EXPLORATIONS IN HISTORIOGRAPHIES OF GEOGRAPHICAL KNOWLEDGES

by

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A.B., University of Missouri, 2001 A.B., University of Missouri, 2001 M.A., Kansas State University, 2004

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Geography College of Arts and Sciences

KANSAS STATE UNIVERSITY Manhattan, Kansas

2012

Abstract

Geographers, as part of their work as scholars and academics, continually "do" geography. Geography is practiced as research when tools, perspectives, and techniques are applied to problems or areas of study, exploring, understanding, and building geographical information. Geography is practiced as a social discipline when geographers interact with those around them, sharing geographical knowledge through writing, publishing, presenting, teaching, and discussion so others can read, listen, and engage.

In doing geography – continuously practicing research and engaging in the documentation and communication of geographical knowledge – geographers also actively continuously construct the history of geography. These incidences, slides, and pages of knowledges are the foundation and structure of geography as a practiced discipline.

Research explored the historiographies of geographical knowledges in presidential addresses of the Association of American Geographers, thematic conceptualizations of the subfield of cultural geography, and representation of women across editions of introductory human geography textbooks through content analysis and spatial. Conclusions strongly support the contention that geographic knowledges and the nature of geographic thought actively evolve as contemporary scholars practice their profession. By paying attention to these constructive processes and understanding their interactive role in it, geographers are better informed of the history of their specialty and their direct and vested role in the enterprise.

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Approved by:

Major Professor John Harrington, Jr.

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Abstract

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Acknowledgements

Thank you to all who have walked segments of this journey with me and helped out along the way: partner, family, advisor, committee, colleagues, and friends.

Dedication

In memory of DDG, 1949-2007.

Preface

"The concept of the history of geography is simple; its study complex."

- Geoffrey J. Martin (2003, 57)

"Geographers have not generally been good at writing their own histories."

- Neil Smith (2012, 553)

"Geographic knowledge is the product of geographic thinking and reasoning about the world's natural and human phenomena."

- Reginald G. Golledge (2002, 1)

"I use the plural 'knowledges' because I think it dangerous to presume there is some settled way of understanding or a unified field of knowledge called 'geography' even within the academy."

- David Harvey (2001, 209)

"Neutrality is difficult in a discipline where through the years there have been many normative opinions as to what we can, should, and should not study."

- Audrey Kobayashi (2010, 1095)

"Just as there can only be a *situated* rationality, so too can there only be a *situated* geography. For geography has meant different things to different people in different places and thus the 'nature' of geography is always negotiated."

- David Livingstone (1992, 28)

"Begin, though, not with a continent or a country or a house, but with the geography closest in – the body."

- Adrienne Rich ([1984] 2001, 64)

Chapter 1 - Practicing Geography

Contexts

Geoffrey Martin (2003, 550) notes that "the history of geography is an untidy term that sprawls across an extended chronology and embraces an ill-defined body of thought, knowledge, and ideas." The purpose of this historiographical research is two-fold. First, the research broadens understandings of the role of historiography in geography and by doing so, documents approaches for addressing contemporary temporal changes in geographic thoughts.. Second, case studies demonstrate possibilities of expanded approaches to the historiography of geography by providing examples and exploring methods of how geographers can work in and benefit from analyses of geographical knowledges. Historiographic assessment of 1) AAG Presidential Addresses, 2) scholarly categorizations of cultural geography, and 3) changing portrayals of men and women in human geography textbooks combine in this researth to document how geographers explore – and what they can gain from – historiographies of geography rooted in geographical discourse and practice.

In doing geography – continuously practicing research and engaging in the documentation and communication of geographical knowledge – geographers actively continuously construct the history of geography. These incidences, communications, slides, and pages of knowledge are the foundation and structure of geography as a practiced discipline.

Given the breadth of geography, this may be the geography practiced as analytical skills and communicative frameworks in private sector companies, or as implemented by subject area knowledge experts in government work, where findings are made available in maps, blog postings, memos, reports, and presentations. This may be geography as practiced in academia, where application of research methods to better understand subjects and places manifests itself in conference halls and classrooms, and physically or digitally in volumes of journals and editions of textbooks. The social, applied, and academic forms of geography are the edge of the same coin. It is how geographers professionally, socially, and individually "do" geography by considering space and place and producing geographical knowledge. Observations and data in this dissertation research are gained from how geographers act, behave, and perform in the

records of their written work, which also provides contextual kernels for the grist mill of understanding the historiography and practice of geography.

Practice

Geographers continually "do" geography. Geography is practiced as research when tools, perspectives, and techniques are applied to problems or areas of study, exploring, understanding, and building geographical information. This is the "practicing geography" of Solem, Foote, and Monk (2013, xix-xx), for whom it "implies a close connection between theory and practice and acknowledges that both are intertwined at a very fundamental intellectual and scientific level." The focus of their approach is to document the different careers and opportunities that geographers can practice professionally by applying their analytical and subject specialist tools and conceptual framings.

Geography is also practiced as a social discipline when geographers interact with those around them, sharing geographical knowledge through writing, publishing, presenting, teaching, and discussion so others can read, listen, and engage. In the words of Daniel Gade (2012, 355), "geographers traffic in formulating knowledge that is then communicated to anyone who wants to read it." This is the "practicing geography" of Eric Sheppard (2004), where it is the behaviors and actions of geographers involved in research and scholarship that produce knowledge. Geographical practice, for Sheppard, is conducting research for the purpose of sharing resultant information and knowledge.

Geographical practice affirms different forms of disciplinary work and aids in the construction and communication of disciplinary, sub-disciplinary, and methodological knowledges and identities (Kurtz and Craig 2009). For Shepard (2004), geographical practice is the identity of Geography. In the frame of Agnew and Muscara (2012), political geography as a subdiscipline is "made" by political geographical research and idea development. For Barnes (2002), how economic geography textbooks "perform" and thereby produce identities of economic geography builds practice. For Moss (2002), feminist geography is put into practice by doing feminist research. Drawing on Reinharz (1992, 6), "feminist research methods" are those used: by "people who identify themselves as feminist;" "in research published in journals

that publish only feminist research, or in books that identify themselves as such;" and "in research that has received awards from organizations that give awards to people who do feminist research." Feminist geography is the practice of feminist research and methods, leading to disciplinary and methodological identities. The theory, methods, and examples of field study assembled by Platt in his 1959 *Field Study in American Geography* affirm the practice and identity of field methods and research. Practice leads to identity; identity to practice. Historiography provides a way to document changes in practice.

Sites of Knowledge

These forms of geographical practice explore and share geographical knowledge. Geographical knowledges are shared through addresses and presentations, monographs and articles, textbooks and conversations. While materials are widely available to conference participants, in libraries, and as articles or video on the internet, the exchange of knowledge occurs at fine interpersonal scales where an individual encounters new information or is part of an information exchange. Foucault's position in the *History of Sexuality* (1980) is that knowledge leads to power, and to understand power, we have to consider how the knowledge that leads to power is shared. The materials of geographical practice are encountered at sites of information exchange that make this sharing of knowledge possible, leading to power and the empowerment of geographical knowledges. This happens "with the geography closest in – the body" and the individual (Rich [1984] 2001, 61).

Doing

Sites where people encounter the fruits of geographical practice are interactional. How and where do we do geography? Sociologists offer a conceptual approach dealing with interactional perspectives. West and Zimmerman (1987) consider how gender, and West and Fenstermaker (1995) consider how difference, operate in society by considering them as "emergent properties of social situations" (West and Fenstermaker 1995, 9). As such, gender is "not a set of traits, nor a variable, nor a role, but the product of social doings of some sort" (West

and Zimmerman 1987, 129). The social doings are "routine, methodological, and ongoing" (West and Fenstermaker 1995, 9). Gender exists, in other words, because individuals are always "doing gender" as part of everything that they do. These actions and behaviors, social activities themselves, work towards or work against individuals' understandings of gender and the function of gender in society as a whole.

Building from this theoretical framework, geographical knowledge is the product of the social doings of geographers. Geography – and geographic knowledge – is emergent in social situations, be it through gatherings of people or diffusion of text or media. The work of geographers is routine, methodological, and ongoing. Everything that is done by geographers is "doing geography." And, geographers might address how the specific details of a site would influence the types and character of the geography being done.

Historiography

Historiography is the study of how an academic discipline and its scholarly perspectives and outputs change with time. The concept is usually associated with the history of history, and how historical studies have evolved over time. When considering the period of the French Revolution, for example, there are histories that: view the events as the progress of society; try to objectively relate the events and the order in which they happened; seek meta-narratives; quantify impacts; apply Marxian dialectics; and consider the events from feminist, post-modern and post-structural perspectives. Each of these works is part of the historiography of the French Revolution. Reading and reflection help advance a more nuanced understanding of how historical studies of the French Revolution have changed over time.

A historiographical eye can also gaze on the history of geography. Like many things in life, current geographical trends and themes are neither perfect proxies for the past nor perfect indicators of the future. While a body of ideas recognizable or self-identified as "geography" remains, its constituent ideas, topics, and perspectives are in a continual state of flux. A historiography of geography may ask questions regarding the status and practice of geography at a point in time or for a period of transition, but also how the image of the discipline at that nexus compares and contrasts to prior and future points. Larger yet is Robin Datel's (2000, 9) point

that a goal of thinking historiographically is "the idea of the ongoing conversation that we can have and should have with people who are not our own contemporaries." As geography changes, what ideas, concepts, methods, and ideas do we lose touch with and become separated from? What gets thrown out with the bathwater? Does what constitutes "bathwater" change over time?

The materials and the geographical knowledges which they convey, how they are used, and the sites of interaction are historically, socially, and spatially situated (Livingstone 1992; Harvey 2001; Agnew and Muscara 2012). Understanding the materials, and understanding how they are used by others, necessitates awareness of the influences and drivers at multiple temporal, spatial, and organizational scales.

For the discipline of geography in the United States, the Twentieth century has seen: regional synthesis, analysis, and science; cultural landscapes, wars, and turns; environmental determinism, environmentalism, and human impacts on environments; spatial analysis, spatial turns, and pictures from space; maps made on paper and maps made in clouds; evocative description, mathematical formulas, and deconstruction; and the influences of Marx, Focault, Baudrillard, and Butler. The historiography of geography is about considering synthesis, the anything, anywhere, any-ism, anyhow that geographers can apply when considering subject, location, approach, and method of their research and work (Gerike *et al.* 2008; Figure 1.1). Such analyses are situated at a point or range of time for a specified place and geographic scales, for things change over time, across space, and between scales.

Foundation

The foundation of this research is the argument that geographers are continuously constructing the history of geography as they do the work and practice the discipline of geography. The knowledge gained is materialized in discourse: presentations, addresses, publications, lectures, structured class discussions. By "doing" geography, geographers "do" and make the history of geography. Practicing geographers actively construct their own history, the incidences in and pages of our historiography. Geographers, like other disciplinary

practitioners, are better informed of the history of our enterprise and their direct and vested role in it by paying attention to these constructive processes.

Figure 1-1: Synthesis: Anything, Anywhere, Any-ism, Anyhow.

Font indicates terms organized horizontally around subject, location, approach, and method (largest fonts). Other font sizes are relative to the perceptions of the concept cartographer. Source: Gerike *et al.* 2008.

| Vegetation | Techniques | Population | Health C | Gender Race |
|--|--|-----------------------------------|---|--------------------------------|
| Climate Oceans | GIScience | Mobility H | Iuman Abili | Olichadon |
| $_{	ext{Soils}}$ $S_{	ext{I}}$ | ubject | | 0 0 | ligion Class Culture |
| Environment | Human Book | NOT! | ^{re} Representati lobalization | on |
| Landforms Morphole | Impacts ogy Chai | nge Cultural Ecology | Knowledge | Anything |
| Space Canada | a California | Region Ard | - IIC Santa Fa | White House |
| Bangladesh Southern Hemisphere Earth Country | , ^{Texas} State | Midwest | Grand Forks Urbo County Cit | Home |
| United States Observation | Deductive I | Humanism Phe Hermeneutic | enomenology | Orientalism al |
| Empiricis Idiographic | - | Appro | $\operatorname{ach}_{\operatorname{str}_0}$ | Post- ucturalism |
| Inductiv Compage | Positivism re Nomothetic | Structuralis | | cipatory |
| Description | Mannina | Marxist Fordist | | Any-ism Analysis |
| | | , Juantitative | Discourse | , |
| Landscape Analysis | | Quantitative _{zation} | | • |
| Analysis Exploration Ne | Cluster Density Analysis Visuali | zation M6 | ethoc | Textual Analysis tent Analysis |
| Analysis Exploration Ne Ar | Cluster Density Analysis Visuali | zation M6 | ethoc view Con valitative | Textual Analysis tent Analysis |

Navigating the Streams to Geographical Knowledge

Since the founding of the first stand-alone geography department at the University of Chicago in 1904, the stream of American geographical scholarship has taken many channels from the headwaters of curiosity and inquiry to the bay of knowledge. At times the stream is braided, reflecting heterodoxy in approaches to geographical research, scholarship, and knowledge. Other times, the braids combine in movements of strong unity. This section visits the stream at different points to provide a reference landscape for the rest of the dissertation. The narrative flow established in geographical scholarship, including Unwin (1992), Peet (1998), Turner II (2002), Johnson and Sidaway (2004), and Martin (2005), is synthesized here as a brief discussion.

Geography started to emerge as a "formal academic discipline" in Germany during the late 1700s and early 1800s (Unwin 1992). Alexander von Humboldt sought to observe, document, and describe the world in a systematic fashion. Carl Ritter's comparative approach documented, described, and organized the world by broad spatial regions and common human historical experiences. Together, the two approaches and their respective *Kosmos* and *Die Erdkunde* projects increased knowledge about the world, helped establish geography as a university subject, and demonstrated two methods of geographical inquiry. The deaths of Humboldt and Ritter in 1859 generally end the classical period of geography and start the modern era. Instead of cataloging and describing the world through exploration and discovery, modern geography is characterized by the pursuit of knowledge through logical systems and science (James 2005, 131-141).

Early American academic geography continued in the channel of understanding the world and how it works. Physical geographers like William Morris Davis explored the distant and nearby landscapes to understand the systemic form of the land and the processes that lead to these forms.

The strength of physical geography and its ties to geology help explain the early history of human geography. As field crews surveyed and took measure of the land in the West, research in the Midwest documented urban and rural land use and the economic resources of the land, starting the channel of human geography. The early 1910s brought the anthropogeography of Ratzel and Semple, which regarded people and culture as part of the environment and subject

to the same influences that molded the physical landscape. Under the work of Huntington, environmental characteristics of climate were used to explain why parts of the country and regions of the world had not developed in the same ways or following the same pattern as Western Europe.

Some geographers were uncomfortable with the strong determinism that these environmental perspectives invoked and started new channels in the stream bed for braids to follow. One of the first of these was Carl Sauer with the growth of a historical and cultural landscapes tradition at the University of California. Rejecting environmental determinism, a hallmark of the "Berkeley School" was to understand how cultures lived and adapted to the environment in which they lived, and adapted the landscapes to meet their needs. In some ways, these approaches toward understanding the human evolution of ways of life and landscapes are not to different from Davis's block diagrams of fluvial systems in karst landscapes over time.

While not turning to cultural landscape perspectives, other geographers interested in peoples and places (*e.g.*, James 1929; Meyer 1954; Philbrick 1957) turned to documenting and describing locations, areas, and landscapes. Eschewing environmentalism and causality, the regional and areal studies scholarship sought to understand unique places by describing the idiographic physical, population, and economic characteristics present. Whittlesey's (1956) AAG presidential address exemplifies this research tradition, providing a detailed 97-page compage of Southern Rhodeisa.

The United States government employed many geographers as part of the war effort during the Second World War. Geographers including Ullman, Ackerman, James, Deasey, Stone, McCune, Harris, Carter, Clark, Mayer, Kesseli, Whitaker, Hartshorne, Robinson, Trewartha, Jones, Ginsburg, and Ristow transitioned from teaching classes or pursuing graduate studies to work in the Office of Strategic Services, the War Department, and the Department of State (Harris 1997). Returning to academia after the war, some brought with them the lessons that geographical scholarship can apply to real-world problems. The rise in applied geography coupled with the emerging stream of spatial science. Rather than viewing geography as an idiographic exercise, young geographers at universities in Chicago, Washington, and Iowa saw geography as a nomothetic science providing models and laws for the spatial arrangement of people and cities and the flow of people, goods, and resources through space (Siddall 1961).

More than any time since the strong environmentalism of the 1910s and 1920s, many of the braided streams of geographical scholarship merged in the channel of nomothetic spatial science.

While spatial science appeared orthodoxical, by the late 1960s, some geographers started realizing what universalizing spatial science, or even the idiographic regional traditions or cultural landscape traditions farther up stream, could not address (Tuan 1976). One critique was that nomothetic modeling did not account for human behavior or agency. Behavioralism soon emerged, which considered how people, culture, and feelings influenced spatial decisions. Another offshoot was the role of behavior and perception in understanding environmental hazards. The intellectual waters of the physical, environmental, spatial science, applied, and behaviors streams mixed to produce geographical scholarship on environmental perception, hazards, risk, land use, sustainability, and vulnerability.

Other more critical geographic perspectives were influenced by streams in other valleys of scholarship and the pursuit of knowledge. These streams broke into geography and soon established their braids of scholarship in the stream bed. Geographical political economy scholarship in the early 1970s applied Marxist and Marxian thought to social justice, class, spatialities of capitalism, uneven development, and neoliberalization. Feminist perspectives started emerging in the late 1970s, producing geographical scholarship about women and expanding to include geographical understandings of standpoint theory, positionality, gender, sexuality, and intersectionalities. Critical theory introduced postmodernism, post-structuralism, and theoretical conceits from the humanities and European continental philosophy into geography in the 1980s. This influx led to geographical insights and scholarship on post-colonialism and representation, semiotics and symbolism, actor-network theory and post-Fordism, simulation and simulacra.

Over time, flow down one of the braided channels may be a trickle of a few researchers and scholars. At times the water may disappear and the path become a losing stream before emerging later. Jared Diamond's (1997) *Guns, Germs, and Steel: The Fate of Human Societies* is an example of this. An evolutionary biologist, Diamond's Pulitzer Prize-winning book explains the uneven development of modern capitalist societies in strong environmental terms: parts of New Guinea did not have the same plant and animal resources available as parts of Europe so New Guinea could not develop in the same way.

To some extent, all of the braids of this geographic stream are still present today. Reviewing recent volumes of the *Annals of the Association of American Geographers* or session titles and paper tiles for a recent AAG conference reveal the presence and influences of traditional physical geography, cultural landscapes, regional and areal studies, spatial science, humanism, political economy, feminism, and critical theory. More than orthodoxy, the current drainage system of geographical scholarship in the United States reflects changing, braided channels and the merger of rivers of theory and perspective from other ontological and epistemological river systems. As ideas flowed together, the discharge of knowledge became greater than adding together the individual ideas from the various stream segments.

Historiographical Expeditions

For most geographers, the historiography of their discipline and subdisciplinary fields is traditional narrative and biography. Understanding the history of geography is not merely a study of the accumulated stacks of building blocks. Such a traditional study leads to narrative approaches communicating the major trends, players, and conflicts. The story of geography, geographical knowledge, and practice is much more diverse. A broader view is that geographers are always adding to the dataset of geographical knowledge with blocks of many sizes, colors, and shapes. Chapter 2 reviews the application of historiographic approaches in geography and makes clear the many ways in which geographers "do" the history of geography.

Since there are always geographers conducting research and spreading information about what they observe, find, discover, analyze, and conclude, there is always more being added to the discursive blocks of disciplinary knowledge, there are always more data to potentially use and consider. Historiographers of geography use data of geographical practice to chart, follow, and interpret the history of the discipline as a whole, histories of subfields and specialties, and histories of how geographers present geographical knowledge to audiences. Most everything we do as geographers contributes to a possible data source.

Each study utilizes forms of content analysis and spatial visualization to explore the diversity of geographical knowledge aimed at different audiences in different contexts for different purposes. Chapters 3, 4, and 5 explore different parts and patterns in the building

blocks of geography by delving into three different sets of texts to demonstrate two points. First, histories of geography other than narrative norms are uncovered by using discursive materials to articulate historiographies of geography and trends that reflect the continuous construction of geographical knowledges. Second, different approaches to geography's historiography further our understandings of the nature of the discipline by considering as evidence some of the many materials geographers produce. Geographers not only produce the discipline, they produce the history of the discipline and its historiographies. The textual datasets of presidential addresses of the Association of American Geographers, published thematic conceptualizations of the subfield of cultural geography, and editions of introductory human geography textbooks tell their own stories of the practice, development, accumulation, and diffusion of geographical knowledge in the United States.

Identities in Association of American Geographers Presidential Addresses

If you have one chance to speak to your professional peers, what do you say? Since the beginning of the Association of American Geographers (AAG) in 1904, a president, honorary president, or past president has had the opportunity to speak at the annual meeting to the gathered professional academic geographers and have their address published, most often in the AAG's flagship journal, the *Annals*. Presidents are elected from the members, and are often senior scholars or respected junior scholars. What does the record of 101 published AAG presidential addresses say about the history of the discipline, the topics, themes, and keywords used at different points in time and over time? Analyzing the titles and full text of these addresses sheds light on geographical knowledges at the disciplinary scale for professional audiences. As text, these addresses become part of geographical canon, the "voices of the presidents," that are used to socialize and produce future generations of professional geographers.

Thematic Conceptions of Anglo-American "Cultural Geography"

Cultural geography is one sub-field of the discipline of geography. "Geography" is a difficult term and identity with which many of the presidential addresses have struggled (e.g., Fenneman 1919; Barrows 1923; Whittlesey 1944; Whitaker 1954; Sauer 1956; Ackerman 1963; Lewis 1985; Gober 1999). "Culture" is no less contested and confused (Williams 1973). The challenge of making sense of the combination has driven numerous "cultural geographers" to think in terms of themes, perpetual currents, and trends as they reason for themselves and share their thoughts with others in the subfield. Most engage these themes in the textbooks, volumes of anthologizing readers, collected essays, or articles. What does the record of 31 published groups of "cultural geography" themes by Anglo-American practitioners in books, chapters, and articles since 1962 say about the history and practice of the cultural subfield in different decades and over time? Analyzing these themes demonstrates geographical knowledges at the subdisciplinary level for professional audiences. They are most often engaged by cultural geographers and students becoming cultural geographers as they seek to understand, think about, and learn the practice of cultural geography.

Human Geography Textbooks and Gender

Tens of thousands of students take introductory human geography classes in high school classrooms and on college campuses around the United States each year. Most of these students will use a textbook. The class and text may be the only geography course that the student will take in either high school or college. Three leading textbooks in use today had their first editions published in the late 1970s or early 1980s. Between then and now, geographers have become more attuned to difference in society on the axes and intersectionalities of culture, race, religion, orientation, ability, experience, and gender. More particularly, feminist thought, since being introduced in mainstream academic geography journals in 1973 (Zelinsky 1973a; 1973b), has continued to spread, especially since 1982, a watershed year in feminist geography (Monk and Hanson 1982; Zelinsky *et al.* 1982). More than practicing geography, these texts are also "doing

difference" and "doing gender" (West and Fenstermaker 1995: West and Zimmerman 1987) through their representations of men and women within the text. How are students introduced to gender and geographies of women through these texts? Analyzing the presence, portrayals, and references to women in photographs, maps, graphs, tables, and diagrams informs changes over time in geographical knowledges presented at the classroom scale for general education students that may never formally experience geographic education again.

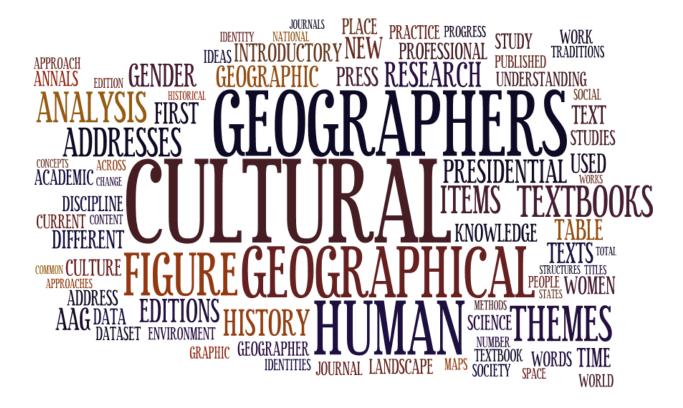
Theory and Visualizing Practice

The three studies of this dissertation research use text and published works as data. Reviewing and reflecting on these works for what they communicate and what information they contain necessitates forms of content analysis. The essence of content analysis is interpreting, determining, sorting, classifying, and counting what is in the text of graphic.

Each of the studies that comprise this research use content analysis in different ways. Various content analysis methods are used depending on the scale, type of text, and historical span of the data. The themes of cultural geography are generally presented in bullet, outline, or table form, making it easy to accurately record the author's intent. Thousands of pictures, maps, graphs, tables, and diagrams in textbooks required a framework for what each of the pictures and information graphics was, and a classification for how each used, displayed, or referred to women or men in the graphic or caption. As such, the analysis is mostly a visual interpretation, documentation, and understanding. Presidential addresses are daunting, as writing and publication trends vary widely since the founding of the AAG in 1904. Lacking consistent abstracts and keywords, which both appeared in the mid 1960s, content analysis considers the whole text. This study uses word frequencies as represented by word clouds. Word clouds are figures depicting the most used words and frequency of use with different sized text. These figures are derived from algorithms that process text, evaluate word frequency, and sort the words alphabetically or randomly. Of the content visualization algorithms available, this study uses Feinberg's Wordle TM (Figure 1-2). The results of these three different content analyses form the basis of discussion.

Figure 1-2: Wordle TM of October 27, 2012 Draft of *Explorations in Historiographies of Geographical Knowledges*. ¹

The word "geography" was removed to improve readability of the other words. Words are arranged alphabetically from left to right. Word color helps differentiate words and does not carry any further meaning. Created with Wordle TM.



Using content analysis introduces other problems. Most notably, studies of texts using content analysis lead to more text. Geography is a visual discipline, be it looking at maps, the landscape, or models and data. Geographers, and science in general, are increasingly exploring: visualization techniques to make sense of the wealth of data available (*e.g.*, Boyack *et al.* 2011; Evans and Foster 2011); the complexities that scientists study (*e.g.*, Borner 2010; Lima 2011; Chen 2004); the complex relations of the practice of science as mapped through citations (e.g.,

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¹ All figures and tables in this dissertation without an acknowledged source are the product of the dissertation research and analysis of dissertation materials held in the author's collection.

Lima 2011; Chen 2004), manuscript submission processes (*e.g.*, Calcagno *et al.* 2012), and published scholarship (*e.g.*, Bettencourt and Kaur 2011; Kirby 2012); and how scientists communicate their personal interests (Zimmer 2011). To visually represent data well implies understanding the data and available communication strategies (Tufte 1990); an awareness of the significance of graphics and graphic variables to this communication are key (Bertin 2011). Skupin (2004; 2011) notes that interest in information visualization is inherently cartographical, both in how data is arranged in visualizations and how choices and variables display connections, categories, types, and amounts.

Each of these three research studies uses a different form of visualization to communicate the data and structure the discussion of results. For presidential addresses, the visualizations are the Wordle word clouds for five bi-decadal cohorts. Each image is different, as the words in address titles and the full texts of the addresses change. The cultural geography study uses a geographic visualization that cognizantly maps the terms and concepts, similar to Figure 1-1. Terms in each successive figure are colored to highlight the themes introduced, present, and used over time. The textbook analysis generated the most quantitative data, lending the data visualizations to graphs that visually communicate totals, percentages, and amounts for multiple variables. While each study uses visualizations that communicate and support the particular discussion, the use of visualizations across this research demonstrates the variety and potential of information graphics as we better understand the historiographies, atlases, and practices of geography and science.

Summary and Departure

The textual bodies of AAG presidential addresses, cultural geography thematic statements, and considerations of introductory human geography textbooks are three different, sometimes interrelating, sets of blocks that partially constitute the material accumulation of geographical knowledge. Traditional narratives of the history of geography may cite several presidential addresses, and may discuss the role of cultural geography as a subfield of the broader discipline. But most narratives do not discuss generations of introductory human geography texts, broader trends in cultural geography, or the scope of ideas presented from the

speaking position of presidents of the AAG. Such detailed stories might stray from the purpose or scope at hand. But that does not mean that these sets of building blocks are not important to understanding the history of geography. Rather, exploring the set of AAG presidential addresses, cultural geography themes, and textbooks over time reveals stories, trends, and patterns of history and practice at different disciplinary scales that can be used to reach different audiences.

The substances that we can use to generate different historical gazes into the discipline and its various sub-disciplines are the materials produced by geographers. The presentations we make and attend, the papers we write and read, the textbooks we assign and teach are all examples of geographical discourse and information exchange at local sites that contribute to the knowledge, understanding, and history of everything that is geography. These materials are the substance of how we "do" geography. As such, they are also materials for exploration and probing by historians of geography. They open up the possibilities of entirely different historiographies.

Each of these three studies strongly supports the contention that geographic knowledges and the nature of geographic thought actively evolve as contemporary scholars practice their profession. Considering studies of these types increases the depth of historiographical understanding of geographical knowledges and the practice of the broader discipline of geography. By paying attention to these constructive processes and understanding their interactive role in it, geographers are better informed of the history of their specialty and their direct and vested role in the enterprise.

In the end, as long as there are geographers, there will be more and continually growing data to generate histories of geography. As we continually produce, we continually construct our own enterprise and extend the boundaries of what we understand to be geographical knowledge. These, in turn, connect us with the past, give us a sense of purpose, ground our current research, and suggest future or revisited research directions.

Chapter 2 - Historiographies of Geographical Knowledges

What are the approaches to the historiography of geography? There are three avenues of how geographers "do" the history of geography. One is what we might call the "history of geography," the traditional narrative approach. Such works have an explicit, conscious focus on "writing history," often in the form of narrative survey or biography. A second approach considers "writing geography." Here the work is not explicitly history, but elements of geographic literature that construct dialogue and discourse. Everything that geographers produce for consumption works toward chronicle – creating a database of the history of geography – a consistent record of practitioners and ideas over time. A third approach entails methods that geographers use to analyze these various discursive statements, such as selection, content analysis, and citation analysis.

Writing History: Narrative Traditions and Personal Stories

Often first thoughts about the history of geography focus on the people and ideas of the past. An example is the subtle point of Pattison's (1964) study of geography's research traditions. Yes, there are four traditions. But Pattison endeavors to show that these are not new, but have long, deep roots in the civilizations of far earlier times. Yet this point is often missed by the casual reader. The leading venues for communicating the history of geography are thick textbooks endeavoring to relate everything geographical from ancient times to the present. These written works often take the form of traditional historical narratives that portray the development and events of disciplinary history as an evolving story. People, ideas, and publications appear in temporal relation to other people, ideas, and publications. Often, the focus is on time periods when specific types of geographic practice are evolving or presiding, setting one form of practice apart from the prevailing practices of other time periods. Narrative is also present in the specific stories written about and by particular geographers and "schools" of geography. The overarching theme of these works is an emphasis on the status and events of geography in the past.

Narratives

Traditional historical accounts are the oldest and most pervasive form of approaching the history, structure, and development of geography. The various editions of *All Possible Worlds* (James and Martin 1993; Martin 2005) epitomize the narrative approach to the history of the discipline, focusing on people, events, and broad-scale changes for an extremely broad period of time. Other writers consider geographic ideas in specific eras. Clarke (1999) examines the ancient period, with emphasis on Polybius, Posidonius, and Strabo. Wright ([1925] 1965) and Glacken (1967) focus on ideas as they exist and develop through time, the former covering the Middle Ages and the latter from early history to the end of the eighteenth century. Buttimer (1971) considers the emergence and evolution of particular ideas of Vidalian human geography in France.

Other narratives focus on explaining the development and application of ideas. Unwin's (1992) *The Place of Geography* and Holt-Jensen's (1999) *Geography History and Concepts* are introductory textbooks that work more with ideas placed in context of persons involved, motivations, and time. Other surveys are more focused in orientation. Johnston and Sidaway (2004) focus on trends in "Anglo-American human geography since 1945," while Gregory's (2000) priority, with an emphasis on the same era, is changes in physical geography. Peet's (1998) *Modern Geographical Thought* considers many of the same developments as Johnston and Sidaway (2004), but from an ideas-based philosophical position. All of these works tell a story of theory and change by gazing back at the past of the discipline rooted in the major persons, works, and ideas of geography.

The goal, especially of Unwin, Holt-Jensen, Johnston and Sidaway, Gregory, and Peet is to consider the types and methods of geography practiced at the time about which they were writing. *All Possible Worlds* is more concerned with the history. Hartshorne's ([1939] 1961) *The Nature of Geography* is an example of both. As a history and a prospectus, Hartshorne's focus is "a critical survey of current thought in the light of the past." It is not only the present and the active, but their roots in the past. Hartshorne's work is also a particular argument about which pasts to use, how, and for a particular contemporary end.

Several histories of geography's various associations also fall within this category. Wright (1952) wrote the centennial history of the American Geographical Society. James and Martin (1978) wrote the 75th anniversary history of the Association of American Geographers 26 years later. Freeman (1980) considered the Royal Geographical Society at its 150th anniversary. These works are best classified as administrative histories and show how the professional organizations organized, developed, and evolved over time.

These reflections upon and discussions of geography's history are also pervasive in other geographical scholarship. Introductory chapters in Holloway *et al.* 2003 and Hubbard *et al.* 2002 develop the history of geography as a starting block for understanding other "key concepts" and a basis for "thinking geographically." Rogers and Viles (2003) *The Student's Companion to Geography* has similar chapters in their introduction to the discipline, but place them at the rear.

Biography

Where some works focus on the synthesis and interaction of people and ideas, other approaches focus on particular persons. Most common are the memoirs and posthumous commemorations that appear in the *Annals of the Association of American Geographers* and the *Transactions of the Institute of British Geographers* after major figures or former presidents pass on. The Association of American Geographers (2012b) now posts memoirs and tributes from the *Annals* and the *AAG Newsletter* online. Other journals including *ACME* (e.g., Mowl 2010), *Progress in Human Geography* (e.g., Withers 2010), the *Geographical Review* (e.g., Gade 2010; Arreola 2010; Keeling 2011) and the *Journal of Cultural Geography* (e.g., Gritzner 1994) draw attention to the passing of colleagues and their impact on individuals and the discipline. *FOCUS on Geography*'s "great geographers" column is another example of re-occurring biography in scholarly periodicals (e.g., Chu 2004).

The International Geographical Union Commission on the History of Geographic Thought inaugurated a project in 1977 to publish "biobibliographical" studies of deceased geographers (Buttimer 1998; *e.g.*, Freeman and Pinchemel 1978; Martin 1991; Armstrong and Martin 2000). Since volume 1 in 1977, more than 400 pieces have appeared in *Geographers Biobibliographical Studies*, with volume 31 published in 2012. This project extends beyond

geographers to persons whose ideas contributed or influenced geographic thought, even if they are not usually regarded as geographers (*e.g.*, Shaw 2000).

Hubbard, Kitchin, and Valentine's 2004 collection *Key Thinkings on Space and Place* continues this trend. Their volume profiles 52 different thinkers on space and place, even though they may not be geographers. As such, Raymond Williams and Immanuel Wallerstein get biographical essays, as do Waldo Tobler and Yi-Fu Tuan. Specialized dictionaries and encyclopedias falling outside of immediate geographic relevance may also profile significant geographical figures (*e.g.*, Baigent 1994; Schroeder 1999).

Other biographical treatments are more research oriented. Book-length treatments, such as Hinshaw's biography of Gilbert White (2006), or Smith's (2003) and Wright and Carter's (1959) studies of Isaiah Bowman, focus on the life experiences, work, and contexts of a single person. Smaller studies also appear as articles, such as Sanderson on Mary Somerville (1974), Bushong on Ellen Churchill Semple (1975), and Sloan on Sir Halford Mackinder (1999). Meinig (1979) profiles the careers and influence of W. G. Hoskins and J. B. Jackson; where Monk (1998; 2003; 2004) focuses on women, either working for the American Geographical Society or as academic geographers. Barnes (2001b) traces the roles of Brian Berry and William Garrison in publishing their 1958 paper. Smith (1976) considers the "non-member geographers" Bernard DeVoto and Wallace Stegner, while Smith (2010) considers Alfred Russel Wallace as a geographer. Or, those persons not related but rather excluded, as Harvey describes in his 1983 memoire of Owen Lattimore.

A closely related area presents works that honor a person's life and work by reconsidering their ideas. Examples include Lowenthal and Bowden's 1976 volume honoring John Kirtland Wright, Buchanan, Jones, and McCourt's 1971 volume for Emyr Estyn Evans, Wilson and Groth's 2003 volume following J. B. Jackson, and Entrikin and Brunn's 1989 volume reconsidering Richard Hartshorne's *The Nature of Geography*. Geographers also revisit the spatial ideas of others, notably Said's concept of orientalism (Gregory 1997), especially when the thinkers pass on (Gregory 2004; Marcuse 2004).

Significantly large numbers of works, both biographical and reflective, exist for Carl Sauer. Brief accounts by Leighly (1978) and Schroeder (1999) contrast with the book-length consideration of Speth (1999). Kenzer's (1987a) tribute combines both biographical and reflective essays, while Mathewson and Kenzer (2003) and Spencer (1976) also consider the

"Berkeley School" often tied to Sauer. Troy (2004) provides a brief sketch of a field trip, while Leighly (1987) and Kersten (1982) consider Sauer's ideas. Entrikin (1987) and Kenzer (1986) reflect on reading Sauer's papers and correspondence. Brown and Mathewson (1999) track a genealogical lineage of research on Latin America amongst Sauer's students. Gade (2012) reflects on the role of curiosity and pursuit of knowledge in Sauer's teaching, advising, and research. Koelsh (2012) considers Sauer's consistent reframing of his view of geography and his role in sorting out the legends and facts of the "rediscovery" of George Perkins Marsh for geographers in the late 1930s. Commentary on Sauer in journals is almost assured to attract more commentary. Following the publication of Leighly's 1987 piece in the *Professional Geographer*, two later issues published comments, replies, and rebuttals by Turner (1987), Porter (1987; 1988), Mathewson (1987; 1988), and Kenzer (1988). These, directly or indirectly, are forms of biography that center on the life and ideas of Sauer, but written by other people.

Autobiography

The line between biography and autobiography is not always clear. Essays by Brown (2003) and Limerick (2003) in Wilson and Groth's 2003 J. B. Jackson volume talk about Jackson's life and ideas, but write themselves and their interactions into the story as well. Autobiography is the author writing their own story, either focused on self or embedded into the historical context of the time. One benefit to this genre is the perspective of lived experience in the words of the person who experienced it, effectively cutting out the representational middle man (Buttimer 1983, 3-5). This is a recent trend in geography, growing especially fast in areas using reflexive research methods (*e.g.*, Domosh 2000; Pini 2004), but growing generally in the literature across many fields and interests (*e.g.*, Liverman 1999).

The roots, from a geographical standpoint, may lie in Maynard Dow's *Geographers on Film* project, where Dow started interviewing geography's leading figures in the early 1970s. Interviews and group discussions led to Browning's slim 1982 collection, but also the Buttimer and Hagerstrand *Dialogue* project. Published as Buttimer's 1983 *The Practice of Geography* and subsequently revisited by Hagerstrand and Buttimer in 1988, the *Dialogue* project sought to collect the stories and experiences of mostly non-North American geographers.

For the seventy-fifth anniversary of the Association of American Geographers, the *Annals* published autobiographical essays by geographers locating their educational and work experience in the contexts of time and American geography as a whole. The March 1979 issue contains 30 essays, ranging from Berkeley in the 1920s to the theory of the 1970s. Part of this issue covered the quantitative revolution of the 1960s and 1970s.

With many of these participants further along in their careers and lives, several are writing their sides of the debates and their experiences. The Billinge, Gregory, and Martin *Recollections of a Revolution* collection came out in 1984. The journal *Urban Geography* has been relatively prolific in special issues and sections where participants reflect on the past changes in geography. The 1990 and 1997 volumes have sections on "origins and evolution of urban geography" and a fifty year commemoration of Harris and Ullman's *The Nature of Cities*. The 1993 volume brought two "geography and spatial analysis: evolution and outlook" sections, including Berry's thoughts on initial conditions and Hanson's "never question the assumptions" paper. Issues in the 2001 and 2002 volumes address urban geography in the 1960s and the 1970s. Some of these, and others, are collected in Berry and Wheeler's (2005) *Urban Geography in America, 1950-2000: Paradigms and Personalities*.

The occasion of the 100th volume of the *Geographical Review* also inspired historical reflection. Papers by Arreola (2010), Ford (2010), and Gade (2010) tell stories of their own development as geographers and the inspiration other geographers had on them. Particular to the anniversary of the journal, all three authors write of papers by Sauer, Gottmann, and Parsons originally published in the *Review* that, in the words of Gade, "profoundly affected the formation of my geographical imagination" (2010, 598).

Reflections in journals do not always occur as parts of anniversaries. Bret Wallach's 2010 "A Slow Learner" was the AAG Cultural Geography Specialty Group marquee address at the 2010 annual meeting (Larsen 2010). Larry Ford aimed to be "unabashedly autobiographical" towards the end of his life, in trying to "clarify what I have been doing for the past forty years" in his geographical research (2011, 414). Clark Akatiff's 2012 account, posted to the *Antipode* Foundation blog, is a version of the talk given at the 2007 AAG annual meeting and relates his personal experiences with the growing field of radical geography. The benchmarks that elicit autobiographical reflection are sometimes more personal or serendipitous than formal. The three

accounts here point to another theme in narrative traditions: each was given or read as a conference paper.

Recent books advance the trend of providing spaces in print for self-reflection. Tuan's (1999) Who am I, Gould's (1999) Becoming a Geographer, Bunkse's (2004) Geography and the Art of Life, and De Blij's (2006) Wartime Encounter are book-length accounts of an individual geographer's story. Gould's book collects and reprints shorter works and conference papers over the years, framing them with notes of the situation, context, and personal meaning that the works had for him at their time of origin. For Tuan, Bunkse, and De Blij, their future careers as geographers are rooted in their upbringing and early life experiences.

Edited collections by Moss (2001), *Placing Autobiography in Geography*, and Gould and Pitts (2002), *Geographical Voices*, and King (2007), *North American Explorations: Ten Memoirs of Geographers from Down Under*, and the "people" section of Aitken and Valentine's (2006a) *Approaches to Human Geography* are book-length accounts that gather geographer's stories into chapters. The fourteen essays in the Gould and Pitts collection are all men, thirteen of them white, who had their most active years during geography's quantitative revolution of the 1960s (Table 2-1). All of the contributors to *North American Explorations*, sharing Australian origins and migrating to the United States during the growth of quantitative geography, are men, except Janice Monk (Table 2-1)

Writings in Aitken and Valentine (2006a) (Table 2-1) are from men and women working within different conceptual frameworks and theoretical approaches to geography, ranging from positivism to Marxist, feminist to queer. These are picked as to support and provide examples for other sections of the book on philosophies and practice (Aitken and Valentine 2006b). Essays in Moss's collection are from men and women, old and young, gay and straight, students and professors (Table 2-1).

Most of the life stories from the Aitken and Valentine collection, and especially the life stories from the Moss collection, are the life stories missing from Gould and Pitts, from the *Urban Geography* and *Annals* sections, and from most of the broad narrative histories. Of these four collections, several contributors tell different multiple stories, as indicated in red in Table 2-1). Janice Monk tells three different stories (Monk 2001; 2006; 2007) and Reginald Golledge two (Golledge 2001; 2007). Monk is one of the few female geographers from her generation that stayed in academia as a career; Golledge one of the few with sight impairment. Their inclusion

in multiple volumes reflects on the different intersecting situated positions – female and/or sight impaired / and or Australian in origin – that they speak from.

Table 2-1: Collected Chapter-length Stories

Table compiles authors of essays in the biographical collections of Gould and Pitts (2001), Moss (2001), Aitken and Valentine (2006a), and King (2007). Names shown in red appear in more than one column.

| Geographical Voices | Placing | Approaches to Human | North American |
|----------------------|------------------|---------------------|----------------------|
| | Autobiography in | Geography | Explorations |
| | Geography | | |
| Brian J. L. Berry | Pamela Moss | Gerard Rushton | William A. V. Clark |
| John R. Borchert | Anne Buttimer | David Ley | Reginald G. Golledge |
| Karl W. Butzer | John Eyles | David Harvey | Peter G. Holland |
| Leslie Curry | Kevin Archer | Robin A. Kearns | Leslie J. King |
| William L. Garrison | Lawrence Knopp | Vera Chouinard | Malcolm I. Logan |
| Reginald G. Golledge | Ian Cook | Linda McDowell | Terry McGee |
| David Harvey | Robin Roth | Richa Nagar | Janice Monk |
| Donald Meinig | Rachel Saltmarsh | Lawrence Knopp | Warren Moran |
| Richard Morrill | David Butz | Janice Monk | Brian Murton |
| Gunnar Olsson | Janice Monk | | Robert H. T. Smith |
| Forrest R. Pitts | | | |
| Waldo Tobler | | | |
| Yi-Fu Tuan | | | |
| Gilbert F. White | | | |

Autobiography is writing from the voice of personal lived experience, and does not attempt to be complete or relate to everyone. It is the strong, personal voice that has the potential to shock as much as inform. Two autobiographical works by geographers make this clear. Gill Valentine's 1998 article "Sticks and Stones May Break My Bones: A Personal Geography of Harassment" describes personal professional experiences, including photographs of threatening messages composed of letters cut from magazines. Valentine uses the article to theorize harassment in spatial and scalable terms. Michael Dear's 2001 article also turns personal and professional experiences into theory, discussing "hate in geography and the geography of hate" and suggesting practices of "anti-hate" (7, 11). Geographers are not just professionals, but people too, suggesting an "inevitable imbrications of professional and personal" in our lives (Dear 2001, 9).

Doing Geography: Discourse and the Continuous Construction of Geographical Knowledge

Most of Geoffrey Martin's 2003 review of scholarship on the history of geography falls into the prior categories of narratives and biographies. These are histories of geography, of people, and of ideas. This is how we "do" the history of geography, but not necessarily how we "do" geography. As the number of ways of "doing" geography through articles and essays, web postings and pictures, increases, it is also being recorded for subsequent or near real time analysis. Some of these publications highlight geographical knowledge at particular points in time. Sometimes for an anniversary or a special conference, collected in a book or a journal volume, sometimes discussion, these forms of geographical work demonstrate their role and value for the history of geography and its historiography by documenting "present" practices at different points in time.

Snapshots

Professional organizations represent and promote the disciplinary perspectives and practices of their members. For professional organizations that primarily represent those in a

single academic discipline, a question often is "what are our beliefs and practices"? Volumes compiled or sponsored by professional organizations seek to represent the nature of geographic study – either as practiced by all, by members of a particular membership organization, or by topical subgroups of such an organization – as it exists at a finite point in time. Structured in a variety of ways, these studies seek to portray the discipline or a subset as it is practiced in the here and now – a picture of practice at the time. These are useful in historiographic study because they tie the ideas and practices of a defined population to a specific era in time.

After the Association of American Geographers (AAG) decided to work towards their first "progress report" in 1944, they worked with the National Research Council to organize committees around research themes and methods (Whitaker and Broek 1954, vii). The 1954 product, *American Geography: Inventory and Prospect* (James and Jones) has 26 chapters representing "objectives and procedure of geographic research" as opposed to a "definitive compendium of the present content of geography" (Whitaker and Broek 1954, vii).

In 1985, the AAG Council started planning a new volume to update the 1954 survey (Abler *et al.* 1992, xv-xix). The result of that project was *Geography's Inner Worlds* (Abler *et al.* 1992) which does not follow topical groupings. Rather, this volume organizes around themes of "what geography is about," "what geographers do," "how geographers think," and "why geographers think that way."

Gary Gaile and Cort Willmott worked to produce a volume more in the spirit of *American Geography Inventory and Prospect* by "using the specialty-group framework to survey and report on the state and future of Geography" (Gaile and Willmott 1989, xi). Specialty groups were organized as research clusters to foster communication among similar types of geographers as Association membership increased. While using the AAG's specialty groups as a frame, the volume was not published, nor explicitly sponsored by, the Association. The preface discusses the roles of AAG members and the AAG specialty groups, but not the formal involvement of the organization. The 1989 volume of *Geography in America* has 35 chapters covering techniques, perspectives, and regional areas. Most of these specialty group-specific chapters have multiple authors working together to produce a joint statement, with 18 individuals contributing to the historical geography chapter. A second volume, *Geography in America at the Dawn of the 21st Century* (Gaile and Willmott 2003), is organized along a similar specialty group framework, and runs 48 chapters long. Unlike the first volume, the AAG organizational logo is

prominently displayed on the cover and at the head of the table of contents, with the acknowledgements noting "the participation of numerous people, and of the Association of American Geographers (AAG) and its specialty groups" (Gaile and Willmott 2003, vii).

British geographers with the Royal Geographical Society (RGS) (Brown 1980) and geographers with the Institute of Australian Geographers (1988) undertook similar evaluation and prospect studies of their research foci in the 1980s. The RGS's volume, coinciding with their 150th anniversary, aims "to review the growth of academic geography in the context of that of the RGS and to look into a crystal ball and seek out likely future trends" (Brown 1980, vii). The volume's 14 chapters are written by individuals, not by the RGS's research groups.

As the Americans focused on American geography and the British on British, the Australians focused on Australian geography for the 1988 25th anniversary of the *Australian Geographical Journal*. Walmsley and Hobbs (1988) examined the articles published in the journal, derived a list of content themes, and asked individuals to write chapters for the 12 themes. The final issue has 15 sole-authored chapters.

Each of these time-specific snapshots considers geographical practices at a set point in time aggregated into groups. Each volume is constrained regionally relative to professional organizations or the purpose of the journal. Examining the set reveals the different ways of organizing and producing these compilation volumes. While successive volumes allow for comparing and contrasting changes within one region, the separate publication dates and organizational frameworks make direct comparison between American, British, and Australian research topics and trends difficult, but highlight the potential for future historiographical work.

Collected Essays and Monographs

Some collected research volumes are snapshots of research in a given area at a set period of time. In effect, these are "cliff notes" to geographical practice sorted by region and topical or methodological specialty. Together, the essays in each volume indicate what geographers are doing and how they are doing it. Other collections of essays serve the same purpose for narrower goals. If discourse is dialogue and making arguments, the effort of organizing and publishing an edited volume is an effort to push discourse in a particular direction. Essays in

Gould and Pitts (2002) serve as one example of arguing for concern for the history of geography; essays in Moss (2001) and Aitken and Valentine (2006a) nuance that argument by including a broader range of geographers and life experiences. While volumes of collected essays make this contribution, so does the investment in writing a textbook or monograph in support of a particular idea, practice, or frame of thought. Two examples are volumes addressing the debate concerning the direction and purpose of geography and volumes covering the tradition and purvey of human geography.

During the transition from what Skaggs (2004, 448) calls the orthodoxy to the nonorthodoxy of geographic theory and method in the middle of the twentieth century, texts were written and organized with the purpose of advocating a particular point of view. While some read Hartshorne's ([1939] 1961) *Nature of Geography* in this vein, the differences of perspective in the period of nonorthodoxy perhaps strengthen opposing views and claims. Chorley and Haggett's 1967 *Models in Geography*, papers from the Second Madingley Lectures at Cambridge University in 1965, advocates the use of models in all geographic research. Each of the 18 chapters, covering traditional topics in geography, contains the word "model" in the title. The front leaf of the dust cover summarizes this movement: "mainly from young geographers" whose perspectives represent "a robustly anti-ideographic statement of work in most major branches of geography." Abler, Adams, and Gould's 1971 textbook *Spatial Organization: The Geographer's View of the World* makes a similar strong claim. For them, the only acceptable geography uses a scientific approach addressing the spatial perspective.

Later geographers used the same method for other arguments. Peet and Thrift ([1989] 2001; 1989) organized *New Models in Geography: The Political Economy Perspective* to demonstrate and argue for a shift from the models of reductionist science to applications of political-economic theory. Each subject chapter, such as "resource management and natural hazards" and "rural geography and political economy" reviews scholarship since 1967 and suggests future political economy approaches (Peet and Thrift [1989] 2001, xiv). The 1997 *Rediscovering Geography* volume also makes a statement about geography. While not overtly proclaiming a particular type of geography, the National Academy of Sciences sponsored *Rediscovering Geography*, which argues for a particular conceptual model of what geographers do, how they look at problems, and how they represent them spatially. The examples of applications and directions in this volume, as indicated by a "critical issues" section discussion

economic health, environmental degradation, and ethnic conflict, and the subtitle *New Relevance* for *Science and Society*, run in the directions of science for the public good.

A recent trend is the explosion of "what is human geography" literature. Agnew and others' (1996) categorizes 41 abstracted readings into: "recounting geography's history," "the enterprise," "nature, culture and landscape," region, place and locality," and "space, time and space-time." In labeling their collection "an essential anthology," they argue that these readings are the core of human geography. Earle and others also released a human geography collection in 1996, centered on concepts instead of specific themes and readings. Nine of the 16 original essays fall into the "substance" category, seeking to explain the basis of the discipline. The remainder are essays in the "method" category that explain some methods as to how human geographers can or could approach the substance. A third collection, by Massey and others, seeks to communicate the "human geography today" circa 1999. This collection divides original essays into categories of "the 'nature' of human geography," "imaginative geographies," "geography and difference," "spatialities of power," and "rethinking space and place." Three volumes in three years purporting to do the same thing for the same discipline. Each sees the discipline in a different way and, by the fact of publishing their books, essays, and frameworks, each volume attempts to make the case for relevance of the specific perspective.

The history of geography and histories of sub-disciplinary thinking are anything but a unified given. Different people draw on different pasts and work towards different futures. The fact that there is difference in what scholars think geography should be, or how it should be done, or what human geography is, or what the foundations of human geography are, presents material for the historiographer of geography. For similar volumes at similar times with similar purpose, the historiographer can address questions related to difference in motivation and approaches to geographical research and scholarship.

Journals and Periodicals and More

While books provide solid physical arguments, discourse is made in other ways. Journal articles are more frequently produced than books, and new ideas take less time to enter the foray of the discipline. As Johnston (2005, 2) notes, "refereed journals are at the core of the

knowledge, however defined, is carried in their pages." Articles can carry the same weight of argument (*e.g.*, Schaefer 1953; Hart 1982) and are more likely to be read completely by more people, especially if they appear in leading journals of the discipline or sub-disciplines. That most major journals appear at least four times a year provides something else. Geography journals are a continuous record of research topic, method, goal, and results. Articles make issues, which make volumes, which create the record of discourse bound into a historical record. The problem then becomes organizing a way to derive history and historical data from these discourses.

Another source for the history of academic geography are departmental histories (Johnston and Withers 2008). Departmental faculty produce these in a variety of forms. Larger projects tell the story and catalog the work that the collective department has done in their practice of geography. Appendices may include lists of courses taught, graduate student theses and dissertations, grant funded projects, visiting scholars, adjunct professors, and scholarship recipients (Bussing *et al.* 2007). All of these lists document the different ways in which faculty have done geography in the field and in the classroom, and who has engaged in the enterprise. Shorter accounts appear as journal articles (Wallach 1999) or are given as addresses (Schroeder 2000). Other departmental products, such as student magazines (Philo 1998), annual or weekly newsletters, document ways in which knowledge interacts and spreads at the scale of academic departments.

Symposium and conference materials organized around a topic are another source. William Thomas, Carl Sauer, Marston Bates, and Lewis Mumford organized a 1956 symposium with papers published as *Man's Role in Changing the Face of the Earth* (Thomas 1956). Providing retrospect, process, and prospect views on human environmental impacts, the more than 50 collected papers and commentaries demonstrate the importance of these considerations for contemporary society (see also Koelsch 2012). The 1990 Turner *et al.* volume *Earth as Transformed by Human Action* updates and furthers the work and message of human environmental impacts.

Direct correspondence between geographers is another way in which scholars can understand geography in and across time. Entrikin (1987) and Kenzer (1986) have both discussed the correspondence and personal papers of Carl Sauer. Ferretti (2011) explored letters

from the years 1882 and 1905 exchanged between Reclus and Kropotkin to understand professional spheres, geographical activity, and diffusion of knowledge.

Correspondence sometime plays out in journals, where comments about papers are not made to the author directly, but in a shared venue for the rest of the community to take part. One example is Domosh's (1991a) "Toward a Feminist Historiography of Geography," to which Stoddard (1991) replied "Do We Need a Feminist Historiography of Geography. And If We Do, What Should It Be?" Another is the comment by ten leading quantitative and spatial geographers (Golledge *et al.* 1982) commenting on the printed version of John Fraser Hart's "The Highest Form of the Geographer's Art" (1982a), the 1981 presidential address, and perhaps the giving of the address itself. In both cases, Domosh (1991b) and Hart (1982b) continued the discussion by replying to the commentaries.

Geographers speak directly to the public through a variety of means. The United States, Canada, New Zealand, and the United Kingdom all have scholarly periodicals aimed at professional teachers. The same countries have popular geographies like *National Geographic*, *Canadian Geographic*, and *The Geographical* that reach broad audiences (Johnston 2009). Profiles of geographers in non-specialist media also raise public attention to their work and the geographical knowledges they produce. American Geographical Society leader John Kirtland Wright (Kahn 1941) and University of California Department of Geography doctorate and artist Trevor Paglen (Weiner 2012) have both been profiled in the *New Yorker*, 71 years apart. That geographers should speak to the public and participate in public debate was at the heart of Murphy's AAG presidential address (2006).

All of these ways of talking about or communicating geography, through books or papers, articles or chapters, stories or narratives, interviews and correspondence, are data of geographical discourse. Not data necessarily to be used in a geographical study, but rather the data that tells us how geographical knowledge is shared, communicated, and past on. These data are the pages, books, and bytes that form understandings of the history of geography, the structure and content of our discipline and subfields (Kurtz and Craig 2009), and geographical knowledges.

From Discourse, Historiography

In order to consider the status or past of geography at one point in time or period, geographers have collected and analyzed samples and sections of these various discursive works. Textual sources include dissertations, presidential addresses, calls for papers, editorial statements, textbooks, citations, and journal contents. Human sources include interviews of professors, surveys of authors, and surveys of topical group members. With data collected, geographers turned to analytical techniques, using statistical rankings, word and key word counts, and thematic content analysis to understand and interpret their collected materials. All of these are examples of mining and interpreting different expressions of discourse in the effort to determine how people did or are doing geography; their methods, intents, topics, perspectives, goals, and publication outlets. Some of these efforts take a broad historical view, while others are limited to the contemporary present. Both efforts, either by being historical in intent or providing snapshots in time, are necessarily historical to the historiographer of geography.

Several scholars use dissertations as data sources, especially as they pertain to continuing or extending academic lineages and "schools" of production (Bushong 1981; Rugg 1981; Robinson and Long 1989; Brown and Mathewson 1999; Koelsch 2001). Surveys of authors (Brunn 1997) and specialty group members (Smith 2003) also give perspective on the status, content, and perceptions of particular groups within the discipline. Sidaway's (1997) study compiles interviews of 40 British geography professors and their thoughts on the state and changing states of publishing, researching, teaching, and living as an academic in their particular spatial and temporal context. Brunn (1998) and Datel (2000) sought trends and evidence of disciplinary feeling in presidential addresses. Brunn focused on the presence of social issues in the 1904-1954 presidential addresses to the AAG while Datel considered the 1940-1999 presidential addresses to the Association of Pacific Coast Geographers (APCG) and the AAG. The approaches used in these studies aim at unraveling the history and geography of the discipline. Hones and Leyda (2004) provide an example of what these approaches can be as they decipher the critical geographies embodied in calls for conference papers and editorial calls for contributions to special journal issues. Myers (2001) considers how different human geography textbook options available in the early 2000s "do" geography by examining how they represent

(stereo)typical themes in Africa. While each of these studies is insightful, they tend not to be repeated or extended; the vein of study begins and ends with the first and last line of thought or manner of approach.

Citations

Perhaps the approach with the largest population of studies is the method of citation counting and analysis. This method analyzes publications to tally how many times an author or article is cited, and who is citing it. Such studies usually exclude self-citations. Bunge (1961) pioneered this research in geography, with Thornthwaite (1961a) and Stoddart (1967) also experimenting with the method and meaning. Studies and commentaries proliferated with the advent of standardized citation indexes for the physical and social sciences (*e.g.*, Whitehand 1984; Turner II and Meyer 1985; Whitehand 1985; Wrigley and Matthew 1986; Haigh 1987; Mead 1987; Whitehand 1987; Wrigley and Matthews 1987; Turner II 1988; Whitehand 1988). Terms like "centurion" (Whitehead 1985), "new centurion" (Wrigley and Matthews 1987), "citation classic" (Wrigley and Matthews 1986), "master weaver" (Bodman 1991), and "achievers of influence" (Wheeler 1994) entered geographic parlance to describe those authors cited a certain number of times or achieving other accountable levels. On occasion, new pieces using citations as grounds for comment appear (Yeung 2001; 2002). Andrew Bodman's studies are insightful for their depth, considerations, continuity, and evolution over time (Bodman 1986; 1987; 1991; 1992; 2002; 2009).

Citation counts introduce problems, principally those of counting names instead of citations. A person having one article cited 20 times would rank the same as one person having 4 articles each cited five times. Other issues arise when one considers why an author is actually cited (Bodman 1991). Citations or reference to other works may build upon the alluded research and ideas, or they may argue or contradict. Citation activities focus on the citations and individual words themselves and not the argument or the string of words into phrases and sentences of context.

The initial wave of British interest in citation counts ebbed with the start of the Research Assessment Exercise (RAE) in 1986 (Wrigley 2002). *Progress in Human Geography* recently

labeled Whitehead's first article that lit the fire a "classic in human geography" and printed commentary and reply by Wrigley (2002), Bodman (2002), and Whitehead (2002). Each raise relevant points about citation analysis and studies of the history of geography. Wrigley inquires as to how *Progress in Human Geography* selects publications for its "classics in human geography revisited" section and wonders why the ranking system, if there is one, is not made public. Bodman sees a shift from "classic emphasis on the histories of the discipline, subjective, partial, and Whiggish in their interpretations and invariably written by the winners of disciplinary donnybrooks, to a greater emphasis on the discipline's sociology" (2002, 514). Whitehead compliments this view in noting that "citations provide an entrée to a communication network whose understanding is an aspect of the solution of questions about the geography, history, psychology, demographics, sociology, economics, and politics of knowledge – but to understand that network we need to know more about the environment in which it functions, including the different kinds of intellectual traffic using the links in the network and the academic life courses of those that generate the traffic" (2002, 518-519).

Interest in issues of citations, journal impact factors, and ways of measuring research continue across academia (Fersht 2009). With the emergence and development of Google Scholar, Web of Science, Scopus, and other databases, citation webs are a growing, interdependent organism. However, online databases are not the whole universe for assessment of geographical scholarship, professional geographic work and knowledge is not always captured (Schuermans *et al.* 2010). Citations provide both a starting point and a method by which we may attempt to understand the structure and workings of geography as a discipline, the geographical knowledges connected, and the greater sociologies of knowledge.

Multiple Journals

Citing the inadequacies of citation counts, other scholars use journal articles to inform different measures and perspectives of geographic breadth, depth, and topic. Geographers publishing in geography and related journals form a vast and nearly contemporary index of who is researching what and how they are going about it. Examinations of a journal, or several journals, reveal patterns and techniques in use.

Rundstrom and Kenzer (1989) surveyed the Annals of the Association of American Geographers, Professional Geographer, and Geographical Review to chart the "decline of fieldwork in human geography" (also Wilson 1990; Kenzer and Rundstrom 1990). Others have employed similar research approaches to identify the use and type of quantitative techniques (Slocum 1990). Raup (1956) analyzed articles in professional journals, publications in other journals, and dissertations to map geography research locations in the United States, the sites where geographical inquiry was producing information and knowledge. Geographers have identified locations of physical geography research sites in the southeast United States and where physical geographers from the same region are focusing their research (Pease and Gentry 2004). Related studies of multiple journals focus on topics of study (Dwyer 1997) and which geographers from where are publishing in certain journals (Garcia-Ramon and Caballe 1998; Gutierrez and Lopez-Nieva 2001; Short et. al 2001; Yeung 2001; Levia and Underwood 2004). Most of these efforts consider scholarly articles. Garcia-Ramon and Caballe (1998) demonstrate the other uses of journals by considering book reviews, themes of articles, and the country and gender of authors. Interestingly, there are no known studies of geography journals considering the roles, patterns, demographics, or influences of article reviewers.

Single Journals

While some studies span multiple journals, others focus on one publication in particular to look at trends. A deciding difference tends to be whether one wants to evaluate conditions for a given period of time, or if one wants to examine how conditions change over time. Multiple journals work well for the former, single journals for the latter. While there are changes in editorship and editorial policy, a single journal provides a more continuous thread to follow through time. This is especially true since different journals have different publication runs, with the most long-standing journals sponsored by professional associations (e.g., the Annals of the Association of American Geographers, Geographical Review, and Transactions of the Institute of British Geographers), and newer journals marketed to sub-disciplines by publishing companies (e.g., Social and Cultural Geography and Cultural Geographies).

The selection of the journal depends on interest and intent. Some prefer examining the popular representations found in *National Geographic* (Pauly 1979; Lutz and Collins 1993; Rothenberg 1994; Tuason 1999; Schulten 2001; Jansson 2003; Gokmen and Haas 2007; Hawkins 2010) or the geographies present in other popular reading material, like the *Saturday Evening Post* (Appleton 2002), *Life* (Doss 2001), *Reader's Digest* (Sharp 2000), and the *New Yorker* (Gerike 2006). Other studies continue the trend of more scholarly journals and consider a fifty-year span of the *Transactions of the Institute of British Geographers* (Bird 1983), a seven-year span of the *Annals of the Association of American Geographers* (Brunn 1995), a forty-two year span of the *Southeastern Geographer* (Lecce and Alderman 2004), and the first thirty years of the *Scottish Geographical Magazine* (Freeman 1976a). While Brunn (1995) and Lecce and Alderman (2004) focus on the author, location, and general topic, Bird (1983) attempts to classify research into a schematic outline of eleven temporally (mostly) progressing research themes (Table 2-2).

Table 2-2: Themes in the Transactions 1935-1983.

Source: After Bird (1983, 55-56).

| Period | <u>Theme</u> |
|-----------|---|
| general | Physical geography and its relation to the subject as a whole |
| 1935-1953 | Geographical influence and 'quasi' determinism |
| 1950 - | Idiographic versus nomothetic approaches |
| 1950 - | Time (as causal process) |
| 1962 - | Perception problems |
| 1967 - | Quantification (as new or desirable) |
| 1968 - | Scale problems |
| 1971 - | Behaviour |
| 1971 - | Decision-making |
| 1975 - | Combinatorial thinking |
| 1977 - | Positivism versus subjectivity |

Other studies consider the presence and development of particular ideas or concepts within one journal. Muir's (1998) study of the *Geographical Journal* focused only on the

relations of geography to landscape history, and only for volumes between 1950 and 1996. Freeman (1976b) considered how *Scottish Geographical Magazine* content varied between times of war and peace.

The Environmental Sciences section of the Annals of the Association of American Geographers has a series of "Centennial Essays" considering the development of biogeography, climatology, and geomorphology over time in the pages of the journal (Gomez 2004). Each article organizes and summarizes their findings by periodizing trends in the history of the discipline. In looking at climatology in the Annals (and extending outside of this publication as well), Skaggs (2004) identifies temporal eras he considers "formative," "regional," and "modern." Further, Skaggs (2004, 448) sees the Modern Era as composed of what he terms "non-orthodoxy" and plethoric approaches to the field that contrast the pre-World War II Formative and Regional veins that practiced one form in an "orthodox" fashion. Cowell and Parker (2004) derive four temporal sets for the biogeographic literature in the *Annals*: 1904-1927 as "dynamic equilibria," 1942-1966 as "regions and positivism," 1968-1987 as "methodological sophistication and environmental variability," and 1987-2003 as "dynamics, heterogeneity, and unpredictability." Haschenburger and Souch (2004) identify research trend periods of "the imprint of the geographic cycle," "a new era of geomorphology," "landscapes as systems," and "a shifting perspective." For Haschenburger and Souch, however, it is not clear if this is a new contribution, a combination of the frames of others, or a single research frame agreed on by several scholars that serves as the "context of broader historical developments in the field of geomorphology" (2004, 775, also 771).

The survey and selections methods used for the three *Annals* studies vary. In the case of the biogeography survey, the data gathering was more of already knowing which landmark studies to include and not a page-through-the-volumes approach to generate a list from which to analyze (Cowell 2004). Outside of author intent, study scope, and selection method, discussions of other methods are lacking in both Skaggs and Cowell and Parker. Haschenburger and Souch select papers that are "broadly representative" and based on citations (2004, 775). The authors note that "contexts of citations are ignored" but "nonetheless article citations provide an indication of the incorporation of theory and methods contained in an article into subsequent investigations" (775). The methods used by Haschenburger and Souch may work well for geomorphology and geography's "harder" scientific subdisciplines. It may be more difficult

when it comes to the social science, humanist, and humanities forms of geography, where an article may also be cited where its methods are presented, critiqued, and subsequently replaced by the method or technique in the publication citing it.

In celebration of the 100th volume of the Annals of the Association of American Geographers in 2010, the four section editors conducted similar studies to those done in 2004 for environmental geography, focusing on "a century of research" (Aspinall 2010; Kwan 2010). The Geographical Review, also celebrating a 100th volume in 2010, did the same. Murphy (2010) conducted an inventory of political geography-related articles appearing in the Geographical Review. Articles by Zimmerer (2010) on nature-society geography and Kobayashi (2010) on human geography structure their narratives around reviews of the literature in the *Annals*. Aspinall (2010) draws on the Annals articles reviewed by Skaggs (2004) and Cowell and Parker (2004). Three other approaches use technology as part of their method. Price (2010) searched "Geographical Review titles and abstracts from the [sic] 1916-2004" and "found nearly 300 articles that contain the word 'region,' 'regions,' 'regional,' 'regionalism,' or 'regionalization'" (2010, 458). Sherman's discussion of physical geography in the Geographical Review utilizes ISI Web of Knowledge ranks and citations. Kwan (2010), writing on "A Century of Method-Oriented Scholarship," utilized and updated an existing Endnote bibliographic database and the ISI Citation Databases to identify 613 articles using terms like "map" (127 times), "analysis" (54 times), and "GIS" (13 times) in the title. Kirby (2012) used a similar data-driven approach, organizing the keywords of primary articles for each of the three decades of the journal *Political Geography* into Wordle TM word clouds to identify keywords and trends. Where the approaches of some researchers page through or scan volumes to find specialty articles and give context of the respective journal as a whole, other approaches demonstrate the value of citation databases and methods of electronic database data mining and data analysis.

Two journals of geographic subdisciplines recently noted their thirtieth anniversaries in different ways. On the occasion of the *Journal of Cultural Geography*'s thirtieth anniversary in 2010, the current editor took the opportunity to document the history of the journal, the conditions of its origin and restructurings (Greiner 2010). Rather than analyze the pages of the *Journal* for trends, the editorial board asked cultural geographers who had studied particular places or regions for about 30 years to reflect on "the developments, issues, experiences, and memories that flavored and informed their intimacy with a particular place" (Greiner 2010, 245).

The editors and editorial board of *Political Geography* celebrated 30 years in 2012 by selecting 15 previously published articles for inclusion in a "Virtual Special Issue" on the journal website (O'Loughlin *et al.* 2012). This approach was not as much comprehensively analyzing the past as much as it was determining the journal content "that merited open-access reprinting, either because of the influence that the article has had or because of the influence that it *should have* had," and making them freely available (O'Loughlin *et al.* 2012, 2; emphasis in the original).

If journals are the primary avenue for the presentation and publication of geographical research, they are also the most consistent and longest-running record of geographic discourse. Historiographic studies considering these data sources, however, are varied in approach, intentions, and conclusions. Dissertations (Browning *et al.* 1956) and conference products including presentations, session titles, session sponsors and co-sponsors, proceedings, and abstracts (*e.g.*, Skupin 2004) present additional data sources for discovering aspects of discourse within particular organizations.

Historiography of Geography

The collected works of geographical knowledge that geographers make available through surveys, book chapters, monographs, essays, and journal articles are the building blocks of traditional historiographical work like narrative histories and biographies. Citation analysis and surveys of trends in multiple journals or a single journal make use of these building blocks for smaller studies that also add to the historiography of geography. Understanding and telling the story of geography and the spread of geographical knowledge would be difficult without these building blocks. It is through these blocks of work and knowledge that the professional practice of geography is done. These blocks, when assembled together, construct the ever-growing body of geographical knowledge. With each journal article, with each conference presentation, the mound of blocks grows.

Chapter 3 - Identities in Association of American Geographers Presidential Addresses

Preceedings

If given the opportunity to speak to your professional peers about the work that you do and share, what would you say? For academic geography, the presidential address to the Association of American Geographers (AAG) at the annual meeting provides this venue and opportunity. Since the Association's founding in 1904, 107 of these opportunities have existed. In the eyes of Brunn (1998, 94), addresses are "statements by our discipline's leaders" that "can be viewed as statements of disciplinary thinking at the time they were presented." Geographic thought and history and philosophy of geography seminars sometimes use presidential addresses, as they give statements on the "nature of geography" (Schroeder 2012). Such a platform, regardless of intent of the speaker, has a role in structuring the discourse and direction of the discipline as a whole. While recent presidents in particular have many other platforms for statements (*e.g.*, Nellis *et al.* 2004) and connect with people at regional and national meetings, the aura of the national yearly presidential address stands alone.

AAG addresses tend to cover the broad interest(s) of the discipline instead of a region (Datel 2000; Brunn 1998); discuss the history, philosophy, and methodological issues of geography (Schroeder 2012; Datel 2000; Brunn 1998); and not focus on a particular scale of study (Datel 2000). This analysis considers the AAG presidential addresses that exist in print as examples of disciplinary thinking in the context of traditions of geography (Pattison 1964), structures of geographical knowledges (Harvey 2001a), and disciplinary identities of geography (Turner II 2002a).

The Association of American Geographers

The American Geographical Society, founded in 1851 and known for its library and map collection, existed as an information gathering entity and source for information about places in

the United States and around the world that were not well known (Wright 1952). The National Geographic Society formed in 1888, and in 1898 moved towards a popular-style magazine written in plain language for "ordinary, intelligent Americans" (Poole 2004, 36; Schulten 2001; James and Martin 1978). William Morris Davis, observing the absence of a professional organization for geographical scholars like the Geological Society of America for geologists, proposed forming one (Martin 2005, 352-353). Davis saw a niche, and the Association of American Geographers formed at a December 1904 meeting in Philadelphia, the first, with 48 members (James and Martin 1978, 36-37). Membership stood at 5,847 at the 75th anniversary of the Association in 1979 (Association of American Geographers 1979b).

The Philadelphia meeting in 2004 observed the 100th anniversary of the Association and the 96th meeting, three having been canceled due to world wars (1917, 1942, and 1944) and fourth missed because of a shift from meeting in December 1949 to April 1950. Individual membership topped 10,000 in 2006 and stood at 10,400 in 2010 (Association of American Geographers 2006 and 2010).

Presidential Addresses

Since William Morris Davis became the first president of the AAG in 1904, 99 different individuals have had the opportunity to give an address to the association (Tables 3-1 to 3-6). Three different types of presidents have had the opportunity to give AAG addresses (Table 3-7). For the first fifty years, the address was the responsibility of the sitting president. The office of honorary president existed mid-century for twelve years, giving Derwent Whittlesey, Carl Sauer, and Preston James the opportunity to join William Morris Davis in giving more than one presidential address (Table 3-8). In 1967, the AAG created the office of past president, who gives the address at the annual meeting near the end of his or her term.

Table 3-1: AAG Presidential Addresses, 1904-1919.

| Year of Meeting | President | Title of Address | Year Published |
|--------------------|---------------------|---|-------------------|
| 1904 | William M Davis | The Opportunity for the Association of American Geographers | 1905 |
| 1905 | William M Davis | An Inductive Study of the Content of Geography | 1906 |
| 1906 | Cyrus C. Adams | Some Phases of Future Geographical Work in America | 1907 |
| 1907 | Angelo Heilprin | No address given. | N/A |
| 1908 | Grove K. Gilbert | Earthquake Forecasts | 1909 |
| 1909 | William M Davis | Experiments in Geographical Description | 1910 |
| 1910 | Henry C. Cowles | The Causes of Vegetational Cycles | 1911 |
| 1911 | Ralph S. Tarr | The Glaciers of Alaska | 1912 |
| 1912 | Rollin D. Salisbury | No address given. | N/A |
| 1913 | Henry G. Bryant | Government Agencies and Geography in the United States | N/A |
| 1914 | Albert P. Brigham | Problems of Geographic Influence | 1915 |
| 1915 | Richard E. Dodge | Some Problems in Geographic Education, with Special Reference to Secondary Schools | 1916 |
| 1916 | Mark Jefferson | Geographic Provinces of the United States | 1917 |
| 1917 | Robert DeC. Ward | Meteorology and War Flying, Some Practical Suggestions | 1918 |
| 1918 | Nevin M. Fenneman | The Circumference of Geography | 1919 |
| 1919 | Charles R. Dryer | Genetic Geography: The Development of the Geographic Sense and Concept | 1920 |

Table 3-2: AAG Presidential Addresses, 1920-1939.

| Year of Meeting | President | Title of Address | Year Published |
|--------------------|----------------------|--|-------------------|
| 1920 | Herbert E. Gregory | Geographic Basis of the Political Problems of the Pacific | N/A |
| 1921 | Ellen C. Semple | The Influence of Geographic Conditions upon Current Mediterranean Stock Raising | 1922 |
| 1922 | Harlan H. Barrows | Geography as Human Ecology | 1923 |
| 1923 | Ellsworth Huntington | Geography and Natural Selection: A Preliminary Study of the Origin and Development of Racial Character | 1924 |
| 1924 | Curtis F. Marbut | The Rise, Decline, and Revival of Malthusianism in Relation to Geography and the Character of Soils | 1925 |
| 1925 | Ray H. Whitbeck | Adjustments to Environment in South America: An Interplay of Influences | 1926 |
| 1926 | J. Paul Goode | The Map as a Record of Progress in Geography | 1927 |
| 1927 | Marius R. Campbell | Geographic Terminology | 1928 |
| 1928 | Douglas W. Johnson | The Geographic Prospect | 1929 |
| 1929 | Lawrence Martin | The Michigan-Wisconsin Boundary Case in the Supreme Court of the United States, 1923-26 | 1930 |
| 1930 | Almon E. Parkins | The Antebellum South: A Geographer's Interpretation | 1931 |
| 1931 | Isaiah Bowman | Planning in Pioneer Settlement | 1932 |
| 1932 | Oliver E. Baker | Rural-Urban Migration and the National Welfare | 1933 |
| 1933 | Francois E. Matthes | Our Greatest Mountain Range, the Sierra Nevada of California | N/A |
| 1934 | Wallace W. Atwood | The Increasing Significance of Geographic Conditions in the Growth of Nation States | 1935 |
| 1935 | Charles C. Colby | Changing Currents of Geographic Thought in America | 1936 |
| 1936 | William H. Hobbs | The Progress of Discovery and Exploration within the Arctic Region | 1937 |
| 1937 | W. L. G. Jeorge | Generalization and Synthesis in Geography | N/A |
| 1938 | Vernor C. Finch | Geographical Science and Social Philosophy | 1939 |
| 1939 | Claude H. Birdseye | Stereoscopic Phototopographic Mapping | 1940 |

Table 3-3: AAG Presidential Addresses, 1940-1958.

| Year of Meeting | President | Title of Address | Year Published |
|--------------------|---------------------|--|-------------------|
| 1940 | Carl O. Sauer | Foreword to Historical Geography | 1941 |
| 1941 | Griffith Taylor | Environment, Village and City: A Genetic Approach to Urban Geography, with Some Reference to Possibilism | 1942 |
| 1942 | J. Russell Smith | Grassland and Farm-land as Factors in the Cyclical Development of Eurasian History | 1943 |
| 1943 | Hugh H. Bennett | Adjustment of Agriculture to Its Environment | 1943 |
| 1944 | Derwent Whittlesey | The Horizon of Geography | 1945 |
| 1945 | Robert S. Platt | Problems of Our Times | 1946 |
| 1946 | John K. Wright | Terrae Incognitae: The Place of Imagination in Geography | 1947 |
| 1947 | Charles F. Brooks | The Climatic Record: Its Content, Limitations, and Geographic Value | 1948 |
| 1948 | Richard J. Russell | Geographical Geomorphology | 1949 |
| 1949 | Not Given | | N/A |
| 1950 | Richard Hartshorne | The Functional Approach in Political Geography | 1950 |
| 1951 | G. Donald Hudson | Professional Training of the Membership of the Association of American Geographers | 1951 |
| 1952 | Preston E. James | Toward a Further Understanding of the Regional Concept | 1952 |
| 1953 | Glenn T. Trewartha | A Case for Population Geography | 1953 |
| 1954 | J. Russell Whitaker | The Way Lies Open | 1954 |
| 1955 | Derwent Whittlesey | Southern RhodesiaAn African Compage | 1956 |
| 1956 | Carl O. Sauer | The Education of a Geographer | 1956 |
| 1957 | George B. Cressey | Water in the Desert | 1957 |
| 1958 | John B. Leighly | John Muir's Image of the West | 1958 |
| 1959 | Stephen B. Jones | Boundary Concepts in the Setting of Place and Time | 1959 |

Table 3-4: AAG Presidential Addresses, 1960-1979.

| Year of Meeting | President | Title of Address | Year Published |
|--------------------|---------------------------|--|-------------------|
| 1960 | John E. Orchard | Industrialization of Japan, Mainland China, and India: Some World Implications | 1960 |
| 1961 | C. Warren Thornthwaite | The Task Ahead | 1961 |
| 1962 | Andrew H. Clark | Praemia Geographicae: The Incidental Rewards of a Professional Career | 1962 |
| 1963 | Edward A. Ackerman | Where is a Research Frontier? | 1963 |
| 1964 | F. Kenneth Hare | New Light From Labrador-Ungava | 1964 |
| 1965 | Fred B. Kniffen | Folk Housing, Key to Diffusion | 1965 |
| 1966 | Preston E. James | On the Origin and Persistence of Error in Geography | 1967 |
| 1967 | Meridith F. Burrill | The Language of Geography | 1968 |
| 1968 | Walter M. Kollmorgen | The Woodman's Assault on the Domain of the Cattleman | 1969 |
| 1969 | Clyde F. Kohn | The 1960s: A Decade of Progress in Geographical Research and Instruction | 1970 |
| 1970 | John R. Borchert | The 'Dust Bowl' in the 1970s | 1971 |
| 1971 | J. Ross Mackay | The World of Underground Ice | 1972 |
| 1972 | Norton S. Ginsburg | Colonialism to National Development: Geographic Perspective on Patterns and Policies | 1973 |
| 1973 | Edward J. Taaffe | The Spatial View in Context | 1974 |
| 1974 | Wilbur Zelinsky | The Demigod's Dilemma | 1975 |
| 1975 | Julian Wolpert | Opening Closed Spaces | 1976 |
| 1976 | James J. Parsons | Geography as Exploration and Discovery | 1977 |
| 1977 | Marvin W. Mikesell | Tradition and Innovation in Cultural Geography | 1978 |
| 1978 | Harold M. Rose | The Geography of Despair: An Assessment of Rising Levels of Lethal Violence | 1978 |
| 1979 | Melvin G. Marcus | Coming Full Circle: Physical Geography in the Twentieth Century | 1979 |

Table 3-5: AAG Presidential Addresses, 1980-1999.

| Year of Meeting | President | Title of Address | Year Published |
|--------------------|---------------------|--|-------------------|
| 1980 | Brian J. L. Berry | Creating Future Geographies | 1980 |
| 1981 | John Fraser Hart | The Highest Form of the Geographer's Art | 1982 |
| 1982 | Nicholas Helburn | Geography and the Quality of Life | 1982 |
| 1983 | Richard Morrill | The Responsibility of Geographers | 1984 |
| 1984 | John S. Adams | The Meaning of Housing in America | 1984 |
| 1985 | Peirce Lewis | Beyond Description | 1985 |
| 1986 | Risa Palm | Coming Home | 1986 |
| 1987 | Ronald F. Abler | What Shall We Say? To Whom Shall We Speak? | 1987 |
| 1988 | George J. Demko | Geography beyond the Ivory Tower | 1988 |
| 1989 | Terry G. Jordan | Preadaptation and European Colonization in Rural North America | 1989 |
| 1990 | David Ward | Social Reform, Social Surveys, and the Discovery of the Modern City | 1990 |
| 1991 | Saul B. Cohen | Global Geopolitical Change in the Post-Cold War Era | 1991 |
| 1992 | Susan Hanson | Geography and Feminism: Worlds in Collision? | 1992 |
| 1993 | John R. Mather | A Shared Vision | 1993 |
| 1994 | Thomas J. Wilbanks | Sustainable Development in Geographic Perspective | 1994 |
| 1995 | Robert W. Kates | Labnotes from the Jeremiah Experiment: Hope for a Sustainable Transition | 1995 |
| 1996 | Stephen S. Birdsall | Regard, Respect, and Responsibility: Sketches for a Moral Geography of the Everyday | 1996 |
| 1997 | Judy M. Olson | Multimedia in Geography: Good, Bad, Ugly, or Cool? | 1997 |
| 1998 | Lawrence A. Brown | Change, Continuity, and the Pursuit of Geographic Understanding | 1999 |
| 1999 | Patricia Gober | In Search of Synthesis | 2000 |

Table 3-6: AAG Presidential Addresses, 2000-2011.

| Year of Meeting | President | Title of Address | Year Published |
|--------------------|----------------------|--|-------------------|
| 2000 | William L. Graf | Damage Control: Restoring the Physical Integrity of America's Rivers | 2001 |
| 2001 | Reginald G. Golledge | The Nature of Geographic Knowledge | 2002 |
| 2002 | Susan L. Cutter | The Vulnerability of Science and the Science of Vulnerability | 2003 |
| 2003 | Janice Monk | Women, Gender, and the Histories of American Geography | 2004 |
| 2004 | M. Duane Nellis | Geospatial Information Technology, Rural Resource Development, and Future Geographies | 2005 |
| 2005 | Alexander Murphy | Enhancing Geography's Role in Public Debate | 2006 |
| 2006 | Victoria Lawson | Geographies of Care and Responsibility | 2007 |
| 2007 | Richard Marston | Land, Life, and Environmental Change in Mountains | 2008 |
| 2008 | Kavita Pandit | Leading Internationalization | 2009 |
| 2009 | Thomas J. Baerwald | Prospects for Geography as an Interdisciplinary Discipline | 2010 |
| 2010 | John Agnew | Waterpower: Politics and the Geography of Water Provision | 2011 |
| 2011 | Carol P. Harden | Framing and Reframing Questions of Human-Environment Interactions | 2012 |

Table 3-7: Variations of AAG Presidents

Source: James and Martin 1978; Foote 2005.

| Variations | Years Address Given |
|--------------------|---------------------|
| President | 1904-1954 |
| Honorary President | 1955-1966 |
| Past President | 1967-2011 |

Table 3-8: Presidents with More Than One Address.

Source: James and Martin 1978; Foote 2005.

| President | Years Given |
|----------------------|------------------|
| William Morris Davis | 1904, 1905, 1909 |
| Carl Sauer | 1940, 1956 |
| Derwent Whittlesey | 1944, 1955 |
| Preston James | 1952, 1966 |

Table 3-9: Women AAG Presidents.

Source: James and Martin 1978; Foote 2005.

| President | Year Given |
|------------------------|------------|
| Ellen Churchill Semple | 1921 |
| Risa Palm | 1986 |
| Susan Hanson | 1992 |
| Judy M. Olson | 1997 |
| Patricia Gober | 1999 |
| Susan L. Cutter | 2002 |
| Janice Monk | 2003 |
| Victoria Lawson | 2006 |
| Kavita Pandit | 2008 |
| Carol P. Harden | 2011 |

Ellen Churchill Semple was a founding member of the AAG, served as president in 1921, and gave an address. Fifty-five years later, Risa Palm gave the past president's address, a stretch of 65 years between female presidential addresses (Table 3-9). Female presidents have become more common recently, with three serving in the 1990s and four in the 2000s, including the back-to-back years of 2002 and 2003.

Since 1950, the Association has met yearly and a presidential address was given and published in the *Annals of the Association of American Geographers* (Table 3-10). Addresses were not given at the meetings of 1907, 1912, and 1937. Joerg had an addresses titled "Generalization and Synthesis in Geography" in the program for the 1937 meeting, but was absent (Association of American Geographers 1938, 1). Neither an abstract, nor an address, were published. Addresses were given but not published in 1913 and 1920, nor do published abstracts exist. Meetings were cancelled but addresses published in 1917, 1942, and 1944. Due to the shift in meeting scheduling, no meeting was held, nor address published, in 1949. These variables give a published dataset of 101 presidential addresses.

Table 3-10: Variations in AAG Meetings, Addresses, and Publication.

Full text or alternate versions of text exist for 101 addresses. Titles are known for 104 addresses. Source: James and Martin 1978; Foote 2005.

| Variations | Year Given |
|---|---|
| No meeting held, no address published. | 1949 |
| No meeting held, address published. | 1917, 1942, 1944 |
| Meeting held, no address given or published. | 1907, 1912, 1937 |
| Meeting held, address given, not published. | 1913, 1920, 1933 |
| Meeting held, address given, address published. | 1904-1906; 1908-11; 1914-1916; 1918-1919; 1921-1932, 1934-1936; 1938-1941; 1943; 1945-1948; 1950-2011 |

Addresses from 1904, 1905, and 1906 are found in the *Bulletin of the American Geographical Society*, a publication of the American Geographical Society (Table 3-11).

Addresses from 1908 and 1909 are found in *Science*, a publication of the American Association for the Advancement of Science. The address from 1909 also appears in the *Scottish Geographical Magazine*. The remaining 96 addresses are found in the pages of the *Annals of the Association of American Geographers*, which started publication in 1911. Fenneman's 1918 address appears in the *Annals* and in the *Geographical Review*, the American Geographical Society's descendent publication to the *Bulletin of the American Geographical Society*.

Table 3-11: Publication Sites of AAG Presidential Addresses.

| Variations | Year Given |
|--|--|
| American Geographical Society, Bulletin of the American Geographical Society | 1904, 1905, 1906, 1909 |
| American Association for the Advancement of Science, <i>Science</i> | 1908, 1909 |
| Royal Scottish Geographical Society, Scottish Geographical Magazine | 1909 |
| American Geographical Society, Geographical Review | 1919 |
| Association of American Geographers, Annals of the Association of American Geographers | 1910, 1911, 1914-1919, 1921-1932, 1934-1936, 1938-1948, 1950-2011. |

Davis's 1909 address is a more complicated story (Table 3-11). The address was given as "The Italian Riviera Levante," but it is not known to exist in this form (James and Martin 1978; Foote 2005). Variations titled "Experiments in Geographical Description" are found in the three different 1910 journals. The version in the *Bulletin of the American Geographical Society* contains a note stating "modified and extended in certain points" (Davis 1910a, 401), while the note in Science states "modified and extended in certain parts" (Davis 1910b, 921). The note with the version published in the *Scottish Geographical Magazine* reads "first published in the *Bulletin of the American Geographical Society* for June 1910, with some modifications. Reprinted in a slightly abbreviated form." The version in the *Bulletin* is 34 pages long and is used in this research, while the *Science* and *Scottish Geographical Magazine* are both 25 pages in length. In short, there is no clear understanding of what was presented at the 1909 meeting.

Printed transcripts of addresses given, printed papers meant to be read, and papers turned into presentations are all written versions of the address. It is not difficult to imagine how some addresses were delivered. The printed version of Davis's 1904 address reads as if it were to be read, a short talk of three pages on "The Opportunity for the Association of American Geographers." By contrast, the printed version of Whittlesey's 1955 address, "Southern Rhodesia – An African Compage," reads as a lecture, punctuated with maps, tables, and pictures, bookended by four paragraphs setting a deeper context. Schroeder (2012) indicates that by the late 1950s, annual meeting addresses and presentations used slides for photographs and maps, which would add to the classroom experience of Whittlesey's address. It is not known if Whittlesey presented his address as published. Anecdotes indicate that the presentation lasted more than three hours. Robert Platt, who attended AAG meetings since the early 1920s and gave the 1945 address, is distinctly recalled as commenting to his graduate Geographic Thought seminar that Whittlesey's address was "one of the most boring" he had "ever heard" and thus suggests the possibility, or at least a strong opinion on the subject matter and/or perceived length of the address (Schroeder 2012). Today, AAG presidents tend to develop ideas for their addresses as they make their rounds to the regional meetings held each fall across the United States. The presentations use computer slide shows, and the published addresses since 2001 are between 8 and 14 pages in length, illustrated with a few slides or diagrams.

Since 2008, the AAG has recorded and posted select annual meeting events online (Association of American Geographers 2012). These include the presidential addresses from

2009, 2010, 2011, and 2012. The availability of these recordings opens a new avenue of analysis. To see an address being given, being delivered, is to experience the performance of the address in context of the power and delivery of the speaker, engagement with the audience, and the benefits and limits of the technology and stage with considerably less exercise of imagination.

The best source material for understanding the AAG annual meetings and the addresses are in the pages of the *Annals*, where the addresses are published and the annual meeting program and select abstracts were published from 1911 to 1968 (Association of American Geographers 1969). James and Martin's 75th anniversary monograph of Association history lists presidential address information up to 1978 in an appendix (1978). James (1974) provides the ground work up through 1972 for several appendices included in James and Martin (1978), including the dates and location of the annual meeting, presidential address, and officers elected. Foote (2005), as part of his Geographers in the Web project, includes the list from James and Martin (1978) and has updated it comprehensively through 2004 and generally through 2008. Coincidentally, the next AAG presidential address to be published will be Foote's 2012 address "Building Community, Changing Culture."

Two geographers, Stanley Brunn and Robin Datel, have examined AAG presidential addresses. Brunn's 1998 study examined AAG addresses from 1904 to 1954, on certain years of national and international trial to see if, how, and to what extent presidents talked about the Great Depression, wars and military activities, social policies, and geography's public responsibility.

Datel's 2000 millennial study, a presidential address about presidential addresses delivered to the Association of Pacific Coast Geographers (APCG), considered the APCG presidential addresses given between 1940 and 1998 and the 59 AAG presidential addresses given between 1940 and 1999. Organized around short discussions of several themes identified by her examination of the addresses (Table 3-12), Datel explored "differences and similarities among the two sets of voices, the regional and the national" (2000, 10).

Table 3-12: Datel's Themes in Presidential Addresses.

Source: Datel 2000.

Themes

Religious language

Regional focus

Scale

Subfield of Geography

Pattison's Traditions

Techniques

Rediscovering Geography's six contemporary problems

Citations and References

Humor and Fun

Despite the different approaches and foci of these two projects, they both make points important here. One, Datel makes an argument for revisiting presidential addresses "in order to learn more about the evolution of currently circulating ideas, to reconsider and perhaps retrieve forgotten ideas, to correct errors, to be socialized into geographical ways, and to honor diverse pasts (2000, 12). Presidential addresses, while set in a particular time and academic context, continue to make their arguments to whoever reads them.

Brunn categorizes the content of presidential addresses as being either mostly (a) personal statements about one's own research interests, (b) having the "strong flavor" of disciplinary history, (c) having philosophical content, or (d) suggesting new developments. Each of these potential content categories is of interest here, as they apply to one of Brunn's concluding questions: "how have these addresses influenced specific disciplinary directions" (1998, 105)?

Traditions, Structures, and Identities

Geographers William Pattison, David Harvey, and B.L. Turner II are three amongst the many to make sense of academic geography's complicated landscape of interests. They each do

this, from different perspectives and with different purposes, to arrive at four traditions of geography, four structures of geographical knowledges, and two competing identities in the discipline of geography.

Pattison viewed American geography pluralistically, as varied but exhibiting "a broad consistency, and that this essential unity has been attributable to a small number of distinct but affiliated traditions" originating in the past and used across the world in present times (1964, 211). For Pattison, a geographical study was one that addresses any one or more of the traditions (Table 3-13). Pattison's original paper was delivered at a meeting of the National Council for Geographic Education and later published in the organization's Journal of Geography. As a framework, "the traditions of geography" aid in teaching geography, "expedite the task of maintaining an alliance between professional geography and pedagogical geography and at the same time promote communication with laymen" (Pattison 1964, 211). Today, the "man-land" tradition is often spoken of as the "human-environment" tradition. Robinson revisited Pattision's ideas in a follow-up article in the same journal, noting that the "four traditions are a happy compromise in learning scale between compiling a list of a dozen or more 'main concepts' of geography and memorizing a frustrating single-sentence definition" (1976, 520). Pattision's traditions have been explicitly used elsewhere, including the AAG presidential addresses of Taaffe (1974), who excluded the earth science tradition, and Marcus (1979), who focused on the human-environment and earth science traditions. Datel's study of 59 AAG addresses concluded that many of the "addresses exemplified more than one tradition, and in a significant share none of the traditions was emphasized" (2000, 26) (Table 3-14).

Table 3-13: Traditions, Structures, and Identities.

The traditions, structures, and identities listed in the order of discussion from the source texts. Source: Pattison 1964; Harvey 2001; Turner II 2002.

| Pattison's Traditions | Harvey's Structures | Turner's Identities |
|-----------------------|--|--------------------------|
| • Spatial | Cartographic identifications | Spatial- |
| Area studies | Measure of space- time | chorological approach |
| Man-Land | Place / region / territory | Human- |
| Earth Science | Environmental qualities and the relation to nature | environment subject |

Table 3-14: Pattison's Themes in AAG Presidential Addresses, 1940-1999.

Source: Datel 2000.

| Traditions Emphasized | Percent |
|-----------------------|---------|
| Human-environment | 37 |
| Spatial | 30 |
| Area studies | 25 |
| Earth science | 7 |
| None | 24 |

Where Pattison viewed the practice of geographical study over time and arrived at four traditions, Harvey considers how institutions, interests, and industries at different scales produce geographical knowledge. Harvey's essay considers the spatiality of geographical knowledges at different governmental, corporate, cultural, and educational sites, and discusses "the common structural components of geographical knowledges" observed at these sites (2001a, 219) (Table 3-13). For Harvey, the structural elements "can help identify the unities (if such there are) that underlie highly diverse geographical knowledges and suggest foci around which strong ideas might cluster" (219) and "collectively form structural supports for a unified methodological field of activity to be called 'Geography'" (229). In Harvey's view, there is a "dialectical relationship between political-economic and socio-ecological change on the one hand and geographical knowledges on the other" (208). The geographical work done in and across the world as part of ever-changing political-economic systems provides and changes foundations for geographical study.

Where the names of Pattison's traditions are simple and the names of Turner's concepts intuitive, the labels that Harvey uses for his structures are more complex. Given this and that Harvey's conceptualization of structures is not as well known as the frameworks of Pattison and Turner, the structures are summarized in the order that they are introduced in the original text (Harvey 2001a). "Cartographic identifications" acknowledges the centrality of maps and cartography to geographical scholarship and knowledge. Going deeper, the "locating, identifying, and bounding phenomena and thereby situate events, processes, and things within a spatial frame" organize the world but also "play a key role in the formation of personal and political subjectivities" (220-221). For Harvey, cartography is not just maps, but also organization, power, and identity.

"The measure of space-time" (MS-T) structure encompasses the dynamic, "malleable, and variable" "ways of representing, understanding, and shaping space" that result in "spatial structures" of "nodes, networks, surfaces, and flows" that are themselves useful for "modeling those structures" (223). MS-T involves the tools "to set up common descriptive frames and modeling procedures to look at all manner of" flows, diffusion, networks, nodes, and surfaces across and in space (223). In Harvey's view, "all of these elements of spatial structure become integral to our understandings of how phenomena are distributed and how processes work through and across space over time" (223).

"Place / region / territory" (P/R/T) are scale-related synonyms in geographical scholarship for constructed and bounded spatial entities characterized by all or one of: similarities, relations, materials, and communities (224-225). P/R/T enables "comparative studies of geographical differentiation and uneven geographical development" and multiples of geographic information made possible when the continuous whole of space is divided intp discrete areal zones (225). Harvey views P/R/T not as static but in flux and struggle, making the diversity and unevenness of systems and characteristics understood through P/R/T "a key pillar to all forms of geographical knowledge" (226).

"Environmental qualities and the relation to nature" (EQ&RN) addresses the "question of how people do and should understand the relationship to environment and nature" (227). In geography, understandings of EQ&RN are dynamic and constantly influence resource issues for the world economy, the affect of these relations on labor and life, and, "anthropogenic influences" (227-229).

Harvey pluralizes "knowledges," making the point that he thinks "it dangerous to presume there is some settled way of understanding or a unified field of knowledge called 'geography' even within the academy" (2001, 209). In this way, though starting at a very different point than Pattison, Harvey also arrives at a pluralist unity. Harvey's concepts were originally presented at the Social Sciences at the Millennium conference, and later at the International Geographical Congress. The published version is in a volume of collected papers and presentations, *Spaces of Capital: Towards a Critical Geography* (Harvey 2001b).

Where Pattison found historical traditions in geographical works over time and Harvey understands a field constructed of geographical knowledges produced at sites across the political-economic system, Turner identifies two disciplinary identities. Identity, which Turner defines as "the key conceptual or cognitive marker on which rationales that justify the partitioning of a 'body of knowledge' into a discipline rely," mimic and "may be reformulated by practice" of those working in the discipline (2002a, 53). Looking at the work of the discipline of geography in the United States, Turner outlines two such identities (Table 3-13). The spatial-chorological identity is a scientific "approach to understanding phenomena and processes" (Turner II 2002a, 54). The human-environment identity is a scientific "condition or substance" or subject of study (Turner II 2002a, 54). The former is an identity of geography as a way of knowing; the latter is an identity of geography as a subject of study. Turner traces the American scholarly origins of

both to European antecedents, and outlines the ebb and flow of the identities, marked "by the hegemony of the spatial-chorological identity" over the past fifty years (2002a, 52). Those in the discipline of geography have used the identities as "intellectual rationales for the existence of geography" within the academy and have reified them as opposing sides in a battle over the discipline (Turner II 2002b, 84).

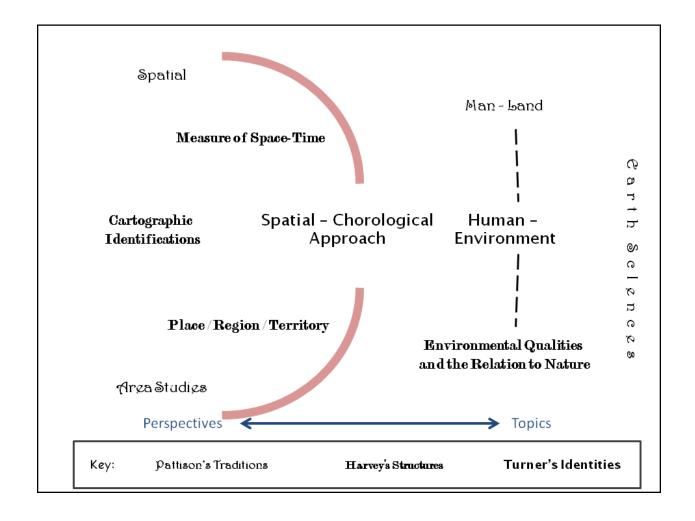
Turner's paper originated from guest lectures, an encyclopedia entry, and the development of course material for teaching a graduate seminar in geographical thought (Turner II 2002a, 64). The paper is found in the *Annals of the Association of American Geographers* with comments by human-environmentally identified geographers Butzer (2002), Kates (2002), and Wescoat (2002), with a reply by Turner (2002b).

Pattison, Harvey, and Turner consider the traditions, structures, and identities of geography, knowledge, and the discipline from three different standpoints for three different purposes. While individually trying to make sense of academic geography's complicated landscape of interests, approaches, and histories, their concepts together suggest a framework for understanding the historical and contemporary practices of geography and geographical work across scales and sectors. Together, the organizational themes in these three approaches provide a foundation to discuss the breadth and depth of geographic approaches, topics, and methods used to construct geographical knowledge.

Figure 3.1 depicts a conceptual cartographic interpretation of how the traditions, structures, and identities fit together. Rather than using automated or algorithmic methods, conceptual cartographic approaches weigh the connections between terms and traditions and express them visually as a web of relative locations. Instead of being random, alphabetical, or a sorted hierarchy, term locations and placement are conscious, cognizant decisions.

Figure 3-1: Foundations of Geography

"Basemap" for figures 3-17 through 3-22 and Figure 3-24.



Turner's two identities are in the center, as the spatial-chorological approach and human-environment identity are the bridge between the perspectives on the left side of the map and topics of study towards the right. Traditions and structures within the red arc of spatial-chorological approaches on the left side of the figure are arranged on a continuum from the spatial tradition at the top to the area studies tradition at the bottom. While the spatial-chorological approach brings these two traditions together, Pattison frames them as two separate, distinct traditions. The measure of space-time and place / region / territory in Harvey's conceptualization help transition the separating aspects of Pattison's traditions with the unity represented in Turner's spatial-chorological approach. For the purposes of this diagram, the location of the spatial tradition and the measure of space-time could switch with the location of

the area studies tradition and place / region / territory, respectively, and not change the intended meaning of the concept map.

Harvey's cartographic identifications structure falls in the middle between the spatial and area studies traditions on the vertical axis. This positioning reflects the balance that maps and cartography bring to all perspectives of geographic study. Cartographic identifications is also parallel to the spatial-chorological approach and the center of the human-environment column, Turner's two core concepts. This arrangement maps the two identities on the same parallel and centers a core tool of geographic inquiry and study.

The traditions, structures, and identities have one commonality across them – the relations of people to nature and the environment. These three terms appear vertically in the center-right of the figure with dashed lines showing connections between them. Human-environment, being the most widely-used term of the three today, is in the center. Geographic perspectives used in researching human-environment topics, like the vertical stretch of this column, span across the spatial-chorological approaches.

Earth sciences, a tradition noted only by Pattison, is the most specific of the topics. Like human-environmental topics, geographic approaches to Earth sciences range from spatial to areal and include maps. Mapped to the right of the human-environment column, this positioning also depicts the role of human-environmental topics as a bridge between the physical Earth sciences and the economic, population, urban, and cultural forms of human geography that use spatial and chorological approaches.

Combining the traditions, structures, and identities differentiates Turner's binary by including earth sciences and exploding the possibilities of the spatial-chorological tradition. Harvey's pillars connect the spatial-chorological identity to the areal tradition through place, region, and territory, and the spatial tradition through measuring space and time. Harvey's cartographic identification is an extension of the spatial tradition, and addresses a concern made by Wescoat (2002) about the lack of mapping practice and technology as a contribution method to the others and an area of focus in its own right.

Approach

At the initial and founding meeting of the AAG, Davis gave a short talk, "The Opportunity for the Association of American Geographers." Though the shortest in print, it stands as the first address to the AAG at a national meeting by the president. Davis uses his address to set the context of the organization, the "little recognition" of "geography as a subject of mature study" in the United States, a focus on "original work in some branch of geography," and the goal of "associating the students of the organic and inorganic sides, ... and in leading them to work in view of and in co-operation with each other, and to present their results in each other's presence, we shall have taken an important step in the development of geographical science" (Davis 1905, 84-86). In many ways, Davis's first address is a model for succeeding addresses. The address stakes a claim to the importance of geography as a subject and discipline, the importance of research, and future potential of geography, building on the communication of those on the human and physical sides of the discipline. How have later presidential addresses served geography by embracing or strengthening this opportunity?

Analysis and visualizations of textual datasets commonly use abstracts or keywords (*e.g.*, Kwan 2010; Byack *et al.* 2011; Kirby 2012). Examining a textual dataset spanning greater than 100 years has challenges. Abstracts were not published with the addresses until 1965 (Table 3-15). Even then, the 1990 and 1998 addresses omitted an abstract. Keywords were first used with presidential addresses in 1970-1975, but have infrequent use. The resolution, rather than using partial abstracts, is to visualize the common words in address titles (Figure 3-2) and presidential addresses (Figure 3-3). This analysis considers the 101 AAG presidential addresses available in full text and the 104 addresses with known titles (Table 3-10) over time against the foundations of geography (Figure 3-1).

Table 3-15: Abstracts and Keywords Published with AAG Presidential Addresses.

| Abstracts | | Keywords | |
|---------------|------------|---------------|-----------|
| Not Published | Published | Not Published | Published |
| 1904-1964 | 10.57 1000 | 1904-1969 | 1050 1055 |
| | 1965-1989 | 1976-1981 | 1970-1975 |
| | | | 1982-1989 |
| 1990 | | 1990 | |
| | 1991-1997 | | 1991-1997 |
| 1998 | | 1998 | |
| | 1999-2011 | | 1999-2011 |

Figure 3-2: 100 Most Frequent Words in Titles of AAG Presidential Addresses, 1904-2011.

All words are included to represent the dominance of "geography" in presidential address titles at the expense of legibility. Compare to Figure 3-10. Color is used to improve contrast but does not impart additional or intended meaning. Created with Wordle TM.

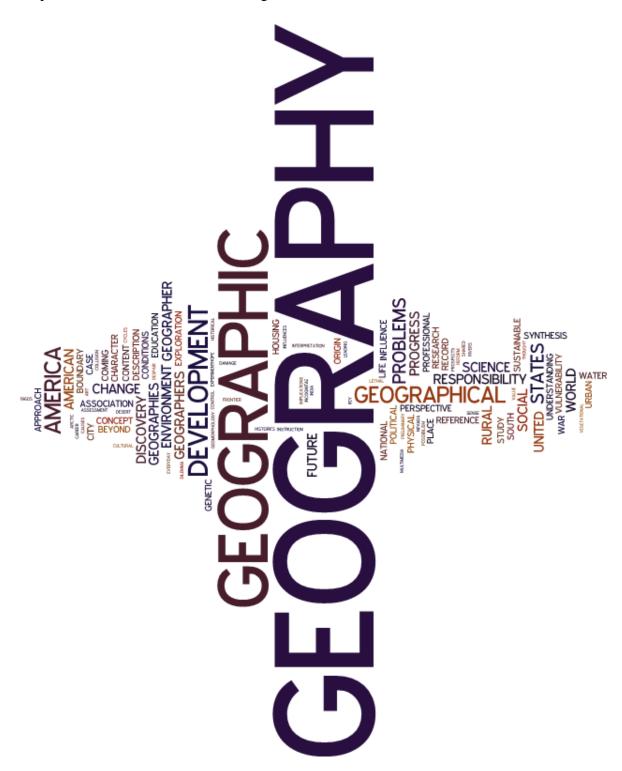
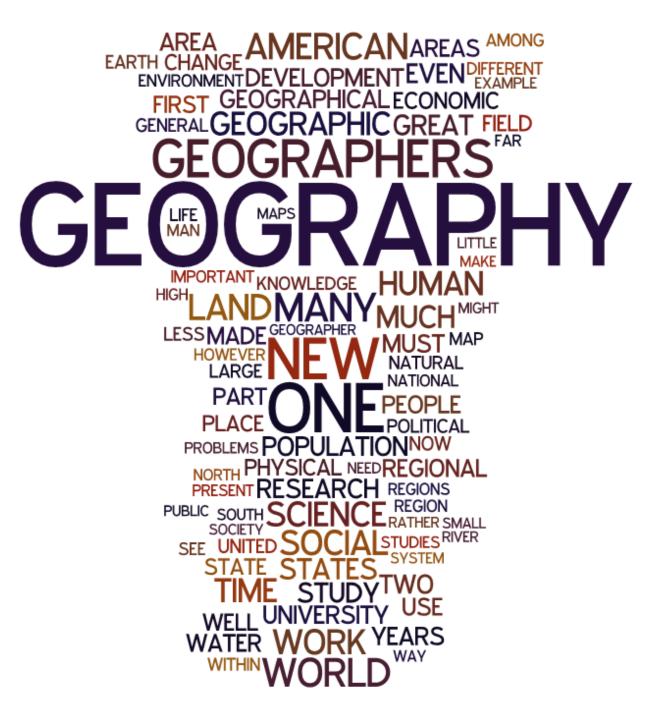


Figure 3-3: 100 Most Frequent Words in the Complete Text of AAG Presidential Addresses, 1904-2011.

Compare to Figure 3-23 for a version without words with the root "geography." Color is used to improve contrast but does not impart additional or intended meaning. Created with Wordle TM.



The title and full text analyses both use Feinberg's (2011) Wordle TM algorithm to generate graphics showing the relative frequency of word usage by size. This analysis is a form of electronic data mining, or the use of software to process text with a summary output of the character or context of the inputs. As demonstrated in Kirby's (2012) analysis of articles from the journal *Political Geography*, Wordle TM is a useful tool to identify key words from large amounts of text and compare cohorts.

Kirby's (2012) analysis uses the three ten-year groupings of the run of *Political Geography*: 1982-1991, 1992-2001, and 2002-2011. The presidential address data has a similar need for periodization to visualize changes over time. Table 3-16 shows the bi-decadal cohorts used in the presidential address analysis, which maximizes the clustering of addresses in the middle periods and keeps the incomplete and future cohorts at the tails of the distribution. This organization results in four twenty-year cohorts from 1920 to 1999 with a possible maximum of twenty addresses per cohort. The 1920-1939 cohort reflects three years where an address was not given or not published (Table 3-10). No meeting was held in 1949. The first and last cohort are partial since the AAG was not founded until 1904 and the 2011 address is the last published.

Table 3-16: AAG Presidential Address Cohorts.

| Years | Number of Addresses |
|-----------|---------------------|
| 1904-1919 | 13 |
| 1920-1939 | 17 |
| 1940-1959 | 19 |
| 1960-1979 | 20 |
| 1980-1999 | 20 |
| 2000-2011 | 12 |

Wordle TM has several options for organizing, filtering, and arranging information. Most of the following visualizations are arranged like Figure 3-3: the orientation is vertical to maximize page usage and readability, the font is "Expressway Free," words are sorted alphabetically from top to bottom, and words are standardized to use capital letters. Figure 3-2, on the other hand, demonstrates issues created when one word is used disproportionately more

than others, "geography" in this case. To deal with this circumstance, words are orientated both portrait and landscape. Color is selectively used across the Wordle TM visualizations, is generated randomly by the algorithm, and carries no additional or intended significance.

Numbers are excluded from the Wordle TM visualizations except in the title analysis. The decades used are clearly visible in these diagrams. Wordle TM visualizations also used the "exclude common words" option, which eliminates words such as: a, and, is, and the. Review of each Wordle TM enabled the selective exclusion of other common, fractional, or misleading words. May, for example, has disproportionate frequencies in the full text analysis attributed to the dual meanings of "giving permission" and the fifth month of the calendar year. "Also," "vol," "con," and "ing" are other words removed during this step. The exclusion option also allows for the creation of Figure 3-10 from Figure 3-2 and Figure 3-23 from Figure 3-3. The text inputs are the same; the figures differ in that figures 3-10 and 3-23 exclude words with the root "geograph" to improve clarity and readability.

A final setting is the ability to limit the maximum number of words used in the Wordle TM visualization. Figures showing the 1904-2011 span for titles and full text are limited to 100 words to improve visual clarity and interpretation. Visualizations for the full text cohorts are limited to the 50 most frequent words. The analysis of the title cohorts left this setting at the default 150, ensuring that each word appearing in a title for the cohort is displayed.

Other than alphabetical, users have no ability to control the order or placement of words in the visualization. The Wordle TM interface does allow users to "re-layout with current settings." Once other settings and formatting was complete, this feature was used until the random re-drawings produced an acceptable layout.

Presidings

"What shall we say? To whom shall we speak" is the title of Ronald Abler's 1987 presidential address. Using the content visualizations of AAG presidential address titles and texts over time, this research examines the words of AAG presidents to members of the Association and other geographers. The foundations of geography model (Figure 3.1) structures

the discussion. Do the results of the analyses suggest modification to the foundations of geography built on traditions, structures, and identities?

Titles

Words in titles are the briefest summary of the content of AAG presidential addresses. Words used in the titles of AAG presidential addresses are shown in Figures 3-4 to 3-9 by two-decade cohort (see Table 3-10). Each cohort contains between 12 and 20 addresses. Each title was coded with the decade (*e.g.*, 1910) and is included in each figure. As a result, the decades in the figures serve as a guide to interpret how often words were used. No term was included in the title in every year of the decade.

One visible trend is the prominence of "geography" and changing preferences for related terms over time. This is clear by reviewing Figure 3.2. "Geography" is the leading term across all periods, excepting the 1920s and 1930s, when "geographic" was used more often. "Geographic' is widely used in the first two periods of study, 1904-1939, but is not widely used after 1940. "Geographies" is apparent in the 2000s-2010s (Figure 3-9). If the AAG presidents are representative of the rest of practicing geographers, this suggests that "geographic" was more commonly used earlier in the 1900s, and the emergent trend is to speak of "geographies."

Figure 3-4: Most Frequent Words in Titles of AAG Presidential Addresses, 1904-1919.

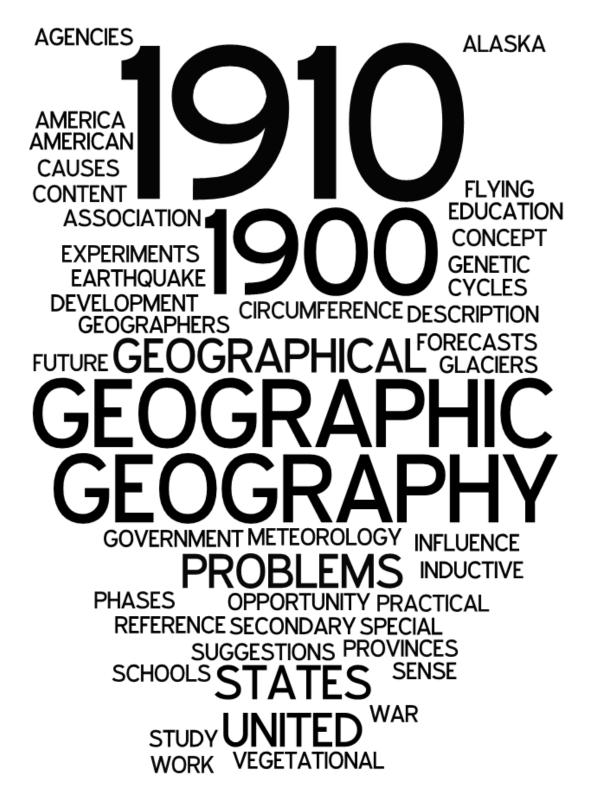


Figure 3-5: Most Frequent Words in Titles of AAG Presidential Addresses, 1920-1939.

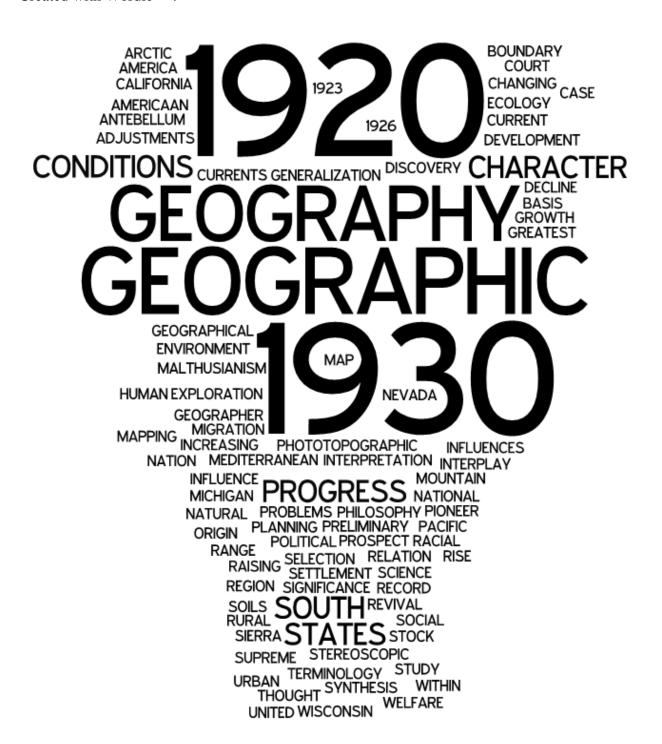


Figure 3-6: Most Frequent Words in Titles of AAG Presidential Addresses, 1940-1959.

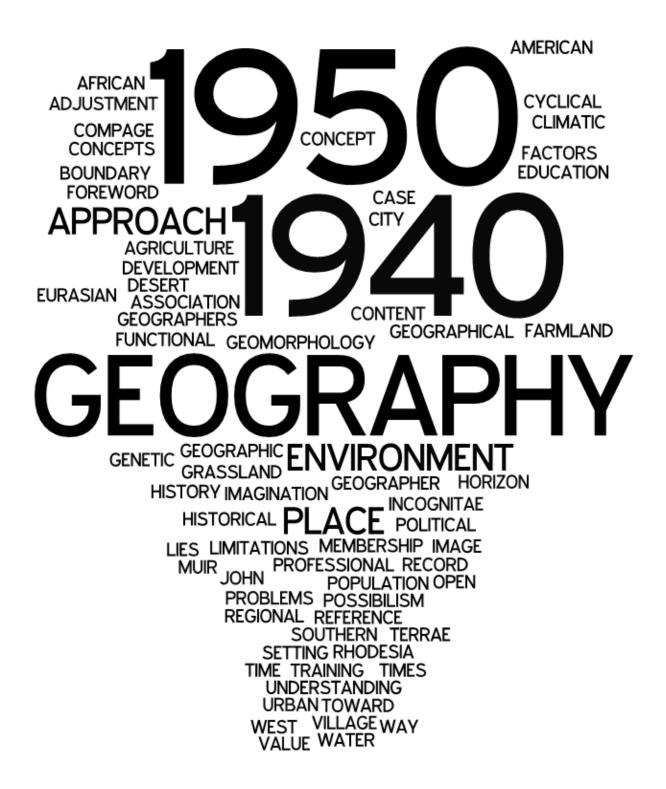
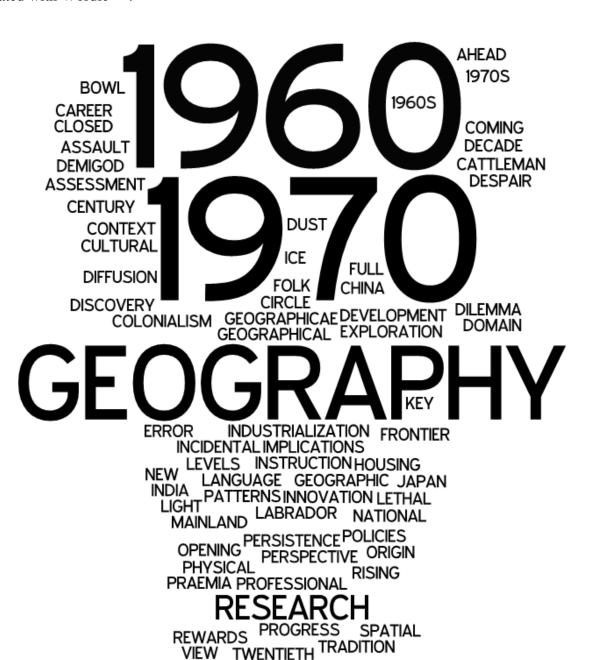


Figure 3-7: Most Frequent Words in Titles of AAG Presidential Addresses, 1960-1979.



TASK UNDERGROUNDUNGAVA

SPACES WOODMAN

Figure 3-8: Most Frequent Words in Titles of AAG Presidential Addresses, 1980-1999.

Words with the root of "geograph" are retained as their inclusion does not impact legibility. Created with Wordle TM.

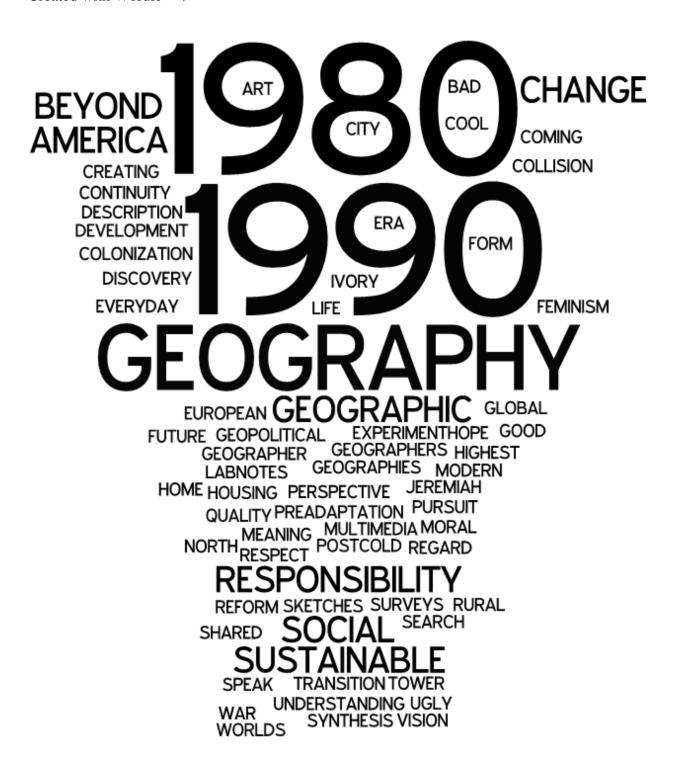
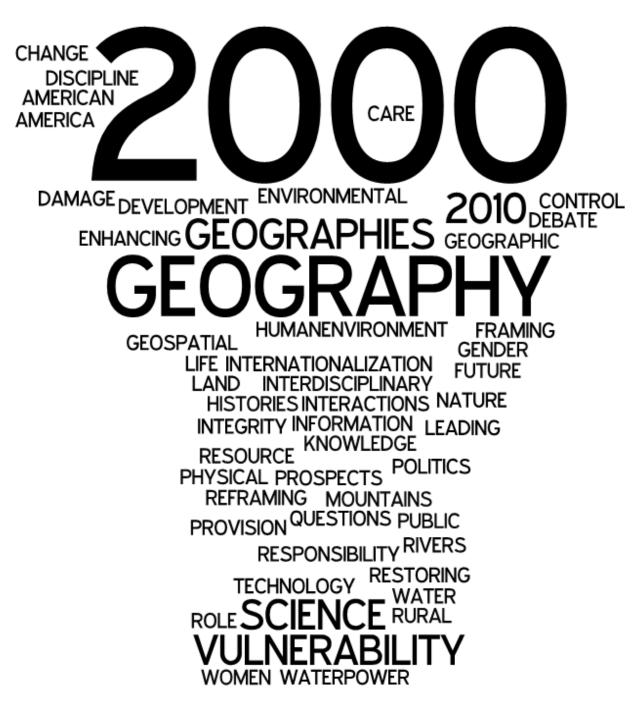


Figure 3-9: Most Frequent Words in Titles of AAG Presidential Addresses, 2000-2011.



Address Titles and Traditions, Structures, and Identities

Words, other than those related to "geography," are seldom used more than once per period. Those words that are more frequently used shed light on the topics, issues, and perspectives of the day. For the 1904-1919 period (Figure, 3-4), the key word is "problems." Brigham (1915) spoke on "Problems of Geographic Influence" and Dodge (1916) spoke on "Some Problems in Geographic Education, with Special Reference to Secondary Schools." A regional label, "United States," appears in two addresses. Bryant (1913 address, not published) spoke on geography and government agencies. Jefferson (1917) spoke on geographic provinces. The focus on the United States and the consideration of problems in schools suggests spatial-chorological approaches, interests in places and regions, and area studies. What is clear is the framing of geography as a perspective that explores "problems" and utilitarian contributions have been appreciated by society.

The most frequent title terms in the 1920s and 1930s, excepting geography, are: "character," "conditions," "progress," "south," and "states" (Figure 3-5). The appearance of "south" and "states" indicates a continued interest in areas and places, part of the spatial-chorological approach. "Character" may also support the spatial-chorological approach, as it relates to understanding the essence of a thing or a place. The two addresses using the term, Marbut's (1924) on Malthusianism and soils and Huntington's (1924) on the "origin and development of racial character" are clearly part of the human-environment identity. Semple's (1922) address discussing "The Influence of Geographic Conditions upon Current Mediterranean Stock Raising" and Atwood's (1934) comments on "The Increasing Significance of Geographic Conditions in the Growth of Nation States" further contribute to the human-environment identity of the period and the era of environmental determinism and geographic influences.

"Approach," "Environment," and "Place" are the most frequent title terms in the 1940s and 1950s (Figure 3-6). The two addresses using "environment," by Bennett (1943) and Taylor (1941) are part of the human-environment identity. The subtitle of Taylor's address, "A Genetic Approach to Urban Geography, with Some Reference to Possibilism," exemplifies the spread of strong environmentalism ideas into other areas of geography. For some, environmentalism and geographic influences was an approach to understanding how the world works. Taylor's use of approach, also used by Hartshorne in 1950, strengthens the concern with how geographers did

their work. If the focus in 1904-1919 was on discussing and describing problems, in 1940-1959 the interest is describing methods and approaches to understanding spatial or environmental problems.

The 1940s-1950s period is the only one where "place" appears more than once. Used by Wright (1947) as he explores "The Place of the Imagination in Geography" and Jones (1959) as he discusses "Boundary Concepts in the Setting of Place and Time," both titles view place as a location. Jones's use also hints at regionalism. For this period, Wright and Jones are examples of place, region, and area studies.

Of the twenty address titles between 1960 and 1979, only two words, other than geography were used more than once (Figure 3-7). Ackerman's (1963) "Where is a Research Frontier?" and Kohn's (1970) "A Decade of Process in Geographical Research and Instruction" both support the continued interest in what geographers do, not just what they study. In the period of the 1960s and 1970s, the language of methods continued to evolve from problems, to approaches, to research. One of the uses of "world,' Mackay's (1972) address on underground ice, reflects his particular research interests. The emphasis on research and the example of specialized research reflect the efforts of the time to reconceptualize geography as a science. The other use of "world" is in the contexts of international implications of Asian industrialization (Orchard 1960), reflecting the growth of economic, political, and interdependent concerns. One reading of the lack of frequent terms for this period is disciplinary flux. The presidents, their addresses, and the titles reflect many different perspectives on geography, but no coherence.

During the 1980s and 1990s, AAG presidents were concerned with society, responsibility, and sustainability (Figure 3-8). As keywords, these bridge the human-environment identity. The full titles of the Wilbanks (1994) and Kates (1995) addresses bear this out: "Sustainable Development in Geographic Perspective" and "Labnotes from the Jeremiah Experiment: Hope for a Sustainable Transition." The Human-Environment identity is strong and well in the early 1990s. Morrill (1984) and Birdsall (1996) both use "responsibility," noting the role of geographers in relation to society and morals in what geographers do. These themes connect with Ward's (1990) address discussing social reform. At hand is not a human-environment subject or a spatial-chorological approach, but an interest in understanding how society works and how geographers can contribute.

"Beyond" and "Change" are two more words that appear more than once in titles between 1980 and 1999. Their use marks an awareness of geographers of needing to continue to develop skills, the work done, and how that work is communicated. Emphasis on change notes the "Post-Cold War Era" (Cohen 1991). These global changes affect the research geographers do, which in Brown's (1999) words is: "Change, Continuity, and the Pursuit of Geographic Understanding."

A clever title, Cutter's (2003) "The Vulnerability of Science and the Science of Vulnerability" explains the frequency of "science" and "vulnerability" in Figure 3-9. Perhaps the 2000s-2010s are moving in the direction of the 1960s-1970s, when there are so many ideas, interests, and geographies that it is difficult to see coherence in the addresses of the AAG presidents.

Analysis of words in the titles of AAG presidential addresses shows that the spatial-chorological approach was evident for all six periods, and that the human-environment subject was present for the latter five periods. No period, based on words used in multiple titles, reflected Earth sciences, the spatial, or cartography and the mapping sciences. Simply put, there are not enough words in titles to support a temporal analysis of the traditions and structures of geography.

While an analysis of titles does not do well for understanding change and identity over time, it does reflect concerns of geography from 1904 to 2011. The words AAG presidents use in titles does draw attention to gaps in the foundations model (Figure 3.1). Traditions, structures, and identities reflect either geographical work, topics of study, or approaches to understanding spaces and places. The titles make clear that presidents also express concern for geography and geographers' situated place in the world. Figure 3-10 revises Figure 3-2 by removing all words that have the root "geograph" for the span 1904-2011. All of the words in the figure appear in at least three address titles. "Development," never a leading concept across the six cohorts, is the most-used word.

Figure 3-10: The 100 Most Common Words in Titles of AAG Presidential Addresses, 1904-2011, Less Forms of "Geograph*"

Words with the root "geograph" such as geography, geographic, and geographers are omitted. Compare to Figure 3-2. Color is used to improve contrast but does not impart additional or intended meaning. Created with Wordle TM.



The landscape of geography in Figure 3-10 is one of synthesis. For the period 1904 to 2011, AAG presidents express interest in the rural, America, the United States, and the world. There is concern for change and for the future. They are aware of problems; there has been progress. Geography is about discovery, but also science; the environment, but also society. Geographers have responsibilities.

Keywords reflect major trends if the words are used often, such as "geographic" and "geographies," but most words are not used often enough across the titles to support meaningful cohort-level results in context of traditions, structures, and identities. The words in titles do reflect the breadth and essence of the discipline for broader time periods, creating a synthesis of subjects, locations, and methods.

Text

At the opposite side of the spectrum of title keywords is analysis considering the full text of each presidential address – the atomic level instead of the summary. Words used in the full text of published AAG presidential addresses are shown in Figures 3-11 to 3-16 by two-decade cohort (see Table 3-16). 483 unique words appeared in the titles of AAG presidential addresses. Analysis of the full text involves more than 8 million words. Full text includes titles, abstracts, keywords, footnotes, endnotes, acknowledgements, and works cited – any and all words included as part of the published article. Since there are more words available for the analysis overall and in each cohort, each figure is limited to the 50 most common words for the cohort, and each word is used more often than once or twice. The Wordle TM option for "remove common words in English" was used, and diagrams were reviewed to remove other common words. The sheer scope of words makes it difficult to relate word and word usage back to specific addresses, but is more revealing for traditions and structures.

Overall, "Geography" is the most common term across the entire dataset, used 4,939 times. "Geographic" does not make the same strong appearance that it did in the title words analysis. "Geographers" increases in use from the 1904-1939 period to 1940-1959, and again to 1960-2011.

Terms appear and disappear. "Spatial" only appears in the 1960-1979 and 2000-2011 cohorts. The 2000-2011 cohort (Figure 3-16) displays "discipline," "knowledge," and "understanding," reflecting interest in geography and geographical knowledges. The same cohort includes "education," "care," and "women." "Influence" is lacking after 1904-1919.

Figure 3-11: The 50 Most Common Words in AAG Presidential Addresses, 1904-1919. Created with Wordle $^{\rm TM}$.

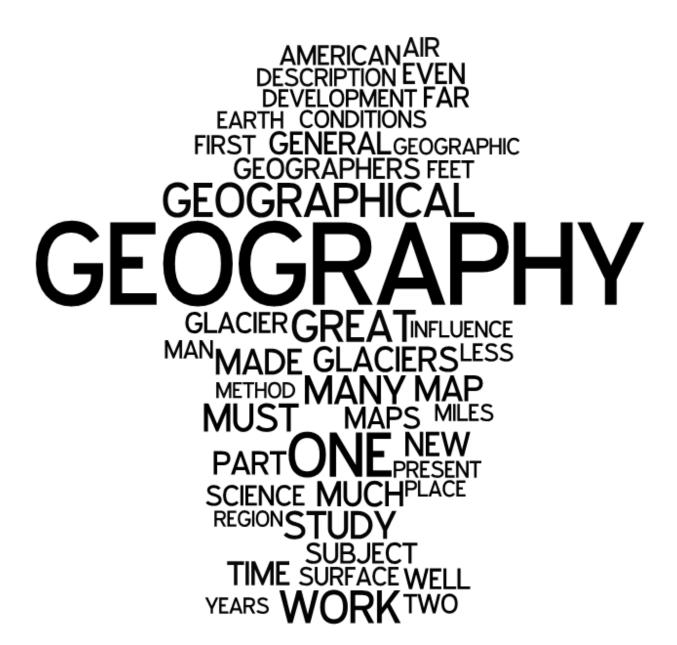


Figure 3-12: The 50 Most Common Words in AAG Presidential Addresses, 1920-1939. Created with Wordle $^{\rm TM}$.

Figure 3-13: The 50 Most Common Words in AAG Presidential Addresses, 1940-1959. Created with Wordle $^{\rm TM}$.

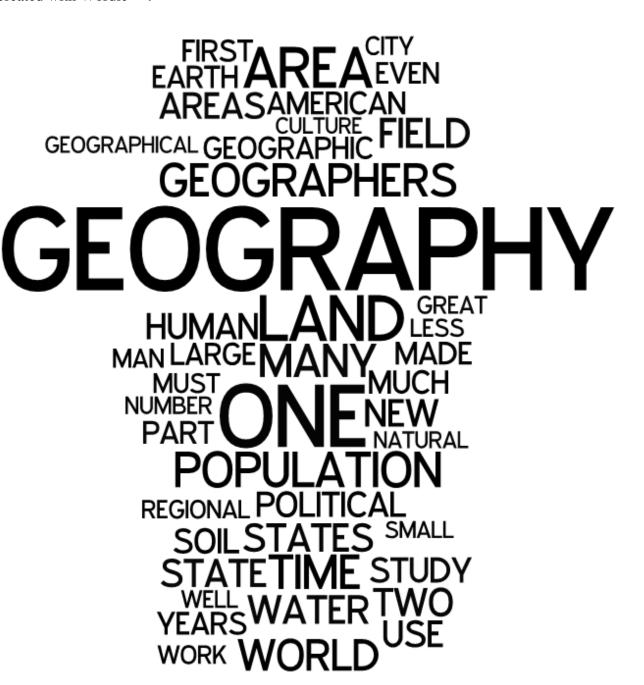


Figure 3-14: The 50 Most Common Words in AAG Presidential Addresses, 1960-1979. Created with Wordle $^{\rm TM}$.

PHYSIC

Figure 3-15: The 50 Most Common Words in AAG Presidential Addresses, 1980-1999. Created with Wordle $^{\rm TM}$.

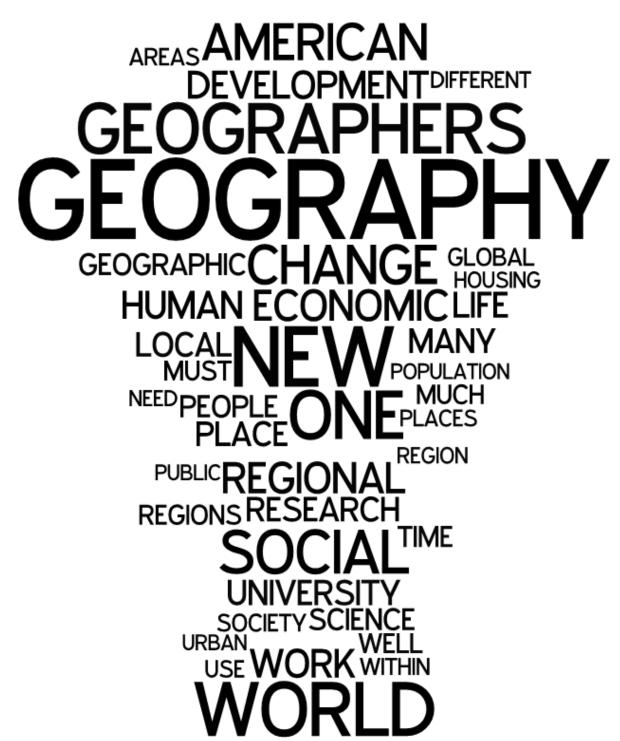


Figure 3-16: The 50 Most Common Words in AAG Presidential Addresses, 2000-2011. Created with Wordle $^{\rm TM}$.

GLOBAL INFORMA

Address Text and Traditions, Structures, and Identities

Frequency analysis using the full text of the AAG presidential addresses provides sufficient data to consider traditions, structures, and identities. Words in each figure from 3-11 to 3-16 were concept mapped against the traditions, structures, and identities basemap (Figure 3-1) to produce figures 3-17 to 3-22, which represent bi-decadal cohorts, and Figure 3-24, which visualizes for the period 1904-2011. The visualizations show single words with high frequencies of use determined by the Wordle's TM algorithm. Single words without context can be challenging to map to Figure 3-1, where the cartographic labels represent articulated and explained conceptualizations of geography's traditions, structures, and identities. Table 3-17 shows how terms were mapped to Figure 3-1 to produce the variations. Text font size increases 2 points with each mapped term. Terms mapped to the human-environment, man-land, and EQ&RN group or to the area studies and P/R/T cluster changes the font size for both of the related classes.

Table 3-17: Mapping Terms to Foundations.

| Tradition, Structure, or Identity | Source | Examples of Terms |
|-----------------------------------|----------|--|
| Spatial | Pattison | Spatial |
| Measure of Space-Time | Harvey | First, feet, number, time, years |
| Spatial-Chorological Approach | Turner | Economic, cultural, population, political, urban |
| Cartographic Identifications | Harvey | Map, maps |
| Area Studies | Pattison | Place, regional, cities, farm, |
| Place / Region / Territory | Harvey | boundary, state, area |
| Human-Environment | Turner | |
| Man-Land | Pattison | Environment, nature, natural, |
| Environmental Qualities and the | Harvey | land, Earth |
| Relation to Nature | Tiai vey | |
| Earth Sciences | Pattison | Air, glacier, ice, river, water, soil |

For each of the six cohorts, Harvey's MS-T structure stands out. This is most apparent in the 1940s and 1950s (Figure 3-19). The structure is at its lowest in 2000-2011 (Figure 3-22).

Another of Harvey's structures, P/R/T, is vivid in all cohorts except the first and the 1960s and 1970s. Names of places, states, regions, countries, and types of places were mapped here. This is associated with Pattison's area studies tradition. "Area" and "Areas" were apparent in the 1904-1919, 1940-1959, 1960-1979, and 1980-1999 periods. Interestingly, in 1920-1939 terms reflecting places, regions, and political units were bountiful, but referring to them as area or areas was not.

Maps are the only geospatial technology or cartographic term to be in the top 50 terms for any cohort. Mapped as Harvey's cartographic identifications, the mapping sciences are only barely reflected in 1904-1919 and 1920-1939. This is similar to "spatial," explicit reference to the term and Pattison's tradition, which is noted only in 1960-1979 and 2000-2011.

The prevalence of Earth sciences concepts ebbs and flows. Practice and reference to Earth science terms was strong amongst the first cohort of presidents, who discussed the Earth, air, and glaciers (Figure 3-17). A cohort later, presidents between 1940 and 1959 frequently used water, soil, and natural (figure 3-19) The period 1980 to 1999 shows no Earth sciences terms (Figure 3-21). The most recent period, 2000 to 2011, shows the use of natural, physical, river, and water.

Figure 3-17: Traditions, Structures, and Identities, 1904-1919.

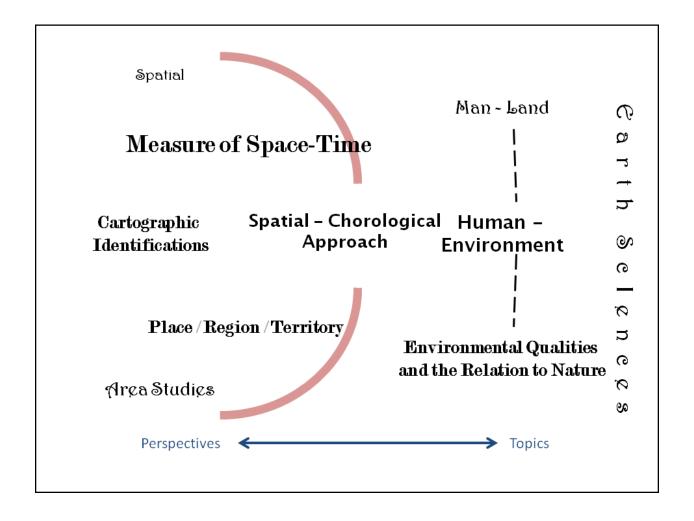


Figure 3-18: Traditions, Structures, and Identities, 1920-1939.

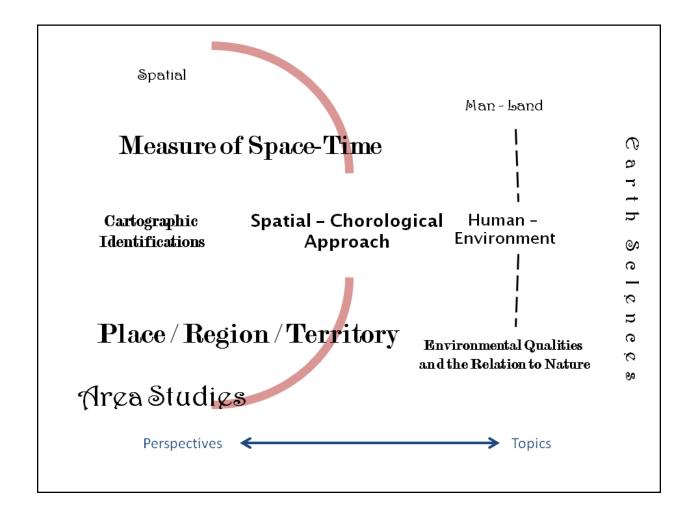


Figure 3-19: Traditions, Structures, and Identities, 1940-1959.

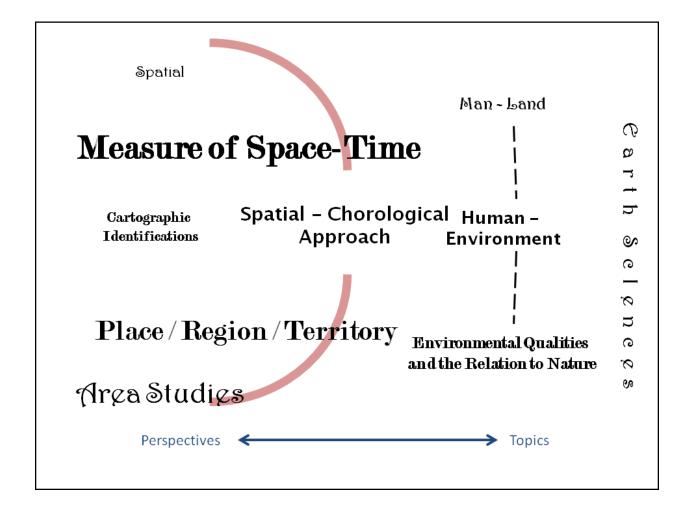


Figure 3-20: Traditions, Structures, and Identities, 1960-1979.

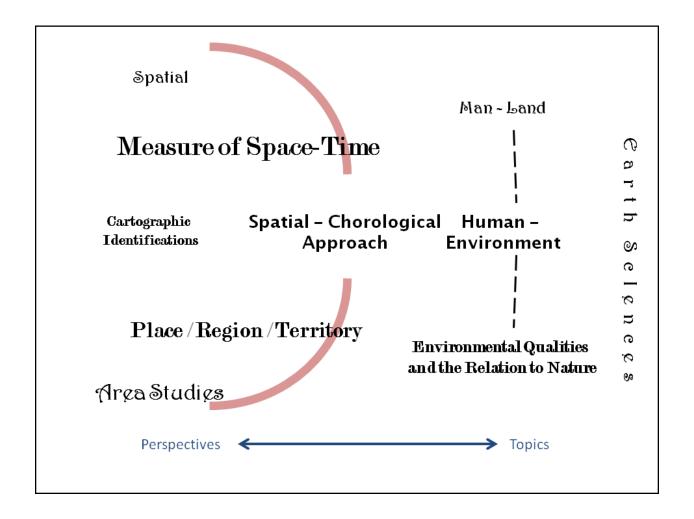


Figure 3-21: Traditions, Structures, and Identities, 1980-1999.

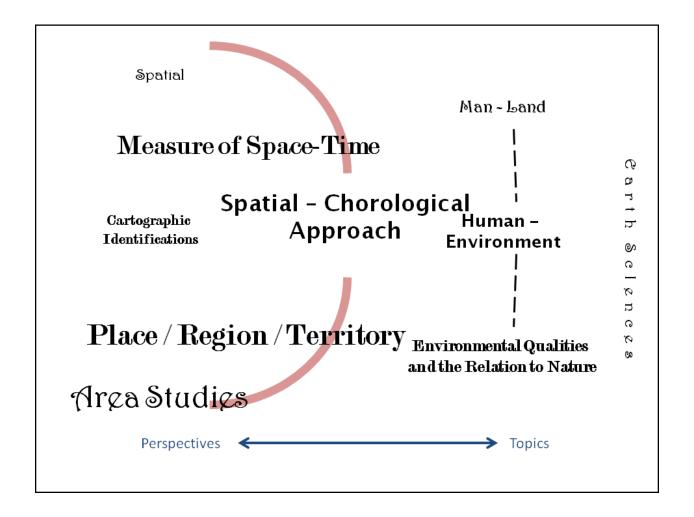
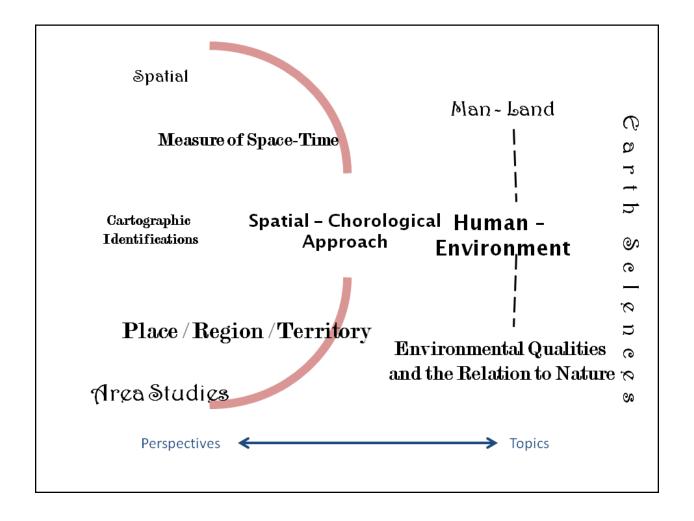


Figure 3-22: Traditions, Structures, and Identities, 2000-2011.

Compare to figures 3-1 and 3-24.



The spatial-chorological approach and the human-environment identity, the latter coupled with the "Man-Land" tradition and Harvey's EQ&RN structure, appear evenly, consistently across each cohort figure. The Turner identities were helpful in understanding the title keywords, but this was also due to the ability to reference the full address titles. More nuanced contextual references (*e.g.*, Pattison and Harvey) are only possible with the full text data.

The previous sets of figures show the evolution over time of the words of AAG presidents, grouped into cohorts, most commonly used, and then concept mapped onto a framework of geographic traditions, structures, and identities. Figure 3-23 modifies Figure 3-3, which represents the 100 most common words across all AAG presidential addresses between 1904 and 2011, by excluding words with the root of "geograph." This removes the dominance of geograph-related words and makes other concepts and trends legible. Once geograph-rooted words are removed, the relative parity of the 100 other most common words becomes clear. All words are legible and close to the same size.

Apparent are research topics and systematic fields: development, economic, human, political, population, and physical. Also clear are regional, regions, and region, place, and area showing the systematic interest in the study of regions and specific locations. The appearance of water, river, system, state, social, and society note the more narrow areas of interest. Map and maps are both present, representing geography's cartographic tradition. Interest is in the now and present, but also in the new. Excluding words that imply metric, value, or transition (*e.g.*, far, among, first, even, different, less, might, need, small, way, within, use, one, two), the remaining words reflect on the practice of geography. It is work, research, study, and science. This takes time, sometimes years, often at a university but also in the field. The studies provide examples that apply to Earth, land, the world, and the United States.

Figure 3-23: The 100 Most Common Words in AAG Presidential Addresses, 1904-2011, Less Forms of "Geograph*"

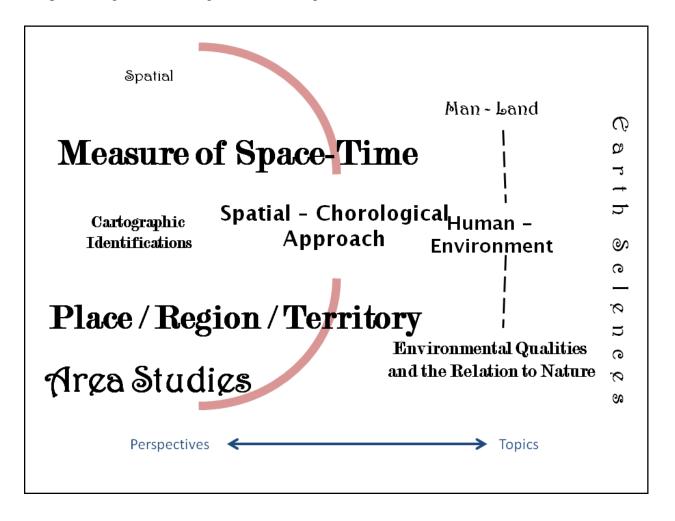
Words with the root "geograph" such as geography, geographic, and geographers are omitted. Compare to Figure 3-3. Color is used to improve contrast but does not impart additional or intended meaning. Created with Wordle TM.



Words appearing in Figure 3-23 are concept mapped to the traditions, structures, and identities basemap in Figure 3-24. Earth sciences, MS-T, and P/R/T visually dominate the figure. MS-T and P/R/T demonstrate the presence of words and terms involved with spatial-chorological approaches, even though "spatial" does not appear amongst the most common words. In this sense, the location of the spatial-chorological approach in the figure and its role as an identity of approaches serves as connective tissue between the interests in understanding spaces and understandings places.

Figure 3-24: Traditions, Structures, and Identities, 1904-2011.

Compare to Figure 3-1 and figures 3-17 through 3-22.



Summary and Conclusions

This study analyzed titles and the full text of available AAG presidential addresses between 1904 and 2011 to understand the history of geography from the lips and pages of distinguished, elected practitioners. Words from the title and text analysis, generated using Wordle TM to synthesize, provide frequencies, and visual the data, are used to evaluate the salience of Pattison's traditions, Harvey's structures, and Turner's identities as a model for understanding changes in geographical practice over six bi-decadal cohorts.

Analysis of the titles, the highest-level "keywords" consistent across the dataset, showed the presence of Turner's identities. The spatial-chorological approach runs the range of the data from 1900s to the 2010s and the human-environment subject is present from the 1920s to the 2010s. There are not enough words in the titles to generate meaningful frequencies and visualizations within twenty-year cohorts. As such, the analysis of titles does not contribute much to understanding the changing practices of geography. Since there are fewer words and the record of inputs is manageable, frequent terms are related back to the full title. This context makes the titles suitable for understanding identities.

Titles are the broadest level of data, the full text the narrowest. These are the two extremes that exist for the full 1904-2011 range of this dataset. Author-selected keywords and abstracts, methods used in other studies, first appeared for presidential addresses in 1965. This is 57 percent of the way through the dataset. For datasets reflecting broader chronologies, the middle ground provided by the evolving trends of scholarly publishing may not always be available.

Evaluating the full text, the full words used in each address, also poses challenges. The Wordle TM visualizations are limited to the 50 most frequent words for each cohort. Mapping these words to the traditions, structures, and identities diagram shows the rise, decline, and return of interest in places, regions, and territories; the strong emergence and recent ebb of space-time; and the generational waxing and waning of Earth sciences. Words from the full text most easily mapped to Harvey's two structures that connect Pattison's spatial and area studies traditions to the spatial-chorological approach. Turner's identities were present in each cohort, but not overwhelmingly so.

The analysis considered the human-environment commonalities of the three models as one: Pattison's "Man-Land," Turner's human-environment, and Harvey's EQ&RN. "Environment" and "environments" were the two words most commonly mapped to this part of the diagram across the titles and the full text. One explanation is that the terms used in this subject of study may be too specialized or divergent, even within twenty years, to accumulate high frequencies. Another explanation is that terms and concepts used in this area, such as "human-environment," "Man-Land," and "nature-society" are not one word, but sets of two related words. Frequency counts based on Wordle TM did not account for this.

The model of traditions, structures, and identities deals more with human-environmental and Earth sciences topics and a series of other approaches. This dichotomy highlights Turner's conceptualization of geographic identity as either the spatial-chorological approach identity or the human-environment subject identity. The model does not deal well with subjects of study that are not human-environment or Earth science. "Population," "political," and "development" are more subfields befitting their own subject area that do not map well, as terms unto themselves, to the traditions, structures, and diagrams. In this sense, these systematic results are much more about "The Circumference of Geography" (Fenneman 1919) and the prevailing subfields of human geography than they are about traditions, structures, and identities.

Other frequent terms from the Wordle TM visualizations could not be mapped but highlight issues of geographical practice. Knowledge, discipline, science, work, social, problems, and forms of the word geography appear across the cohorts and become more frequent as time progresses. It is clear that presidents are speaking to the discipline and practice of geography at large, but these holistic considerations cannot be mapped to the traditions, structures, and identities. One reason for this is that the traditions, structures, and identities themselves, as originally formulated by Pattison, Harvey, and Turner deconstruct the whole of geographical knowledge and practice into what geographers study or how they study it to better understand the whole. In identifying the trees, the traditions, structures, and identities lose sight of the forest.

Presidents sometimes advocate for what the discipline should do, not as research, method, or subject, but for society. Addresses discussing geography's role in public policy, social responsibility, moral issues, and care highlight greater concerns or roles of the profession that do not map to the traditions, structures, and identities. Morrill's (1994) address calls

responsibility to truth, the discipline of geography, the Earth, community, society, and humanity. Lawson (2007) argues for care and an ethics of care with those we interact with and serve. Murphy (2006) feels that it is the responsibility of geographers to enhance public discourse and debate by contributing their geographic knowledge and insights. Balancing these calls for responsibility, ethics, and service is Rose's (1978) address making salient social issues and problems, leading to a "geography of despair." A similar potential exists in Kates's (1995) discussion of population issues, the forecast of potential crises, and hopes for future sustainable transition between increased world population and finite resources. This is another forest that is lost when looking at the trees of traditions, structures, and identities.

Academic geographers and graduate students know presidential addresses for their evocative messages, passionate pleas, eloquent wisdom. Addresses are one of the ways in which geographers are socialized and educated in the field (Sauer 1956). Boiling the art of eloquence down to words removes heart from the addresses, analysis of individual words dehumanizes the very human leaders selected on account of their achievements and personality.

Geography is a wide-ranging area of study that embraces overlaps between subjects of study, intellectual approaches, and methods. While the cohorts provide a structure to evaluate topics over time, analyses of the entire title and full text datasets lend themselves to representing the synthesis of what geographers do, study, and care about. If geography is what geographers do to produce scholarship, and the tradition and discipline is built on what is done, the field is a synthesis of research and science at multiple sites, exploring multiple topics, looking for emergence and change. There are multiple geographies.

Chapter 4 - Thematic Conceptions of Anglo-American "Cultural Geography"

By Way of Introduction

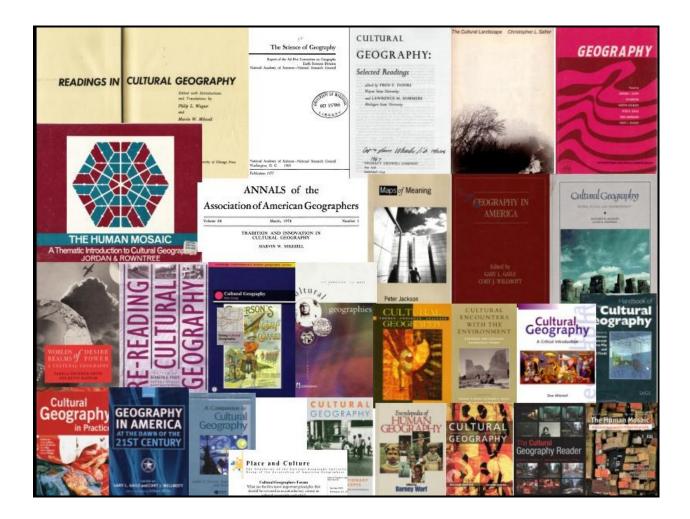
Cultural geography is a vibrant and wide-ranging area of geographical scholarship.

Canadian geographer William Norton explains "cultural geography" as being "concerned with making sense of people and the places that they occupy, an aim that is achieved through analyses and understanding of cultural processes, cultural landscapes, and cultural identities" (2000, 3). Yet not all cultural geography is about understanding process, nor about landscape. While process and landscape are two mainstays of cultural geography in North America, the "cultural turn" in the United Kingdom and North America brought increasing interest since the 1980s in trying to understand cultural identities and cultural difference. So while cultural geography is vibrant and popular, what exactly is "cultural geography?"

Scholars working in the field have repeatedly developed organizational and ordering frameworks to summarize and communicate their understanding and view of the content of cultural geography. Since Wagner and Mikesell's 1962 *Readings in Cultural Geography* collected essays and articles by 32 different scholars into five themes, numerous other readers, survey chapters, textbooks, and articles or chapter length position pieces with "cultural geography" in the title or subtitle have provided organizational structures or overviews of cultural geography. These works have proposed themes, nominated core readings and contributors, summarized existing practices, or argued for new considerations.

The task here is to not to definitively demarcate the terms, scopes, and limits of cultural geography. Any attempt at doing so runs counter to what many practitioners see as a benefit of doing cultural geography – its loose borders, ranging terrain, and dynamic scales and scope. Rather, the purpose here is to more formally understand the boundaries, interests, and variability of the academic practice of Anglo-American cultural geography by tracing and analyzing the different, evolving, and changing conceptualizations of cultural geography over time. Not only does this help make clear the past, but it gives perspective on the continuing and evolving present of cultural geography.

Figure 4-1: Cultural Geography Data.



This analysis considers the practice and positioning of a subfield of geography. While Association of American Geographers presidential addresses speak with authority to the whole disciple and introductory human geography textbooks speak primarily to instructors and beginning students, the present analysis works at the subfield scale of the broader academic discipline of geography. Analysis at the cultural geography subfield scale makes salient the conversations of cultural geographers with other cultural geographers. True, members of other subfields or disciplines may participate in cultural geographical discourse, and cultural geography remains a broad and overlapping body, much like the rest of geography and the rest of the humanities and sciences. All of the works in this assessment, however, include the root words of "cultural geography" in the title or subtitle. The authors and editors are thus self-

identifying with the subfield. These texts are assessments of a shared enterprise that scholars want to share with their compatriots or lessons and thoughts that the authors and editors want to share with the next generation(s) of scholars through particularly focused introductory and advanced textbooks.

Here I consider a portion of this cultural geographic discourse – 31 different attempts to organize and guide the subfield of cultural geography – as a temporally structured dataset revealing how practitioners understood and conceptualized "cultural geography" in different ways at different times. The "data" for this study are these 31 texts, the conversations and thinking that cultural geographers publish for others doing or wanting to know about cultural geography turn to, engage with, and respond to (Figure 4-1). Analysis of discourse lets us in on the conversations and understandings of a community. Looking into cultural geographic discourse – especially the conversations trying to engage with what cultural geography is and what it does – demonstrates how members of subdisciplinary communities practice, form, and change their geography.

Data and Analysis

William Norton concludes his 2006 text by stating that "organizational frameworks... aid in understanding diverse ideas and analyses without in any sense imposing unwavering identities on ideas and analyses or suggesting that the framework used is in some sense correct and uncontestable" (385). Grouping and subdividing the corpus of cultural geography into organizational themes is one of the characteristic ways that cultural geographers have sought to understand their work, with the 31 texts of the dataset presenting organizational or structuring themes. This analysis seeks to understand what themes cultural geographers used between 1962 and 2010 to encapsulate, describe, and explain their profession.

This organizational approach allows a way for cultural geographers to work through their own understandings of the sometimes disparate landscape of cultural geography, providing a method to summarize, understand, and communicate the different thematic features. Because the themes are used to organize the readers, surveys, and textbooks, they are clearly identified and explained in the texts and remove an element of subjectivity from this research.

Texts are noted by publication date, title, and type. Themes used in the book are identified through content analysis. The analysis results are presented as themes, the number of times the theme was used, and the date of each publication using the theme. This temporal and frequency data enables a presentation of evolving concept maps and a discussion of themes present at different time periods and for the span of the entire dataset as a whole.

Scope of the Dataset

This data set includes 31 different works with "cultural geography" in the title published for Anglo-American audiences since 1962 (Tables 4-1 and 4-2) that organize around or articulate a set of organizing themes for cultural geography. The year 1962 marks a watershed in cultural geography. Not only does it see the publication of Wagner and Mikesell's *Readings in Cultural Geography*, it also initiates an emerging trend of thinking about, discussing, and evaluating "cultural geography" with theme frameworks that greatly increased in the 1990s and the first decade of the 2000s (Figure 4-2).

While there are earlier statements about cultural geography, they are few and far between (e.g., Sauer 1925; Association of American Geographers 1937). Mid-20th century "cultural geography" in the United States is today associated with Carl Sauer and the "Berkeley School," but most of the practitioners did not associate with the explicit term "cultural geography." More human geographers identified with "regional geography" overall and the subfields of historical, population and settlement, political, and economic geography. Evidence of this is seen in disciplinary assessments *American Geography: Inventory and Prospect* in 1954 and *Geography in the Twentieth Century* in 1957, which do not include chapters on "cultural geography," but do include the others (James and Jones 1954; Taylor 1957).

A qualification for inclusion in the dataset is that texts have to include "cultural geography" in the title or subtitle. Assessment of "cultural geographic" discourse requires a focus on those works self-identified and clearly constituted as "cultural geography." Finding "cultural geography" in the title is the most salient way for the author and the research community to identify and know that the author or editor intended their work to be considered "cultural geography."

Using this qualification means excluding some work by cultural geographers, or work that we may think of as "cultural geography" such as Meinig's 1979 collection *The Interpretation of Ordinary Landscapes: Geographical Essays* and the 2001 collection *Textures of Place: Exploring Humanist Geographies* (Adams *et al.* 2001). Also excluded are books with "human geography" in the title or subtitle, though the authors, editors, and contributors might self-identify separately as cultural geographers or doing cultural geography. Examples of these works include *Envisioning Human Geographies* (Cloke *et al.*, 2004), *Reading Human Geography: The poetics and politics of inquiry* (Barnes and Gregory 1997), *Human Geography: An Essential Anthology* (Agnew *et al.* 1996), *Concepts in Human Geography* (Earle *et al.*, 1996), and *Man, Space, and Environment: Concepts in Contemporary Human Geography* (English and Mayfield 1972).

Table 4-1: Cultural Geography Dataset, 1960s - 1990s.

| Year | Author(s) / Editor(s) | Title | Format |
|------|---|---|--------|
| 1962 | Wagner & Mikesell | Readings in Cultural Geography | reader |
| 1965 | NAS / NRC | Studies in Cultural Geography / The Science of Geography | survey |
| 1967 | Dohrs & Sommers | Cultural Geography: Selected Readings | reader |
| 1970 | Taaffe, Burton, Ginsburg, Gould, Lukermann, Wagner | Cultural Geography / Geography | survey |
| 1971 | Salter | The Cultural Landscape reader | |
| 1976 | Jordan & Rowntree | The Human Mosaic: A Thematic Introduction to Cultural Geography (1st) textbook | |
| 1978 | Mikesell | Tradition and Innovation in Cultural Geography | survey |
| 1989 | Rowntree, Foote, Domosh | Cultural Geography / Geography in America | survey |
| 1990 | Jackson & Hudman | Cultural Geography: People, Place, and Environment textbook | |
| 1994 | Foote, Hugill, Mathewson, Smith | Re-reading Cultural Geography reader | |
| 1994 | Wagner | Foreword: Culture and Geography survey | |
| 1994 | Duncan | After the Civil War survey | |
| 1994 | Shurmer-Smith and Hannam | Worlds of Desire, Realms of Power: A Cultural textbook Geography | |
| 1999 | Anderson & Gale | Cultural Geographies (2nd) | reader |

Table 4-2: Cultural Geography Dataset, 2000s.

| Year | Author(s) / Editor(s) | Title | Format |
|------|--|---|--------------|
| 2000 | Mitchell | Cultural Geography: A Critical Introduction | textbook |
| 2000 | Norton | Cultural Geography: Themes, Concepts, Analyses | textbook |
| 2000 | Murphy & Johnson | Cultural Encounters with the Environment: Enduring and Evolving Geographic Themes | reader |
| 2002 | Anderson, Domosh, Pile, Thrift - Organization of book | Handbook of Cultural Geography | reader |
| 2002 | Anderson, Domosh, Pile, Thrift - Introduction | Handbook of Cultural Geography | reader |
| 2002 | Shurmer-Smith | Doing Cultural Geography | textbook |
| 2003 | Blunt, Gruffudd, May, Ogborn, Pinder | Cultural Geography in Practice | textbook |
| 2003 | Buttimer | Five "Principles" of Cultural Geography | survey |
| 2003 | Strohmayer | in Place and Culture | survey |
| 2004 | Duncan, Johnson, Schein | A Companion to Cultural Geography | reader |
| 2004 | Myers, McGreevy, Carney, Kenny | Cultural Geography / Geography in America | survey |
| 2005 | Atkinson | Cultural Geography: A Critical Dictionary of Key Concepts | reader |
| 2006 | Norton - Chapter 1 - framework | Cultural Geography: Environments, Landscapes, Identities, Inequalities | textbook |
| 2006 | Norton - Chapter 10 - commonality | Cultural Geography: Environments, Landscapes, Identities, Inequalities | textbook |
| 2006 | Duncan | Cultural Geography / Encyclopedia of Human Geography | survey |
| 2008 | Oakes and Price | The Cultural Geography Reader | reader |
| 2010 | Domosh, Neuman, Price, Jordan- Bychkov | The Human Mosaic: A Cultural Approach to Human Geography (11th) | textbook (I) |

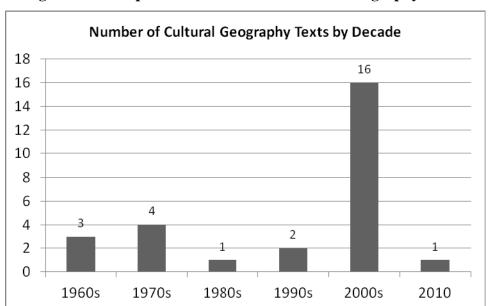


Figure 4-2: Temporal Distribution of Cultural Geography Texts.

A third qualification for inclusion is that the text has to use themes. This excludes textbooks that follow a narrative or evolutionary approach (*e.g.*, Spencer and Thomas 1969; Wallach 2005), those that group chapters into topical headings instead of themes (*e.g.*, Jackson 1989; Crang 1998), or that are a "cultural geography" of a place or region (*e.g.*, Zelinsky 1992). Some are works that define or argue for definitions of cultural geography, but do so in such a way that the definition cannot be broken into themes. Denis Cosgrove's (2000) definition in the 4th edition of the *Dictionary of Human Geography* is one example, while Price and Lewis's 1993 *Annals* article "The Reinvention of Cultural Geography" is another.

Also excluded is Smith's 2003 survey of perceptions of the Association of American Geographer's Cultural Geography Specialty Group. While Smith's results provide several insights into the minds and perceptions of cultural geographers, the data do not meet the standards established for inclusion in the analysis.

Those texts excluded by way of date, title, or lack of structural agreement does not mean that they do not matter to cultural geography or that they are not part of the discourse. Rather, these texts are beyond the scope and focus of the analysis at hand.

Works included in the analysis are organized into four types (Figure 4-3). The categorization is not a necessary part of the analysis, but it helps to show the ways in which cultural geographers communicate cultural geography to different audiences.

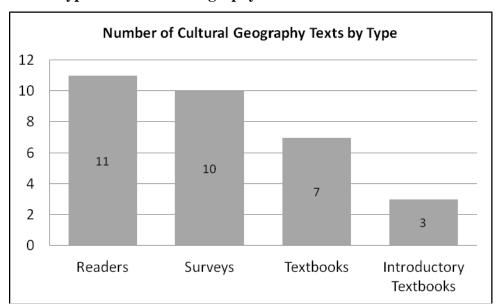


Figure 4-3: Four Types of Cultural Geography Texts.

"Readers" are edited books that compile chapters written by others. The chapters may be previously published chapters or articles that are included. While the focus of each collection varies, the general intent is to organize the cultural geographical work of others into an accessible collection. Readers tend to organize by theme or topic, and anthologize the work of writers that are not the collection editors. As such, readers and material from them are rich data sources for this analysis. Examples of readers include: Wagner and Mikesell's 1962 Readings in Cultural Geography, Dohr and Summer's 1967 Cultural Geography: Selected Readings, Foote et al's 1994 Re-reading Cultural Geography, Anderson et al.'s 2002 Handbook of Cultural Geography, and Oakes & Price's 2008 The Cultural Geography Reader."

"Surveys" are articles, entries, or sections of larger works that explicitly engage cultural geography. Instead of looking at the organization or content of a book as a whole, surveys look at the content expressed within a particular shorter piece of writing. Writings in this category are particularly useful for the theme analysis, as the authors here often try to summarize and articulate what "cultural geography" is. Examples of surveys include: the section on "cultural geography" from the 1965 National Academies of Science's *The Science of Geography*, Mikesell's 1978 article "Tradition and Innovation in Cultural Geography," contributions by

Duncan and Wagner to the 1994 collection *Re-Reading Cultural Geography*, and Duncan's 2006 entry in the *Encyclopedia of Human Geography*.

"Textbooks" are sole or jointly authored books that are written for use in the classroom. The occasional textbook may be an edited collection (*e.g.*, Blunt *et al.* 2003), but most are the expressions and thoughts of one or two individuals. Because they seek to organize and educate, materials from texts contribute to the thematic and topical analyses. Examples of textbooks include: Don Mitchell's 2000 *Cultural Geography* and the 1st (2000) and 2nd (2006) iterations of William Norton's *Cultural Geography*. Norton re-works his themes between the two editions, meriting inclusion in the analysis as two different sets of themes.

A subset of textbooks are "introductory textbooks," which are operationally defined here as texts aimed at first or second year introductory college courses. Introductory textbooks used in the thematic analysis are the 1st (1967) and 11th (2010) editions of *The Human Mosaic* and Jackson and Hudman's 1990 *Cultural Geography: People, Place, and Environment*. Only the 1st and 11th editions of *The Human Mosaic* are used, as the 11th is the first version to significantly rework the themes used in editions one through ten.

Readers and surveys are the most common forms of material used in this analysis, and span the time of the dataset (Figure 4-4). Introductory texts also span the dataset, but are fewer in number. Part of the choice here is to use introductory texts that represent difference instead of opting for editions of similar texts that do not exhibit much change or difference. Textbooks that are not introductory are closer in number to the readers and surveys, but do not appear in the dataset until 1994. This reflects a recent and growing market in upper-level undergraduate and graduate level textbooks covering cultural geography.

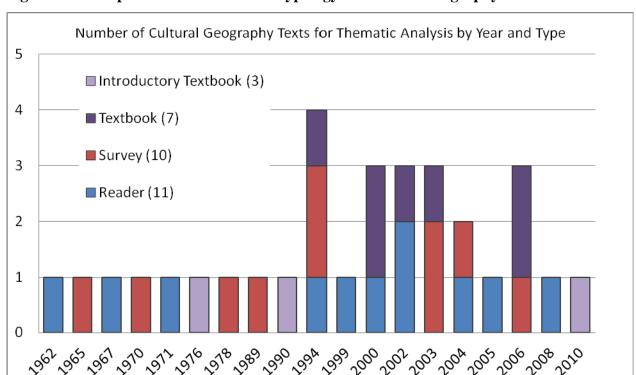


Figure 4-4: Temporal Distribution and Typology of Cultural Geography Texts.

Method of Thematic Analysis

Each text was coded for the themes that it used. The data collection process listed each theme as it was mentioned and the year of publication. This process yielded 162 distinct themes, with a mean of five themes per text and a dataset mode of five. For several themes, the cultural geographic vernacular of the term changed over time. "Cultural areas" and "cultural ecology" were common in the 1960s as "regions" and "human-environment" are now. Other themes are closely related, such as "place" and "sense of place." In such cases the themes were combined. After data collection and consolidation, there are 24 themes used by at least 2 texts (Table 4-3).

Table 4-3: Frequency and Distribution of Cultural Geography Themes.

Table of the 24 themes from the content analysis that had a frequency of two or more across the 31 texts.

| Themes and Parts | Count | Count Years: 1 | 7 | m | 4 | Ŋ | 9 | 7 | 8 | 6 | 10 |
|---|-------|----------------|------|-----------|-----------|------|------|------|------|------|------|
| (Cultural) Landscape(s) | 10 | 1962 | 1976 | 2000 | 2002 | 2003 | 2004 | 2006 | 2006 | 2008 | 2010 |
| Identity | 6 | 1999 | 1999 | | 2000 2003 | 2004 | 2006 | 2006 | 2006 | 2008 | |
| Culture areas and regions | 8 | 1962 | 1965 | l | 1967 1976 | 1994 | 2000 | 2006 | 2010 | | |
| "Doing" | 8 | 2002 | 2002 | 2003 | 2003 | 2003 | 2004 | 2004 | 2008 | | |
| Cultural ecology and human-environment | 9 | 1962 | 1965 | 1970 | 1970 1976 | 2000 | 2006 | | | | |
| 'Other' | 9 | 1994 | 2003 | 2003 | 2002 | 2006 | 2008 | | | | |
| Place and Sense of Place | 9 | 1994 | 1994 | 1994 | 2000 | 2006 | 2008 | | | | |
| Cultures and natures | 9 | 1994 | 1999 | 2992 | 2003 | 2004 | 2010 | | | | |
| Diffusion and mobility | 2 | 1965 | 1970 | 1971 | 1976 | 2010 | | | | | |
| Interaction, integration, globalization | 2 | 1965 | 1989 | 1976 | 2003 | 2010 | | | | | |
| Culture | 4 | 1962 | 1989 | 2006 | 2008 | 1 | | | | | |
| Culture history | 4 | 1962 | 1970 | 1978 2008 | 2008 | | | | | | |
| Human modification of environment | 4 | 1971 | 1978 | 1990 | 2000 | | | | | | |
| Meaning | 4 | 1994 | 1994 | 2002 | 2002 | | | | | | |
| Politics and Culture | 4 | 2000 | 2000 | 2000 | 2004 | | | | | | |
| Theory | 4 | 1989 | 1994 | 2004 | 2006 | | | | | | |
| Ways of life, ordinary, everyday | 4 | 1989 | 1994 | 1994 | 2002 | | | | | | |
| Environmental perception | 3 | 1967 | 1970 | 1994 | | | | | | | |
| Future of cultural geography | 3 | 1967 | 1994 | 2004 | | | | | | | |
| Landscape processes / evolution | 3 | 1994 | 2000 | 2006 | | | | | | | |
| Postcolonial | 3 | 2002 | 2004 | 2006 | | | | | | | |
| Power | 3 | 2002 | 2005 | 2006 | | | | | | | |
| Space and organization of space | က | 1971 | 1994 | 2000 | | | | | | | |
| Fieldwork | 2 | 1978 | 2006 | | | | | | | | |

Constructing a Narrative of Academic Cultural Geography

Academia is the community and institutional practice of professional scholars – those writing the themes, and those whose work is summarized by them. The field of geography is one area of scholarship addressed by professional academics. Those scholars studying culture are another, but they are a transdisciplinary group. The cultural geography community exists where the geographic and culture interests overlap. At another level are ideas, concerns, and theories shared by many scholars across disciplines. These are the methods, epistemologies, and ontologies that structure and connect the multiple disciplines and subfield by considering what knowledge is possible, how that knowledge is gained, and ways of gaining that knowledge.

Discussion of the thematic analysis results (Table 4-3) builds on these four categorical groupings: geography, culture, cultural geography, and academic. Themes that are categorically grouped as geography are those related to the four traditions of Pattison (1964) and themes that carry beyond any one part of geography: diffusion, space, and place. These include the environmental themes of modification of the environment and environmental perception, part of Pattison's "man-land" tradition. Fieldwork and landscape or landscapes are themes that carry beyond cultural geography into physical geography, geomorphology, and economic geography, among others.

Themes that are categorically grouped as cultural are those that have culture as part of the title (*e.g.*, culture history, cultures), related to landscape (*e.g.*, landscape process and evolution), or are used as a definition of culture, as in Raymond Williams' (1973) explanation of culture as "ways of life."

The cultural geography categorical grouping is a merger of the cultural and geography groupings. Cultural geographers have traditionally concerned themselves with different studies or foci that they have understood and seen as "cultural," be it culture, ways of life, cultural ecology, or culture history.

The fourth grouping, academic, is one that contains the themes, concepts, and topics that did not develop in geography or as part of understanding culture. Rather, these developed in other strains of scholarly thought and in other academic disciplines, characterize broader trends in academia in general, and have diffused into geography. Examples are post-colonial thought,

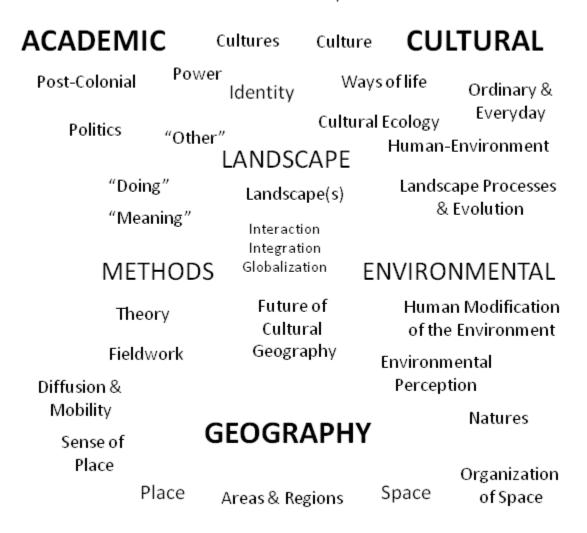
power, and "doing." This group includes the methods and logical constructs that are transdisciplinary, including theory and fieldwork.

Together, the categories of geography, culture, cultural geography, and academic highlight reoccurring themes in Anglo-American cultural geography and in how practitioners organize and structure their understandings of cultural geography. These four categorical groupings serve as structure for Figure 4-5, a concept map representation of the results of the thematic analysis.

Figure 4-5: Academic Cultural Geography Dataset Themes Basemap

"Basemap" for concept mapping and variations. Compare to figures 4-6 to 4-12.

Culture History



Beyond this top tier of categories, the thematic analysis results support a second topical tier of methods, landscape, and environment. Methods are the ways in which academics approach, study, and understand their areas of inquiry, including those understanding culture. Environmental topics lie amidst the tradition of geography that seeks to understand the spatial patterns and aspects of physical phenomena and the processes of how they work; the cultural element of people and populations living with, affecting, and affected by the physical systems, and other academic approaches to the physical world. In the concept map, environmental lies between other themes that use "environment" or "environmental" in the label: human-environment, human modification of the environment, and environmental perception. Landscape is a method used to understand environmental elements, one to see and interpret the impacts, affects, and effects of humans and cultures on different spaces and places throughout the world. Other themes that fill out spaces of the concept map lie among the six categories of academic, cultural, geography, methods, landscape, and environment.

The categorical groupings for this discussion are not mutually exclusive. Landscape is as much a part of culture as a part of geography, and others have argued that "cultural landscape" is redundant with "landscape" (Henderson 2003, 336). Fieldwork has a strong tradition in geography, but also in anthropology and geology. While some of these other themes strongly map to one or the other of the six primary and secondary categories, themes are prone to relate to several. For example, human-environment is both cultural and environmental. Some themes also reflect changes in wording, conceptual understandings, and practice. For example, cultural ecology is a term with a longer history that is still used today, but human-environment is a very closely related term that holds broader meaning today. The current fashionable label for this work is "nature-society," a hybridization that draws attention to the integration and interdependencies of physical environmental systems and socio-cultural systems, but does not yet appear widely in works outlining themes of cultural geography. In these cases, the diagrams highlight the specific terms if used more than once in the dataset. The placement of themes, like human-environment half way between cultural and environmental and cultural ecology between culture and landscape connect the broader categories within the concept map. Cultural ecology and human-environment tie together the cultural and environmental sides of cultural geographical practice.

In the process of professional work, practitioners balance between the core of their home discipline, their subject area within their discipline, and other ideas circulating through academia. For cultural geography, this is negotiating the space and place emphasis of geographical approaches that distinguish geographers from historians and other scholarly disciplines; the human-environmental studies that have been a traditional subject focus of cultural geographic work; and the specifics of culture, language, religions, and the coarser concerns ideologies of politics, power, identity, and nature.

The thematic dataset reflects this balance and negotiation. At times, practicing cultural geographers trend towards geography, culture, and cultural geography. At other times, there is more interest in the subjects, concerns, and language of other academic pursuits of culture and the social sciences. Cultural geographers organizing explanations of cultural geography around themes incorporate and reflect these emphases and trends, as it is part of the context in which they practice their profession and craft over the advance of time. The temporal aspect of the thematic analysis tells this story, the balance and negotiation of the geographical, cultural, cultural geographical, and broader academic worlds by decade from the 1960s through the 2000s.

Concept Maps

The themes identified more than once in the thematic analysis are portrayed in Figure 4.5 as a concept map. This map is used as an expository and organizational device to discuss the results of the thematic analysis. Unlike randomly generated concept maps like Wordle TM, or algorithmic approaches like self-organized maps (SOMs), the approach here follows Gerike *et al.* 2008, where the concept cartographer is cognizant in the organization and placement of the map elements.

Nearly all concept maps, especially those used to map out mined data, face the problem of "where" to place terms on the map. This is not where in the absolute sense, but where in the relative sense of neighboring terms and themes. Wordle TM does not account for this, and most SOM algorithms organize by the closeness of terms within the text. Texts using differing or opposing terms in comparative and contrasting styles of discussion pose problems. The benefit

of logically organizing the concept map rather than relying on computers allows the mapmaker to reason through what they know about the concepts and place it into context.

Granted, this approach leans on an individualistic reading of the dataset, and the items herein may, like any map, be selectively emphasized, generalized, and symbolized to meet any or a wide range of possibilities (Monmonier 1996). This is not only for the concept map as a whole, but for the different variations of the map as they emphasize different periods and categorical groupings (figures 4-6 through 4-12).

The concept map approach, also like maps, has the ability to visually connect readers with data and patterns that are more powerful than textual descriptions themselves (Wood 1992). The intent here is to provide a framework to visually tell the story of the results of the data analysis.

Academic Cultural Geography Themes Over Time

The 1960s

The first decade of this analysis is the 1960s, which contains two readers and one survey (Table 4-1). The readers, Wagner and Mikesell's 1962 Readings in Cultural Geography and Dohrs and Sommers' 1967 Cultural Geography: Selected Readings both exemplify the genre by anthologizing articles and chapters over time that fit the purpose of their text. In this case, the purpose of both texts is to provide an introduction to the scope and practice of cultural geography. The third text, the National Academy of Sciences and National Research Council's 1965 The Science of Geography is a survey of contemporary geography that includes a chapter on cultural geography.

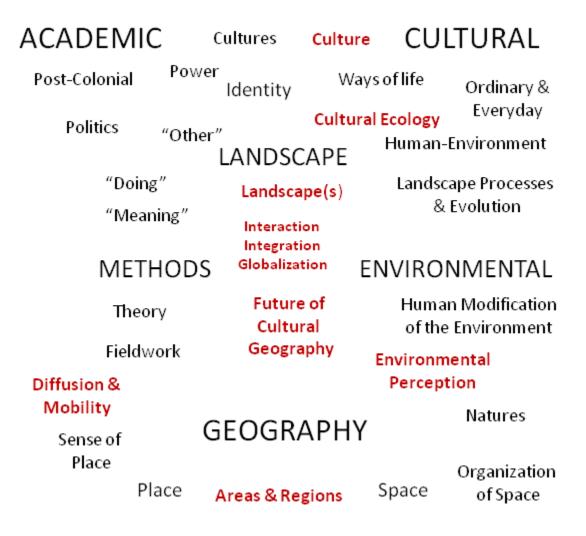
The most common themes from these works are those involving culture and landscape (Figure 4-6). Culture, culture history, cultural ecology, and landscape are all noted. Combined with areas and regions, the themes highlighted in this decade reflect what are now referred to as the traditional approaches to cultural geography; understanding parts of the world through the people living there, how their way of life changed over time, and how they live with their environment. Often this understanding is through the methods of landscape, with clues to the cultural present in the built or modified environment. Within these themes lie three of William

Pattison's four "traditions of geography" (1964), the geographical foci of understanding places and areas, space, and human-environment concerns that are part of the several thousand year history of geographical inquiry. Just as they are traditions for all of geography, so are they for cultural geography.

Figure 4-6: Academic Cultural Geography Dataset Themes of the 1960s.

Red indicates themes present in the time period. Compare to Figure 4-5.

Culture History



During the 1960s, interest in geography as a spatial science was on the rise. In geography, this interest manifested itself through research framed within the scientific method

and nomothetic approaches aimed at deriving generalized laws of how the physical and human worlds operated *e.g.*, Chorley and Haggett 1967; Harvey 1969). On the human side of geography, practitioners started asking more questions about how ideas, traits of culture, and people move through space and time – concepts of diffusion and mobility (*e.g.*, Bunge 1962; Hagerstrand 1967; Abler *et al.* 1971). Practitioners of cultural geography also inquired into how people saw and understood their surrounding environment, and other places of the world (*e.g.*, Wright 1947; Lowenthal 1961). The idea behind the theme of environmental perception was that the mental maps and images that people held of places effected how they interacted with the world around them.

A goal of nomothetic approaches is to create explanations of how things work, which is often balanced by the idiographic critique that things work differently in different places. The idea of interaction and integration compliments the arguments and mutual critiques of nomothetic and idiographic approaches. For cultural geography, the theme of interaction and integration encompasses both approaches, along with the many different methods and topics of interest. Interaction and integration, now conceptualized as globalization working at the planetary scale with local manifestations, highlight the benefit that comes from looking at the ties and feedback loops between how things work, society operates, and cultures change. The point is that understanding peoples, places, and processes is furthered by considering the web of relations, and those considerations are better understood when approached from different perspectives.

Cultural geographers, like other practicing academics, are concerned with the direction and path of their area of study. The themes of a "past" or "present" cultural geography are not explicitly highlighted, though the context of ideas and cited works reflects this. The 1960s do introduce the theme of "the future of cultural geography," a glance and forecast of the road ahead.

The 1970s

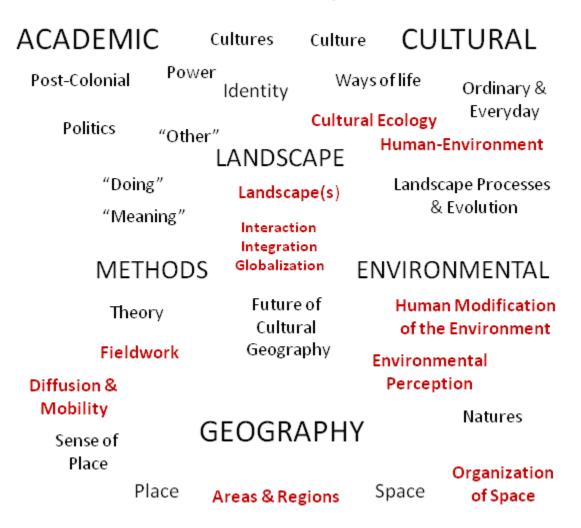
The 1970s portion of the dataset consists of four texts (Table 4-1). The Taaffe *et al*. (1970) book, kin to the 1965 National Academies book, is a survey of social science approaches

to American geography that includes cultural geography, while Mikesell's 1978 Association of American Geographers presidential address is a survey of the discipline of cultural geography. Salter's 1971 *The Cultural Landscape* is a reader anthologizing examples of cultural landscape approaches to cultural geography. Jordan and Rowntree's 1976 *The Human Mosaic: A Thematic Introduction to Cultural Geography* is the first edition of the long-running textbook aimed at students in introductory college courses.

Figure 4-7: Academic Cultural Geography Dataset Themes of the 1970s.

Red indicates themes present in the time period. Compare to Figure 4-5.

Culture History



Landscape and culture remain strong themes in the 1970s, with an increasing environmental influence (Figure 4-7). Cultural ecology and environmental perception remain themes, along with the introduction of human-environment and human modification of the environment. This cluster reflects the interests of society at the time, with the growing concern for the environment and resources. The research of academic practitioners supported these concerns, rooting them in the traditional concerns and approaches of their field.

The *Human Mosaic's* thematic approach organizes around the five themes of culture region, cultural diffusion, cultural ecology, cultural interaction, and cultural landscape. As a textbook, the content is not framed as new or cutting edge ideas as much as it addresses the five cores associated with traditional ways of understanding the world from often overlapping cultural geographic perspectives. The emphasis on culture areas highlights the role that cultural traits play in classifying and understanding predominant culture groups across the globe, but also highlight how societies organize and goods and ideas move through functional regions from nodes of production to areas of consumption. Regional themes also highlight the overlap with the cultural landscape theme, as dominant cultures in an area tend to have more impact on the visible landscape and built environment, just as landscape provides an environment and fabric for minority groups to make visible their presence and differing values and identities. The Human Mosaic also incorporates the theme of cultural interaction, spreading this theme and integrative perspective into the classroom.

For those trying to understand cultural geography, landscape is a difficult term. Landscape is something that we look at, something that is built or modified, something that integrates nature and society, something that is observed. Landscape is also something of a method. To look at landscape is to practice a landscape approach to geography. The method of landscape and landscape analysis is part of the cultural approach as a whole. For many cultural geographers, landscape analysis involves fieldwork, where they can observe and interact with their object of study first hand (*e.g.*, Platt 1959; DeLyser and Starrs 2001b). Today this relates to participant observation methods (Dowler 2001). The traditional practice in twentieth century American geography is addressed by Ford (2011, 415) as "lurking" or "informal fieldwork" that lends experience to the synthesis of understanding places and landscapes. Of the 56 contributions to the 2001 *Geographical Review* special issue on "doing fieldwork," only one title includes "participant observation" (DeLyser and Starrs 2001b). Sometimes fieldwork is

identified as a separate theme, as Mikesell (1978) does in the first of its two appearances in this analysis.

Space is something of a keyword for academic geography in the 1960s and 1970s. For those on the nomothetic track, space lent itself easier to quantitative approaches than understanding the nuanced qualities of peoples and places. As developments in social sciences and other parts of geography focused on space and spatial metrics, cultural geographers made reference to space as well. This is not to say that cultural geographers did not try to understand space before, just that the word as a theme was not common prior to the 1970s. Salter's 1971 reader uses organization of space as a theme, articulating how cultural geographers looking at landscapes and understanding people in place consider the morphology of the built environment and the places people use.

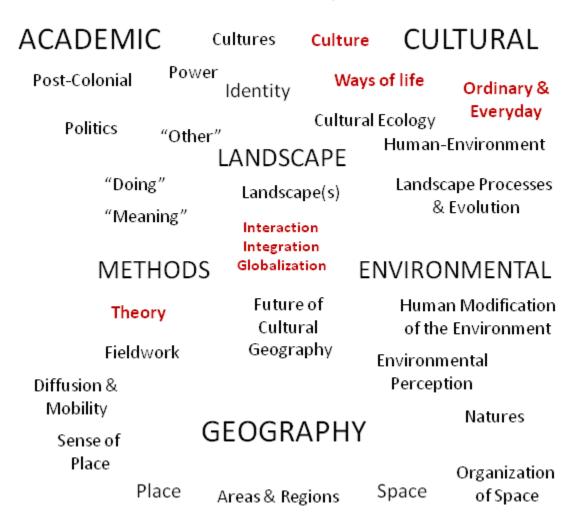
The 1980s

The 1980s have the lowest frequency of samples in this dataset, with the only entry coming with the 1989 chapter on cultural geography in Gaile and Willmott's *Geography in America* (Table 4-1). Rowntree, Domosh, and Foote co-author this chapter, which aims to provide a "critique of contemporary North American cultural geography that is shaped and framed by a sensitivity to emerging themes and issues of the 'new,' without denying or severing ties to the core of traditional cultural geography" (1989, 210). The co-authors frame this discussion under the headings of "the epistemological spectrum," "the centrality and conceptualization of culture," "interaction among humans, culture, and landscape," "expanding problematic inquiry," and "studying everyday life and landscape." These headings map to the themes of theory, culture, interaction, ordinary and everyday, and landscape (Figure 4-8). The sensitivity to holistic language suggests tension and change in the subfield. Greiner (2010, 239), reviewing the thirty years of the *Journal of Cultural Geography*, notes that 1980 not only saw the founding of the journal, but also three papers marking the "emergence of the so-called 'new cultural geography' and the beginnings of the cultural turn in academia more broadly."

Figure 4-8: Academic Cultural Geography Dataset Themes of the 1980s.

Red indicates themes present in the time period. Compare to Figure 4-5.

Culture History



In the span of this analysis, much like the era of Rowntree, Domosh, and Foote's review, the 1980s are a time of debate, uncertainty, and change. While the goal of this analysis is to consider the identified themes of the texts, the explanations of these themes and the points of the texts themselves point to debate in geography in general and cultural geography in particular between "traditional" ways of practicing geography, "scientific" ways of practicing geography, and "social-theoretical" ways of practicing geography (for cultural geography, *e.g.*, Price and Lewis 1993; Duncan 1994). Rowntree, Domosh, and Foote's discussion of epistemology and "problematic inquiry" point to the need to frame and understand new concerns and possibilities

for the practice of geography. These new concerns are not just new to geography, but are simultaneously developing and evolving in the humanities and other social science disciplines (Greiner 2010; Jackson 1989). Theory emerges for the first time as a theme in this text as the authors use "The Epistemological Spectrum" as a thematic heading (Rowntree *et al.* 1989, 211). This slightly tilts the practice of academic cultural geography towards emerging ideas in broader cultural, social, and humanities scholarship.

The limited texts suitable for this analysis from the 1980s perhaps point to the changing of geography during the time. "Human geography" became a more widely-used term, especially as it addressed the geography of humanity from social science perspectives and less from particular cultural or landscape methods. Another conjecture is that thematic approaches to understanding cultural geography tend to occur when there is a target audience or supporting pool of practitioners that identify with the fabric of the larger idea that the themes support, suggesting diversity of cultural geographic ideas in the decade. Peter Jackson's 1989 *Maps of Meaning: An Introduction to Cultural Geography*, is not part of this analysis because it does not explicitly organize around themes, but stands as an influential work of cultural geography from the decade. *Maps of Meaning* exemplifies the diversity of approaches to cultural geography by borrowing and arguing a case for cultural geography on the structure of the Birmingham School of Cultural Studies. Jackson's discussion of cultural materialism and society to culture and geography draws upon Raymond Williams; ideology upon Marx; hegemony upon Gramsci; and linguistic theory upon Saussure and Levi-Strauss.

The 1990s

Six texts form the pool for analysis of cultural geography themes in the 1990s (Table 4-1). Similar to *Geography in America* and *Maps of Meaning* clustering late in the decade, most of the 1990s texts appear between 1990 and 1994, with the a sixth in 1999. The texts include a second introductory textbook, Jackson and Hudman's 1990 *Cultural Geography: People, Places, and Environment*. Another text is upper level textbooks that target upper-level undergraduate or graduate level students, Shurmer-Smith and Hannam's 1994 *Worlds of Desire, Realms of Power: A Cultural Geography*. Anderson and Gale's *Cultural Geographies* is a reader. Both Shurmer-

Smith and Hannam and Anderson and Gale are reflective of new ideas influencing the practices of cultural geography. The remaining three texts come from the 1994 anthology with commentary *Re-Reading Cultural Geography*.

Re-Reading Cultural Geography is a reader edited by Foote, Hugill, Mathewson, and Smith organized around themes. Most of the readings are anthologized, but several new writings appear at the beginning, end, and introducing sections. Of these new commentaries, Wagner and Duncan organize their thoughts around themes that meet the standards of analysis. In an introduction to the volume, Hugill and Foote (1994, 19) explain their structure as: "how the world looks," "how the world works," and "what the world means." Fourteen themes organize the readings underneath this structure (table 2.4) (Hugill and Foote 1994, 19-22). The themes of the volume demonstrate one issue with the analysis: sometimes authors break down themes beyond what other authors do, or name the themes so uniquely that no other themes will match it in wording, removing it from the analysis. I prefer Wagner's (1994, 6) use of "morphology, mechanism, and meaning" as an effective, simple alternative wording to the "how the world looks," "how the world works," and "what the world means" phraseology explicated by Hugill and Foote (1994, 19) (Table 4-4).

Table 4-4: Organizing Structures and Themes in Re-Reading Cultural Geography.

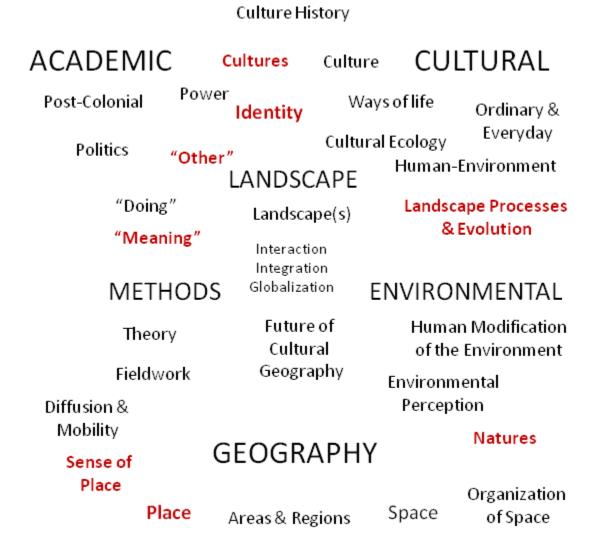
Source: Hugill and Foote 1994; Wagner 1994).

| Hugill & Foote Structure | Hugill & Foote Themes | Wagner Structure |
|--------------------------|-------------------------------|------------------|
| | Learning from looking | |
| How the world looks | Ordinary landscapes | Morphology |
| | Emblems of authority | 2 31 |
| | Dynamic regions | |
| | Technics and culture | |
| | Agency and institution | |
| How the world works | Contact, conflict, and change | Mechanism |
| | Innovation and adaptation | |
| | Reproduction and resistance | |
| | Environmental perception | |
| | Privileged views and visions | |
| What the world means | Sense of place and identity | Meaning |
| | Ethical senses of nature | |
| | Iconography of landscape | |

Eight new themes emerge during the 1990s (Figure 4-9). Place and sense of place appear, reflecting the humanistic influences of Yi-Fu Tuan and Edward Relph during the 1970s and 1980s. In some ways, the emphasis on place builds off of the idiographic chorology traditions of studying regions and areas, but opts for a more scale-neutral term.

Figure 4-9: Academic Cultural Geography Themes Emerging in the 1990s.

Red indicates themes emerging in the time period. Compare to Figure 4-5.



Many of the new themes and ideas reflect the balance between more traditional forms of geographical practice and other forms borrowed from other areas of the social sciences and

academia that Rowntree, Domosh, and Foote highlighted in 1989. The appearance of identity, "other," and "meaning," along with the reappearance of theory, strongly relate to emerging foci at the time in other branches of the liberal arts (*e.g.*, Jackson 1989). The dataset concept maps (*e.g.*, Figure 4-9) use "other" and "meaning." The quotation marks around the terms in the figures emphasize and indicate that it is not the common usage of the words, but particular, intentional, strategic uses of the term as a keyword that relates to particular academic practices. "Meaning" reflects the emphasis on symbolic, discourse, and textual analysis in the semiotic traditions emerging from literary and cultural studies (*e.g.*, Cosgrove and Jackson 1987; Cosgrove and Daniels 1989; Barnes and Duncan 1992; Barnes and Gregory 1997). "Other" emerges from sociological concerns with minority populations and cultural groups at a variety of scales (*e.g.*, Said 1979; Spivak 1988). Both "meaning" and "other" reflect the growing attention given identity and identity politics as ways of understanding and valuing an increasingly diverse world and political landscape.

Cultures and natures, with the "s" added on the end to indicate concern for and attentiveness to the multiples of possibilities, first appear. These terms as themes reflect the practices of academic postmodern conceit where there is more interest in polyvocality than in one voice or side to the story (Crang 1992). The weight continues to shift away from traditional geographic concerns towards concerns and perspectives shared across professional academic relations.

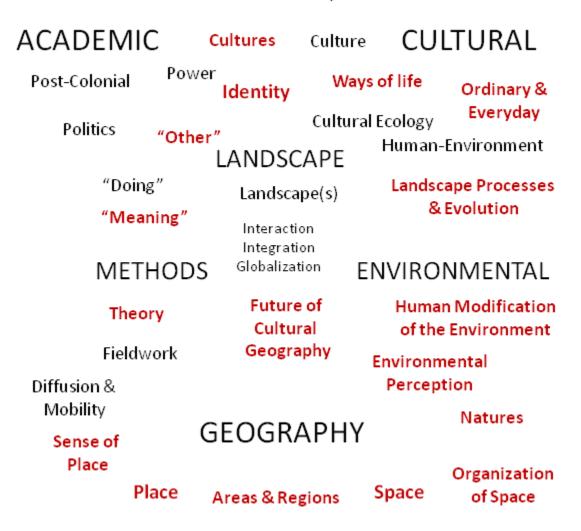
Nine other themes make an additional appearance in the 1990s (Figure 4-10). Some of these are due to the survey and scope of *Re-Reading Cultural Geography*. Nonetheless, the fact that they are identified as themes in the 1990s highlights the importance of the theme and practice to cultural geography.

Ways of life and ordinary & everyday continue to reflect the concern with culture, though understandings of culture that start to consider cultures, identity, and "other." Cultural and environmental concerns continue through the themes of human modification of the environment and environmental perception. Traditional concerns of geography remain as well, with themes of areas and regions, space, and organization of space. Another appearance of the future of cultural geography relates to how the field of study may move forward balancing traditional concerns and methods of cultural and geography with the influx of ideas from other areas of academia.

Figure 4-10: Academic Cultural Geography Dataset Themes of the 1990s.

Red indicates themes present in the time period. Compare to Figure 4-5.

Culture History



The 2000s

The 17 texts from the 2000s make up more than half of the 31-text dataset used for this analysis (Table 4-2). If the 1980s were the low mark for this analysis due to a lack of disciplinary cohesion, perhaps the explosion of writing and themes from this most recent period

demonstrates that idea development within cultural geography is vigorous, alive and well in its various practiced forms.

Similar to the multiple texts from 1994's *Re-Reading Cultural Geography*, texts in the 2000s section contain selections from volumes or collections that have separate component parts that organize by themes. This thematic organization is true of the 2002 *Handbook of Cultural Geography's* introduction and organization, items from the Spring 2003 issue of *Place and Culture*, the *Association of American Geography Cultural Geography Specialty Group Newsletter* on themes in cultural geography by Strohmayer and Buttimer, and chapters 1 and 10 of William Norton's 2006 second edition textbook *Cultural Geography: Environments*, *Landscapes, Identities, Inequalities*.

Texts from this period also demonstrate the continued evolution of different individuals thinking about cultural geography from the thematic aspect. This is best characterized by different thematic frameworks put forth by William Norton (Table 4-5). The first edition of *Cultural Geography*, subtitled *Themes, Concepts, Analyses*, outlines "six principal themes" of cultural geography in the first chapter. His second edition of the text in 2006, subtitled *Environments, Landscapes, Identities, Inequalities*, revises the six principal themes in the first chapter. Norton's 2006 concluding chapter, "Cultural Geography – Continuing and Unfolding," lists seven thematic commonalities shared between traditional and new approaches to cultural geography. Each of Norton's three sets of themes reflects a different temporal or organizational perspective on cultural geography.

Five additional cultural geographers make additional appearances in the 2000s. James Duncan, who had a 1994 entry as part of Re-Reading Cultural Geography returns to edit and organize the 2004 A Companion to Cultural Geography with Johnson and Schein, and contributes the entry on cultural geography to the 2006 Encyclopedia of Human Geography. Shurmer-Smith follows up the co-authored 1994 text Worlds of Desire Realms of Power with the 2002 textbook Doing Cultural Geography. Anderson, who co-edited 1999's Cultural Geography with Gale returned to co-edit the 2002 Handbook of Cultural Geography with Domosh, Pile, and Thrift. Domosh, who contributed to the 1989 entry on cultural geography in Geography in America also co-wrote the 2010 edition of the introductory textbook The Human Mosaic: A Cultural Approach to Human Geography. This edition of The Human Mosaic is the 11th edition, and the second version to appear in the dataset behind Jordan and

Rowntree's 1st edition in 1976. It is worth including because editions 1 through 10 used the same thematic structure, which the 11th edition changes. Price, one of the co-authors of the 11th edition with Domosh and Neuman, also co-edits the 2008 *The Cultural Geography Reader* with Oakes.

Table 4-5: Cultural Geography Themes of William Norton

Source: Norton 2000 p. 23 and Norton 2006 pp. 27 and 384.

| .2000 Introduction | 2006 Introduction | 2006 Conclusion | |
|------------------------|-------------------------|------------------------|--|
| Landarana Errabettan | Environments, Ethics, | Continuing interest in | |
| Landscape Evolution | Landscapes | cultural landscape | |
| D ' 17 1 | Londonana Evolution | Mutual mistrust of | |
| Regions and Landscapes | Landscape Evolution | scientific method | |
| Ecology and Landscape | Danianal Landsonnes | Interest in human-and- | |
| | Regional Landscapes | land relationships | |
| Behavior and Landscape | Power, Identity, Global | Predilection for | |
| | Landscapes | fieldwork | |
| Unequal Groups, | Other Voices, Other | Concern for regional | |
| Unequal Landscapes | Landscapes | identity | |
| Landscape, Identity, | r''' Di | Concern for group | |
| Symbol | Living in Place | identity | |
| | | Willingness to conduct | |
| | | research at various | |
| | | spatial, temporal, and | |
| | | social scales. | |

Texts from this period span the types of texts considered in this analysis. The 11th edition of *The Human Mosaic* is an introductory text, while Mitchell's 2000 Cultural Geography: A Critical Introduction, Norton's 2000 and 2006 editions of Cultural Geography, Shurmer-Smith's 2002 Doing Cultural Geography, and the 2003 Cultural Geography in Practice edited by Blunt, Gruffudd, May, Ogborn, and Pinder are all textbooks aimed for upper-level undergraduate or graduate students.

Cultural Encounters with the Environment (Murphy and Johnson 2000), Handbook of Cultural Geography (Anderson et al. 2002), A Companion to Cultural Geography (Duncan et al. 2004), Cultural Geography: A Critical Dictionary of Key Concepts (Atkinson 2005), and The Cultural Geography Reader (Oakes and Price 2008) are all readers consolidating pieces written by others. All of these works contain new contributions with the exception of The Cultural Geography Reader (Oakes and Price 2008), which is an anthology spanning from past geography to the present like Readings in Cultural Geography (Mikesell and Wagner 1962), Cultural Geography: Selected Readings (Dohrs and Sommers 1967), The Cultural Landscape (Salter 1971), and Re-Reading Cultural Geography (Foote et al. 1994).

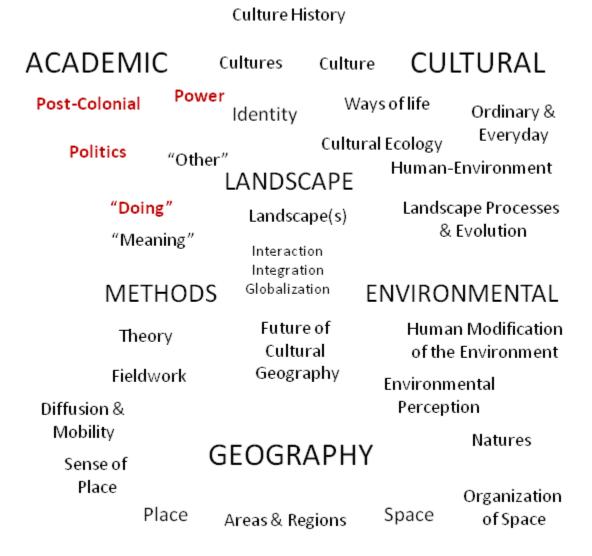
The remaining texts are surveys of varying length. Duncan's 2006 entry is in the *Encyclopedia of Human Geography*. Myers, McGreevy, Carney, and Kenny contribute the chapter on cultural geography to the 2004 *Geography in America at the Dawn of the 21st Century*, which is a follow up to the 1989 volume *Geography in America*. Buttimer (2003) and Strohmayer (2003) are short newsletter articles from a special section of the Cultural Geography Specialty Group's newsletter *Place and Culture*.

The 17 texts only add 4 new themes to those already used in this analysis (Figure 4-11). The themes of power, post-colonial, politics, and "doing" lean the balance of cultural geographic practice further away from considerations of culture and geography towards ideas originating in and spreading from other disciplines. Power and politics reflect the influence of Foucault and understandings of hegemony, often relating to analysis of "others" and identity. Post-colonial concerns and methods emerge as related concerns, especially as identity and identity politics try to understand the functions of power and "other" operating in areas where the ideas, ideals, and politics of colonizing powers took precedence over the "others" already there. This shift is noted in Norton's themes (Table 4-5). His 2000 set includes a theme dealing with inequality of groups and landscapes. The 2006 themes include keywords of ethics, power, identity, and other.

"Doing" is a theme very much related to the context and content of my argument. There are eight uses of "doing" as a theme although it does not appear in the dataset before 2002. Rather than post-colonialism and politics, this theme reflects the increasing attentiveness to the methods by which professional academics "do" their research, work, and profession that make up their identity. It is not as much a theoretical term as much as one of methodological conceit.

Further, the theme provides a commentary to the power that is involved in researching other people and places in the world.

Figure 4-11: Academic Cultural Geography Dataset Themes Emerging in the 2000s. Red indicates themes emerging in the time period. Compare to Figure 4-5.



Almost all of the themes considered as parts of other decades in the analysis are present in the 2000s (Figure 4-12). The theme of environmental perception is absent in the 2000s. One may speculate that this is due to the presence of an anthology-style reader providing old history to the current discipline. Excluding *The Cultural Geography Reader* (Oakes and Price 2008),

however, would only exclude one of the themes, that of culture history. All of the other themes are present in the various other texts from the 2000s.

Figure 4-12: Academic Cultural Geography Dataset Themes of the 2000s.

Red indicates themes present in the time period. Compare to Figure 4-5.

Culture History **ACADEMIC CULTURAL** Cultures Culture Power Post-Colonial Ways of life Ordinary & Identity Everyday **Cultural Ecology Politics** "Other" **Human-Environment** LANDSCAPE "Doing" Landscape Processes Landscape(s) & Evolution "Meaning" Interaction Integration Globalization **METHODS** ENVIRONMENTAL Future of **Human Modification** Theory Cultural of the Environment Geography Fieldwork Environmental Perception Diffusion & Mobility Natures **GEOGRAPHY** Sense of Place Organization Place Space Areas & Regions of Space

Understanding Academic Cultural Geography, 1962-2010

Cultural geography continues to be a vibrant and wide-ranging area of geographical scholarship. Compared to the nine themes used in the 1960s (Figure 4-6), the 29 themes used in the 2000s demonstrate that the concerns of cultural geography emphasizing culture, landscape, and environment are still present and vibrant. What is added to these poles is a refinement of concepts based on changing ideas. Culture is tempered by cultures, nature by natures.

The significant temporal change is the eight themes added in the 1990s and the four added in the 2000s. Together, these themes add the weight to cultural geography of ideas from other academics and disciplines. Because the culture and geography remains, the metaphor does not teeter over completely to the academic side; rather the snapshot of the 2000s shows that overall, academic cultural geography remains balanced. While select publications from one year or another may support the argument that the balance may have shifted, analysis of all 17 texts combined does not.

The summary of themes used (Table 4-6) sheds further light on the contemporary composition of cultural geography. All of the eight uses of "doing," 83 percent of the six uses of "other," and 78 percent of the 9 uses of identity are from the 2000s (the other two uses of identity are from 1999). At the same time, 38 percent of the eight uses of areas and regions, 33 percent of the six uses of cultural ecology and human-environment, 50 percent of the three uses of sense of place, and 80 percent of the ten uses of landscape are from the 2000s. By these considerations, the balance may be trending towards an expansion of cultural geography with the majority of new inputs from the academic side while maintaining core geographic and cultural themes. Of the themes first used in the 1960s and 1970s, only environmental perception does not reappear as a theme in the 2000s.

Table 4-6: Percentage of Themes by Period.

| Themes and Parts | Count | First Year | Last Year | Percent Before 2000s | Percent in 2000s |
|---|-------|---------------|--------------|----------------------|------------------|
| Cultural ecology and human-environment | 6 | 1962 | 2006 | 67 | 33 |
| Culture | 4 | 1962 | 2008 | 50 | 50 |
| Culture history | 4 | 1962 | 2008 | 75 | 25 |
| Landscape(s) | 10 | 1962 | 2010 | 20 | 80 |
| Culture areas and regions | 8 | 1962 | 2010 | 63 | 38 |
| Diffusion and mobility | 5 | 1965 | 2010 | 80 | 20 |
| Interaction, integration, globalization | 5 | 1965 | 2010 | 60 | 40 |
| Environmental perception | 3 | 1967 | 1994 | 100 | 0 |
| Future of cultural geography | 3 | 1967 | 2004 | 67 | 33 |
| Human modification of environment | 4 | 1971 | 2000 | 75 | 25 |
| Space and organization of space | 3 | 1971 | 2000 | 67 | 33 |
| Fieldwork | 2 | 1978 | 2006 | 50 | 50 |
| Ways of life, ordinary, everyday | 4 | 1989 | 2002 | 75 | 25 |
| Theory | 4 | 1989 | 2006 | 75 | 25 |
| Meaning | 4 | 1994 | 2002 | 50 | 50 |
| Landscape processes / evolution | 3 | 1994 | 2006 | 33 | 67 |
| 'Other' | 6 | 1994 | 2008 | 17 | 83 |
| Place and Sense of Place | 6 | 1994 | 2008 | 50 | 50 |
| Cultures and natures | 6 | 1994 | 2010 | 33 | 67 |
| Identity | 9 | 1999 | 2008 | 22 | 78 |
| Politics and Culture | 4 | 2000 | 2004 | 0 | 100 |
| Postcolonial | 3 | 2002 | 2006 | 0 | 100 |
| Power | 3 | 2002 | 2006 | 0 | 100 |
| "Doing" | 8 | 2002 | 2008 | 0 | 100 |

Summary and Conclusions

Analysis of themes from the 31-text cultural geography dataset shows that the sub-discipline from 1962 to 2010 integrates diverse bodies of knowledge from geography, studies of culture, and ideas from wider academia into its professional practice. Over the 40-plus years, the style of text has moved from readers and surveys to surveys and textbooks for upper-level undergraduate and graduate level classes. The proliferation of course management software systems (*e.g.*, Blackboard, WebCT, and Axio), and the increase of current and historical journal articles available through online databases help explain the decline of published readers as a marketable product.

While each decade is represented by texts in the dataset, there is an overwhelming amount of cultural geography literature from the 2000s. Not only does this show that the sub-discipline is alive and well, it highlights the themes that introduce and spread ideas introduced from broader academia into cultural geography during the 1990s and 2000s. This may indicate a working out of cultural geography debates and "civil war" in the 1980s and 1990s (*e.g.*, Price and Lewis 1993, Duncan 1994), a state of heterotopia in cultural geography (Duncan 1994), or less concern about difference in the practice of cultural geography. Another interpretation is that cultural geography and other subfields and disciplines are continually in a state of flux as practitioners try out new methods and ideas; time tells us what sticks.

From the 1960s to the present, geographers have contributed "big questions" and helped develop new concepts and areas of study (Cutter *et al.* 2002; Strategic Directions 2010). Many of these ideas are part geography's human-environment identity (Turner II 2002a) including sustainability science (*e.g.*, Wilbanks 1994; Kates *et al.* 2001; Clark 2007; Kates 2011), vulnerability (*e.g.*, Cutter 2003; Turner II *et al.* 2003), resilience (*e.g.*, Cutter *et al.* 2008; Pike *et al.* 2010), and land change science (*e.g.*, Rindfuss *et al.* 2004). Given that themes of cultural geography from the 1960s and 1970s include cultural ecology, environmental perception, and human modification of the environment, it is surprising that new developments and extensions of these lines of work are not represented amongst cultural geography's themes. Cultural geography as a subfield is not alone. Of the terms above, only sustainability has an entry among

the 817 pages of entries in the fifth edition of the *Dictionary of Human Geography* (Gregory *et al.* 2009).

This foray into understanding the temporal variation of cultural geography by analyzing themes used by self-identified practitioners also furthers knowledge on methods of analysis and visual data representation. Author and editor-identified themes are a ripe focus for content analysis research. Using texts in the dataset organized around themes facilitated a qualitative content analysis. Clarity of theme selection in each of the texts ensures that the authors and editors using the themes are speaking for themselves at a greater extent than other examples where ideas are plucked from multiple sources using content analysis or individual judgment. The overwhelming tendency of cultural geographers to clearly express their thoughts on the subfield as explicit themes allows the analysis to move forward with less concern for bias of individual contributors and of the analysis as a whole. By being explicit about their themes, authors and editors remove layers of interpretation and guesswork sometimes necessary for content analysis. The role of researcher, analyst, and interpreter advanced the process of analysis to clustering isolated themes together.

Time-series data with multiple variables across the decades pose challenges for summarizing and representing the data. Organizing time into ten year periods called "decades" starting in year xxx0 and ending in year xxx9 is a human organizational construct. Given the meaning of such decades in popular American culture and society, and that this culture and society produced the texts used in this study, this analysis acknowledges and uses these temporal categories.

This analysis used concept maps representing the whole era, three groupings for the whole era, and five time periods within the era to visually represent the changing patterns across time. Logically organizing the concept maps based on similarity and correspondence of themes makes the figure easier for users to interpret than those created by random or algorithmic methods.

Through content analysis and data visualization, this chapter explores thematic conceptions of the Anglo-American cultural geography as a subfield of the broader discipline of geography. Tracing themes and big ideas across geography as a whole is challenging due to the multiple speaking positions and diversity of subfields, topics, and areas of interest. Cultural geography as a microcosm helps document and show how a self-identified cluster of scholars

within academia has changed their understandings of their area of study in response to the diffusion of postmodern influences across the humanities and social sciences in the 1990s and 2000s. Analysis of materials from anthropology or sociology, history or comparative literature, or the subfields of human, social, historical, economic, political, and urban geography would likely reveal similar results. Such studies would rely on data mining, clustering, and content analysis. Cultural geography's tradition of thinking and organizing in themes clearly demonstrates this process by letting the themes speak for themselves.

Chapter 5 - Human Geography Textbooks and Gender

Setting the Stage

Geographers working in academia produce, use, and communicate with more people than just other geographers. Textbooks, particularly introductory textbooks, reach far wider audiences than most other scholarly publications. Classrooms, perhaps more than scholarly conferences or published research, are a local site where people become exposed to geographical information and the potential for human-environment and/or spatial knowledge. As examples of geographical information framed for consumption, class syllabi (Kurtz and Craig 2009), course lectures (Barrows 1962; Adickes 1925), and textbooks are examples of how aspects of the discipline are presented, performed, and practiced at the localized site of the college classroom. Since the early 1980s, scholarship considering the "geography of women" and situated, intersecting differences within the human experience have rapidly grown as geographers have considered the role and power of difference in society along social categories: race, class, work, gender, sexuality, sexual orientation, ability, and age. This research considers the impact of these research trends by examining three undergraduate human geography textbooks, comparing the first editions to the current editions. Analysis considers the presence, portrayals, and references to women and men in photographs, maps, graphs, tables, and diagrams between the two generations to better understand changes over time in geographical knowledges present and presented in textbooks and the role of textbooks in doing gender.

This chapter explores stories of geography present in six different introductory human geography textbooks developed for the United States college market. These texts represent two generations of geographical thought framed for the classroom in three distinct family lines – the first and the most recent editions of the Jordan, Getis, and de Blij texts (Figure 5-1 and Table 5-1). The analysis presented in this chapter explores and compares the content of the late 1970s and early 1980s generation of texts with the 2009 and 2010 generation of texts.

Figure 5-1: Human Geography Textbooks Dataset.

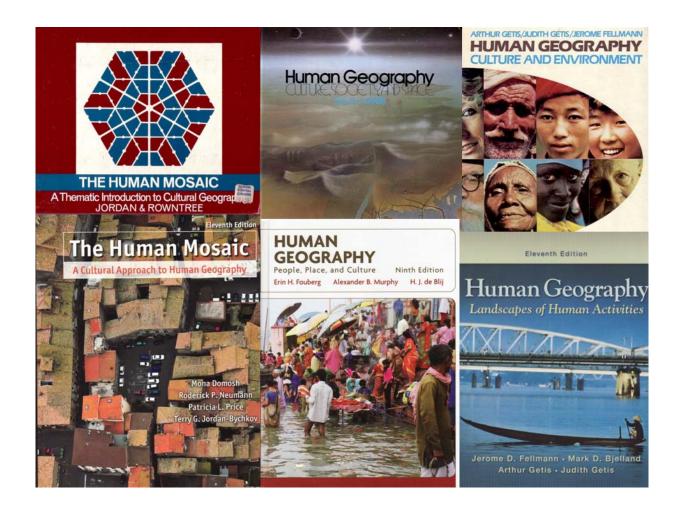


Table 5-1: Human Geography Textbooks Dataset.

| Title | Authors | Publisher | Edition | Year | Number of Chapters |
|---|---|---------------------------------|----------|------|-----------------------|
| The Human Mosaic: A thematic introduction to cultural geography | Terry G. Jordan Lester Rowntree | Canfield Press; Harper & Row | First | 1976 | 10 |
| The Human Mosaic: A cultural approach to human geography | Mona Domosh Roderick P. Neumann Patricia L. Price Terry G. Jordan-Bychkov | W. H. Freeman and Company | Eleventh | 2010 | 12 |
| Human Geography: Culture, society, and space | Harm J. de Blij | John Wiley & Sons | First | 1977 | 21 |
| Human Geography: People, place, and culture | Erin H. Fouberg Alexander B. Murphy H. J. de Blij | John Wiley & Sons | Ninth | 2009 | 14 |
| Human Geography: Culture and environment | Arthur Getis Judith Getis Jerome Fellmann | Macmillan Publishing Company | First | 1985 | 13 |
| Human Geography: Landscapes of human activities | Jerome D. Fellmann Mark D. Bjelland Arthur Getis Judith Getis | McGraw Hill | Eleventh | 2010 | 13 |

Thirty years is a long time, especially in academia where new research is continuously presented, concepts flow between disciplines, and new ideas are applied to existing knowledge. Since the 1980s, multiple editions of a text are common. Multiple editions provide insight on how the discipline changes over time (Jackson *et al.* 2006; Gerike 2010). Considering multiple editions of a text suggest ways of working around "textual time" (Smith 1990) problems.

There is more to the historiographies of geography than the basics of history and geography. Human geography in particular is about people. Geographers are people. Students are people. And half of the people in the world today are female. Geographers can further nuance their historiographies of geography by applying the analytical perspectives of other disciplines. In this case, examining aspects of the representation of men and women in

introductory human geography textbooks and considering aspects of gender and power sheds light on these changing contexts.

Teaching Undergraduate College Courses

Most undergraduate programs of study at colleges and universities in the United States have entry level survey courses that meet college and/or all-university general education requirements. These courses are designed to expose students to the breadth of knowledge and produce generally educated students knowledgeable in the physical sciences, social sciences, liberal arts, math, and writing. Few of the students taking these lower-level courses major in the subject matter, so it is often the only chance for an academic discipline to impart its particular basic knowledge or perspectives. Such courses are also a site at which departments try to attract and recruit majors. Particularly in geography, the number of students reached in these "bread and butter" courses may outnumber the students declaring geography as a major or minor, or enrolling in interdisciplinary certificates like GIS, environmental sciences, or natural resources. As such, introductory geography courses and their textbooks provide a dynamic locale at which to convey of geographical ideas and how geography is practiced.

Disciplines with a consistent core identity have consistent survey courses. There is not much variation in sociology departments offering introduction to sociology, history offering world and United States history surveys, and English offering composition. The local variation comes from the skill set and examples presented by specific faculty or graduate student instructors. Geography departments across the United States structure these introductory courses differently. In general, these "bread and butter" courses may be a general introduction to geography, touching on regional, human, and/or physical geography. Other departments may use a regional geography survey as the introductory course. Yet others may use human geography or physical geography as the vehicle. The history of the department situated within a college and university usually sheds light on the particular arrangement. Departments with a strong tradition in regional geography, often in departments founded by faculty coming from the University of Chicago in the 1910s through 1940s, tend to have regional survey courses as their foundation (see Visher 1947, Visher 1950, Blouet 1981, Wheeler 1999, and Koelsch 2001 for

examples of impacts of origins of students, location of doctoral work, and location of career work). Other departments, particularly those with a strong faculty core in either human geography or physical geography will have those courses as their foundation. Some geography departments offer some or all, taking advantage of geography's breadth across common curriculum aspects of social sciences, physical sciences, explorations of world cultures and religions, international studies, and representations in models and literature.

Depending on the school, an introduction to geography, world regional geography, environmental geography, or human geography course could be the bread and butter of the department, having more sections, students taught, teaching assistants, and geographers involved in teaching them. Far from solidifying the general college-educated publics' understanding of the discipline of geography, this multi-pronged approach may confuse and perpetuate misconceptions of geography's pluralistic contributions to general knowledge.

Textbooks

Textbooks are a common component of many introductory college classes in the United States. As geographers or other academic practitioners take turns teaching a survey of their discipline or subdiscipline, they are distanced from the particular and advanced research they do on specialized themes and sites. Introductory textbooks help in this regard by providing a picture of the field as a whole (or at least a major subset of the field), reducing the complex breadth and depth of disciplines into a few hundred pages that can be covered in a quarter, semester, or year (Wheeler and Slack 1981). Lynch and Bogen (1997) make this point by comparing session and paper titles at academic conferences to material in introductory textbooks. The latter is considerably more "stable and coherent" (Lynch and Bogen 1997, 486). As de Blij puts it, textbook "content is deemed summation, and not an advancement of knowledge" (1989, 145). For introductory geography, this is summarizing the world's regions, its peoples and cultures, and/or physical and environmental systems into several hundred pages of text, maps, pictures, tables, diagrams, and graphs. This same facticity, in the view of Dorothy Smith (1990, 66), "obliterates the historical and specific source; the work, the local setting, and the authorship of

particular scientists." Summarization of the world and summarization of research and scholarship is a product of objectified knowledge of a discipline (Smith 1990, 15).

For students in the classroom and practicing scholars both, textbooks have important functions (Table 5-2) beyond providing summary factual information. The framework used to present the organization, the language, and the graphics demonstrate the boundaries of the discipline, examples of how work in the discipline is done, and the institutional structure of the discipline. For students, this may be a first introduction. For scholars and teachers, textbook revisions provide an opportunity for updates of changes in the field and the current status (de Blij 1989; Johnston 2000b, 2006). Textbooks are important as they are "the medium through which geographers reach out to the general student public" (Larimore 1978, 183).

Table 5-2: The Roles of Textbooks.

Source: Compiled by the author from Wheeler and Slack (1981), de Blij (1989, 146), Lynch and Bogen (1997), Dicken *et al.* (2001, 111), and Barnes (2002).

| The Role of Textbooks |
|--|
| Establish the status of a field or fields |
| Define disciplinary practice |
| Record the summary state of knowledge |
| Facilitate the production of a core curriculum |
| Outline overarching or driving themes |
| Highlight future directions |
| Establish significant contributions by leading practitioners |
| Demonstrate methods of research |
| Stimulate change |

Some geographers write widely about the impact and meaning that textbooks have had on their lives, particularly those of importance at the beginning of their careers or at moments of transition (Table 5-3). These thoughts sometimes come in autobiographical pieces (Berry 1993; de Blij 2006). Since 1991, the journal *Progress in Human Geography* has had a special section on *Classics in Human Geography Revisited*, and supplemented this series in 2001 with the

section *Textbooks that Moved Generations*. Recollections in the former tend to appraise the subject and its impact on the discipline (Dicken *et al.* 1991). The latter tend to focus on the book at the time and the impact on the individual. As Michael Wise notes, "it is not easy to be wholly objective about textbooks. So much depends upon personal experience and the circumstances of the times in which they were read" (2001, 112). What is clear from the autobiographical musings is that these texts were very important to the personal experiences of the geographers that still recall them, situated as they were at particular times and in specific places.

Additionally, recognition of key textbooks spans the discipline, including regional, cultural, Earth system, human-environment, spatial science, logical positivism, and Marxist perspectives (Table 5-3). Beyond their formal role (Table 5-2), textbooks serve as experiential foundations and groundings for its practitioners.

Table 5-3: Prominent Geographic Scholars and Their Recollections of Important Texts.

Organization is alphabetical by publication date, then alphabetical by recollector's last name.

| Recollector | Date | Textbook |
|-------------------|------|--|
| Richard Morrill | 1991 | Haggett Locational Analysis in Human Geography |
| Brian Berry | 1993 | Losch The Economics of Location |
| Peter Jackson | 1998 | Ley The Black Inner City as Frontier Outpost |
| Noel Castree | 2000 | Smith Uneven Development |
| Erik Swyngedouw | 2000 | Smith Uneven Development |
| Marvin Mikesell | 2002 | Finch and Trewartha Elements of Geography |
| Richard Morrill | 2002 | Man's Role in Changing the Face of the Earth |
| Richard Morrill | 2002 | Isard Location and Space Economy |
| Faye Gale | 2003 | Wagner and Mikesell Readings in Cultural Geography |
| Risa Palm | 2003 | Abler, Adams, and Gould Spatial Organization |
| Daniel Arreola | 2006 | Spencer and Thomas Cultural Geography |
| Harm de Blij | 2006 | Van Loon's Geography |
| Reginald Golledge | 2006 | Chorley and Haggett Models in Geography |

Geographers have increasingly looked to the history, meaning, and utility of texts in understanding the history of the discipline. Ron Johnston also looks to textbooks as data sets, noting how geography textbooks are a site of struggle for disciplinary hegemony between spatial analysis and social theory (2000b) and how these books help steer disciplinary change by how they discuss different approaches to geography (2006). The volumes Johnston focuses on are commonly used in first year British geography classes, but in the United States are more often used in higher-level undergraduate or graduate level courses, such as Peet's 1998 *Modern Geographical Thought*, Hubbard *et al.*'s 2002 *Thinking Geographically*, and Cloke *et al.*'s 2004 *Envisioning Human Geographies*. In a similar vein as the *Classics in Human Geography Revisited* section, Hubbard *et al.*'s (2008) collection *Key Texts in Human Geography* contains 26 contributed chapters on texts ranging chronologically from Hagerstrand's 1953 *Innovation Diffusion as Spatial Process* to Massey's 2005 *For Space*, each chapter stepping through the contexts, the book and its arguments, reception, and impact.

Keighren (2006, 2010) provides similar material, but in much greater depth, about the ideas and reception of Ellen Churchill *Semple's Influences of Geographic Environment*. Trevor Barnes (2001a, 2002) uses Chisolm's 1889 *Handbook of Commercial Geography*, Smith's *1913 Industrial and Commercial Geography*, and Haggett's *1965 Locational Analysis in Human Geography* as examples in studies of the evolution of economic geography as a field and the role of textbooks in disciplinary practice. William Koelsch's 2012 study of the knowledge and mention of different versions and reprints of the work of George Perkins Marsh by geographers, with the goal of separating legend from fact. Hanson and Monk (2008) revisited the origins, reception, and impact of their 1982 "On Not Excluding Half of the Human in Human Geography" article. These works are in the theme of "geographies of the book" research (Withers and Ogborn 2010), which seeks to understand spatial dynamics of knowledge production, publication, and reception.

An interest in geographical texts is part of a long trend in considering geographic education. Geography, traditionally taught across the pre-collegiate curriculum, has used texts to communicate to young students. Schulten (2001) uses elementary and secondary level geography textbooks in her study of American development of geographic knowledge. The *Journal of Geography*, produced by the National Council for Geographic Education, has articles critiquing how textbooks present economic industries (McConnell 1920) and methods of

comparing geography textbooks for use in class (Halverson 1936). More recently, scholars have considered issues of representing the "other" (Bar-gal 1994), national environmental ideologies (Morgan 2003), and the spatial nature of textbook questions (Jo and Bednarz 2009; 2011).

Geographers have also considered introductory texts used in survey-level classes in college classes in the United States. Several geographers note and consider the contexts and geographical implications of these texts as they apply to the next and upcoming generations of students and the geographic literacy of the public as a whole (*e.g.*, Larimore 1978; Wheeler and Slack 1981; Mayer 1989; Trimble 1989; Mitchell and Smith 1991; Cole 2005; Martis 2005). Consideration of textbook perspectives are important, as geographical scholarship rapidly produces new knowledge in conference papers and journal articles, but textbook editions take years to produce and are relatively slow to change (Wheeler and Slack 1981; Scott 1984; Mayer 1989). The slowness is not only due to the time involved in writing or editing a text, but in working with the hundreds of pages that present generalized versions of the wide breadths and deep depths of ever-expanding and changing disciplinary content and perspectives (Wheeler and Slack 1981). Scott (1984) noted similar delays in a study of seven introductory physical geography textbooks published between 1960 and 1970 and eleven published between 1974 and 1983. Multiple editions can be problematic, as revisions can introduce error, especially in attempts to convey new concepts (Day 2009).

Several studies focus on introductory college level human geography textbooks. Mitchell and Smith (1991) reviewed five world regional, cultural, and human geography textbooks in light of the events of the First Iraq War, concluding that "for those among the American public exposed to college-level introductory geography, the texts they used will have been of little help in interpreting the events of the Middle East and Europe" (338). Myers's survey of ten introductory human geography textbooks examined how Africa is commonly represented in their pages through "text, figure, photograph, or map" and aligning them to current and antiquated regional themes (2001, 522). As such, his study is a geography of Africa as represented in textbooks. Myers's study falls into the wider vein of textbook research aimed at identifying bias with the hope of future correction (Graves and Murphy 2000; Loewen 1995). Cole's (2005) study of 42 undergraduate geography textbooks published between 1953 and 204 also considers Africa. For Cole, the interest is in how the texts define and bound Africa into regions.

Wheeler and Slack examined 12 introductory human and 12 introductory world regional geography textbooks published between 1972 and 1981 in a 1981 study. Using a five-point scale ranging from 1 (not covered at all) to 5 (completely covered, their analysis measured the extent to which these texts addressed the "contemporary research themes" of: applied geography, behavioral effects, policy approaches, problem solving approaches, and societal effects. The overall mean ranking of the 24 books in the study on these five themes was 2.18, falling closer to "inadequately covered" than to "partially covered." For Wheeler and Slack, the gap between contemporary research themes emerging in the 1970s and their presence in contemporary textbooks that increasingly rely on "sources other than important research articles," was expected (1981, 254).

Mayer considered the representation of women in eight introductory human geography textbooks published between 1985 and 1989. The study examined visibility versus invisibility in photographs, consensus versus diversity through gendered language, and applied consensus and invisibility to the text discussions of population geography and urban geography. Mayer proposed "incorporating gender as a variable" by including women in textbook discussions of all topics and by replacing or supplementing traditional subtopics with "gendered dichotomies" such as "public/private, home/work, waged/unwaged work, and city/suburb" (406).

Geographers have also considered how textbooks are aides to classroom teaching (Phillips 1994) and the pedagogical approach of textbook exercise writing (Graves and Murphy 2000). Content revisions in college-level introductory physical geography texts have introduced errors in concepts and systems used across the physical sciences (Day 2009). Other studies note the varying quality of writing and reading level of college texts as a measure of their accessibility (Wheeler and Slack 1981; Scott 1984; Trimble 1989).

De Blij (1989) offers thoughts on writing textbooks, having authored or co-authored introductory general, regional, physical, and human geography texts. In general, authoring geographers are attuned to the role that geography textbooks, like any other textbook, play. Textbooks form the basis of knowledge about geography and geographic ways of understanding the world that those using them gain. The examples, content, and approach to these materials form the basis of how students and society understand the world around them.

Sociologists have turned their own disciplinary eye towards textbooks, and tend to publish more studies using textbooks. This may be because the introduction to sociology course

is standard, or because sociologists study representations and structures of societies, including how they are represented in textbooks. The questions, scope, and methods in the sociology literature vary from study to study. Hall's 1988 study of the presence of women in 36 introductory textbooks dating from the mid-1980s counts the number of pages on which certain terms appear, based on the index. Ferree and Hall (1990; 1996) used a similar data set to answer several other questions. In 1990, they coded the 5,413 photographic illustrations appearing in 33 introductory textbooks in terms of gender and race. Their 1996 textbook analysis showed that class, race, and gender are presented as operating at distinct macro/societal, meso/group, and micro/individual scales respectively, rather than exploring each at multiple interacting levels. This study led to extended discussions revealing how other sociologists understood their field through textbooks (Manza and Schyndel 2000; Ferree and Hall 2000).

Other research themes for introductory sociology textbooks include the coverage and representations of sexuality (Suarez and Balaji 2007), use of myths of crowd control (Schweingruber and Wohlstein 2005), negotiating accurate presentations and myths of affirmative action (Beeman, Chowdhry, and Todd 2000), and the incorporation of current environmental sociology scholarship measured by the presence of key concepts and references to important books in the subfield (Lewis and Humphrey 2005). Still others extend textbook analyses beyond introductory materials to textbooks for education methods (Zittleman and Sadker 2002) and educational psychology (Yanowitz and Weathers 2004).

Other disciples consider and critique textbooks. In history, textbook studies have focused on factual errors (Loewen 1995). Textbooks have roles in producing and re-writing collective memory of Japan, Germany, and the United States (Hein and Selden 2000), and Russia (Shnirelman 2009). Heth (2008) studied the themes of North Dakota history presented in Robinson's ([1966] 1995) narrative, considering the themes as formative of cultural identity.

Four studies are of particular interest to historiographically-minded geographers because they consider how textbooks change over time. Hall (2000) provides consideration of how, how much, and where poverty is discussed in terms of the number of pages, tables, images, and locations of these concepts in relation to discussions of class, race, and gender and notes changes between the 1980s and the 1990s. Keith and Ender (2004) compare the core concepts discussed in 16 introductory textbooks from the 1940s to 19 texts from the 1990s. Scott (1984) examines two introductory physical geography textbook cohorts, seven from 1960-1970 and eleven

from1974-1983, considering physical characteristics of the books, illustrations, approach, and emphasis on applications or location. Scott found an increase in human-environmental emphasis, a "tendency to discuss weather and climate earlier" in the texts, and "more interest in interrelating" content with "the use of unifying approaches such as systems analysis" Scott (1984, 272). Cole (2005) surveyed 42 undergraduate geography texts published between 1953 and 2004 to understand practices and methods for regionalizing Africa. In his discussion, Cole discusses results in terms of the dataset as a whole, the first five texts of 1953-1962, and the five most recent texts of 1994-2004. While considering textbooks as discursive materials raises questions as to what is represented how and why, these studies add the dimension of historical context. Continuous geographical practices increase the amount of geographical knowledge and scholarship available for analysis and synthesis. Different times mean different institutional influences. Things change over time.

Geography, Feminism, Women, and Gender²

How do texts represent men and women, and how have these changed between generations of the texts? The question of how the textbooks in this study change over time is particularly salient given the dates of the first editions. Two of the three first edition texts were published in 1976 and 1977. In 1977, Zelinsky explained "The Strange Case of the Missing Female Geographer" (1977a) and documented the history of women in the Association of American Geographers addressing membership, employment, and publication trends (1977b). Five years later, 1982 became one of the watershed years in geographical scholarship on women with the appearance of two important papers. Monk and Hanson's (1982) "On Not Excluding the Other Half of Human Geography" makes the point that talking about all people as if they are all male effectively reduces by half the possibilities of geographic scholarship and knowledge of how the world is and works across all scales. Zelinsky, Monk, and Hanson's (1982) forty-nine

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² Gender, like other keywords (*e.g.*, Williams 1973), is a contested term of evolving meaning and practice that means different things to different people at different times and places (Jackson 1989; McDowell 1999a; Connell 2002). The meanings of gender and feminism, situated socially, historically, and spatially, are continually contested in geography, academia, and society.

page review in *Progress in Human Geography* effectively demonstrated the amount, presence, and paginated weight of research on geographical aspects of women.

The three more recent editions of the introductory human geography textbooks at hand come after thirty years of continuously constructed geographical discourse on women and the application of feminism and feminist perspectives. Both the 1989 and 2003 versions of Geography in America have chapters written by members of the Association of American Geographers Geographic Perspectives on Women Specialty Group (Grunfest 1989; Oberhauser et al. 2003). Other benchmarks include two Association of American Geographers presidential addresses: Hanson's 1992 "Geography and Feminism" and Monk's 2004 "Women, Gender, and the Histories of American Geography." Several monographs and texts have been published, Rose's (1993) Feminism and Geography: The Limits of Geographical Knowledge and McDowell's (1999) Gender, Identity, and Place: Understanding Feminist Geographies, as well as the collection Thresholds in Feminist Geography (Jones et al.) in 1997, and the textbook Putting Women into Place: Feminist Geographers Make Sense of the World by Domosh and Seager in 2001. The year 2003 celebrated the 10th anniversary of the journal Gender, Place and Culture (Bondi and McDowell 2003).

Geography's encounter with feminism is not unique among the social sciences and humanities (Spender 1981) in the effort to put "women into place" (Domosh and Seeger 2001). Bernard (1973) writes of her experiences with four different revolutions in sociology between the 1920s and the 1970s, the fourth being the feminist revolution. Acker notes in 1973 that academic work studying the status of women had been increasing since 1963, but not by very many sociologists. As late as 1985, Stacey and Thorne were still contemplating "the missing feminist revolution in sociology."

Beyond considering women in geographical understandings of how the world works, the benefit of feminist thinking has expanded into other areas of difference. The focus on women as being different from men is an example of sex categories, the reliance on a biological definition of "male" and "female." Early work fused the physical distinction of sex with gender as biologically determinate (Connell 1987). For example, a 1976 sociological study by Lever observed fifth grade school children on the playground and discusses the results in terms of boys, girls, boys' games, and girls' games. A study ten years later by Thorne (1986) considering social spatial segregation of elementary aged boys and girls argued that gender – the social

characteristics of what boys and girls do and how they act — "should be conceptualized as a system of relationships rather than as an immutable and dichotomous given." In other words, the boys may be playing boys' games, but it is the social interaction (or lack thereof) between boys' games and girls' games that lead us to label them as such. Following Connell (2002, 8), "in its most common usage, then, 'gender' means the cultural difference of women from men, based on the biological division between male and female." Gender is the mutable, flexible socially constructed meanings attached to sex categories (Best 2000; Ferguson 2001; Williams 2002). Gender is negotiated and worked out among individuals and their interactions with others as they "do gender" (West and Zimmerman 1987). At root is the diversity of human experience, the full range of masculinities, femininities, and the interplays between in which individuals play with and try on gender, discovering and negotiating identity (Best 2000; Williams 2002). Like all human experience, the individuals and influences are spatially and temporally specific and work across ranges of spatial scales (McDowell 1999a).

Separating the social interactions and cultural processes of gender from naturalized biological categories allows for exploration and understanding of gender order and the relations between gender and power (Connell 1987). Gender and power operate at multiple, nested scales. Gender regimes (Connell 1987) are the structures of gender relations present in institutions: the state, school, work, family, the street. Each institution, by formal rules or informal practices, sets expectations or otherwise influences the social and cultural gender norms. The rule making and control is an exercise of power. For example, dress codes in private schools or work environments establish "proper" dress and constrain flamboyance and expression. The "proper" dress tends to be uniform and conservative, matching the image and ideology of the institution. Guidelines or laws for acceptable behavior in public places regulate what the institutional government prefers couples not do in public. As individuals go to school and work, participate in social activities, visit public places, and are parts of families, friendships, and social circles, they live under the structure of the gender order, or the "collation of gender regimes" and the interacting relationships between them (Connell 1987, 134). Because individuals live within the structures of gender regimes and the gender order, gender and power is also individual. Institutional power always already affects individuals. The acts and actions that individuals consider or complete are subject to the formal power of institutions and the informal power of peers and colleagues. These acts, actions, and doings are also the interactional aspect of gender

and power, the interplay of social peoples under the structural umbrella of institutions (West and Zimmerman 1987).

Geographical scholarship expanded from considering the role and presence of women to the dynamics of gender and feminist geographies of difference (Pratt 2000). This is noted in geography by increasing scholarship and attention to femininity (e.g., Domosh 2000; Pini 2004) and masculinity (e.g., Berg 1994; McDowell 2001; Aitken 2009). Working from feminist perspectives, geographers have extended beyond women and gender into bodies (e.g., Duncan 1996), sexuality (e.g., Valentine 1997; Browne et al. 2007), sexual orientation (e.g., Valentine 1998; Knopp 2001; Knopp 2004), class (e.g., Oberhouser 1995; Saltmarsh 2001; Pini 2004; Trauger 2008), work (e.g., Domosh 2000; Duncan 2003; Pini 2004; Pratt 2004), race (e.g., Pratt 2004; McKittrick 2006), age (e.g., Valentine and Skelton 1998; Aitken 2001; McDowell 2001), and ability (e.g., Dyck 1998; Laws and Radford 1998). Given the overlaps and mutual presence of many of these categories, the broader feminist project has started thinking in terms of difference and intersections among varying aspects of social difference (e.g., West and Fenstermaker 1995). Valentine (2007) notes that while geographers study many of these forms of difference, geographic perspectives on the "connections between categories" and intersectionality theory, a concept that "is used to theorize the relationship between different social categories," "has received little attention in geography" (10-11). Demonstrating the need for geographical considerations of intersectionality, Valentine (2007) discusses the complexity in the longitudinal study of one individual that involves gender, sexuality, sexual orientation, class, work, age, and ability differences.

Geographers writing across the decades have advocated the need for materials used in geography courses to be more aware of human diversity and intersectionalities, especially as textbooks and curricula are "the medium through which geographers reach out to the general student public" (Larimore 1978, 183; Valentine 2007). Writing in 1978, Loyd and Rengert argue that "most present courses deny women the opportunity to perceive themselves as agents of social and landscape change and to explore the models of social science analysis that would be most applicable to their own experiences" (164). The lack of opportunity led Deatherage-Newsom to research material to support a "women's role in changing the face of the earth" class (1978). Mayer's observation of leading introductory human geography textbooks published between 1985 and 1989 was that "women remain invisible" (1989, 397). Larimore expands the

point, noting that "women, children, or even men are seldom specifically represented either as individuals or groups" in introductory cultural geography textbooks (1978, 183). Simon's (2009) experience in creating and teaching a gender and geography class echoes Larimore: there is a lack of focus about difference. In Simon's case, the intersectionalities of gender, race, class, and sexualities introduced many students to geographical for the first time, as well as the social production and experience of masculinity and femininity.

Scholarship, discourse, and interest in feminist geography and geographies from the perspective of women strongly emerged at the time the first editions of the introductory human geography books in this study were published. Since then, considerations of geographic perspectives on women, feminist geographies, geographies of gender, difference, and intersectionality continued to grow and diversify (Pratt 2000). These trends, and the presence of women on all of the introductory textbook author teams, build the impression that the most recent editions should represent men and women in human geography quite differently than earlier editions.

Approach

This research uses methods of comparative textual history and sociological understandings of sex categories and gender. The site of this study is where introductory human geography textbooks are used – in college classrooms. At this site, the people most impacted by the images and representations in the text are mostly first and second year students taking introductory human geography courses, and the graduate students, adjuncts, and professors teaching or assisting in the instruction. These texts, especially recent versions of the de Blij text, are increasingly used in high school classrooms for Advanced Placement Human Geography courses, impacting high school students and teachers there as well.

Power exists at multiple interacting scales at these sites. Educational governing boards are elected by the public or appointed by elected officials. Administrators are hired, who hire department heads and faculty. Committees approve curriculum. Instructors have the power to organize the syllabus and select a text, or it may be approved at a departmental, school, or system level. Instructors guide and govern the course and classroom. Students attend the classes.

Power affects and influences instructors and students daily. Gender regimes are part of every institutional level, and are part of the power.

Where the study of cultural geography focuses on literature written for other practitioners of the subfield and presidential addresses are aimed for the academic professional field as a whole, the scale of this study is broader and is part of a far different geographic culture of publishing (Sheppard 2012). Textbooks transcend the scales of expert authors and professional peer audiences to those that may not have yet chosen whether or not they want join the professional sphere. Introductory textbooks work at the scale of generalized practice for audiences interested in the material for general education purposes. While relatively low on the totem of professional practice among academicians, textbooks working at this introductory scale have the potential to be seen, viewed, and read by many more people than other products produced by academic geographers.

Instead of looking at an assemblage of textbooks grouped over time or present at one time, this dissertation study compares the first generation of introductory human geography texts to the current generation. Is the current generation (the current editions) of these three introductory human geography textbooks more equitable in their portrayal of men and women than the earliest editions? Have things improved, but is there still more that needs to be done?

Students and teachers existing in gender regimes socially interact with and gain gendered meaning from the depictions of men and women in pictures, maps, tables, graphs, and figures. Since gender is attached to sex categories, studies in the tradition of "the geography of women" (Pratt 2000) considering sex categories reveal patterns of power. Far from being a product of an author, texts reflect the intersecting and overlapping institutional gender regimes of society, government, publishing industries, academia, universities, and departments, in which the authors are situated. Each instructor and each student is situated in similar gender regimes, influencing the social organization of production and the social organization of reading (Smith 1990, 72).

West and Zimmerman (1987) argue that gender is continually and constantly "done." Everything a person or institution does as part of society either supports or works against the gender order as these societal participants interact. Gender regimes are either continuously constructed or opposed. If you are not part of the solution, you are part of the problem. Consumers of the textbooks read words and captions, view pictures, and interpret maps and graphs, to synthesize the material. At the same time, consumers are interacting with the textbook

as a product of a power-infused society. Seeing portrayals of men and women initiates negotiation of socially and culturally constructed meanings of gender. Analyzing and understanding the portrayals of women and men in undergraduate human geography textbooks are entry points for understanding and discussing gender and power in the geography classroom.

This research explores the portrayals of sex differences in textbooks, revealing the pattern and power of structural entities through content analysis of sex differences. Types of textual analysis using page counts (Hall 1988; Hall 2000; Suarez and Balaji 2007), illustration counts (Scott 1984), referential content analysis (Mayer 1989; Ferree and Hall 1996; Hall 2000), analysis of photographs (Mayer 1989; Ferree and Hall 1990; Ferree and Hall 1996, Jo and Bednarz 2011), analysis of maps (Wheeler 1998; Martis 2005), thematic content analysis (Wheeler and Slack 1981; Ferree and Hall 1996; Hall 2000), and story grammars (Yanowitz and Weathers 2004) are more common approaches in the analysis of textbooks. If women are portrayed as part of society, it is expect that women would appear in a similar number of textbook images as men, and appear as subjects and examples on a similar number of pages throughout a text. Understanding geographies and portrayals of sex differences is helpful for understanding the socially constructed meanings associated with and attached to them.

Exploring the Data

Six Texts, Five Visualizations

This study considers three lines of introductory human geography textbooks whose editions span from the late 1970s and early 1980s into the present (Table 5-1). Between them, the six textbooks use 2,360 graphic items – photographs, maps, graphs, tables, and diagrams – to show, explain, and support the presentation of geography. These books represent the work of leading geographers in the specialty of human geography and evolving authorship teams that bring different perspectives to content. Each lineage of books stands apart from the others in its approach to introductory human geography.

The Human Mosaic adopts a thematic approach highlighting cultural geography, focusing on culture regions, cultural diffusion, cultural ecology, cultural interaction, and cultural landscapes. The Human Mosaic was very consistent through its first ten editions. Lester

Rowntree contributed to the first through seventh editions. Mona Domosh joined Jordan and Rowntree as co-author for the 1994 sixth edition. Jordan passed away in 2003 (Doolittle and Knapp 2008). Patricia Price and Roderick Neumann joined Domosh on the authorship team for the tenth edition in 2005 and continue to the present. The subtitle of the text changed between the tenth and eleventh editions from "a thematic introduction to cultural geography" to "a cultural approach to human geography." The themes used in the eleventh edition also changed to region, mobility, globalization, nature-culture, and cultural landscape.

Harm de Blij authored the first edition of *Human Geography* with the subtitle "culture, society, and space" in 1977. Where Jordan *et al.*'s approach is cultural, de Blij is best classified as a geographical generalist with a flair for storytelling. Most of his publications are editions of world regional or human geography textbooks. Three other recent monographs address *The Power of Place* (2010), *Why Geography Matters* (2007), and *Why Geography Matters: Now More Than Ever* (2012) by exploring themes of demography, climate change, political geography, China, and Russia. Chapters, sections, and boxes teach geography by telling stories. For many of a certain generation, de Blij is the face of public geography for his work with "Good Morning America," NBC News, and PBS. Peter Muller co-authored the 1986 third edition of *Human Geography*. The 2009 ninth edition includes Alec Murphy, who joined as co-author for the 1998 sixth edition, and Erin Fouberg, who joined as co-author for the 2007 eighth edition. The eighth edition also marked the turn from "culture, society, and space" to "people, place, and culture." Structurally, the first edition contains five parts – population, culture, settlements, livelihoods, politics – each containing three to five chapters. By the ninth edition, the text turned to a 14 chapter format (Table 5-1).

University of Illinois at Urbana-Champaign colleagues Arthur Getis and Jerome Fellmann, joined by Judith Getis, co-wrote the first 1985 edition of Human Geography: Culture and Environment. As noted in the preface to the first edition, Human Geography was spun off from their broader introductory survey Geography, with several chapter re-written or expanded (Getis et al. 1985, v). Jerome Fellmann became lead author with the second edition in 1990. The second edition also saw the subtitle shift from "Culture and Environment" to "Landscapes of Human Activities." Mark Bjelland joined the author team with the eleventh edition in 2010. Structurally, the first edition contains twelve chapters and the eleventh edition contains thirteen organized into five parts. These five parts help understand the authors' perspective on human

geography: 1) themes and fundamentals of human geography, 2) patterns of diversity and unity, 3) dynamic patterns of the space economy, 4) landscapes of functional organization, and 5) human actions and environmental impacts. Where the Jordan approach is cultural and the de Blij approach is generalist storytelling, the Getis, Getis, and Fellmann line reflects a spatial science approach in its emphases on patterns, economy, and functional organization.

These three sets of texts were included as they were the earliest human geography texts in a regular, multiple-edition series and use "human" in the lead of the title. Other series of human geography books started much later, such as: Kuby, Harner, and Gober's *Human Geography in Action* (five editions from 1998 to 2009); Paul Knox and Sallie Marston's *Human Geography: Places and Regions in Global Context* (six editions from 1997 to 2012) and William Norton's *Human Geography* (seven editions from 1992 to 2010). James Rubenstein's *The Cultural Landscape: An Introduction to Human Geography*, which runs from a 1983 first edition to a 2010 tenth edition, was excluded because "human" is not in the lead of the title.

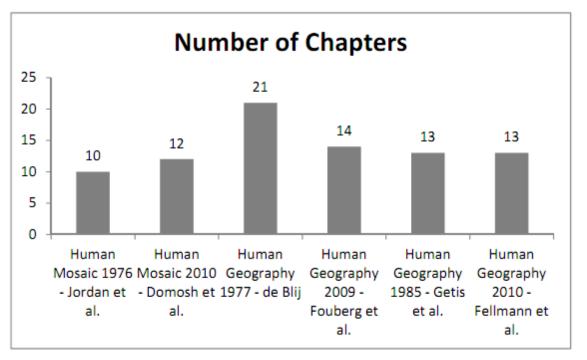
Other texts appearing in the early 1990s follow the older publication pattern of a single edition or spread apart editions, like that of the *Culture Worlds* text, 1951 first edition by Richard Joel Russell and Fred Kniffen followed by a 1961 revised edition by Russell, Kniffen, and Evelyn Pruitt, or did not move beyond one or two editions. Examples of these texts include: Stoddard, Wishart, and Blouet's two editions of *Human Geography: People, Places, and Cultures* (1986, 1989); Bergman's 1995 *Human Geography: Cultures, Connections, and Landscapes*; Hudman and Jackson's 1990 *Cultural Geography: The Global Discipline*; and Jackson's 1985 *The Shaping of Our World: A Human and Cultural Geography*. It is difficult to tell from Morrill and Dormitzer's 1979 *The Spatial Order: An Introduction to Modern Geography* that it is a book that covers the substantiative content of other introductory human geography texts.

New texts continue to emerge, such as Alyson Griener's 2010 *Visualizing Human Geography: At Home in a Diverse World*. Other texts are spin-offs, such as Rubenstein's condensed and highly visual *Contemporary Human Geography*, with editions in 2009 and 2012, and the 2010 *Fundamentals of the Human Mosaic: A Thematic Approach to Cultural Geography* with Jordan-Bychkov, Domosh, Neumann, and Price. New editions of texts used in this study arrived during its progress and were not used in the analysis, including the 2011 twelfth edition

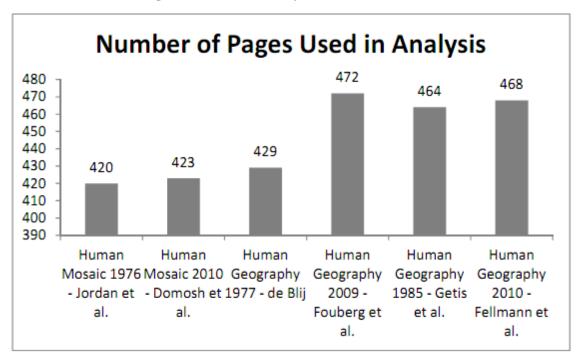
of the Domosh *et al. Human Mosaic* text and the 2012 tenth edition of the Fouberg *et al. Human Geography* text.

Textbook production has changed over time, as books are published more frequently and printing technologies change. Overall, the number of chapters remained relatively the same between generations, excepting the de Blij book's consolidation of 21 chapters to 14 (Figure 5-2). The number of pages of principal text across generations was relatively stable, excepting again the de Blij text which increased by 43 pages (Figure 5-3).

Figure 5-2: Number of Chapters.







Dimensions of the textbooks changed for all three lineages from 9.4 by 7.6 inches (*Human Mosaic*), 8.4 by 9.5 inches (de Blij), and 8.25 by 9.5 inches (Getis *et al.*) to the current 9.0 by 11 inches size. Figure 5-4 shows the surface area available in each text for narrative, maps, pictures, graphs, tables, and diagrams. This measure standardizes comparisons made by number of pages to reflect how much usable area is available in each text. Interestingly, where the Jordan and Getis books change by less than 3,000 square inches either way, the de Blij book gains more than 10,000 square inches from the first edition to the current generation.

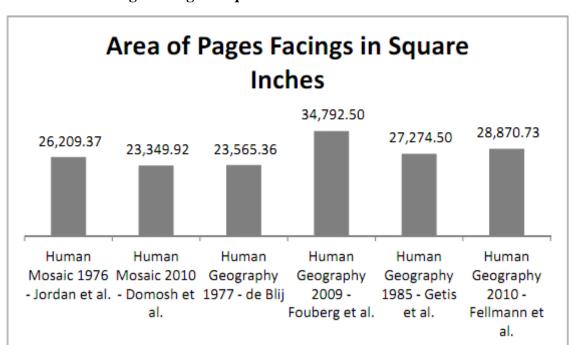


Figure 5-4: Area of Page Facings in Square Inches.

Editions from the first generation of the texts rarely use full color. Black and white, shades of gray, and brown (Jordan and Rowntree; Getis *et al.*), are used to provide contrast. The exception in the first edition is de Blij's text, where about half of the photographs are full color and most of the maps use a deeper color palette. The current generation only uses full color pictures, and color for most graphs and diagrams.

Comparing the first and current generations overall, there are only slight differences in the number of chapters and number of pages (Figure 5-5). The large increase in the surface area of pages is attributable to the de Blij volume.

The foci of interest in these six texts are five types of visualizations. Geographers use pictures to understand landscapes and situations they cannot immediately see or to help convey the convergence of many features within a scene. Maps help a user explore patterns, features, and phenomena of location, and are of particular interest for geography curricula. Diagrams help represent concepts or examples that may be difficult to convey with text alone. Tables organize information to make it easier to understand, and graphs further understanding by visualizing the data. These five visual elements are the "graphic items" of this analysis. Excepting pictures, the other types are information graphics, "vehicles for consolidating and displaying information for

purposes such as analysis, planning, monitoring, communicating, etc." (Harris 1999, 71). Textbook authors and publishers select pictures and create information graphics to introduce, communicate, exemplify, and support the textbook presentations of geographical concepts and ideas.

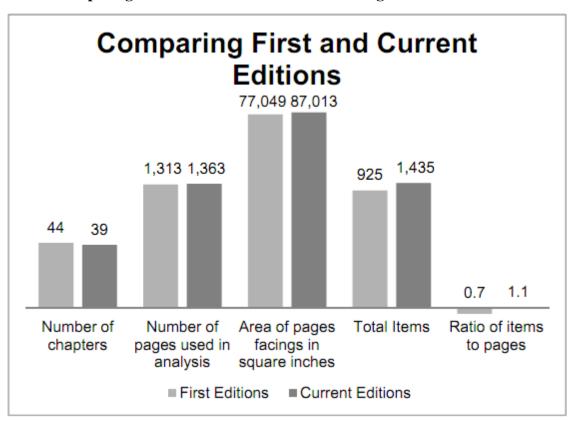


Figure 5-5: Comparing First and Current Editions on a Logarithmic Scale.

The complete dataset of six texts contains 2,360 items (Figure 5-6). Between the first and current generations of texts, the number of total items increased by more than half from 925 to 1,435 (Figure 5-5). Figure 5-7 shows that each textbook lineage saw an increase in number of items per book, gaining between 93 and 218 additional examples. The ratio of items to pages shows the total number of items divided by the number of pages used in the analysis. Figure 5-5 shows that overall item per page increased to where there is an average of one item per page in the current generation. All textbook lineages saw an increase in the ratio between 0.1 and 0.5 (Figure 5-8).

Figure 5-6: Types of Items, Complete Dataset.

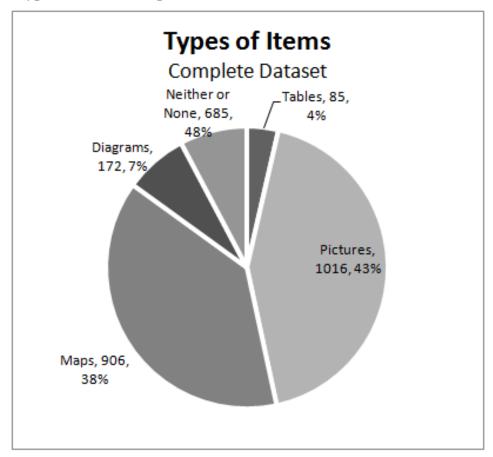


Figure 5-7: Total Number of Items by Textbook.

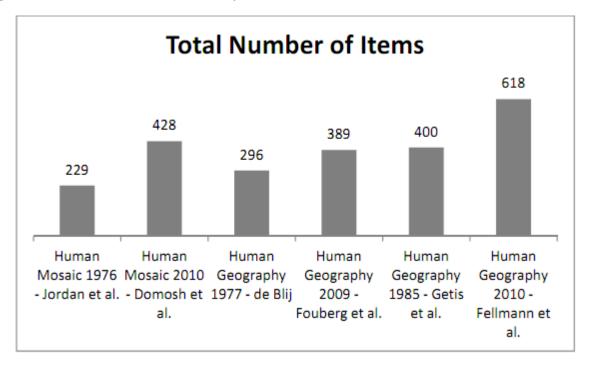
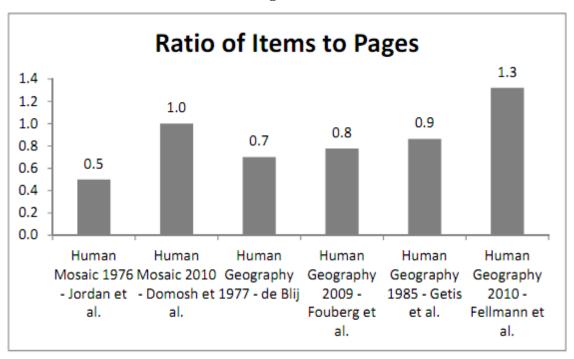


Figure 5-8: Ratio of Items to Number of Pages.



Of the five types of visualizations considered, pictures are the most common, followed closely by maps (Figure 5-9). The increase in number of items between the generations is most clear in pictures and maps (Figure 5-9), which also take advantage of improvements in color and printing technologies. The categories of pictures and maps make up more than 80 percent of the total number of items in both the first and current generations (Figure 5-10 and 5-11). Generationally and within each lineage, the introductory human geography textbooks in this study have matured over each edition in terms of the number of graphic items used in the text, the number of each type of graphic item used, and the density of items per page.

Figure 5-9: Number of Items by Type, First Editions and Current Editions.

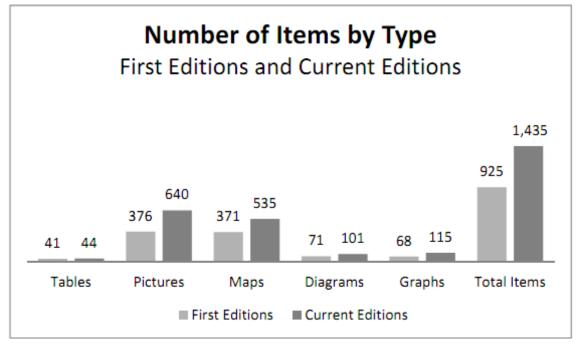


Figure 5-10: Types of Items, First Editions.

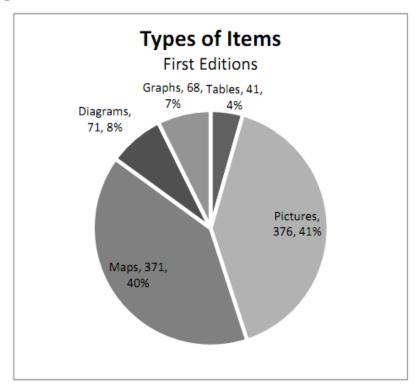
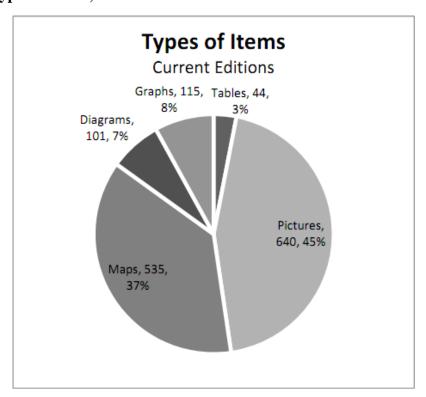


Figure 5-11: Types of Items, Current Editions.



Method

Over time from the first to the current editions of the three textbooks, the author team members of the texts experienced life and geographical knowledge continued to grow and expand. With each of the multiple editions of the texts, authors had the opportunity to review, revisit, and reflect on changes in geographical knowledge. Authors had opportunities to change their works to reflect new research trends and topics and to make each edition a new mold for the cohorts of students that would use it in introductory college classes.

One of the changing themes and concerns in geographical knowledge over this time was the concern for including women in geographical perspectives and thinking. From the first editions to the most current, each textbook lineage had (Judith Getis) or added (Mona Domosh, Patricia Price, Erin Fouberg) women to the authorship team and have them present on the team for multiple generations.

The question is this: given the changes in society and geographical practice between the generation of the first editions and the generation of the current editions, have and how much have the presence and portrayal of women changed in textbooks? How do these changing portrayals contribute to gender?

Monk and Hanson's 1982 article "On Not Excluding the Other Half of Human Geography" made the point of working towards recognition that not all people are male and established parity as a goal. Textbook authors and teams, by what they choose to use, show, and discuss, are "doing" geography and have the opportunity to broaden and inform readers of geographical thinking and examples of doing geography. The textbooks and their contents are designed to interact with students, guide learning, and develop knowledge of geography and geographical concepts. Yet because the authors are part of society, because they are writing and publishing for society, and because they include pictures, maps, and portrayals of data about society, they are also guiding the learning and developing knowledge about the presence of and gendered roles of men and women in society as the students learn geography. By representing people, textbook readers are able to "do gender" by interpreting and reading social and cultural meaning. Acknowledging difference in pictures, graphics, and examples enhances understandings of how the world works and how concepts apply differently across societal difference. In doing geography, the textbooks also do gender.

To answer the questions above and better understand representation across these textbook generations, this study considers pictures and information graphics. Studying visuals is appealing for introductory human geography texts as they rely on pictures to show people, places, and landscapes; maps to show locations and patterns; diagrams to explain concepts; and tables and graphs to convey detailed data. With the changes in time and technology, there are more graphic items present more often in the pages of texts. For students that do not have the time or care to read the words of the text, graphic items are an appealing option when flipping through the book.

The five types of visual items from each text were examined and coded on the basis of sex categories portrayed in the graphic items. Analysis considered: what the picture showed or what type data was mapped, graphed, or conveyed; the wording used within the frames of maps, tables, graphs, and diagrams; and the wording used outside the frame of all items in captions or descriptions.

Table 5-4 summarizes the five different codes used. This is an extension of Mayer's (1989) work, which coded photographs from eight introductory human geography textbooks published between 1985 and 1989 into pictures with people, pictures with men and women, pictures with men alone, and pictures of women alone. Graphic items coded as men and women in this analysis use the same standard as Mayer. In some pictures including many people, some were more in focus than others. Photos were classified based on the visible and identifiable people in the image, or language in the caption or description.

Table 5-4: Content Analysis Codes.

| Code | Discussion | | |
|--|---|--|--|
| Men | Only men are depicted in the image or data. | | |
| Women | Only women are depicted in the image or data. | | |
| Both Men and Women | Both men and women are depicted in the image or data. | | |
| Total Population | Image or data reflected the total population or the population of a social group. | | |
| Neither or None Image or data does not show, mention, or represent hur population. | | | |

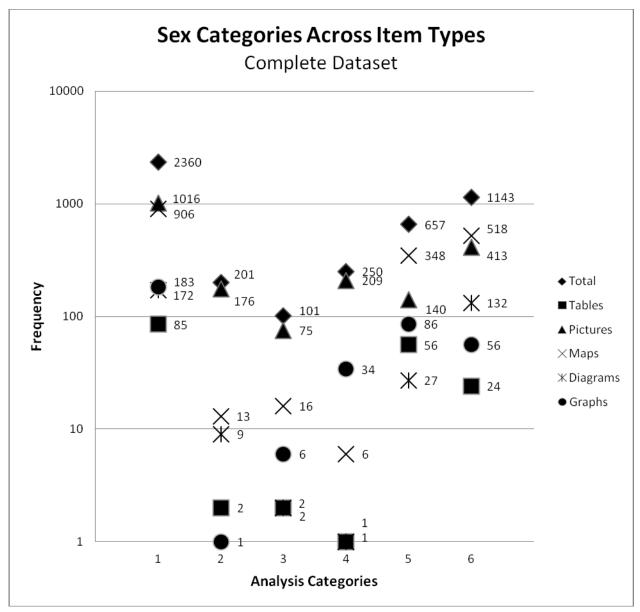
The categories of "both" and "total population" are common in chapters discussing population. Graphs and tables of world population show the total population of the world, regions, and countries and generally do not refer to men or women or both men and women. Graphs, tables, and maps in economic chapters show "per capita" data that is based on the total population of an area. On the other hand, traditionally constructed population pyramids, with female on the right side of a central y-axis and male on the left, are coded as "both." "Both" was used if there was explicit visual recognition or textual labeling. Chapters discussing culture groups often have "both" pictures. Terms and labels like speakers, members, migrants, protestors, Finns, and Russians represent the total of a social group. With total population, the subject of the graphic item is possible to gender as men, women, or both, but the framing and context of the item prevents it. For example, if the caption of a map showing world population density includes the words "male and female," the map was coded "both." If the map symbols, caption, or title only referred to "world population" and no mention was made of men or women, the map was coded "total population."

"Neither or none" is the code where analysis of the graphic item does not allow the analyst the possibility to identify a category. The map may show average daily temperatures; the graph depicts the stages of the industrial revolution, the picture illustrates a landscape devoid of people, or the picture is at such a scale that people are not visible, as from space. Neither or none is common in chapters discussing physical, political, or economic characteristics.

Visualization Technique

Graphs and charts constructed from the data are similar to column graphs and pie charts already used in this chapter. Visually representing the relationships of frequency of gender analysis categories and the total and different types of graphic items poses a more difficult graphicacy challenge. This section uses a series of point graphs to convey this information (Figure 5-12).





| Key to Content Analysis Categories | | |
|------------------------------------|------------------|--|
| 1 | Total | |
| 2 | Men | |
| 3 | Women | |
| 4 | Both | |
| 5 | Total Population | |
| 6 | Neither or None | |

On their own, the data in each vertical column off the x-axis could be a separate column graph or pie chart showing amount and percentage of graphic item type per gender analysis category. This graph consolidates the data by stacking the data points into a columns running across the x-axis based on gender analysis codes shown in Figure 5-12. Symbolizing the data points by graphic item type and their differences in value allows for the graphing of 36 different data points, five graphic item types and the total by five gender analysis categories and the total. The y-axis is logarithmic to maximize use of page space and make values as legible as possible. Generally, tables, graphs, and diagrams will be lower in these graphs as there are fewer of them, and maps and pictures higher because there are more of those illustrations (Figure 5-6 and 5-9).

Portrayals of Men and Women in Graphic Items

A first analytical perspective is to consider the sex category classification of items across the entire six-text dataset. This analysis considers human geography for the collective late 1970s – 2010 perspective by looking at the categorization of items overall, of items by type of item, and of items located in the standard flow of text compared to items set out in special boxes.

The total dataset of six texts contains 2,360 different items (Figure 5-12 column 1), 81 percent of which are pictures or maps (Figure 5-6). Figure 5-13 shows the sex category analysis of all of the graphic items. Nearly half of the graphic items show data or images that do not show people and do not refer to people in the caption or description. More than a quarter of the items represent the total population or present people. Of the remaining 23 percent, eight show men, four show women, and eleven contain both. Expressed as a percentage, the category of both men and women is nearly equal to those showing just men and those showing just women combined. Percentages are used throughout the comparative analysis to adjust for the greater number of graphic items in the more recent editions (Figure 5-9).

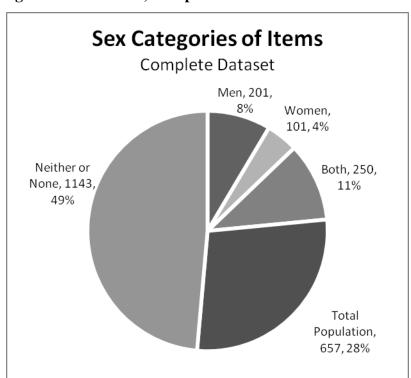


Figure 5-13: Categorization of Items, Complete Dataset.

Pictures, being the most common graphic item, are the leading type of item for the gender analysis categories of men, women, and both across the entire dataset (Figure 5-12). Maps also commonly express difference in categories of men and women, but much less frequently than pictures. Tables and diagrams are the least likely to show categorical sex difference terms.

Maps replace pictures as the leading graphic item for the neither or none and total population categories (Figure 5-12). Pictures are still common, but graphs, tables, and diagrams are all more common in these categories than in men, women, or both.

Pictures are among the easiest items to classify. If pictures include people, they are readily identified for this analysis. Pictures also provide examples to the text, and are usually easier for authors to construct and students to interpret than maps, graphs, and diagrams. Language in the captions and descriptions of the photographs readily summarize the point of the picture or scene, and also readily make gender apparent in how they draw attention to "men," "women," and "families." At the same time, pictures are the easiest to exclude themselves from the analysis by not showing people or referring to them in caption.

Mapped data in introductory human geography texts tends to be global (the major language families of the world) or regional (languages families of South America) in scale. Very few of these maps are explicitly identified with men or women. The most common examples are maps of total fertility rates, which often include explanatory text that it is the number of times that a woman will give birth during her child-bearing years.

As textbook and book publishing technologies improved over time, not only did the number of graphic items increase, but also the number of supplementary boxes inside the text. These supplements are used to explore particular examples in depth. Current editions often have a series of boxes that create a framework for students to connect to boxes among chapters and over the course of the book. Examples draw attention to particular ways of doing and seeing geography (Domosh *et al.* 2010), highlight practitioners of human geography and their work (Domosh *et al.* 2010), explore geography and public policy (Fellmann *et al.* 2010), or feature field notes from the authors or guest field notes from others (Fouberg *et al.* 2009). Most boxes use pictures and occasionally maps. Other types of graphic items are uncommon.

Table 5-5: Graphic Items and Location in Text.

| | Total Dataset | First Editions | Current Editions |
|----------------|---------------|----------------|------------------|
| Total Items | 2,360 | 925 | 1,435 |
| Items in Boxes | 139 | 44 | 95 |
| Items in Text | 2,221 | 881 | 1,340 |

Table 5-5 shows the growth of the number of items, the number of items in boxes, and the number of items in the standard flow of the text. While items in boxes make up 5.9 percent of the total items in the dataset, this figure increases from 4.8 percent in the first editions to 6.6 percent in the current editions.

Figure 5-14: Categorization of Items in Text, Complete Dataset.

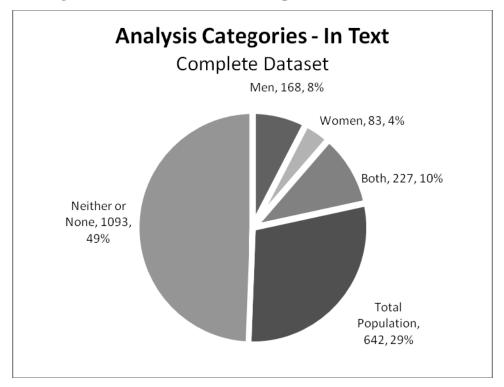
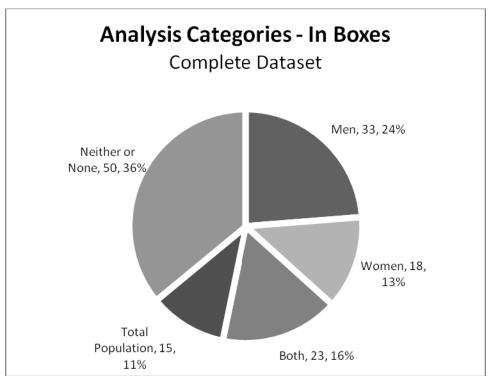


Figure 5-15: Categorization of Items in Boxes, Complete Dataset.



These boxes are of interest when considering the portrayal of women. At times, it is easier to create an example in a new supplementary box than it is to rework more inclusive examples into the standard flow of the text. At the same time, boxes can be used to highlight issues of particular importance to women.

Overall, the analysis for items in the text (Figure 5-14) closely matches the results for the items as a whole (Figure 5-13). The results for the items within boxes category is starkly different (Figure 5-15). Fewer of the items are classified as neither or none. Given that the data are introductory human geography texts, it makes sense that the special boxes drawing on examples of human geography would be more likely to include humans or data about humans, making classification more likely. The striking difference between this chart and the others is that the total population percentage is very low. For all items the total population category is 28 percent, for items in the flow of text the percent is 29 percent. The items receiving special attention in boxes only make up 11 percent. This is balanced by an expansion for the men, women, and other category. Compared to the percentages of total graphic items, there are three times as many men, slightly more than three times as many women, and 5 percent more of the both category for graphic items in special boxes. Rather than highlighting the total population or both categories, use of graphic items in boxes makes the difference between the men and women categories much more salient.

The discussion of the results thus far has explored the total dataset of six editions. Data presented here serve as benchmark and comparison for how the textbooks change and differ between the first and current generations.

Men and Women Across Generations

Another perspective of looking at these six texts of data is to compare the generations. What do the snapshots of gender in introductory human geography textbooks look like if we cluster the three textbooks from the first generation and then do a comparison with three textbooks from the current generation together? This level of analysis sheds light on how the discipline as a whole compares and changes over time, rather than the agency or perspectives of different situated authors. Overall, how do the generation of textbooks from the late 1970s and

early 1980s compare to the generation circa 2010? This analysis considers class of items overall, the class of items by type of item, and comparing the gendering of items located in the standard flow of text to items set out in special boxes.

The slices of the pie in the total dataset (Figure 5-13) have similar size and shape compared to the first (Figure 5-16) and current editions (Figure 5-17). However, there is distinct difference in the first editions. The first editions have many fewer representations of women, with only two percent of the total graphic items, compared to nine percent for men. This grows in the current editions to five percent for women, slightly reducing the percentages of both the men and neither or none categories.

The distribution of sex category types across types of graphic items shifts between the first and the current editions. While the total number of items increase for all types of graphic items and all of the gender categories, it is interesting to see where the differences take place. Comparing the first editions (Figure 5-18) to the current editions (Figure 5-19), the number of items containing only men grows from 86 items to 115 a one percent reduction from the first to the current editions. Most of these items are added in pictures, which rise from 71 (83 percent of the men items) to 105 (91 percent). Diagrams show a decrease in men from first editions to the current editions, from eight (nine percent) to one (less than one percent). Items classed as women alone rise from 23 to 78 items, an increase from two percent in the first editions to five percent in the current editions. Pictures of women increase in number from 17 to 58, but stay consistent at 74 percent of the items of women in both the first and current editions. The maps increase in number from 3 maps to 13, or from 13 percent of the women items in the first editions to 17 percent in the current editions. Maps showing data of men alone increase from five maps to eight, an increase from six percent to eight. As discussions and attention in introductory human geography textbooks turn to women, a significant increase in the representation of women in graphic items is through maps. Numbers and distributions for graphic item types across the categories of both, total population, and none or neither are comparable across the total, first editions, and current editions views of the data.

Figure 5-16: Categorization of Items, First Editions.

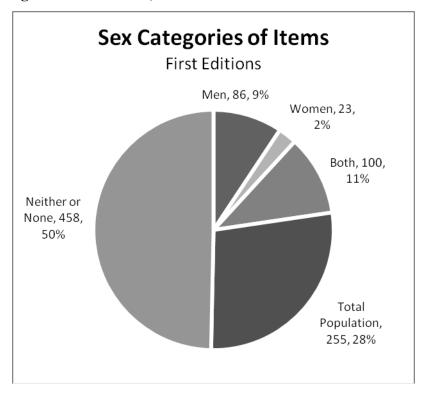


Figure 5-17: Categorization of Items, Current Editions.

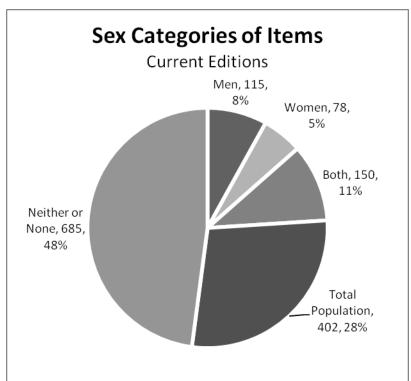
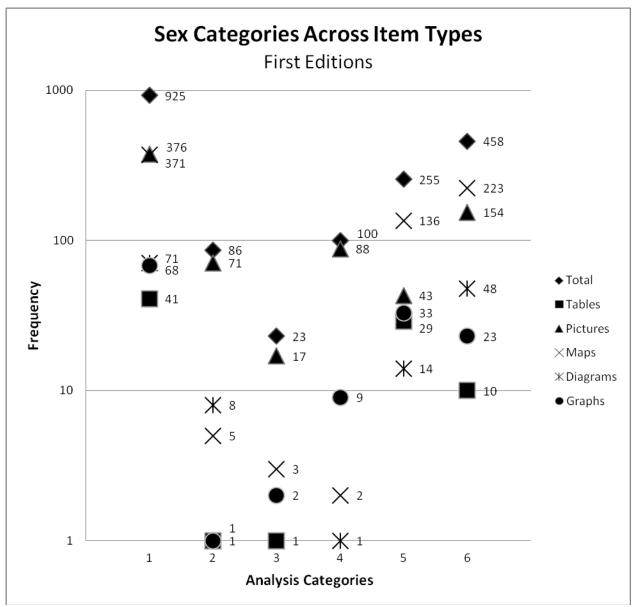


Figure 5-18: Categories Across Item Types, First Editions.

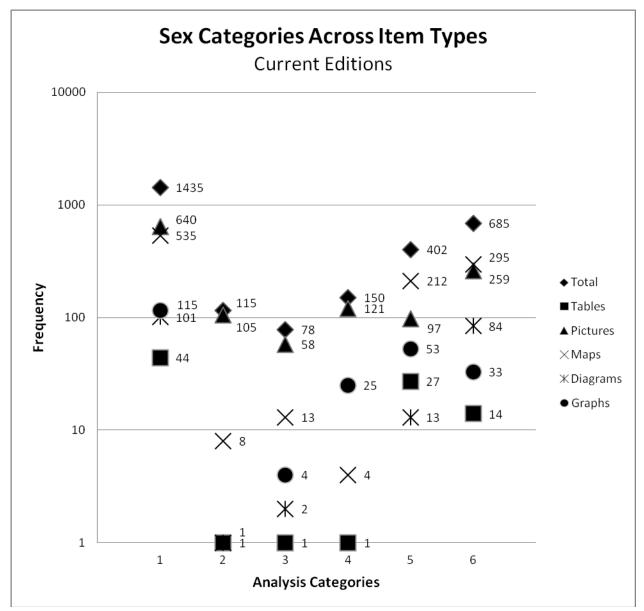
Compare to Figure 5-12.



| Key to Content Analysis Categories | | |
|------------------------------------|------------------|--|
| 1 | Total | |
| 2 | Men | |
| 3 | Women | |
| 4 | Both | |
| 5 | Total Population | |
| 6 | Neither or None | |

Figure 5-19: Categories Across Item Types, Current Editions.

Compare to Figure 5-12.



| Key to Content Analysis Categories | | |
|------------------------------------|------------------|--|
| 1 | Total | |
| 2 | Men | |
| 3 | Women | |
| 4 | Both | |
| 5 | Total Population | |
| 6 | Neither or None | |

Figures 5-20, 5-21, 5-22, and 5-23 show the differences in the results of the sex category analysis between the two generations of textbook editions and the separation of items between those that appear in the flow of the text and those that are set out in boxes. Comparing these charts reveal several things about the representation of women in graphic items over time and the locations with the text.

In the first generation of texts, categorical difference is more emphasized in boxes than it is in the standard flow of text. Figures 5-20 shows that the men are represented in 8 percent, women 2 percent, and both in 11 percent of the graphic items in the standard text. By comparison in Figure 5-22, boxes represent men in 34 percent, women in 5 percent, and both in 18 percent. Graphic items in the text classed men, women, or both total 21 percent, where similarly classed items in boxes total 47 percent. This pattern continues in the current generation of texts, where the men, women, and both classes make up 22 percent of the graphic items in the text (Figure 5-21) and 52 percent of the items in boxes (Figure 5-23). Boxes again show the salience of the men and women. While the percentage of items in boxes classified men and women decrease from 39 percent in the first editions to 36 percent in the current editions, the percentage gap between the men / women categories and both / total population categories increases from 5 percent in the first editions to 12 percent in the current editions.

Comparing the graphic items in boxes from the first editions (Figure 5-22) to the current editions (Figure 5-23) shows that gap between graphic items classed as men or women is decreasing. For the first editions, the gap is 29 percent. For the current editions, the gap is two percent. The shift occurs most with the decrease in graphic items classified men and total population, and the increase in graphic items classified women or neither or none. Overall, graphic items in boxes are more balanced between those classed as men and as women in the current editions than in the first editions, reducing the gap from 13 to 2.

A similar shift, though not as pronounced, occurs in the graphic items that appear in the standard flow of the text. For the first editions (Figure 5-20), the gap between items classified men and women is 6 percent. This shrinks to 2 percent in the current editions (Figure 5-21), showing that graphic items in the flow of the text are also more balanced between those classed men and women in the current editions than in the first editions.

Figure 5-20: Graphic Items in Text, First Editions.

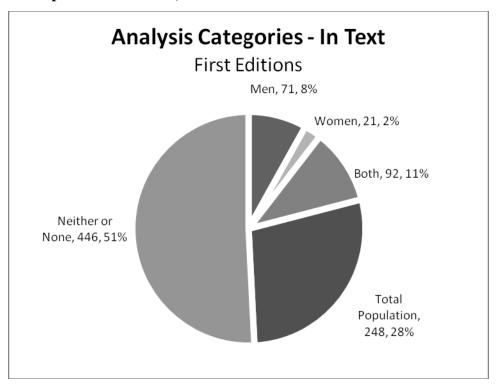


Figure 5-21: Graphic Items in Test, Current Editions.

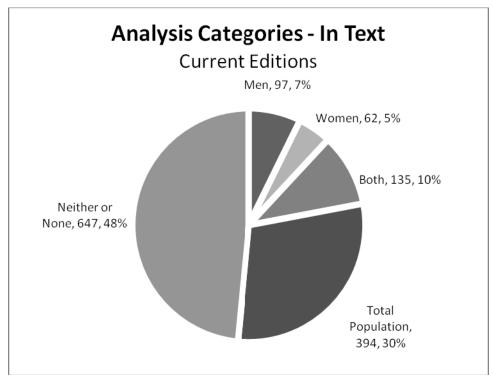


Figure 5-22: Graphic Items in Boxes, First Editions.

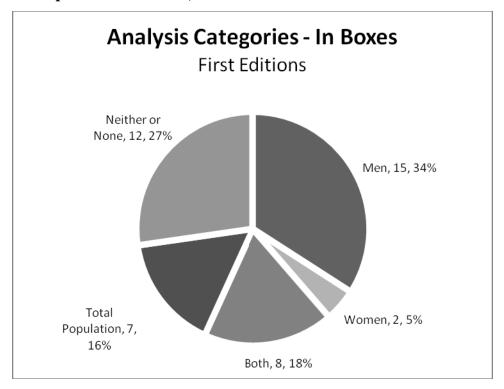
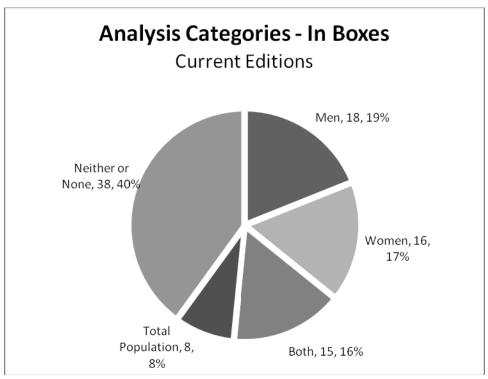


Figure 5-23: Graphic Items in Boxes, Current Editions.



What these last several figures show is that the shift in the men and women categories between the graphic items of the first editions (Figure 5-16) and current editions (Figure 5-17) is happening in the boxes that supplement the text. Of the items in the text, no class changes more than 3 percent between the first and current editions (Figure 5-20 and 5-21). This small change happens in the rise of women. Of the items in the boxes (Figure 5-22 and 5-23), the category that changes least is both, at 2 percent. The changes for all of the other categories are at least 8 percent.

Summary and Conclusions

The focus of this study is exploring how and in what ways people viewing and reading introductory human geography textbooks witness different sex categories in picture and information graphics, for the textbooks as a whole and between the first and the current generations of these texts. Difference is very much at work in the 2,360 graphic items, by those that show men, those that show women, those that show both, those that represent the total population, and those that show neither or none.

This analysis considers sex categories, showing the patterns of portrayals of men and women. Products of gender regimes and the gender order, the patterns are also ones of power. Students and instructors, in the continuous cultural and social interactive process of "doing gender" (West and Zimmerman 1987), construct, contest, and negotiate meanings of masculinity, femininity, and androgyny attached to these categories as they read. In doing human geography, are students reinforcing a legacy of sex category stereotypes or is the class helping to emancipate students' mindsets related to gender?

Changing technologies for publishing textbooks and the evolution of a standard size text allow for more pictures, maps, graphs, diagrams, and tables in the current edition, and show them more clearly with color palettes. While the number of all graphic item types increases between the generations, photographs and graphs – visual items – increase in percent share of total graphic items in the current editions while analytic items like maps and diagrams, and tables showing data decline in percent share.

Across the types of images, pictures most often show men and women. Compared to the total dataset (Figure 5-13), the analysis of complete items does not show much change when compared to the current editions (Figure 5-17). However, there is distinct difference when compared to the first editions. The first editions have many fewer portrayals of women, with only two percent of the total graphic items. This grows in the current editions to five percent, reducing the percentages of both the men and neither or none categories.

The distribution across types of graphic items shifts between the first and the current editions. Between the first and current editions, the percent of graphic items showing men decreases and those showing women increases, mostly through the increase in maps showing data related to women.

Changes in the number and percentages of portrayals of men and women between textbook generations could be thought of in terms of representational parity. Parity is reached with the inclusion of women on all of the author teams. Graphic items are relatively closer to parity as items classed women are closer to the percent of items classed men in the current editions than they were in the first editions, but still falls short of the "explicitly equal representation in textbook illustrations" called for by Mayer in 1989 (406). These changes are seen for graphic items overall, for those items in the flow of the text, and the items in supplementary boxes.

The location of the picture or map in the text also matters. Graphic items appearing in supplementary boxes have less likelihood of portraying the total population or neither or none, and a higher likelihood of containing pictures, maps, graphs, diagrams, and tables showing or representing men, women, or both. Given that supplementary boxes draw the reader's eye and provide detailed examples or sidebar concepts, this is an important finding.

To adequately teach introductory human geography, students need to understand how space, place, and interaction work in the world. Beyond sex category analysis, further research can explore ways in which textbook consumers do gender. Furthering a feminist geographical project of understanding the world means embracing subtleties and nuances of lived experience. Consideration of explicit gender examples and the extent to which textbooks consider masculinities, femininities, and androgynies attached to biological categories furthers the potential for student understanding of difference, diversity, and power in the world. Examples of

different ages, different abilities, different classes, and different races intersecting further inclusion and better portray the reality of the world that textbooks seek to model.

Living in the media age, geographers and other scholars explore the role of movies and the ties of the internet to understand spaces, places, and interdependencies. Textbooks in paper or electronic form are the media of educational courses in real and virtual classrooms across the world. Similar to the attentiveness paid to situation, frame, message, and audience in understanding other forms of media, geographers and other scholars should cast their critical views on the texts and materials used in classes. After all, movies and the internet generally inform the foundations of popular culture. Textbooks are the foundations of general education and life-long learning. While some progress is evident, the mileage signs along the pathway to inclusiveness suggest we still have a ways to go.

Chapter 6 - "The Way Lies Open" – A Summary and Conclusions

Synthesis

These pages explore historiographies of geographical knowledges. Geographical works that explain and explore geographic knowledge, the results of research, exploration, and discovery, are the building blocks for understanding geography's histories, pasts, and trends. Each paper and presentation, article and book that possibly conveys geographical knowledge to another actively and continuously constructs the history of geography. This dissertation research contributes to the study of scholarship-making and metaknowledge research (Calcagno *et al.* 2012; Evans and Foster 2011) by highlighting methods and applications using the scholarship of academic geography, its cultural subfield, and the distillation of human geography into introductory texts.

By better understanding the work that geographers have done, geographers can better recognize their personal role in making and constructing the discipline and its history. The historiographies of geographical knowledges chapter outlines a conceptual framework of approaches that geographers have taken to build the history of geography. In addition to history in the narrative tradition and biography, geographers are increasingly telling their own stories through autobiography and reflexive research. Geographers, through snapshot-in-time collections and collected essays frame such works as being part of the history of the discipline at a specific period; taking inventory and considering prospects. Recently, geographers and other physical and social scientists have taken interest in citations to reveal lineage networks and webs of knowledge. This interest, with the demonstrated practice of reviewing journal articles to understand the history of themes across the course of the journal, demonstrates that geography is actively and continuously constructing geographical knowledge. Discourse provides the blocks. Analysis of the literature from temporal perspectives tells the history of geography.

Discoveries

This dissertation research synthesizes historiographical methods in geographical scholarship and provides three new studies. Each study considers a different site and scale of geographical practice. Examination of these three geographic datasets over time provides examples demonstrating the concept that the materials of geographic work construct the history of geography and provide the grist for understanding histories of topic, theme, and practice for particular periods of time. Each of these studies contributes to the historiography of geography by providing a new analysis or expanded perspective.

Analyses of AAG presidential addresses, thematic representations of cultural geography, and introductory human geography textbooks demonstrate different techniques of content analysis and data visualization to mine, understand, and communicate stories of geography over time. These examples consider the disciplinary scale using Association of American Geographers (AAG) presidents speaking to the membership and future geographers through the pages of journals; the sub-field scale of cultural geographers trying to understand and communicate "cultural geography," and the summarization of the breadth of human geography into college textbooks to promote a generally educated public through higher education. In addition to demonstrating method and considering scale, each study sheds light on the history of geography revealed in the particular datasets as these are studies with new and unique contributions to the literature of geography.

Analysis of the titles of AAG presidential addresses from 1904 to 2011 supports the presence of Turner's two geographic identities – the spatial-chorological approach and the human-environment subject. These two identities work well with Pattison's traditions and Harvey's structures to provide a more nuanced presentation of the foundations of geography. Analysis of the full text of presidential addresses validates Harvey's measurement of space-time and Place / Region / Territory structures, which connect Turner's spatial-chorological identity to Pattison's spatial and area studies traditions. The models of traditions, structures, and identities, each explain geographical research, practice, and themes on their own. This research shows that the conceptual models integrate to provide a more comprehensive and connected map of the foundation and breadth of geography. Viewing the 50 most frequent words used in the full text of presidential addresses in bi-decadal cohorts visualizes the changing prominence of spatial

approaches that measure space and time, continual interest in places, areas, and regions, and the generation ebb and flow of interest in Earth sciences. The models, however, do not account for geographers concerns about the relation of the discipline to the world, such as informing public debate or considering the social and moral responsibilities of the profession. While previous studies have considered subsets or limited periods of the AAG presidential addresses, this research is the first to consider the complete 1904-2011 span to date and to utilize the full texts of the published addresses.

Thematic conceptualizations of cultural geography, evidenced through 31 different texts, demonstrate that practitioners in the sub-field of cultural geography continually update understandings of the content and breadth of the field. Rather than losing content and themes, cultural geography continues to add ideas and new framings. All of the themes present before the 1980s are still present in the 2000s, with the exception of environmental perception. Of those that are present, each has at least 20 percent of its references in the 2000s. Of the 24 identified themes, two were introduced in the 1990s and four in the 2000s. These new themes of politics and culture, postcolonial, and power reflect the transition and diffusion of ideas from cultural studies, anthropology, sociology, and other social science and humanities fields into cultural geography. There is no other known study that considers the multitude of thematic presentations of cultural geography.

Categorical analysis of 2,360 textbook photographs, maps, graphs, tables, and diagrams between the first editions of the late 1970s and early 1980s and the current editions circa 2010 shows that recent texts are more even in portrayals of women and men, but there is still a long way to go to reach quantitative parity. This was expected but unknown, given the development and interest in feminist geography after the watershed year of 1982. There are more women represented, by percent and total number, in the current editions. Comparison of men and women is closest in the supplementary boxes of the current editions, which focus attention on particular issues and examples. Items categorized as men alone are mostly pictures. For items categorized as women alone, 17 percent of the representations in the current editions are in maps. This study reveals patters of portrayal of sex categories consumed by students and instructors, making visible some of the effects of institutional gender regimes structuring textbook education. Consumers interact with the text, "doing gender" (West and Zimmerman 1987) and using the images and graphic items in their own sorting out and negotiation of gender – the socially and

culturally constructed meanings associated with and attached to sex categories. This study expands on Mayer's (1989) work on textbook pictures in geography textbooks by also considering maps, graphs, tables, and figures. Additionally, this work is unique in the human geography literature by utilizing a historical approach to different editions of the same text.

Each study uses information visualization techniques to better understand and interpret the texts and compiled data. In addition to the technology-derived frequency visualizations used in this research, visualizations using series of modified base maps explore temporal change in presidential addresses and cultural geography. This approach to concept cartography demonstrates a useful intersection of qualitative generalization and idea presentation. A concept cartographer can use the tools and techniques of map design to represent and communicate locations, relationships, and connection of geographical concepts and practice. Similar to cartography as a whole, concept cartography is both an art and a science.

The various sites and scales of geographical practice highlight the intersectionality of scholars and scholarship. Undergraduate human geography textbooks draw on research and scholarship in cultural geography and other subfields. Cultural geographers and textbook authors may be members of the AAG, the audience of the presidential addresses.

Situations

Martin (2003, 57) notes that "the concept of the history of geography is simple; its study complex." Perhaps this is why Smith (2012, 553) observed that "geographers have not generally been good at writing their own histories."

Geographic scholars pursue and produce knowledge through a variety of ways of "thinking and reasoning about the world's natural and human phenomena" (Golledge 2002, 1). As the pursuit of geographical knowledge expanded in practice and research, but also in methods, ontologies, and epistemologies, it is increasingly difficult, in Harvey's (2001, 209) view, to "presume there is one settled way of understanding" things geographically or in geography. Passion for geography and forms of the pursuit of geographical knowledge, including "normative opinions as to what we can, should, and should not study" have made neutrality difficult (Koybayashi 2010, 1095). These conflicts highlight the "situated geography,"

"for geography has meant different things to different people in different places and thus the 'nature' of geography is always negotiated" (Livingstone 1992, 28).

Dorothy Smith (1990, 15) critiques objectified knowledge where "members of a discipline accumulate knowledge that is then appropriated by the discipline as its own. The work of members aims at contributing to that body of knowledge." We, as geographical practitioners, "know the everyday world through the particularities of our local practices and activities, in the actual places of our work and the actual time it takes" (Smith 1990, 28). Geographical scholars can work towards overcoming objectified knowledge by beginning "not with a continent or a country or a house, but with the geography closest in – the body" (Rich [1984] 2001, 64), which enhances recognition, understanding, and recollection of our situated role as active producers and consumers of geographical knowledges.

Knowledge, Power, and Difference

Power/knowledge is possible at sites of information exchange (Foucault 1980), at the most local of scales with the individual. The studies of this dissertation demonstrate the knowledges present in geographical scholarship and practice in original research, thought, and synthesis conveyed by AAG Presidential Addresses, thematic statements of cultural geographers, and introductory human geography textbooks. As the textbook study makes salient, there is more power at play than just knowledge. Geographical work is situated, not just in space at time, but also at nested scales and within the structures of power and institutional gender regimes of higher education, academia, and society (Connell 1987).

In doing geography, geographers are also doing gender (West and Zimmerman 1987) and doing difference (West and Fenstermaker 1995). The work of geographical practice cannot be abstracted from its situation and society. Those engaging and interacting with geographical work use the knowledges of geographical research and thought, but also the portrayals and positionings of individuals, cultures, and societies as they work out socially and culturally constructed meanings attached to difference.

Departures

The way lies open for geographical scholars as conceptualizations and understandings of difference, power, and knowledge continue to develop. Improved understandings of how the world works – socially, structurally, and physically – transforms the ways in which geography can "understand the world and all that is in it" (Alexander Graham Bell, cited in Pauly 1979, 523). Better understandings of climate change and its implications moved thinking from "global warming" to "global change" at sites and scales across the Earth (Wilbanks and Kates 1999). As gender scholars better understand social constructions of masculinity, femininity, and androgyny, these knowledges make it possible to revisit and explore human geography and human-environment interaction across the world, at multiple scales, and at different periods of time. Frontiers are pushed farther by growing understandings of intersectionalities of social categories: age, ability, orientation, gender, race, and class. Doing so furthers a feminist goal of "different" meaning nothing other than "different."

The way also lies open for further research in the concept of historiographies of geography. As long as geographers continue to do geography and produce geographical knowledges for others to interact with through address or publication, the field, the discipline, and the material available for historical study and understanding of geography and geographical scholarship will continue to grow. The more geographers communicate with each other, the more voices historiographers of geography will have the opportunity to converse with in the future to understand the actively evolving nature of geographical knowledges and geographic thought.

As points of departure and springboards for future work, there is endless potential for examining geographical work at different disciplinary scales and at different slices and aggregations of time. What patterns will the full text of AAG presidential addresses show if mapped against a different model of the discipline in 10-year cohorts using a different method of word frequency and visualization? How does the analysis of cultural geography change if works by cultural geographers that do not have "cultural geography" in the title or subtitle are used? What would the Wordle TM analysis show of these works? Do the middle editions of

introductory human geography textbooks display progress towards gender parity from the first to the current editions? Was the progress steady or did it leap frog? Enough with the maps and pretty pictures, how do the words and examples in the body of the texts "do" gender? All of these are ways of extending the current research. This is to say nothing about applying these methods of analysis and visualization to journal article abstracts, presentation titles and abstracts, calls for papers, and series of publications, such as the three *National Academy of the Sciences* publications on geography in 1965, 1997, and 2010. Each of these possibilities, and more, tells us something of geography at a point in time, how geography contributes to a range of time, and helps carry the storyline between other points before and after.

Another dimension of historiographies of geography considers not just the works themselves, but the humanist aspect of the people producing them. The texts and research are situated in time and place, but so are the people writing them. Why did presidents discuss what they did, with some focusing on research, others the discipline, and others geography's role in society? Why did cultural geographers resort to themes? How did author teams form and why did they change? Each work considered is part of the biography of a geographer, subject to the opportunities and obstacles of personal and professional life. What stories are there?

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