 4. Merit Briefs\Windsor – Brief on Merits for Edith Schlain Windsor, in Her Cap: 66: 969 – 66: 1529)

> [Citing Stier:] It is challenging to fill out forms in doctor's offices that ask whether she is single, married or divorced because "I have to find myself, you know, scratching something out, putting a line through it and saying 'domestic partner' and making sure I explain to folks what that is to make sure that our transaction can go smoothly."); [citation] [Citing Meyer:] For lesbians and gay men, *filling out a form requiring them to designate their marital status can be significant because the form-filler has no box to check.* While correcting a form is a minor event, it is significant for the gay or lesbian person because *the form evokes something much larger for the person – a social disapproval and rejection.* "It's about, I'm gay and I'm not accepted here.").[57] [emphasis added]

In Stier's testimony, the way she categorizes her relationship status on a form has consequences for how smoothly their social interaction will go. In Meyer's testimony, filling out this form is evocative of something much larger. Filling out administrative forms makes opportunities for the classification that leads to discrimination to become manifest:

> What seems to matter is whether the characteristic of the class calls down discrimination when it is manifest. Thus a person of illegitimate birth may keep that status private, and ensure that no outward sign discloses the status in social settings or in the workplace, or on the subway. *But when such a person applies for Social Security benefits on the death of a parent (for example), the illegitimate status becomes manifest. The characteristic is necessarily revealed in order to exercise a legal right.* Similarly, sexual preference is necessarily disclosed when two persons of the same sex apply for a marriage license (as they are legally permitted to do in New York), or when a surviving spouse of a same-sex marriage seeks the benefit of the spousal deduction (as Windsor does here). BLAG argues that a classification based on sexual orientation would be more "amorphous" than discrete. *It may be that the category exceeds the number of persons whose sexual orientation is outwardly "obvious, immutable, or distinguishing,"* [and then concurs with the following excerpt:] ("It is clear that by 'immutability' the [Supreme] Court has never meant strict immutability in the sense that members of the class must be physically unable to change or mask the trait defining their class. People can have operations to change their sex. Aliens can ordinarily become naturalized citizens. The status of illegitimate children can be changed. People can frequently hide their national origin by changing their customs, their names, or their associations. . . . At a minimum, then, the Supreme Court is willing to treat a trait as effectively immutable if changing it would involve great difficulty, such as requiring a major physical change or a traumatic change of identity.").[58] [emphasis added]

In this argument, gay people are deserving of legal protection as a class even though many might not be outwardly distinguishable until filling out these administrative forms.

[57](Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 313: 895 – 314: 261)

[58](Windsor 3. Certiorari Stage Documents – Granted December 7, 201\Windsor – Supplemental Brief of United States: 33: 6 – 35: 899)

It is considered that the number of people who would be outed by their administrative classification would exceed "the number of persons whose sexual orientation is outwardly 'obvious, immutable, or distinguishing'." On this basis, it is argued that the administrative outing is enough to warrant gay people protected status as a class. This illustrates the biopower of the administrative records that use these demographic categories.

A central issue in the marriage equality cases was whether to be "married" meant something materially and symbolically different than other relationship statuses (such as civil unions). All sides agreed there was something elevated and special about marriage (for better and for worse!). Administrative matters ranged from the mundane to the profoundly symbolic. An example of the mundane follows: "Even assuming the state were to have an interest in administrative convenience, Proposition 8 actually *creates an administrative burden* on California because California must maintain a parallel institution for same-sex couples to provide the equivalent rights and benefits afforded to married couples[59] [emphasis added]." Because federal regulation and the taxpaying voters are concerned with the financial bottom line, it does make sense to raise the issue of the costs of maintaining a larger administrative burden to not all same-sex couples access to the same marriage status.

Administrative matters that depended on the formalizing of the classifications wrought by population management included birth, the raising of children, and dignity in death. The final 2015 *Obergefell* case consolidated the concerns of families on all of these issues. One of these concerned Robert Grunn, a gay man and funeral director living in Ohio. He brought suit to force a "declaration of his rights and duties when serving clients with same-sex spouses." Here is the elaboration of his administrative concerns that rose to the level of the Supreme Court:

> One of his responsibilities as a funeral director is to fill out death certificates, including the portion of the *certificate* indicating the deceased's marital status and the name of the surviving spouse. [. . .] He uses Ohio *Department of Health software* to do this, and for deaths that occur in Cincinnati, he delivers the *death certificates* to the office

[59] (Perry 3. Certiorari Stage Documents – Granted December 7, 2012\Hollingsworth – Petition for Certiorari: 362: 482 – 362: 1343)

> of Defendant Camille Jones. [citation] In his experience, *his clients often do not realize the importance of death certificates until he returns certified copies to them.* [citation] Mr. Grunn has multiple married gay or lesbian clients, including Mr. Obergefell, who utilized his services when Mr. Arthur died. [citation] In the future, Mr. Grunn is certain to face the question of how to fill out death certificates for married same-sex couples. [citation] Mr. Grunn intends to record the marital status as "married" and list the surviving spouse of the next married decedent with a same-sex spouse that he serves, but fears that by doing so he may be prosecuted for purposely making a false statement on a death certificate.[60] [emphasis added]

The bureaucratic issues of filling out certificates using state software and recording and filing them appropriately prompts the concern that to list a same-sex partner as a "spouse" could be a crime.

> Three months later, Arthur died. Ohio law does not permit Obergefell to be listed as the surviving spouse on Arthur's death certificate. *By statute, they must remain strangers even in death*, a state-imposed separation Obergefell deems "*hurtful for the rest of time.*""[61] [emphasis added]

There is a tragic and poetic temporal politics to these narratives of how administrative classification impacts individuals and families. *Obergefell*'s administrative concern was recognition and dignity in death. It was birth and childhood for other plaintiffs in one of the lower court cases that was consolidated with *Obergefell*'s:

> April DeBoer and Jayne Rowse now ask whether Michigan may continue to deny them the certainty and stability all mothers desire to protect their children, and *for them and their children the childhood years will pass all too soon.*"[62] [emphasis added]

The example of the birth certificate is instructive in understanding the material and symbolic issues at stake in this administrative form and classification: "For most families, *a child's birth certificate is the badge by which adults exercise their protected rights and responsibilities as parents.* But for families like the Vitale-Talmases, Ohio has made it a badge

[60](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petition for Certiorari: 216: 226 – 216: 1734)

[61](Obergefell 7. Decision – Decided June 26, 2015\Obergefell v. Hodges – Opinions – October 2014: 10: 274 – 10: 703)

[62](Obergefell 7. Decision – Decided June 26, 2015\Obergefell v. Hodges – Opinions – October 2014: 30: 1777 – 31: 332)

of stigma.[63] This is harmful discrimination, not mere internal recordkeeping[64]" [emphasis added].

The issues being decided in the marriage equality cases have material and symbolic implications for family life—from birth, through childhood, to death. These are contrasted sharply with "mere internal recordkeeping."

These administrative uses range from the benign to the symbolic, and came up in my interviews as issues for the *future*. How is the data collected going to be used? This is something that came up in Chapter 3 in the ethics of what questions to ask: researchers should only ask questions about identity and sexuality that are relevant to the objectives of the research, and this should be made clear to the research participants so that it does not seem inappropriately invasive. This came up in my interview with Meghan Maury in discussing the high-profile politicization of possibly adding a citizenship question to the 2020 Census. I asked if stakeholders differentiated between fighting for SOGI and citizenship questions. Maury explained:

> For me the answer is simple. The answer is we've been fighting for these questions for thirty years, and stopping them was politically motivated, in the same way that adding the citizenship question was politically motivated. [...]So I mean folks heard the messaging around the citizenship question, and that it could result in people being deported. They heard the historical throw back to how Census data was used to put Japanese Americans in internment camps. They looked at what this current administration is doing to harm LGBTQ people and said, "Oh, crap. This administration is trying to create a registry of LGBTQ folks. And in some way to harm us." [...] And it was actually really heartening to sit at the table with these national organizations that are doing Census work and hear them all say, "We absolutely understand the difference, and we absolutely are behind, still supporting the inclusion of SOGI." And at the same time fighting against the citizenship question. And there was never any hesitation in the room.

The historical context of what state administrations are collecting these data are crucial to their interpretation. In our interview, Jaime Grant said:

[63](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petitioner's Reply: 13: 71|163 – 13: 386|393)

[64](Obergefell 3. Certiorari Stage Docs – Granted January 16, 2015\Petitioner's Reply: 14: 273|365 – 14: 577|398)

> The Census has never been a very big place of empowerment in communities of color, right? It's always a struggle to get people to fill them out because *nobody trusts how the data is going to be used*, and I was always like, queers fill out your Census forms. [. . .] whenever we do this kind of work we count on not a fascist administration, right?

In Grant's experience doing grassroots activism in hard-to-count communities for the Census, there was distrust and fear about how the data would be used. Maury's examples of how data was used in precisely these feared ways—for Japanese Americans in World War II—affirms Grant's conclusion that to do this work of encouraging data collection among vulnerable populations, there has to be a significant level of trust between the people and the state.

4.5 Conclusion: Love Wins

"No Differences" was an essential frame of argument in the marriage equality cases. It was also a dominant frame in the popular media. Published writing about sexuality during the years in which the marriage equality cases were taking place (including but not limited to press coverage of the court battles) used the concept of no differences to understand same-sex couples and their families and lay out strategies for their acceptance.[65]

[65] My use of the term "acceptance" is intentional. This is the word used in writing about LGBTQ civil rights and social inclusion. While acceptance may be a step up from tolerance in the hierarchy of progress, it is a far cry from equality and equity.

CHAPTER 5

Conclusion: Capabilities and Criticisms of Our Contemporary *Scientia Sexualis*

I have identified demographic sexuality knowledge as a primary way that we have come to know sexuality in the last two decades. Furthermore, I have claimed that population science is our contemporary scientia sexualis. This idea draws on Foucault's argument that the authorized vocabulary of sexuality in Western modernity is framed as scientific (as opposed to ars erotica, which locates sexuality in passion, desire, and poetic expression). He identifies the medicalization of sexuality as a major way that private and public life, family, and the population as a whole are controlled through the late 19th and early 20th century. In refutation of the "repressive hypothesis" (that suggests that sexuality is broadly suppressed and silenced), Foucault locates an explosion of sexuality discourse controlled through the languages of doctors, scientists, and other experts. He traces the genealogy of sexuality discourse from its earlier regulation by the Church, at which time the authorized vocabulary of sex emerged through *confession*. I argue that the modern survey is a form of personal confession made scientific.

In this concluding chapter, I consider the ways in which a scientia sexualis of population science connects with other scientific disciplines that also strive to *know* sexuality, for example the efforts to locate homosexuality in the body (genes, hormones, neuroanatomical structure).

Embodied *Sciencia Sexualis*

The issue of whether gay people constitute a *class* having a shared *distinguishing characteristic* for purposes of legal classification and protection brings together these issues of identifying and categorizing gay people with another major frame where scientific claims are drawn upon: the etiology of sexuality. That is, whether gay people are "born this way."

In the last twenty-five years, there has been increasing acceptance of a biologized and geneticized conceptualization of (homo)sexuality. While biological scientists conduct research searching for the "gene for" homosexuality, the youngest generation of LGBT youth has taken up Lady Gaga's anthem that they are "born this way." This is a striking doubling back to medicalized understandings of non-heterosexualities prevalent in the 19th and early 20th centuries, and highlights still unsettled tensions between "queer theory" and "LGBT studies," and between essentialist and constructionist approaches to identity and science. These debates draw on theory and evidence to advance political and social agendas that are often at odds with one another. I am interested in the discursive frames guiding this (re)emergence of genetic and biological origin theories of (homo)sexuality. Popular discourse about sexuality draws heavily on evidence from psychology in order to make claims about the biological fixedness of sexuality. These claims, in turn, motivate civil rights arguments and broader claims for acceptance and inclusion. These sub-fields of psychology and the biological sciences share a relatively unified understanding of sexuality, which is radically disconnected from queer and social constructionist theories. Research in genetics and neuroendocrinology is interpreted and explained by evolutionary psychologists, leading these scientists to become legitimate experts for explaining sexuality in public and political debates. Beyond the popular discourse, this "born this way" evidence positions psychologists (rather than sociologists) as experts in conceptualizing sexuality.

This renewed interest in locating homosexuality in the (male) body in the last 25 years shares some key features with sexology, psychiatry, and phrenology of the previous two centuries. This most recent research program keeps its hold on the popular imagination to

this day, and has consequences for personal conceptions of the innateness of one's sexuality, and for social organizing, politics, and legal decisions. Critically, I further argue that the trend of its increasingly widespread acceptance is out-of-step with the empirical foundation on which it rests.

Public Opinion and Strategic Activism

Both Gallup and The Pew Research Center have documented new and striking trends: over the last thirty years, an increasing number of Americans believe gays and lesbians are born with their sexuality (as opposed to it being a choice, or product of upbringing or environment). This trend exists across the political spectrum (though with a consistently lower number and flatter rise among Republicans) (Haider-Markel & Joslyn 2013). This number crossed the 50% majority threshold for the first time in May 2015 (Jones 2015).

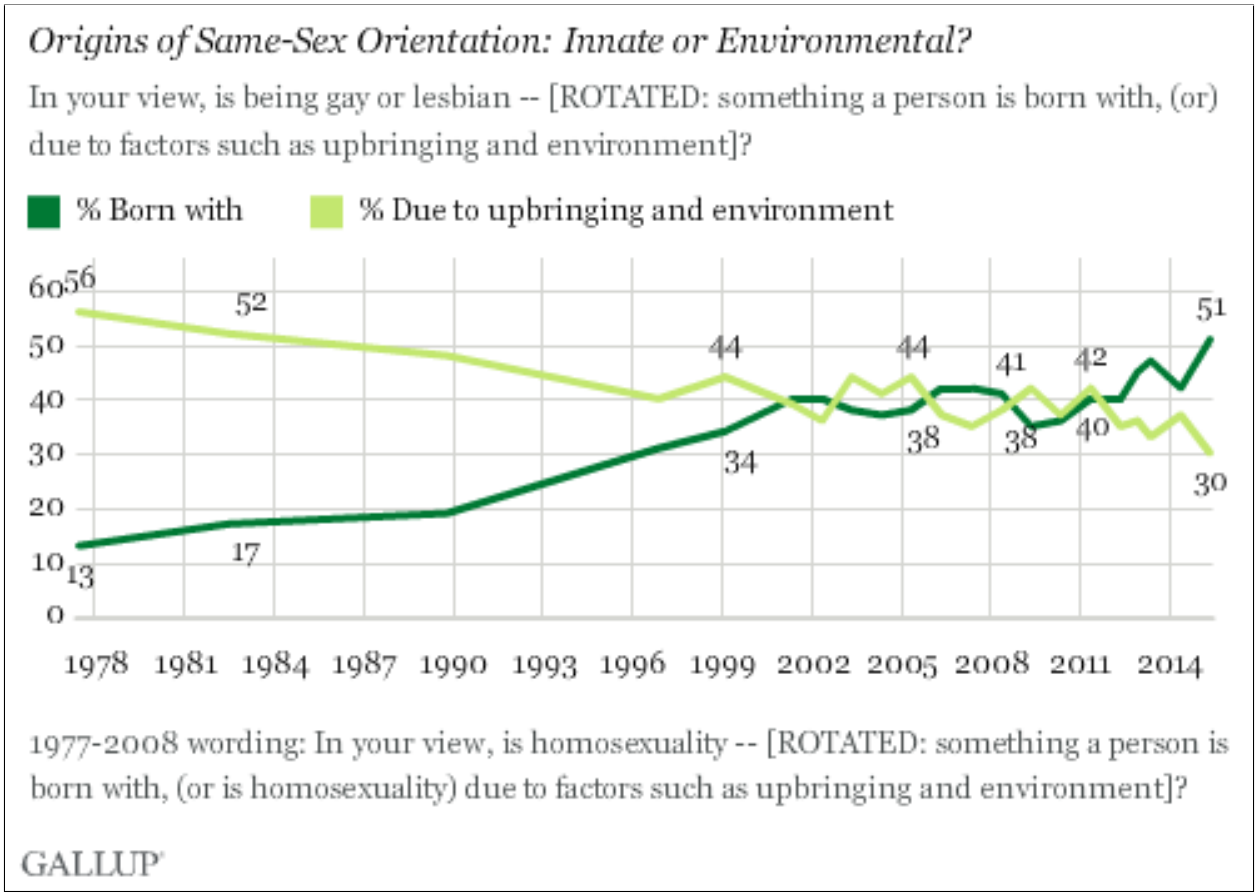


Figure 5.1: Public opinion polling finds that, for the first time, over half of Americans believe gay people are "born that way."

The idea that gays and lesbians are "born this way" is a politically useful idea for progressives fighting for same-sex marriage and adoption (Haider-Markel & Joslyn 2013; Hegarty & Pratto 2001). It presents a challenge to conservatives supporting "ex-gay" therapy (Waidzunas 2015). Despite its popularity, it rests on a fundamentally shaky empirical foundation.

Exploring the "Born This Way" Scientific Research Program

What empirical areas comprise what I am calling the "born this way" research paradigm? Research on *genetics* has found (Hamer 1993), failed to find (Mustanski 2005), and then found once again (Sanders 2015) a specific genetic sequence shared by a high percentage of pairs of gay brothers in the q28 region of the X chromosome – suggesting that this region of the human genetic code might hold the secret to sexual orientation, or, at least, male homosexuality. *Neuroanatomical* (brain structure) differences were found in the brains of homosexual men who died of AIDS (LeVay 1991). The work of Hamer and LeVay remain touchstones of this research program. Together, their work represents the dawning of a new level of empirical evidence that sexual orientation can be located in the body. Research on *heredity* predates these, and investigates the idea that homosexuality (as a type of mental disease) runs in families (Kallman 1953) or that homosexual men are more likely to have homosexual brothers (Bailey & Pillard 1991). Following everything made newly possible with the Human Genome Project, heritability studies began collecting DNA and other biomarkers, leading to a proliferation of these so-called linkage studies. Research on *hormones* is the largest, most varied, and perhaps most convincing of these empirical areas. Feminist science scholars have also taken up endocrinology as a key area of inquiry where science and gender intersect (Fausto-Sterling 2000; Longino 2013), with some following the STS tradition of practicing as applied natural scientists as well as critical feminist scholars (for example, Sari van Anders who professionally identifies as a social neuro-endocrinologist, and who not coincidentally taught my graduate seminar in Feminist Science Studies). A subset of these endocrinology studies focuses on the maternal-fetal amniotic environment

and has correlated hormones to the degree of expression of masculinity and femininity and, by extension, homosexuality including—a rare focus—in women (Williams et al. 2000). One of the only studies focused specifically on women found that lesbians have different types of otoacoustical emissions within their inner ear (this came up in my interview with Kristin Miller in our discussion of how uncritical media coverage can twist the narrative of scientific findings; McFadden & Pasanen 1998). An example of the hormone research, where the difference in length between the first and ring finger reflects fetal endocrine development, features prominently as a party joke in an early episode of the lesbian soap-opera *The L Word*, a cultural touchstone of the early 2000s. This is a sketch of the landscape of empirical research attempting to locate sexual orientation in the (mostly, male homosexual) body.

Critiques of the "Born This Way" Research Program

What critical frames have emerged to contest this "born this way" research program? Feminist science scholars have identified at least four areas of critique: empirical, ethical, epistemological, and constructionist. *Empirical criticism* claims at a basic level that the studies themselves are not good enough, which insinuates at least some theoretical merit in the enterprise. Empirical criticisms include: that the findings of the studies overgeneralize, that they vary in the way sexuality is defined and operationalized, and that there are methodological issues, particularly with the sampling of research subjects. This research program is critically limited by its focus on male homosexuals. It has almost nothing to say about bisexuality, let alone queer and nonbinary expressions of gender and sexuality. Consequently, the "born this way" research program—as with the aims of demographic knowledge production—is out of step with the way many "sexual minorities"—particularly young people and women—experience and describe their sexualities. This exemplifies and exacerbates a long history of exclusion in medical research and risks reinscribing a legacy of scientific racism and sexism by neglectfully substituting a particular white male perspective for the human experience of sexuality. Though these limits in generalizability and applicability beyond male homosexuals has been raised as a limitation in these studies, it remains critically

undertheorized.

Ethical criticism of this research program are concerned with the immediate and longer-term consequences of these studies. Some argue that conducting research on sexual orientation legitimizes homosexuality as natural and normal, while others argue that making it a scientific object of study does precisely the opposite. Bio-ethicists have also raised concern about the extreme logical ends of this research: genetic frames could allow parents to selectively terminate homosexual fetuses (see Murphy 1999 or Stein 2001 for elaborated bio-ethical considerations).

Epistemological criticism takes issue with the very object of study and the way this scientific program attempts to produce knowledge about sexuality. Research on sexual orientation raises fundamental, and probably intractable, epistemological concerns from the outset. In order to study human difference, one first needs to define different types into which people can be categorized. Sexualities research has established that behavior, attraction/orientation, and identity do not neatly align for individuals or communities – and that people change over time. Sexualities research has also established profound cross-cultural and historical variation on the definitions and meanings of these terms.

Constructionist criticism has a strong yet simple premise: that people are not born gay, just as they are not born straight. The social constructionist perspective is that sexuality is a fundamentally social and cultural phenomenon. Importantly, this does not mean it is not "real," that it does not have marked material consequences for real people, or even that sexuality is not deeply embodied. Constructionist criticism draws on a rich interdisciplinary scholarship that increasingly must grapple with challenges presented by the emerging genomic research paradigm. Constructionist criticism is epistemological and ontological – it asserts that scientists in this research program are asking the wrong questions.

Today, sociology is having to confront and contend with these biological and genetic debates (Heuveline 2004; Schilt 2015) as the latest iterations of challenges to the constructionist view (Epstein 1987). In some ways, we have always been defending constructionist

perspectives on science and identity, but this new iteration brings new challenges. Both the "born this way" research program and population science are politically useful frames that can be harnessed strategically, but do not actually capture or reflect how many gay people understand their sexualities. This is the bind experienced when it feels powerful and necessary to get counted in the first place, but we are disappointed by the options available in our measurement tools. Nonetheless, stakeholders have rallied around these scientific frames because they do so much *work* (see Mora 2014; Rodríguez-Muñiz forthcoming). As sociologists, we have many new opportunities to study these intersections as our professional organizations and funding agencies increasingly include bio-marker data collection as part of population surveys (e.g., Cole et al. 2020).

5.1 Arguments and Implications

In this dissertation, I made the following three arguments. First, that demography (joining psychology and biology) has become our *scientia sexualis*, the authorized vocabulary of contemporary LGBTQ sexuality discourse. Put differently, demography has become the new gay science. I find that contemporary newspaper coverage, political debates, and legal battles all rely heavily on demographic evidence, arguments, and logics. This is, in part, driven by the recent and increasing availability of sophisticated data on LGBTQ populations. I also find that before these statistics existed, public discourse already invoked a demographic imaginary in two ways: by strategically (mis)using Kinsey's 10%, and by explicitly calling attention to the unavailability of better numbers. In short, I show how the contemporary scientia sexualis is increasingly one of population science.

Second, that the availability of demographic data and the normative practice of separately measuring sexual behavior, attraction, and identity has generated new sexual theories (e.g., sexual fluidity), types ("MSM," or "men who have sex with men," and "mostly heterosexual"), and research paradigms ("concordance/discordance" and "SOGI"). These data enabled localized and intersectional claims about discrimination and policy impact, which

crystallized into various constructions of LGBTQ people as a "population at risk." At the same time, these new scientific theories, types, and paradigms are often at odds with queer modes of identification. The privileging of population science was compatible with the essentialization and minoritization of LBTQ people, for better and for worse.

Third, that demographic knowledge has engendered powerful claims to representation, as evidenced by the use of social science expertise in pivotal marriage equality court cases and the emergence of data activism. Population counts of families impacted by same-sex marriage bans were used to effectively demonstrate the scope of harm in legal battles at the U.S. Supreme Court. The fact that specific calculations were expressly debated in *Obergefell* merit briefs, oral arguments, and judicial opinions underscores the status and influence of demographic expertise, as well as the unsettled nature and high stakes for this type of sexuality knowledge. This is further exemplified by the rise of what I call "data activism" in at least three arenas: social movements (e.g., public engagement around data collection and measurement choices, as in the 2010 "Queer the Census" campaign), policy (e.g., the 2015 federal mandate to collect SOGI data in electronic medical records or the introduction of the 2016 Congressional "LGBT Data Inclusion Act"), and academia (e.g., the gatekeeping and enforcement of symbolic boundaries on display in the *American Journal of Public Health*'s 2017 dossier denouncing the removal of SOGI questions from a federal survey of older adults as "public health malpractice," and the display of attempts to educate arbiters on what makes good social science methodology). Although quantitative measurement can reproduce inequality by limiting definitions and foreclosing more nuanced understandings of sexuality, population counting is also being deployed as a tool for progress and justice.

Three implications of the project are to: (1) address material disparities and sociopolitical marginalization impacting LGBTQ communities specifically through the power of data collection, (2) bring together the goals of survey methodology and feminist STS to advance the demography of sexuality, and (3) use our contemporary *scientia sexualis*—demographic sexuality knowledge—as a case to understand the role of social scientific expertise in politics.

APPENDICES

APPENDIX A

Methods

An elaboration of my research methods, study design, and data.

Sexuality Knowledge in Public Discourse

I first constructed a random sample corpus of 100 newspaper articles to test my search parameters and coding criteria. My test corpus included major news articles (as opposed to editorials, commentary, etc.) in *The New York Times*, *The Wall Street Journal*, and *USA Today* focused on the U.S. and published between the years 2010–2015. I used the ProQuest News & Current Events database to search for articles with key terms appearing in both of two major thematic areas: (1) sexuality (terms included LGBT*, gay, lesbian, homosexual, bisexual, heterosexual) and (2) research (terms included study, finding, research, report, expert). This search yielded 1,341 hits. I used a random number generator to select a sub-sample of 100 articles to analyze. I downloaded both the full text of the articles and a spreadsheet of the meta-data. I took notes on each article, including organizations or individuals cited, and pulled relevant quotes. Next, I developed a rough coding scheme to sort these articles according to how relevant they could be for my analysis on a scale of 0 to 5. According to this schema, about a third of hits were irrelevant and indicated my search parameters required tweaking, about a fifth were exactly what I was looking for (substantive

reporting citing the science of sexuality), and the rest of the articles fell somewhere in between the two extremes.

After reviewing the results of the test corpus, I refined my search parameters and constructed my final corpus to analyze. At this stage, I searched across five newspapers, but ultimately only coded and analyzed the original three of interest. I used the ProQuest News and Current Events database to search and download my final corpus of 5,907 articles. I downloaded the full text of all the articles into "paper-years": a single year of a single paper would be one "paper-year" (for example, *The New York Times* 2012). I processed a total of 30 paper-years (6 years each for 5 papers), but coded only 18 paper-years (2010–2015 for *The New York Times*, *The Wall Street Journal*, and *USA Today*). This means coding is at the "paper-year" level, not the article level. This is not a population or census of all articles, and I'm not interested in making claims about a denominator that would include all articles in that paper. This is a search capturing discussion of research and sexuality, and my search parameters might approximate what somebody else would find if they sought "research" about "sexuality." I can make comparisons between years and papers, but not at the article level. I can make claims about what kind of discourse was circulating, and what were the most prominent kinds of knowledge claims about sexuality.

My codebook includes approximately 30 topical codes. Most labeled text was coded at multiple topics (that is, the codes are not mutually exclusive). The codes capture broad themes such as "law," "expert," and "public opinion" as well as substantively specific content such as "bullying and hate crimes," "identity labels," and "marriage bans." I also had a set of codes to identify articles that were not relevant to my analysis but were pulled into my corpus despite my careful efforts to clean and control the search parameters up front. This irrelevant content was filtered from analyses, resulting in a final corpus of 1,578 substantively relevant articles coded in NVivo.

As my analysis unfolded, I decided I needed to be able to make historical comparisons. To

do this, I conducted an additional analysis on the use of demography or population claims across the previous decades, covering the 1970s through 1990s. Using ProQuest, I analyzed 263 articles published in *The New York Times* in the years surrounding five moments of national discussion and moral panic over LGBTQ issues: the Stonewall riots (1969); the removal of homosexuality from the *DSM*, psychiatry's *Diagnostic and Statistical Manual* (1972–1974); the beginning of the AIDS crisis (1981–1983); DADT, or, Don't Ask, Don't Tell (1993–1994); and DOMA, or, the Defense Of Marriage Act (1995–1997). I used NVivo for my analysis of contemporary news, and MAXQDA for my analysis of historical news.

Selecting the Surveys

In order to analyze the sexuality content in surveys, I first chose which of the many available surveys to examine. My first selection criterion was to narrow to surveys in the United States fielded since 2000. My time period of interest, 2000–2015, begins when national survey questionnaires started asking about sexual orientation and extends through the conclusion of the same-sex marriage cases.

Survey focus in the U.S. has been driven by demographic and health concerns in a way that shapes content differently than in other countries. In particular, surveys of sex in Canada, Australia, and the U.K. are shaped by a different set of historical and cultural variables and thus do not look the same. Future research into cross-cultural and international differences would be useful. The advent of the sexual revolution and second wave feminism led to shifts in what was appropriate to ask about and what was of interest and concern. I am interested in the sexuality content of surveys on the national and most generalizable scale. The sexuality content of surveys fielded in college and military populations (and convenience samples, most notably Kinsey's landmark studies) looked markedly different than major national surveys and to this day still do. An in-depth treatment of these surveys and comparisons to national surveys is beyond the scope of my project.

Having narrowed my geographical and historical focus to surveys fielded in the United States since 2000, I select four journals of interest to contemporary sociologists who would likely use survey data, based on impact factor and prominence: the *American Journal of Sociology*, *American Sociological Review*, *Demography*, and the *Journal of Marriage and Family*. I collected all tables of contents dating back to 2000 and read titles, abstracts, and keyboards to collect the subsample on topics related to sexuality and gender. This process was facilitated by auto-highlighting of keywords (e.g., gender, sexuality), and I only reviewed research articles (not letters to the editor or book reviews, etc.). My first review of abstracts was more wide-ranging to ensure I did not leave anything out. Then, I narrowed my sample to include only those papers substantively addressing sexuality (excluded articles at this stage are most commonly analyses of male/female gender differences). Next, I look to the abstract and/or methods section of the articles to determine the data source, collecting only those analyses based on surveys. This allowed me to identify the most frequently utilized surveys across these journals. My final list was longer and more varied than I anticipated, with more original data collection (rather than analysis of existing datasets). To allow for some variation and comparisons, I include contrasting surveys that are mentioned at least once. My analysis of these surveys is also informed by the secondary literature (Ericksen & Steffan 1999).

Sexuality Knowledge at the Supreme Court

There are many realms in which demographic sexuality knowledge might circulate meaningfully and significantly. It certainly does at the individual level, shaping how individuals and then communities come to understand identity, participate in dominant narratives, and imagine possible avenues for engaging in activism. I focus on court cases because it is one of the predominant arenas revealed in my analysis of news media and because court decisions are a really important outcome with major consequences for people's lives. Other major arenas were politics, health surveillance, and personal interest stories. However, the cover-

age of DADT, DOMA, and the state-level marriage bans leading to the marriage equality court cases were the biggest that used multiple examples across time that affected so many aspects of public life. Court cases also are the object of interest of political scientists and sociologists seeking to understand expertise. The marshalling of scientific evidence is visible at all levels of these cases—and we can see expertise on sexuality being explicitly presented, debated, refuted, and drawn upon in legal justification—in my analysis of writs of certiorari, merit briefs, expert testimony, oral arguments, amicus briefs, and majority and dissenting opinions. I chose to examine the three most recent and relevant cases for marriage equality: *Hollingsworth v. Perry* (2013), *United States v. Windsor* (2013), and *Obergefell v. Hodges* (2015).

I coded thousands of pages of case materials by reading deeply, developing lists of major themes, organizing these themes into topical codes, and then proceeding through all of the content first by hand and then finally using MAXQDA qualitative analysis software. These included the petitions for writ of certiorari and replies, merit briefs and replies, oral arguments, majority and dissenting opinions, and lower court decisions. I also read, with the help of a research assistant, all amicus briefs submitted, coding those from social science-oriented authors and organizations. Through all of these documents, I coded for any discussion of social science disciplinary norms, methods, or claims to consensus as well as the marshalling of social science evidence to support or refute arguments or the establishment of "legislative facts." Having established why I was reading these documents and what time of information I was looking for, I will briefly note that this process resulted in approximately 2,400 snippets from these materials being captured, organized, and coded in MAXQDA qualitative analysis software. This content is coded at one or more of thirty major codes representing the many dimensions of social science arguments and evidence.

There are several things to note about all quotations in the dissertation from my analysis of courts materials. My priority was to make excerpts readable and understandable. When it

does not change the meaning of the quote, I may cut material (denoted by [. . .]). If I am cutting the references in citations to other court documents (such as legal precedents), I use [citation]. In longer excerpts, my own emphasis is added in italics and always denoted. All excerpts have a footnote referencing their specific location in my primary dataset. These footnotes include what case the document is part of and what official filing it is part of (e.g., oral arguments or merit brief for a certain party). Importantly, my reference does not specify which sub-document the quote is from when it is excerpted from a combined PDF (for example, the Supreme Court case documents on file may include a lower court opinion or brief - I try to mark this in my introduction of the quote wherever relevant, but my exact page or line number in my reference is to the combined PDF in my dataset, not the internally cited sub-document). In introducing the quote, I describe who the speaker or writer is to provide context for my analysis. To keep these introductions as brief as possible, I may use shorthand that describes actors as being "in opposition to" or "in support of" marriage equality. As I will describe where I first introduce the cases I examine, the actual legal issues being debated are far more complex. When the exact legal or ideological position of the actor is important to interpreting their quote, I provide that additional detail. In sum, my priority is to not weigh down the quote with unnecessary references and details, but I strive to provide exactly what is necessary to understand its context and to follow the source back to my primary dataset.

Expert Stakeholder Interviews

I submitted my interview plan to the University of Michigan's Institutional Review Board (IRB) and received the reply I expected: that this fell under the exception for oral history interviews and was not subject to IRB oversight. Interviews were conducted in person, lasted approximately 1–2 hours, were recorded and transcribed verbatim. I shared my project description and interview questions prior to meeting in person (see Appendix E), and sent interview quotes and follow-up questions after completing a draft. I used MAXQDA to

organize memos and notes and help me analyze audio-linked time-stamped transcriptions. Excerpts that appear here have been lightly edited where possible without losing meaning or context to get rid of verbatim (um, like, right, you know) and condense back-and-forth conversation to shorter block quotes. Deletions, replacements, gaps, and emphasis are all noted with brackets.

As a guide for the purpose of these interviews, I follow the STS tradition of being an interlocutor, a critical insider-scientist. Specifically, I was guided by Rebeca Jordan-Young's use of interviews with experts for her 2010 book analyzing the *Brain Storm: The Flaws in the Science of Sex Differences*. Like Jordan-Young, I am interested in concrete details about scientific practices (in my case, measuring and defining sexualities at the population level), and in the gap between theory and practice.

Interviewees are introduced with their title and institutional affiliation the first time they are quoted. After their initial introductions, I repeat their full name sparingly. Short interviewee biographies can be found in Appendix D.

APPENDIX B

Extended Abstract for RDSL Working Paper

"'This Survey Did Not Define it as Sexual Intercourse':
Non-Heterosexual Women's Participation in Fertility Research."

Here, I extend my research history and genealogy of the RDSL sexuality knowledge to a concrete example. This is adapted from a working paper titled, "'This Survey Did Not Define it as Sexual Intercourse': Non-Heterosexual Women's Participation in Fertility Research." In it, I ask: What can demographers learn from listening to the critical perspectives of non-heterosexual women participating in fertility research? We may not explicitly recruit sexual minority participants or ask questions about same-sex relationships, but information on these topics lies just beneath the surface. Motivated by the convergence of two prominent areas of inquiry—sustained attention to reproductive and sexual health as social problems on the one hand, and increasing articulated need for data on LGBT populations on the other—I leverage diverse data from the Relationship Dynamics and Social Life study (longitudinal surveys, participant comments/complaints records, and qualitative interviews) that together demonstrate the benefits of responsive mixed-methodological study design. I present four lessons revealed in my analysis, and argue non-heterosexual women in fertility research offer demographers ways to increase validity of their outcomes of interest, improve study design to reduce attrition and increase survey data quality (in line with best practices for studying

minority populations; see Badgett 2009), and make sense of anomalous or contradictory findings (extending the literature on responsive mixed methods research on fertility; see Pearce 2002). In outlining these four lessons, I foreground the research participants' perspectives and voices as a critical component of the production of sexuality knowledge.

My interest and contribution focuses on the sub-population of study participants who identify as lesbian or bisexual, or who report same-sex romantic or sexual experiences or attraction (described in Research History in Chapter 3). Data for the present analysis on non-heterosexual RDSL participants were collected in creative ways, including:

- Open-ended responses to standard journal questions in the longitudinal study.
- Questions, comments, and complaints sent to the study team.
- Questions on (non-hetero)sexual identity, attraction, and behavior collected in a one-time supplemental survey halfway through the study period (for an analysis of non-heterosexual women's relationships and contraceptive use, see Ela & Budnick 2017).
- Qualitative interviews conducted with 35 RDSL participants identified as non-heterosexual based on their responses to the supplemental survey (for an analysis of non-heterosexual identity in this population, focusing on mothers, see Budnick 2016). In these interviews, I had participants fill out a selection of the most commonly repeating measures in the longitudinal RDSL survey, and recorded our conversation about how they interpreted the questions and came up with their responses. Interviews were transcribed and analyzed in NVivo qualitative software

My analysis of these diverse data reveals four key lessons:

(1) Fertility surveys may not intentionally recruit sexual minority participants or ask questions about same-sex relationships, but information on these topics lies within reach if researchers probe just beneath the surface. After sexual minority respondents made themselves "visible" to the RDSL study team (see below), explicit efforts to learn more about this sub-group began by adding new questions to a supplemental survey

on topics not covered in the ongoing longitudinal study (598 respondents completed this one-time survey, for a response rate of just under 60%). I wrote three questions which ultimately demonstrated the prevalence of RDSL participants reporting a sexual identity other than straight (16%), any same-sex attraction (22%), or any same-sex romantic or sexual experiences (28%). The design of these survey questions and response options, and the resulting descriptive statistics, are described at length in the full working paper and also in related previously published work (Budnick 2016; Ela & Budnick 2017).

(2) Sexual minority participants will make themselves "visible" to the researchers when given opportunities to do so, and there are many associated benefits.

I found that participants will take advantage of open-ended survey items to disclose extra information or frustrations, which I argue is one reason non-heterosexual women do not seem to have worse study participation (measured in number of completed journals, late journals, or early attrition). This insight draws on research in survey methodology demonstrating the importance of survey mode and the consequences of removing opportunities for personalization and interaction. In RDSL, this happened in three ways.

In calls and comments, some participants wrote unprompted to the study team and identified themselves as lesbian or bisexual, or clarified that their reported partner was a woman. There were 29 women who contributed a total of 65 such remarks either while completing their weekly survey over the phone (logged as a call note) or in the open comment box at the end of every online survey. These women were contacting the study about how to answer a survey question, whether they should be in the study at all, or simply to make their opinions heard. For example (presented verbatim), the call log includes the following note: "R is lesbian. and she wants to refer us some of her friends who arn't gay to answer our questions 'better than she can'," and one response to the open survey box read: "Again [partner's name] is a girl, we cant have sexual intercourse in the the way you guys described it. So, again can you tailor the question for ppl that includes other alternates than being with a man."

RDSL does not ask partner's sex, but does include an unambiguous specification of sex as

heterosexual penetrative intercourse (. . . "when a man puts his penis in a woman's vagina."). In the qualitative interviews, I found that respondents did not report sex with same-sex partners as intercourse (I elaborate on this important finding below). However, 11 participants did not fit this pattern and consequently made themselves visible via their answer to an open-ended survey question on reasons for contraception non-use. Many RDSL women reported having heterosexual intercourse without contraception despite saying they did not want to become pregnant, thus looking "at risk" or inefficacious. When asked their reason for not using contraception, some respondents chose "other" (an open-ended question), 11 of whom said their reason was their sexual partner was a woman ("Female partner," "not in a heterosexual relationship," "we are both girls, we don't need birth control").

(3) These women are actively and critically engaging with their position as research subject, and see their participation as meaningful and helpful to others.

Participants are thinking carefully about why they were recruited and what their purpose in the research is, and express a lot of respect for the institution, the researchers, and the objectives of the project: "Definitely as someone who's enthusiastic about any form of research and trying to gain some insight about our species or whatever in this world I definitely appreciate it. Plus I feel like it's cool that they're trying to capture a little, teeny piece of our specific generation). Participants do not want to "ruin" the data, but they still can have "frustration" with what they perceive as "oversights" or blind spots: "It's going to screw up their survey, and I know if I were doing it, I would want an accurate survey so I'm like, ah, I'll just go through and answer the questions like I'm supposed to. Like in your situation, doing these surveys and stuff like that, I don't want a bunch of false answers. I want real, honest, true facts. And I'm getting paid to do it, so why am I going to go on there and lie and forge a bunch of answers?" Participants do not attribute oversight as intentional or exclusionary (that is, they felt their recruitment and inclusion was important) but are surprised that researchers at prestigious institutions would leave anything out: "I mean I really was confused by it because I figured a study of young women from the University of Michigan – It seems like something they would've thought so I just really didn't know why they didn't." This finding should build confidence in researchers' efforts to personalize

recruitment and retention efforts, and in their respondents' seriousness and care. We can and should build on these positive traits to improve our research.

(4) Unambiguous definitions of sex are necessary and get the researchers what they intended.

Non-heterosexual women bring their own understandings and experiences to their participation in research, which affects how they interpret the purpose of survey questions and how they will respond. This is particularly relevant when the questions are about relationships and sex, which are always already indeterminate topics. Consider the following excerpt from a qualitative interview, "When I was taking this survey, absolutely [definitions were necessary.] It made me irritated because I called what I was experiencing with my girlfriend as sexual intercourse. But this survey did not define it as sexual intercourse. So at least it made it so that I couldn't throw off the results too much, I guess. Yep, I always said no [to the sexual intercourse question]."

Survey questions need to include absolutely unambiguous language. In a comment on the Online College Social Life Survey, Ford & England (2010) found a small number of lesbian-identified women reporting "penetrative" sex with a female partner. They theorize these women may have been reporting penetrative sex with hands or toys, when the researchers' intent was to identify women who might get pregnant by having intercourse. Similarly, RDSL participants brought an open and interpretive perspective to survey questions about "sex" (that did not specify heterosexual intercourse by including a definition), even if they did not report their same-sex sexual experiences as "sexual intercourse." That respondents' engagement with survey questions on "sex" and "sexual intercourse" differs underscores the critical importance of language, definitions, and questionnaire instructions.

In conclusion, these insights on how non-heterosexual women make meaning of survey questions on sex and relationships are in line with the large literature showing that what counts as "sex" changes across time, place, and population. These lessons demonstrate how interviewing sexual minority participants in a fertility survey can shed light on unanticipated individual interpretations that may or may not disrupt the aggregate survey findings. These

insights may also shift how we understand responses to questions about risk and risk perception, making sense of cases of cognitive dissonance or inefficacy (e.g., lesbian participants who report unprotected sex with a female partner, but are inappropriately classified as "at risk" of unintended pregnancy). These lessons also provide some context for unexpected outlier responses to questions on risk perception (e.g., a lesbian participant who reports a very low perceived risk of pregnancy or STI transmission), or why responses to any of these survey questions might change over time or across relationships (because it is not uncommon for "straight" women, especially young women, to have a same-sex sexual experience; see "sexual fluidity" theory; Diamond 2008). These insights should be useful in shaping study design, data collection, and analysis of research involving young women participants, in particular those studies and resulted scholarship related to sexuality and reproductive health.

APPENDIX C

Surveys

The following pages summarize the sexual orientation and gender identity measures in existing federal data collection instruments.

Survey	**Sponsors** **Population** **Mode**	**Years Asked**	**Questions** Response Options
AddHealth (National Longitudinal Study of Adolescent to Adult Health)	*Sponsors* *Population* *Mode*	*Years*	H3SE13: S16Q13 SEXUAL SELF DEFINITION-W3 Please choose the description that best fits how you think about yourself. 100% heterosexual (straight) Mostly heterosexual/somewhat attracted to people of own sex Bisexual-attracted to men and women equally Mostly homosexual/somewhat attracted to opposite sex 100% homosexual (gay) Not sexually attracted to either males or females
BRFSS (Behavioral Risk Factor Surveillance System)	DHHS/CDC U.S. civilian noninstitutionalized 18+ CATI (Optional module)	2014	(582) Do you consider yourself to be: Straight Lesbian or Gay Bisexual
HCPS (Health Center Patient Survey)	DHHS/HRSA/BPHC Health center patients 15+ CAPI	2014	(DMO8a] Do you think of yourself as straight or heterosexual, as gay, lesbian or homosexual, or as bisexual? Straight or heterosexual Gay, Lesbian, homosexual Bisexual Not sexual/celibate/none Other, please specify

Survey	Sponsors Population Mode	Years Asked	Questions Response Options
NATS (National Adult Tobacco Survey)	DHHS/CDC U.S. civilian noninstitutionalized 18+ CATI	2012-2014	(SEXUALORIENT1) Do you think of yourself as...? [If R is female then Lesbian or] Gay Straight, that is, not [If R is female then Lesbian or] Gay Bisexual Something else (Don't Know) (Refused) [If R selects "Something else" in SEXUALORIENT1] (SEXUALORIENT2) By something else, do you mean that ... You are not straight, but identify with another label such as queer, trisexual, omnisexual or pansexual You are transgender, transsexual or gender variant You have not figured out your sexuality or are in the process of figuring it out You do not think of yourself as having sexuality You do not use labels to identify yourself You made a mistake and did not mean to pick this answer You mean something else. (Don't Know) (Refused) [If R selects "You mean something else" in SEXUALORIENT2] (SEXUALORIENT3)You gave "Don't know" as an answer. Is that because ... You don't understand the words. You understand the words, but you have not figured out your sexuality or you are in the process of figuring it out You mean something else
NCVS (National Crime Victimization Survey)	DOJ/BJS U.S. civilian noninstitutionalized 16+ Interviewer administered, CAPI, in-person and telephone interviewing	2016-present	Which of the following best represents how you think of yourself? [If R is female then Lesbian or] Gay Straight, that is, not [If R is female then Lesbian or] Gay Bisexual Something else I don't know the answer (Refused)
NHIS (National Health Interview Study)	(DHHS/CDC/NCHS U.S. civilian noninstitutionalized 18+ CAPI, some telephone follow-up	2013-present Current Question: 2015-present	(ACISIM/F) Which of the following best represents how you think of yourself? [If R is female then Lesbian or] Gay Straight, that is, not [If R is female then Lesbian or] Gay Bisexual Something else I don't know the answer (Refused)

Survey	Sponsors Population Mode	Years Asked	Questions Response Options
NHANES (National Health and Nutrition Examination Survey)	DHHS/CDC/NCHS U.S. civilian noninstitutionalized 18-59 ACASI	2001-present Current Question: 2015-present	(SXQ.295/296) Which of the following best represents how you think of yourself? [If R is female then Lesbian or] Gay Straight, that is, not [If R is female then Lesbian or] Gay Bisexual Something else I don't know the answer
NHANES (National Health and Nutrition Examination Survey)	DHHS/CDC/NCHS U.S. civilian noninstitutionalized 18-59 ACASI	2001- present	Sexual behavior questions include age at first sexual intercourse, number of sexual partners, and history of STDs
NHSLS (National Health and Social Life Survey)	*Sponsors* *Population* *Mode*	*Years*	*In general, are you sexually attracted to:* *Only men* *Mostly men* *Both men and women*
NIS (National Inmate Survey)	DOJ/BJS Incarcerated 18+ (2011-12 included 16+) ACASI/PAPI	2007, 2008-2009, 2011-2012	(D5) Do you consider yourself to be heterosexual or 'straight', bisexual, or homosexual or gay? 'Straight,' which is also called Heterosexual Bi-sexual [If R is male] Homosexual or Gay [If R is female, DK, Refused] Homosexual, Gay, or Lesbian Other (Don't Know)
NIS (National Inmate Survey)	DOJ/BJS Incarcerated 18+ (2011-12 included 16+) ACASI/PAPI	2007, 2008-2009, 2011-2012	[IF D3 "number of partners" NE 1 (no partners)] (D4) Before you entered this facility, had you had sex with men only, women only, or both men and women? Men only Women only Both men and women
NSDUH (National Survey on Drug Use and Health)	DHHS/SAMHSA/CBHSQ U.S. civilian noninstitutionalized 18+ ACASI	2015-present	(QD63) Which one of the following do you consider yourself to be? Heterosexual, that is, straight [If R is female then Lesbian or] Gay Bisexual (Don't Know) (Refused)

Survey	**Sponsors** **Population** **Mode**	**Years Asked**	**Questions** Response Options
NSDUH (National Survey on Drug Use and Health)	DHHS/SAMHSA/CBHSQ U.S. civilian noninstitutionalized 18+ ACASI	2015-present	(QD62) People are different in their sexual attraction to other people. Which best describes your feelings? [If R is male] I am only attracted to females I am mostly attracted to females I am equally attracted to females and males I am mostly attracted to males I am only attracted to males I am not sure (Don't Know) (Refused) [If R is female] I am only attracted to males I am mostly attracted to males I am equally attracted to males and females I am mostly attracted to females I am only attracted to females I am not sure (Don't know) (Refused)
NSFG (National Survey of Family Growth)	DHHS/CDC/NCHS U.S. civilian noninstitutionalized 15-44 ACASI	2002, 2006-2010, 2011-2013 Current Question: 2006-2013	(ORIENT) Do you think of yourself as... Heterosexual or straight Homosexual or Gay [If R is female then Lesbian] Bisexual Something else (Don't Know) (Refused)

Survey	Sponsors Population Mode	Years Asked	Questions Response Options
NSFG (National Survey of Family Growth)	DHHS/CDC/NCHS U.S. civilian noninstitutionalized 15-44 ACASI	2002, 2006-2010, 2011-2013	(ATTRACT) People are different in their sexual attraction to other people. Which best describes your feelings? Are you... [If R is male] Only attracted to females Mostly attracted to females Equally attracted to females and males Mostly attracted to males Only attracted to males Not sure [If R is female] Only attracted to males Mostly attracted to males Equally attracted to males and females Mostly attracted to females Only attracted to females
NSFG (National Survey of Family Growth)	DHHS/CDC/NCHS U.S. civilian noninstitutionalized 15-44 ACASI	2002, 2006-2010, 2011-2013	

Survey	Sponsors Population Mode	Years Asked	Questions Response Options
NSOAAP (National Survey of Older Americans Act Participants)	DHHS/ACL Title III service participants, most 60+. CATI	2014-2016	(ACISIM/F) Which of the following best represents how you think of yourself? [If R is female then Lesbian or] Gay Straight, that is, not [If R is female then Lesbian or] Gay Bisexual Something else Refused Don't Know If R answers "Something else" to ACISM/F: (ACISMELS/FELS) What do you mean by something else? You are not straight, but identify with another label such as queer, trisexual, omnisexual or pansexual You are transgender, transsexual or gender variant You have not figured out or are in the process of figuring out your sexuality You do not think of yourself as having sexuality You do not use labels to identify yourself You mean something else Refused Don't Know If R answers "Don't know" to ACISMELS/FELS: (ACISIMDK/FDK) What do you mean by don't know? You don't understand the words You understand the words, but you have not figured out or are in the process of figuring out your sexuality You mean something else Refused Don't know If R answers "Something else" to ACISIMDK/FDK: (ACIMSESP/FSESP) What do you mean by
PATH (Population Assessment of Tobacco and Health)	DHHS/NIH and DHHS/FDA ACASI U.S. civilian noninstitutionalized 12+	2013-present Current Question: 2014	(R02_AM0063/R03_AM0063) Do you consider yourself to be… Straight Lesbian or Gay Bisexual Something else Don't know Refused

Survey	Sponsors Population Mode	Years Asked	Questions Response Options
PATH (Population Assessment of Tobacco and Health)	DHHS/NIH and DHHS/FDA ACASI U.S. civilian noninstitutionalized 12+	2013- present Current Question: 2015	(R01_AM0021) The next question asks about your level of sexual attraction to BOTH males and females. Please consider the response choices carefully, as it is important that you understand them and are as honest as you can be in your answer. To whom have you felt sexually attracted, even if you did not take any action based on feeling attracted? Only to females, never to males Mostly to females, and at least once to a male About equally often to females and to males Mostly to males, and at least once to a female Only to males, never to females I have never felt sexually attracted to anyone at all Don't Know Refused
YRBSS (Youth Risk Behavior Surveillance System)	DHHS/CDC Students grades 9-12 School-based, self-administered PAPI	2015	(Q68) Which of the following best describes you? Heterosexual (straight) Gay or Lesbian Bisexual Not sure
YRBSS (Youth Risk Behavior Surveillance System)	DHHS/CDC Students grades 9-12 School-based, self-administered PAPI	2016	(Q67) During your life, with whom have you had sexual contact? I have never had sexual contact Females Males Females and males

APPENDIX D

Interviewee Biographies

Kellan Baker, MPH, MA
Baker is the Centennial Scholar in the Department of Health Policy and Management at the Johns Hopkins Bloomberg School of Public Health, where he is pursuing a doctorate in health services research with a focus on transgender health and economic evaluation. Kellan is also a current Health Policy Research Scholar with the Robert Wood Johnson Foundation. Previously he was a Senior Fellow at the Center for American Progress, where he worked on LGBT health and data collection policy at the federal and state levels. Senior Fellow with the LGBT Research and Communications Project at the Center for American Progress where he works on LGBT health and data collection policy across the U.S. Department of Health and Human Services. Directs the LGBT State Exchanges Project, which works to ensure that the benefits of the Affordable Care Act (ObamaCare) reach LGBT communities. He was a founding steering committee member of Out2Enroll, which also did work around LGBT enrollment to access ACA benefits. He also co-directs the "Do Ask, Do Tell" project on electronic health records.

Jaime Grant, PhD
Grant is the author of *Injustice at Every Turn: A Report of the National Transgender Discrimination Survey*, and *Great Sex: Mapping Your Desire*, is an equity expert, researcher and trainer who has been active in LGBTQ, women's and racial justice movements since the late 80s. Built the membership program, local and national events, and foundation funding for theNational LGBTQ Task Force during the height of the AIDS crisis. Director of the Policy Institute, National Gay and Lesbian Task Force, 2007–2010. In this role, she was the architect of the Queer the Census campaign. PhD in Women's, Gender and Sexuality Studies, The Union Institute and University, 1999. When journalists or others search the internet for LGBTQ statistics, a frequent top hit is Dr. Grant's report, "How Big is the LGBT Community? Why Can't I Find This Number?" Her most recent work is about mapping sexual desire.

Jack Harrison-Quintana, MA
Harrison-Quintana is a queer Mexican-American activist, writer, and researcher who serves as director of Grindr for Equality (G4E), which leverages the app's global reach to spread information related to health and social justice. He holds a Master's (Communication, Culture, and Technology) and Bachelor's degree from Georgetown University, and is a co-author of the 2011 report based on original national transgender data, *Injustice at Every Turn.*

Meghan Maury, Esq.
Maury is Policy Director at the National LGBTQ Task Force. Their work spans a broad range of issue areas, but focuses heavily on economic justice, criminal justice, and data collection. Before joining the Task Force Maury worked with a variety of policy advocacy and legal service organizations, including the National Center for Lesbian Rights, Citizens for Tax Justice, the U.S. Attorney's Office for the District of Columbia, the Public Defender Service for the District of Columbia, and the Criminal Defense and Prisoner Advocacy Clinic.

Kristen Miller, PhD
Miller is the director at the Question Design Research Laboratory, National Center for Health Statistics, CDC. She was instrumental in the development and evaluation of the sexual identity measure for the National Health Interview Survey. Holds a PhD in Sociology from the University of Delaware, where she worked with Sandra Harding. Co-editor of *Cognitive Interviewing Methodology* (2014), a comprehensive approach to cognitive interviewing in the field of survey methodology, and *Question Evaluation Methods: Contributing to the Science of Data Quality* (2011).

Randall Sell, ScD
Sell is a Professor at Drexel University's School of Public Health, in the Department of Community Health and Prevention. His most recent work has focused on critically examining demographic variables. Dedicated his career to research on defining and measuring sexual orientations, and sampling sexual minorities for public health research. Holds a doctorate in Health Policy and Management & Health and Social Behavior from the Harvard University School of Public Health. Sell was one of the first to estimate the prevalence of lesbians, gays and bisexuals in a probability sample of the United States, United Kingdom and France. His work critically examines the variables used to measure health disparities. Sell is a collaborator on a federally funded scientific study of social diffusion in online media for reaching hidden communities. He is also the lead investigator for a study of social networks as a means to sample gay men and collect health information. He has researched and published on the history and best practices of sampling homosexuality and has created an assessment of sexual orientation (the Sell Scale). He serves as a consultant to an ever-increasing number of surveys and programs that have begun to collect sexual orientation data. Sell also established the website GayData.org.

APPENDIX E

Interview Guide

This document was sent in advance of the interview via email.

Interview Information:
Jamie Budnick
Doctoral Candidate
Department of Sociology
University of Michigan
jalobu@umich.edu
#248–495–0128

Thank you so much for agreeing to meet with me to tell me about your work and discuss topics related to my dissertation research! This document is to give you a sense of the purpose of our interview and to give you an easy reference and contact information.

Dissertation Title: "The New Gay Science: Sexuality Knowledge, Demography, and the Politics of Population Measurement"

Committee: University of Michigan Professors Karin Martin (chair), Jennifer Barber, Rachel Best, and Alexandra Stern

Project Description: As part of my dissertation research, I am conducting interviews with a variety of stakeholders that focus on the use of social science about sexuality–especially demography—used in your public-facing activism or policy work. I am interested in the politicization of demographic topics like survey inclusion, measurement, and classification as

well as the public interest in LGBTQ population counts. In my dissertation, I investigate how specific prominent knowledge claims about non-heterosexuality circulate in public discourse and policy debates, and interrogate their technical production within social science, specifically demography. These interviews are part of a pilot project that will inform my plans for a future book.

Example Topics and Questions:

- What are your social, political, and/or policy goals related to LGBTQ people and issues?
- What is your relationship to the media, social media, and other public-facing outlets?
- What are your perspectives on the role of social science in your policy work, particularly the use of demography and statistics? How relevant are specific LGBTQ population counts and statistics?
- How did issues of data collection become important to your organization?
- How do you use social science research in your policy work? Where do you get this data and when is it updated? How do you distinguish or evaluate different types of research? What research do you prioritize (or what has been most useful)?
- What kinds of arguments are most useful/helpful in general? What kind of scientific arguments?
- What do you think about academic debates over how to study sexuality? Where do you fall in terms of these tradeoffs? Are there concessions you are making either to research or to your policy agenda?
- Who do you think understands what you do and what your organization's goals are? Who do you need to get on board? How do you go about doing that?

Request to Quote You: I will ask you if you would allow me to record all or parts of our conversation for my own personal use. Because these interviews are regarding your professional work only, this project is IRB exempt. I would like to be able to quote you in my research (including your name and professional affiliation). If you are okay with this, I would share the specific quotes with you before using them. If you would prefer to speak off the record in a more casual way, that is just fine as well. I appreciate your time and expertise!

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