

# Mapping Morality: Visible and Invisible Geographies

# Stanley D. Brunn

Department of Geography, University of Kentucky, Lexington, United States of America E-mail: brunn@uky.edu

*Key words:* disciplinary history, ethics, morality, silences

#### ABSTRACT

Issues related to morality have been discussed in the geography literature off and on for the past fifty years. Since morality deals with correctness—right vs. wrong, good vs. bad, or correct vs. incorrect—it is not difficult to understand how these value labels also exist in geography contexts. The geography literature often deals with morality questions in a light or superficial way which leaves geographers and others wondering if there are more value questions we might address in studying human behavior, actions and policies. Three major foci are addressed in this discussion. The first explores moral questions geographers might address when looking at cultural behavior, economic development, social policies, laws and the organization of space, the allocation of resources, environmental understanding and interpretation of places and landscapes. The second focus is on mapping moralities, including examples of maps that display visible and invisible geographies about moral places and spaces. The third discusses how this moral thread is worthy of further study in many fields of human and human/environmental geography. A greater understanding these threads will strengthen our understanding and appreciation of "why things are the way they are," "how we make decisions about places and spaces, and also "why we make decisions that we do" at local and global scales.

Article processing Submitted: 09 February 2021 Accepted: 28 April 2021 Published: 04 June 2021 Academic editor: Stoyan Nedkov

© *S. D. Brunn* This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.



"Debates and conflicts over questions of morality and ethics are not a mere product of millennial angst. Rather, they inform the very nature of the human condition. Furthermore, . . . the nature of morality and ethics is itself profoundly related to geography and difference." (Lee and Smith, 2004, p. 8)

"The diversity of geographical imaginations cast upon this world thus offers an important point of beginning for geographers to make a real contribution to moral discourse." (Proctor, 1999, p. 9)

#### **Introduction: Where We Are**

Most geographers conduct research on topics and themes familiar to them. That is understandable as we often teach what we are taught and conduct research on topics that others like and approve. These features of professional life are reflected in who we are, what we do and how we do what we do. They provide us personal satisfaction and constitute our professional comfort zones where we hope that what we do will be awarded and rewarded by our students and by peers.

This kind of professional security blanket is understood, practiced, and respected by many. We know that this "blanket" has many merits or positive results because doing what others do, study, and like gives us a strong sense of personal and professional worth. To deviate from the norm or to choose a different pattern in our scholarly career *may* make us uncomfortable or *will* make us uncomfortable, the results which *can* make us not liked or respected by our colleagues, or our students, or not appreciated by those in our own discipline or subfields.

The perspective above would be the same for many disciplines, that is, a perspective that applies to many professionals studying and conducting research in the same or familiar intellectual channels. It applies to those in the sciences and the sciences. Escaping the channel or deviating slightly within the channel often requires us or our colleagues to "think outside the box" about some slightly or significantly different worlds. Those are worlds where we may not wish to contemplate or even "wander" into for fear that we will not be accepted or rewarded, or even liked or valued. Not wandering too far from conformity may be our modus operandi.

While the situation above may apply to us individually, as well as our friends and associates, we also sometimes need to step back, take a deep breath and ask this question: "Are we missing something by not studying some topic or using some different approach?" This question we may contemplate daily in our professional lives or after we have read something in a journal article or heard something at a conference presentation that made us wonder about some spatial relationship or some new topic that is entirely new to our thinking. Or perhaps a "nagging or troublesome" question may have arisen in a discussion with colleagues in a casual conversation over coffee, or at a department meeting, or possibly even a question raised by a curious student in one of our classes. These are the kinds of situations and experiences that often expand our thinking, taking us beyond our comfort zone to some "new intellectual arena" for further contemplation and even possibly some actual newfound study arena for research.

## **Answering Unanswered Questions about Horizons**

Keeping the above intellectual background in mind, let's think about "intellectual horizons" of what we know and what we study. First, we might even ask: "do we ever think or act beyond our horizons" or are they frozen and solid? A horizon may be defined as where we see or set our own limits. A "frozen horizon" is one that is the same every day and every year, that is, nothing has changed. We always know it is there because we observed it for a long time as just being there. We know it is there and that provides a deep sense of personal and professional security. If someone suggests we might expand our horizon to see something new or to consider some new relationship or landscape or landscape feature, that might make us uncomfortable and uneasy. While inwardly we may feel comfortable and at ease, we also know that if we are to grow intellectually, as we were taught by some of our professors and parents, we might expect to see the horizon or the same horizons slightly or perhaps significantly differently. If and when that experience happens, the question is "what are we going to do about it?" It is not only what our colleagues may see in us, or expect to see in us, but what about our students? Do we not expect them or want them to grow, that is, to expand their horizons and even to wander and wonder about new worlds, new relationships, new environments and even new maps? What we expect from and wish for our students is to grow in knowledge and understanding and be more knowledgeable than we are. Is this also not what professionals expect from other professionals? That is, to explore new horizons or to see an old horizon differently. Who knows where those discoveries might lead?

#### **Comfort Zone Geographies**

Every professional can define comfort zone topics in her/his research field. These are topics that have been the focus of much research for a decade or perhaps even for a generation or more. These familiar topics have a rich literature base and methods of analysis that are known, acceptable and familiar to youthful scholars as well as seasoned professionals. Research on familiar topics and approaches

is observed by readers in mainline professional journals and even specific journals that relate to a specific topic, place, or methodology. When one reads comfort zone research, the reader knows a strong literature foundation is associated with a topic. Advances will come from introducing a theory or tweaking a small part of a theory in a new location or introducing some new methodology into the familiar research method. Natural and social scientists can think of the intellectual breakthroughs stemming from the pioneering research by Wegener (1922) on continental drift and Haraway (1989) on gender and primates and from social theorists such as Giddens (1987) and Unger (1987) and others and on disciplinary and interdisciplinary research in the past couple of decades.

Disciplinary and interdisciplinary knowledge is akin to building a brick wall, that is, a wall where the scholar or scientist already knows about many of the existing "bricks" because she/he has used, taught, or studied them in the field or laboratory. There is some real comfort and pride in working within familiar and existing comfort zones as one knows that the research builds on existing foundations and also will likely be accepted and welcomed by one's peers, which is a much-valued feature in conducting any research. Those comfort zones could even be extended to the role of the state or a research foundation "controlling or supporting conformity" in scholarly agendas by funding research on familiar topics and themes and perhaps even some unwillingness to fund ventures into unchartered territory because of potential unexpected outcomes.

Professional geographers who study landforms, ecosystems, climates or river systems know what comfort zones are popular and are worthy of additional study by new or seasoned scholars. The same acceptance is known by those who study economies, whether agricultural or industrial land use, transportation systems, or specific service economies such as banking, real estate, recreation/tourism or retail trade. And the same for those studying legacy or popular cultures, settlement patterns, field patterns, religions, elections, boundaries, languages, house types, and plant/animal ecologies. Familiar methods, research designs and even locations are part of the world of comfort zone geographies.

Many an avid reader of a discipline's history or sub-discipline's specializations would conclude that many junior and senior scholars of all ranks pursue research paths which are predictable in varying degrees. Some scholars will work for decades on the same or very similar topics or the same place or environmental setting. This path of regularity for some provides much personal satisfaction and security, knowing that they will be supported by colleagues for their work, likely to receive research funding, and appreciated by their students and by journal reviewers and editors. In short, it is a predictable professional life's journey that many choose.

# When Some Disruption Appears

Professional life in a research institution or university setting is seldom described as "eternally at ease." Rather it is a life built around ideas, innovative approaches to old problems, the introduction of new techniques and technologies, critical assessments of previously accepted theories and new opportunities for funding some pioneering research. These are the standards most professionals, regardless of discipline, live with in the scholarly world. Many professionals like this competitive career development because it is what they grew up with, are familiar with, and are rewarded with additional research funding, academic promotions, publications in respected peer journals, program reviews, international travels for research, new research opportunities and interdisciplinary conferences where participation may be in person, a webinar or some interactive zoom setting.

The worlds of "newness" are part of the professional's life. The "newness" may be a concept, a new paradigm, a new methodology or a new field experience. And scholars look for these "new worlds" and think of ways they might be able to incorporate the "newness" into what they teach and what they study. What scholars contemplate is how to introduce new subject matter into lectures or incorporate some new technique to investigate a time-honored problem or to explore an application to a different physical, environmental, or human setting. The "rewards" from considering "the new" are that they not only expand our "knowledge horizons," but open up some ingenious ways connecting with those in another field or subfield. Each "horizon breakthrough" expands not only the worlds or the individual investigator, but also possibly the emergence of a new subfield of disciplinary or interdisciplinary investigation. The pioneering works of Sauer (1952) on agricultural origins and dispersals and Glacken (1967) on nature and society were landmark treatises for those interested in historical and cultural geography. Many human and environmental geographers trained in the 1960s and 1970s were exposed to Thomas Kuhn's (1970) thinking about paradigm shifts regarding the intersections of science, society, philosophy in rethinking geography's histories and intellectual contributions. Those trained in the late 1980s and 1990s would have been exposed to some of the first social theorists including Giddens (1971), Habermas (1987), and Unger (1987) and the emerging worlds of GIS (geographical information systems) (Tomlinson 1987), all which led to some paradigm rethinking in the sciences and humanities in the coming decades.

## When Major Disruptions Appear

It is not difficult to deal with minor disruptions in a professional career, as they are expected. As acknowledged above, new terms, new methods, new techniques and approaches are integral parts one expects in professional life. For someone in her/his fifties or sixties, she/he has already probably experienced new directions, new paradigms, new literature and new professional linkages; these are welcomed and an integral part of a professional life. Many seek to fit these new ideas, terms, theories, and structures into introductory and advanced classes and into familiar and time-honored research projects knowing that they represent professional growth of some magnitude for the individual and for one's subfields of interest. It is the size of that magnitude that is important for many professionals. Probably they can handle easily most of what is introduced as it strengthens their professional career development with new ideas and new ways of thinking.

The situation is likely different when there are entirely *new ways* of thinking either in content or subject matter or in relationships that we were not taught or even considered in our previous training and research experiences. Once we are exposed to some new perspective or some new knowledge base, we may be faced with making some unexpected choices. We can consider them or not. We can evaluate them for their merit or we can simply refuse to even consider them. It is in this context where I introduce the concept of morality in a geographic discourse.

#### Geography, Geographers and Morality

Morality is a term and concept most scholars would associate with philosophy, not geography. It relates to the value we place on something. Words associated with morality relate to conduct: good and bad, right and wrong, correct and incorrect. Ethics on the other hand relates to what is considered good and acceptable in a society. When addressing the concept of morality into the geography lexicon and the geography community, it is likely that more than one

professional would be curious as to what morality has to do with geography. Their thinking is that it is an acceptable term and concept to use when studying philosophy and especially moral philosophy. Or, if they reflected further on the term, they might consider it a possible concept to apply in some areas of human geography, but not physical or environmental geography.

The appropriate place for studying morality in geography needs to be made before we explore any further examination of how it might be used by geographers. We also need to realize that some professional geographers may find the term unacceptable and inappropriate simply because it was not part of their professional training and, therefore, is not important in teaching or considering in any research endeavor. These professionals may be uncomfortable even thinking about the concept. It might even be said that those thinking along these lines actually live, practice, and enjoy geography in a "frozen or static comfort zone." It is a world where the comfort zone they define and experience excludes any concept or conceptual framework different from what they are accustomed. These individuals might consider morality as a separate intellectual domain, separate from the subject matter and worlds of geographic thought. Their intellectual security may rest on their thinking that morality is not part of the history of geography or of any specific geographic tradition, believing that what was considered acceptable to study or to examine in geographic space was decided long ago by a long list of respectable professionals and disciplinary mentors.

The above way of thinking may be associated with some members of the physical geography communities and even members in the discipline's human geography communities. The physical geographers might ask the simple question "what does morality have to do with the study of landforms, weather and climate, forests and grasslands, soils, water systems and coastal areas, and even animals and plants?" And there might be those in the human geography community who question "what has morality to do with the study of agriculture, industries, service economies, cultural heritage, settlement patterns, human behavior and tourism, politics, religion and language." Morality questions may not have been part of their training and for that reason are not topics addressed in school texts or research agendas of research foundations.

To state the issue succinctly, morality deals with "why" questions, questions that are often very difficult and even tricky to answer. While many scientists, including geographers, are comfortable looking at "how" something happened, asking and answering "why" is a completely different line of questioning in studying something. These questions are just as difficult for physical/environmental scientists to answer as those who study human behaviors and policies. Perhaps "how" questions are easier to answer than "why." In short, a lengthy heritage of professional avoidance and negligence may best describe the present situation and is responsible for our avoiding the study of values and ethics related to place, space and environment. This "avoidance" may describe a situation where many geographers and other professionals are just uncomfortable and ill-prepared to discuss morality and ethical issues in classroom instruction on physical processes or human behavior, research design and methodology. In short, they may have difficulty coming to grips with morality issues being important in examining future research directions in the discipline.

#### **Towards a Geomorality**

While the previous paragraphs may identify and define the thinking of one part of the professional geography community, another group of scholars has quietly emerged in the past several decades. It is a group that examines how geography can deal with philosophical questions regarding human behavior, institutional structures, environmental conditions, and public policy. One of the ways this thinking became clear to the geography community is evident in those who were part of the spatial/locational modeling way of thinking that began in the 1960s in much of the Englishspeaking world in western Europe and North America. The early "geomoral roots" emerged from many who were schooled in the spatial tradition where model building and quantitative methods were integral to how they viewed what geographers could and might contribute to knowledge. The innovators who led and influenced disciplinary thinking on morals and ethics were interested in models and theories and using these to build a strong rational and scientific framework for the study of physical and human geography topics. While constructing, testing, and retesting models or elements of a model were important in how they defined geography and what they studied, some critics of scientific geography felt that these scientists were living and working in a "science comfort zone." That is, the physical and environmental geographers had their own comfort zones as did those in human geography. Testimony to this observation could be documented in titles of theses and dissertation, journal articles, new journals, books on geographic methodology, and the content of introductory and advanced textbooks.

While there were professionals seeking ways to advance geography as a spatial science, there were other professional leaders in the discipline who asked geographers of all ages whether at geographers were guilty of ignoring humans and human behavior and human experiences. Their belief could be expressed as simply: "people are more than numbers" as they live, work, travel, behave and communicate in space. The early proponents of this thinking were called radical geographers, some with Marxist leanings and others with humanistic interests. They were suggesting and advocating that geographers not only examine the human or humane sides of economies, cultures, social classes, societies, social institutions, time-space issues and political systems organizations of space, but actually seek some relevance to the worlds around them. Among the pioneers in this slowly, but emerging, framework were Harvey (1973), Peet (1977), Bunge (see Bergman and Morrill 2018), Buttimer (1974), Tuan (1974, 1982, 1989, 1991), Relph (1976), Soja (1989) and Robert Sack (1997, 2005). While the majority of these scholars who suggested the geography community study in greater depth the meanings of places, human behavior and organization of spaces, contemporary and historical landscapes and environments were in human geography, there were some physical geographers who were studying human/environmental interfaces. Gilbert White and colleagues (1974), Thomas Detweyler and Mel Marcus (1972), Karl Butzer (1982), Wilbanks (1994), Susan Cutter (2012), Kates et al. (2012), Billie Lee Turner et al. (1990, 2007) and Alkon (2012). These individuals and many of their peers and students were included in a new generation of environmental geographers who have studied disasters, human impacts on physical landscapes, sustainability, climate change, earth transformations, human/biodiversity interfaces, and environmental/human conditions.

Another group of geographers also emerged on the scene in the 1970s, 1980s and 1990s. These were scholars interested in addressing socially relevant issues about human rights and dignity, territoriality, empowerment and social well-being, gender and feminist issues, law and justice, ethics, time-space issues and shrinking worlds, mental maps, political organization and power. The contributions are many; examples include the works of Abler, Adams and Gould (1971), Janelle (1973), Gould and White (1974), Abler et al. (1975), David Smith (1974, 1994, 1997, 1999, 2004), Ley and Samuels (1978), Brunn (1998), Buttimer and Seamon (1980), Leinbach and Brunn (1991),

Proctor (1998), Proctor and Smith (1999), Lee and Smith (2004), Mona Domosh (1991), Birdsall (1996), Hyndman (2004), Popke (2006), Jones (2007). Many of these humanistic geographers were trained in location theory and the spatial tradition, but felt the urge to move beyond the numbers to look at social and political contexts, institutional structures (governmental, financial, education, legal, etc.), the human condition (health and welfare) individuals and communities.

## Beyond a Casual Morality to a Serious Geomorality

For those who study and follow disciplinary history trends in Europe and North America, a case can be made that morality questions today are being addressed by more than just a couple of handfuls of geographers. While likely morality questions are not a major thread in disciplinary research and thinking, more than just a few studies are the subject of serious research. Evidence of this appears in conference themes and presentations, the titles, abstracts, journal contents and literature cited in journal articles, single authored and edited books. These include studies on discrimination, injustice, refugees, the disabled and elderly, human trafficking, homeless populations, and women's and children's rights, all which might be under broader heading such as social justice, corporate responsibility, spatial efficiency, human care and empowerment and civil rights. These studies address issues about minorities and women having power, constructive policies related to health care and education, bettering human livelihood, fairness in representation, consumer rights, human security, etc. Many of these are "invisible" topics when it comes to depicting places, landscapes and regions on maps, but they are recognized as distinct features of the human condition landscapes in cities and rural areas.

An additional element of this emerging thread of morality relates to features associated with the physical environment. Recall the discussion above about some physical geographers ignoring or choosing to ignore questions about correctness, goodness and fairness in their research programs, research careers and even the contents of textbooks. Their focus has been on the methods used in addressing research topics, which is how their research has been evaluated by their peers. Today, also as noted above, we have more physical and environmental geographers looking at the impacts of natural and technological disasters on populations and economies, short and long term resettlement practices because of flooding, hurricanes, volcanic eruptions and forest fires, the impacts of climate change on sea level rise, animal rights, settlements in marginal ecozones and ecosystems, land use practices, prudent conservation and preservation policies and practices.

In short, there are multiple ways that geographers can address geomorality issues. These would include using archival materials, conducting field work including surveys, and mapping. The extant literature includes examples of each. Specific examples of topics that would intersect some physical and human geography subject matter are presented in Table 1. The list includes topics that could easily fit into textbooks of human geography and also physical/environmental geography. For many in human geography communities it is not difficult to envisage discussions of racial discrimination, gerrymandered school and legislative districts, gender empowerment, aging populations, reviving slow or laggard communities, refugee resettlement, minority representation in policy making, LGBTQ (lesbian, gay, bisexual, transexual, queer) legislation or parades as having a subtle or a significant moral framework. Some physical geographers might have to stretch their imaginations and comfort zones to study human evacuations related to natural or technological disasters, human-induced causes of global warming,

the need for preserving or conserving a pristine wilderness, coastal zone or an alpine environment. the protection of endangered species, preserving unique plant and animal communities, and ensuring water use for sustainable agricultural lands or for household use. These are examples of decisions made that relate to goodness, fairness, and correctness.

In a contemporary research focus in 2021 one might look at the impacts of COVID-19. This is not a local or a regional epidemic; it is a global pandemic in which all countries and all places and all peoples are affected in one way or another. Economies and economic livelihoods are altered and destroyed, human institutions (health, education, human welfare) are restructured or closed, political systems are stressed and restructured, entire landscapes become ghost appearances, service economies, including recreation and tourism, are seriously affected. The impacts of the pandemic on the human livelihood are personal, local, regional and global. May suffer from job loss, family restructuring, isolation and lockdown, community redefining, and an emptiness in their spiritual, family and community life.

**Table 1.** Examples of geomorality research themes.

Theme	Topics
Animal geography	Preserving endangered species
Climate	Climate refugees, Global warming ethics
Cyperspace	Privacy, Security issues
Deserts	Food, Library, News
Education	School boundary drawing, Favored and silent histories
Mapping	Colonial mapping, Use of colors, The power of maps
Protect spaces	Boycotts, Marches
Religion	Sacred spaces, English language missions
Tourism	Protecting heritage sites, Indigenous group places
Visual blight	Substandard housing, Abandonment
Viluntary communities	Faith communities, Ad hoc groups
Women	Safe shelters, Access to abortion

An apt term that one can use to address these emerging worlds is geomorality. It is more than morality related to the worlds studied by scholars in the humanities and social sciences. It also includes the worlds studied by scholars in the natural and physical sciences. Human living, human livelihoods and human institutions are integral parts of the worlds of understanding many landscapes altered by mining, deforestation, and agriculture, ecosystems disrupted by human practices and governmental decisions, weather and climate patterns altered by excessive fossil fuel uses and policies, disaster forecasting and preparedness, border closings, health care practices and disease eradication policies. Behind all of these and more one can observe morality and ethical questions related to power and representation, the visual and narrative worlds, and justice related to cyberspace and earth space. While it is possible to separate the physical and the human worlds in terms of understanding what is going on where and why, a stronger case can/might be made that explores these intersecting worlds and also raises questions about correctness, rightness, fairness and goodness. These are worlds

where "why" questions come to the fore, not simply only describing "how" something happened, questions that may be easy to ask, but difficult to answer.

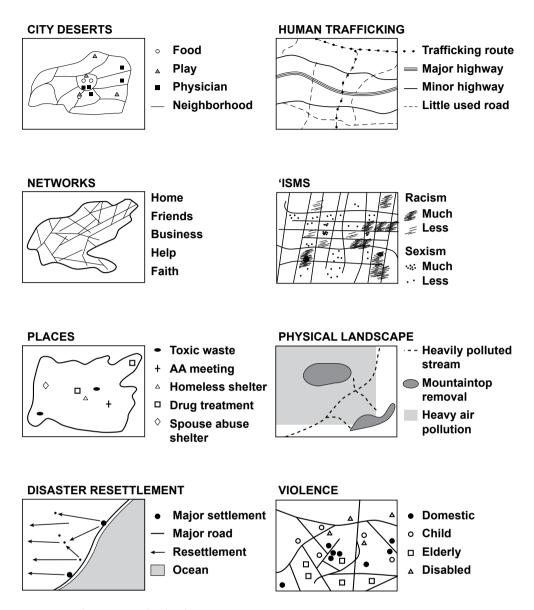
It goes without saying that changing the way members of the geography communities (plural, as we are members of many different kinds of scholarly communities) think about what they teach and what they study will not be easy. Introducing moral arguments and thinking is not something most scholars are accustomed to or even comfortable with, a point made above. However, "living in separate worlds" has its drawbacks, a major one being that the world is not a world of separate geographies, but of intersecting, interlocking and interrelated geographies. A new mode of thinking and reasoning about intersections and interrelationships may require us to think how we approach a topic, what methodologies we will use, what new conceptual frameworks we will use, and what kinds of maps and mapping these changes require?

It is worth having serious discussions among junior and senior geographers with different interests about the pressing issues the present world faces. These include sustainability (land, water, air systems), climate change (forecasting, dislocation, sea-level rise), improving the human condition (health care, education, human welfare and law), conservation and preservation (human, plant and animal ecosystems), media worlds (print and visual), cyberspaces (personal and global, social media and Zoom) and power/empowerment policies to name just a few. Also, we need to move outside our disciplinary comfort zones and silos to interact with scholars who also are in their own silos. In short, we need to explore those common boundaries, networks, systems, surfaces, landscapes and places we already share with kindred professionals in many of the disciplines in the humanities and the physical, natural and social/behavioral sciences. Many features of a moral geography are visible and easily observable, but many others are silent and invisible and awaiting our discovery.

#### Mapping Visible and Invisible Geomorality

An important dimension about geomorality that would appeal to geographers and others who think about places, landscapes, regions or environments has to do with maps. Fig. 1 illustrates some examples of what might be called "a geomorality cartography." While these are hypothetical maps, they can and will be real to many viewers. Some maps might be considered as "visualizing" the invisible, which builds on Wright's (1947) study on terrae incognitae or the geography of silences (Brunn and Wilson 2013, Swietek et al. 2019, Gilbreath 2020). Related works to the "cartographies of silence" have been addressed by geographers interested in critical geography and critical cartography (Harley 1989, Crampton 2001, Livingston 2010).

The invisibility of places or landscapes of silence exist in multiple locations in large and small metropolitan areas, in small cities, in small towns and villages and rural areas. They exist in large countries and ministates, in peninsulas, on islands, in coastal and landlocked states. The maps display examples of topics and themes that have a moral dimension. For example, many cities will have different kinds of "deserts," that is, where there are no playgrounds for children, no food stores or clinics or hospitals. Those involved in the human trafficking of women and children know the importance of using minor roads and traveling at night to avoid detection by law enforcement authorities. In many cities and regions, it is easy to identify clusters or points of racism and sexism. Violence, whether against children, the elderly, women or the disabled, has a distinct geographical feature if we wish to study it. And those who help residents evacuate from forest fires or hurricanes know the



**Figure 1.** Silent geomorality landscapes.

importance of finding temporary shelters for families and even pets. For those studying landforms and mountain economies, they know the towns and villages that are in danger with onshore tropic storms, mass wasting and unhealthy drinking water and living conditions.

Some of the features depicted on Fig. 1 are observable, others are invisible, but both are part of the geomorality landscape. Toxic waste dumps and playground deserts and temporary shelters for those fleeing an impending natural disaster may be known only to a narrow public. But half-way houses for those leaving prisons may not be known nor will suburbs where children are physically abused at home or in schools. Similarly, the routes used in human trafficking of women, men and children from another country will likely not be known to a wide public nor will the location to obtain a vaccination to prevent COVID-19. As noted above, all these examples are part of society where we hear about but seldom "see" anything about their location on maps. Mapping them makes the invisible visible. All maps for a public are reflecting something about the values and ethics of

a society itself or what the map producer wants the reader to know. Government produced maps for a city or state contain locational information (names of towns, parks, rivers and road numbers), but not places for those in need).

The purposes of Fig. 1 are (a) to encourage the reader to consider examples of human activities in areas in which they are familiar and (b) to actually plot on a real map examples of geomorality. These might be a city map that shows toxic waste dumps or areas of heavy industrial (smoke or noise) pollution or areas most distant from a physician or hospital or places where women and children can travel if their lives are endangered. Some of the features on Fig. 1 are points, some are landscapes (human and physical) and others are networks (transportation, communication, self-help, etc.). Some are permanent, such as areas with no parks or playgrounds, while others are temporal, such as shelters from floods and fires and for fleeing refugees. We need more maps and atlases of human need and compassion, online and offline.

## **Going Forward**

The major objectives of this presentation are threefold. The first is to encourage geographers to think about the importance of addressing moral issues in their research and teaching—issues that are important in human geography and physical/environmental geography, but also at the intersections of human and physical geography. The second purpose is to stimulate our thinking of real-life examples of more "moral geography places, landscapes, networks, and regions." The hypothetical examples are meant to encourage youthful and senior geographers to think outside the box and explore the many geomorality worlds in their own communities, cities and regions. These explorations will advance our thinking about the intersections between human and physical worlds and lead to a better understanding how moral issues are part of public policies (local or national), land uses and human spatial behavior and organization. The third objective is to encourage the reader to take some "leaps" in our disciplinary thinking to address moral questions head-on rather than skirting them entirely or only subtly noting their importance. Failure to address moral questions about human-induced climate change due to continued use of burning fossil fuels or the inhumaneness related to human trafficking or protecting the most vulnerable from ever-worsening natural disasters can convey to members of geography and other scholarly communities that geographers are not a caring group of professionals. What is more important in the short and long run is a realization that caring, assisting and empowering those who are vulnerable and live in vulnerable communities is part of our responsibility as humane geographers, whether we are specialists in climate change, biogeography, political organizations of space, tourism, health care or regional development. Living up to this professional redirection or mission will be easy for some, while for others it may require some support from emerging scholarly communities in geography and from related fields which acknowledge that places, landscapes, systems and surfaces are not only abstract concepts, but where the imprints of human activities are there to be studied, valued, understood and mapped.

#### Acknowledgement

I wish to thank Donna Gilbreath for making the graphic and preparing the manuscript for publication.

#### References

- Abler RJ, Adams JS, Gould P (1971) Spatial Organization: The Geographer's View of the World. Prentice-Hall, Englewood Cliffs, NJ.
- Abler RJ, Philbrick A, Janelle DG, Sommer J (Eds) (1975) Human Geography in a Shrinking World. Duxbury Press, Belmont, CA.
- Alkon AK (2012) Black, White, and Green: Farmers Markets, Race and the Green Economy. University of Georgia Press, Athens, GA and London.
- Bergman L, Morrill R (2018) William Wheeler Bunge: Radical Geographer (1928-2013). Annals, Association of American Geographers 108 (1): 291-300.
- Birdsall SS (1996) Regard, respect and responsibility: Sketches for a moral geography of the everyday. Annals, Association of American Geographers 86: 619-629.
- Brunn SD (1998) Issues of social relevance raised by presidents of the Association of American Geographers: The first fifty years. Ethics, Place and Environment 1: 77-92.
- Brunn SD, Wilson MW (2013) Cape Town's million plus Black Township, Khayelitsha: Terrae incognitae and the geographies and cartographies of silence. Habitat International 39: 284-294.
- Buttimer A (1974) Values in Geography. Washington, DC: Association of American Geographers. Commission on College Geography. Resource Paper 24.

- Buttimer A, Seamon D (1980) The Human Experience of Space and Time. St. Martin's Press, New York.
- Butzer K (1982) Archaeology as Human Ecology: Method and Theory for a Contextual Approach. Cambridge University Press, Cambridge.
- Crampton J (2001) Maps as social constructions: Power, communication and visualization. Progress in Human Geography 25: 235-252.
- Cutter S (2012) Hazards Vulnerability and Environmental Justice. Taylor and Francis, Oxfordshire, UK.
- Detweyler TR, Marcus MM (1972) Urbanization: The Physical Geography of the City. Duxbury Press, Belmont, CA.
- Domosh M (1991) Toward a feminist historiography of geography. Transactions, Institute of British Geographers 16 (1): 95-104.
- Gilbreath D (2020) Silence as the Language and Landscape of Abuse. In Brunn SD, Kehrein R (Eds) Handbook of the Changing World Language Map. Springer, Dordrecht, the Netherlands, pp. 2973-2994.
- Giddens A (1971) Capitalism and Modern Social Theory. Cambridge University Press, Cambridge, UK.
- Glacken C (1967) Traces on a Rhodian Shore. University of California Press, Berkeley.
- Gould PR, White R (1874) Mental Maps. Routledge, New York.
- Habermas J (1987) The Philosophical Discourse of Modernity. MIT Press, Cambridge, MA.
- Haraway D (1989) Primate Visions: Gender, Race and Nature in the World of Modern Science. Routledge, New York and London.
- Harley JB (1989) Silences and secrecy: The hidden agenda of cartography in early modern Europe. Imago Mundi 40: 57-76.
- Harvey D (1973) Social Justice and the City. Edward Arnold, London.
- Hyndman J (2004) Mind the gap: Bridging feminist and political geography through geopolitics. Political Geography 23 (3): 302-322.
- Janelle DG (1973) Measuring extensibility in a shrinking world. Journal of Geography 72 (3): 8-15.
- Jones M (2007) Landscape, law and justice concepts and issues. Norsk Geografisk Tidsskrift – Norwegian Journal of Geography 60 (1): 1-14.
- Kates RW, Travis WR, Wilbanks TJ (2020) Transformational adaptation to incremental adaptations to climate changes are insufficient. Proceedings, National Academy of Sciences 109 (19): 7156-7161.
- Kuhn TS (1970) The Structure of Scientific Revolutions. University of Chicago Press, Chicago.
- Lee R, Smith DM (Eds) (2004) Geographies and Moralities. Blackwell, Malden, MA and Oxford, UK.
- Leinbach TR, Brunn SD (Eds) (1991) Collapsing Space and Time. Harper/ Collins, New York.
- Ley D, Samuels MS (Eds) (1978) Humanistic Geography: Prospects and Problems, Maaroufa Press, Chicago.
- Livingston DN (2010) Landscapes of knowledge. In Meusberger P, Livingston DN, Jőns H (Eds) Geographies of Science. Springer, Dordrecht, 3-22.
- Peet R (1977) Radical Geography: Alternative Views in Contemporary Social Issues. University of Minnesota Press, Minneapolis.
- Popke J (2006) Geography and ethics: Everyday mediations through care and consumption. Progress in Human Geography 30 (4): 504-512.
- Proctor JD (1998) Ethics in geography: Giving moral focus to the geographical imagination. Area 30: 8-18.
- Proctor JD (1999) Introduction: Overlapping terrains. In Proctor JD, Smith DM (Eds) Geography and Ethics: Journey in a Moral Terrain. Routledge, London, 1-16.
- Relph EC (1976) Place and Placelessness. Pion, London.
- Sack RD (1997) Homo Geographicus: A Framework for Actors, Awareness and Moral Concerns. Johns Hopkins University Press, Baltimore and London.
- Sack RD (2005) A Geographical Guide to the Real and the Bad. Routledge, New York and London.
- Sauer CO (1952) Agricultural Origins and Dispersals. American Geographical Society, New York.

- Smith DM (1974) Who gets what where and how? A welfare focus for human geography. Geography 50, 289-297.
- Smith DM (1994) Geography and Social Justice. Blackwell, Oxford.
- Smith DM (1997) Geography and ethics: A moral turn? Progress in Human Geography 21: 583-590.
- Smith DM (1999) Geography, community and morality. Environment and Planning A 31 (1): 19-35.
- Smith DM (2004) Moral Geographies: Ethics in a World of Difference. Edinburgh University Press, Edinburgh.
- Soja E (1989) Postmodern Geographies: The Reassertion of Space in Critical Social Theory, Verso, London and New York
- Swietek A, Brunn SD, Wójtowicz D (2019) Identifying and removing the silence of Roma culture in Polish school texts. Journal of Geography 18 (4): 169-184.
- Tomlinson RF (1987) Current and potential uses of geographical information systems: The North American experience. International Journal of Geographical Information Systems 1 (3): 203-218.
- Tuan Y-F (1974) Topophilia: A Study of Environmental Perception, Attitudes, and Values. Prentice-Hall, Englewood Cliffs, NJ
- Tuan Y-F (1982) Segmented Worlds and Self. University of Minnesota Press, Minneapolis.

- Tuan Y-F (1989) Morality and Imagination. Paradoxes of Progress. University of Wisconsin Press, Madison, WI.
- Tuan Y-F (1991) Landscapes of Fear. University of Wisconsin Press, Madison, WI.
- Turner BL et al. (1990) The Earth Transformed by Human Action: Global and Regional Changes in the Biosphere Over the Past 300 Years. Cambridge University Press, Cambridge.
- Turner BL et al. (2007) Global Change and the Earth System: A Planet under Pressure. National Academy of Sciences, Washington, DC.
- Unger R (1987) Social Theory: Its Structure and its Task. Cambridge University Press, New York.
- Wegener A (1922) Die Entwicklung der Kontinente und Ozeane. Fredrick Vieweg und Sohn, Braunschweig.
- White GF et al. (1974) Natural Hazards: Local, National, Global. Oxford University Press, New York.
- Wilbanks TJ (1994) "Sustainable development" in geographic perspective. Annals, Association of American Geographers 84 (4): 541-556.
- Wright JK (1947) Terrae incognitae: The place of the imagination of geography. Annals, Association of American Geography 37: 1-15.