1 Visual Rhetoric and Spatiality

In this chapter, I tell the story of visual rhetoric largely from the perspective of critical cartography, a subdiscipline of cartography that sees geographic knowledge as tied to power relations and understands mapping and the practices of visuality as informed by cultural contexts (Crampton and Krygier 11). A story is of course a subjective account, and I have been interested here in crafting a narrative that demonstrates how visual rhetorics, when considered through a geographical lens, can help account for the spatial dimensions of texts and artifacts, and subsequently allow for an understanding of space as rhetorical, and of rhetoric as spatial. After describing more specifically how maps function as rhetorical artifacts, I contextualize the intersections of visual rhetoric and critical cartography by providing a brief analysis of photo 22727, the famous NASA photo of the whole earth taken by the crew of Apollo 17 in December 1972. As a visual artifact that functions as both iconic photograph and cartographic representation, an analysis of photo 22727 not only helps situate visual rhetoric relative to critical cartography but also paves the way for a discussion of how visual rhetoric can be more attentive to the relationships between materiality, space, and the body. This discussion of visual rhetoric and spatiality, however, is a means to a greater end, for I link the two in order to suggest that there exist some possible limitations in an understanding of visual rhetoric that does not explicitly consider an artifact's contextualized engagement with the body. I thus call for a visual rhetoric that more expressly accounts not only for a rhetorical artifact's material and spatial components but also for its subsequent impact on the body. Within the context of this call to action, I introduce Blair's theory of material rhetoric and Foucault's theory of heterotopias, which, in chapter two, I then describe in more detail as helping constitute a sustainable theory of visual-material rhetorics that provides a point of entry into a more embodied rhetorical approach—

one that can help demonstrate the value of visual-material rhetorics both within and beyond the field of rhetoric.

Visual Rhetoric as a Project of Inquiry

As described in the introduction, my interest in the intersections of rhetoric, visual studies, geography, and critical cartography has allowed me to arrive at an understanding of visual rhetoric compatible with what Cara A. Finnegan describes as "a *project of inquiry,* rather than a product" ("Review Essay" 244). Again, this conception allows for two related research trajectories within visual rhetoric (244). These trajectories function 1) to focus on the study of the artifact itself, and 2) to explore the significance of visuality for rhetorical theory. Finnegan feels we need to be more mindful of how the practices of visuality influence, affect, or shift understandings of rhetoric (245). Visual rhetorical analysis, she writes, "should recognize the influence of visual artifacts and practices, but also place them in the contexts of their circulation in a discursive field conceived neither as exclusively textual nor exclusively visual" (245).

The question of how to work analytically with visual artifacts should not be minimized, though at the same time it should not be cause for paralysis either. While scholarship in visual rhetoric has rightly begun to acknowledge the interplay of the verbal and the visual, moving past older references to the verbal/visual dichotomy[1], acknowledgement of the interplay between textual, visual, and material ways of knowing does not make for a methodological non-issue. In fact, to acknowledge this interplay and its attendant multimodal epistemologies invites a new set of methodological questions. On the one hand, as Finnegan notes, "labeling as 'visual rhetoric' artifacts such as photographs, memorials, art, images, and advertisements creates a false category," in that many of these artifacts include textual or linguistic characteristics (244). Thus, to place such artifacts under the rubric of visual rhetoric "ignores the often untenable distinction between the visual and verbal in practical discourse" (244). On the other hand, visual and material artifacts arguably require specific methodological treatment, thus necessitating that we acknowledge such categorical and analytical distinctions within our analyses.[2] I suggest that it is possible to understand the textual, visual, or material qualities of rhetorical artifacts as functioning along a spectrum, without necessarily creating the false categories about which Finnegan cautions, so long as we are attendant to the nuanced readings that such artifacts require. Such mindfulness will only serve to further our understandings of how multimodal contexts and artifacts can influence, affect, or shift our understandings of rhetoric.

Moreover, the idea that the study of visual artifacts and practices should be contextualized within their discursive field is, to my mind, not incompatible with an understanding of visual rhetoric as always already concerned with embodied practice. In *How We Became Posthuman,* for example, N. Katherine Hayles describes the idea of embodiment as related to but different from the body; the difference, she feels, is linked to a consideration of the cultural contexts in which the subject is situated:

> Embodiment differs from the concept of the body in that the body is always normative relative to some set of criteria [. . .] In contrast to the body, embodiment is contextual, enmeshed within the specifics of place, time, physiology, and culture, which together compose enactment. [. . .] Experiences of embodiment, far from existing apart from culture, are always imbricated within it. (196–97)

To understand visual rhetorics and the rhetorical study of visual, spatial artifacts as embodied practice not only allows us to more explicitly consider the contextualizing features of "place, time, physiology, and culture" that Hayles describes but also requires that we understand the visual as concerned with space, place, and the body (196). In other words, to fully understand the broader implications and consequences of the rhetorical work of visual and material artifacts in the world, we must understand visual rhetorics as also concerned with and receptive to studies of space, place, and the body.

Space as Rhetorical

To engage in a study of visual-material rhetorics from a vantage point that understands space as rhetorical requires a brief review of how space and place may be understood to function in this book. As mentioned earlier, I borrow from the ideas of philosopher Michel de Certeau, who has familiarized the notion that "space is a practiced place" (117). *Space,* he notes, "is composed of intersections of mobile elements. It

is in a sense actuated by the ensemble of movements deployed within it. [. . .] Thus the street geometrically defined by urban planning is transformed into a space by its walkers" (117). These "walkers," or the subjects residing within a space, also give that space its sense of "place." Subsequently, *place* is concerned with relationships among the elements within the space and the ways in which they interact and coexist (117). In this sense, space and place function together and may be understood as constituting the power relations that make possible particular ensembles of movements and intersections of mobile elements. Again, de Certeau understands a place as "an instantaneous configuration of positions" (117). For example, the green spaces and public commemorative sculptures at sites such as the Lowell Mills Park (the subject of chapter three) may foster a specific sense of place largely because of the interactivity invited by their layout and subsequently by the activity of their "walkers," or the movements of visitors within the park. Likewise, specific representations of the park as performed through the park map, or the features deployed within the map, may be seen as constructing more nuanced versions of a place. Human geographers have also suggested that certain places engender a specific sense of place, or particular feelings or emotions associated with a place (McDowell and Sharp 210).[3] To view a space as rhetorical is to acknowledge the capacity for consequence borne out of the interaction of the texts, artifacts, bodies, and discourses deployed within it, and the sense of place engendered by those interactions.

The Map Can Take Us from Here to There

The idea that space and place are socially produced and contextually relevant has implications for cartography as well. A discussion of cartographic representation serves as an ideal point of entry into understanding how visual rhetoric can be more attentive to the relationships between space and the body. Scholars aligned with critical cartography, for example, not only take as given that the cultural work of the map relies on multimodality and intertexuality but they also understand the map as rhetorical, and as always already shaping and shaped by the cultural contexts in which it is immersed. Contemporary cartographic practice has largely begun to acknowledge that mapping, while historically understood as an objective, scientific practice,[4] is also a cultural practice that may impact "how the space is perceived

and what action takes place within it"; in other words, mapping may also "represent an exercise in power" (McDowell and Sharp 25). As geographers Jeremy Crampton and John Krygier note, mapping invites participation and dialogue: "If the map is a specific set of power-knowledge claims, then not only the state but others could make competing and equally powerful claims" (12). Moreover, they write, "critical cartography assumes that maps *make* reality as much as they represent it" (15). Critical cartographers then understand mapping as an active practice that can shape knowledge, reflect power dynamics, and serve as a means for advancing social change (15). One type of mapping made possible through a critique of critical cartography is what Crampton and Krygier refer to as "everyday mappings" (25). Everyday mappings may be "experiential or narrative, and creatively illuminate the role of space in people's lives by countering generalized and global perspectives" (25). The digital maps created by GPS devices, for example, fit the bill well; as chapter four will discuss in more detail, they are multimodal, rhetorical, everyday texts created in the moment by users who want tailored information about their immediate environments. These cartographic texts, much like the work of other spatial artifacts and representations, have both an immediate impact on contextualized, bodily experience as well as broader consequences within and beyond the rhetorical situation. Other mappings may resemble more traditional modes of visual representation such as photographs, more so than what we might typically consider to be a map. In the discussion that follows, I first describe more specifically how maps function as rhetorical artifacts through their potential for visual and textual interplay, selectivity, and modes of projection, as well as the ways in which they are always already implicated in cultural practice. Next, to better contextualize the intersections of visual rhetoric and critical cartography, I provide a brief analysis of a visual artifact that counts as both iconic photograph and map: Photo 22727, also known as the "Blue Marble." An analysis of this image not only helps show the connections between visual rhetoric and critical cartography but also begins to demonstrate how visual rhetoric can be more attentive to the relationships between materiality, space, and the body.

The Map as Rhetorical Artifact

The late geographer J.B. Harley conveys an understanding of the map as rhetorical and able to present arguments about the world when he

writes: "My position is to accept that rhetoric is part of the way all texts work and that all maps are rhetorical texts. [. . .] All maps strive to frame their message in the context of an audience. All maps state an argument about the world [. . .]. All maps employ the common devices of rhetoric such as invocations of authority" (242). While Harley understands the map as contextually-specific and as requiring a specific audience and purpose, his work is sometimes critiqued for its more inward focus on the production of the map itself, rather than on the "nuanced and multiform" processes of mapping and the social and political contexts that inform "the production of geographical images" (Pickles, *A History of Spaces* 146). In describing cartography's recent turn to "processual" modes of knowing, Leila Harris and Helen Hazen advocate for a focus on the "multiple, reiterative production and reproduction of maps as they are engaged in multiple times and spaces," rather than focusing solely on the power dynamics that inform the production of specific maps (51).

Interplay of Text and Image.

In rethinking the ways in which mapping is informed by specific contexts and relationships, Harris and Hazen also note that "key insights are possible by analyzing the ways that lines and colours *become* maps, are given meaning, and are performed in relation to specific knowledges or techniques, or through relational engagements involving mapmakers or users" (51). The idea that the graphical features of the map not only shape its meaning but are also informed by the cultural contexts and relational processes in which mapmakers and users are immersed broaches an understanding of the map as both sign system and cultural artifact.

Noted cartographers Denis Wood and John Fels likewise understand the cultural work of the map but also acknowledge its fundamental composition as a sign system that is comprised of both word and image when they describe a map's meaning as tied to the interplay of visual and textual elements inherent in its display: "As word lends icon access to the semantic field of its culture, icon invites word to realize its expressive potentials in the visual field. The result is the dual signification virtually synonymous with maps, and the complementary exchange of meaning that it engenders" (Wood and Fels, "Designs on Signs" 80). Acknowledging the semiotic components of the map, cartographer David Turnbull notes that cartographic representation

generally falls under two main categories: *iconic* and *symbolic*. Aligned with Peirceian semiotics, Turnbull understands iconic representation as bearing a direct likeness to the feature it describes; it attempts "to directly portray certain visual aspects of the piece of territory in question," whereas a symbolic representation taps into social contexts in order to make meaning, and makes use of "purely conventional signs and symbols, like letters, numbers, or graphic devices" (3). Many Western maps employ both iconic and symbolic features; however, this is not to say they explicitly distinguish between the two modes of representation. Rather, these two modes are common and implicit functions of cartographic convention and representation.[5]

Selectivity

Similarly, Ben Barton and Marthalee Barton note that part of how the map creates meaning is through its selectivity, or through the inclusion and exclusion of information (55). Lawrence Prelli also demonstrates the notion of the rhetorical selectivity of display in his analysis of the Georges Bank and the boundary line dividing "United States and Canadian jurisdiction over resources in the Gulf of Maine" (90). At stake in the debate over these boundary lines was control of the lucrative fisheries in the region (90). Here, Prelli examines how maps and graphics were used selectively by both parties to influence "how the gulf's features were seen and disposed the attitudes of those who saw them" (91). In doing so, Prelli explores the idea of "visual *taxis*," or how visual artifacts may be implemented in the strategic structuring of an argument "for maximum persuasive effect with particular, targeted audiences" (92).[6] As Barton and Barton and Prelli emphasize, selectivity is clearly a large component of visual and material representation. Turnbull too agrees that while the map cannot possibly account for or "display all there is to know about any given piece of the environment," for a visual representation of space to be deemed a map, it "must directly represent at least *some* aspects of the landscape" (3).

Scale and Projection

In addition to understanding selectivity as a component of cartography's epistemic capacity, projection and scale also shape how the map conveys particular meaning. Maps rely on scale to "bring the worldview to manageable proportions" (Dorling and Fairbairn 25). Maps that represent the whole earth on a single piece of paper or on a com-

puter screen, for example, are "small-scale" maps, because they convey relatively little detail about a vast area within a small space. By contrast, a map of a city park that portrays "the landscape, other spatial features and their variation in great detail over a limited tract of space" can be considered a "large-scale" map, because a unit of measurement such as 1 centimeter on the map may be equivalent to 5 meters on the ground (25). What counts as large-scale or small-scale more precisely, however, is "subject to enormous subjective individual variation," and so these terms are not generally understood as conveying precision (25).

The idea of projection helps account for how "the irregularity of the earth's surface can be precisely addressed on a two-dimensional plane" (Dorling and Fairbairn 25). Barton and Barton describe projection schemes like the Mercator view as potentially sustaining visual distortions that "are embodied in the cartographic space as a grid" (58). Thus, they view the grid as an ideologically-charged representational device that has a propensity toward distortion, despite the fact that its purported goal is to convey accurate models of the terrain by positioning space along *equal* lines of latitude and longitude (58). Turnbull also points out that the grid is socially constructed and that it does not correspond with a specific physical reality or territory (26). Thus, a generic convention of the map in Western culture is its imposition of the grid onto the landscape it represents. Like Barton and Barton, Turnbull and geographer Mark Monmonier both note the potential distortions that may result from the use of various map projections. The round Earth cannot be projected onto a flat, two-dimensional surface without some level of distortion; as a result, Turnbull says, various projections have been devised to account for this issue (6). While "no one projection is the best or the most accurate," different types of projections have different purposes for which they are more or less well-suited: "A particular projection is selected by the mapmaker on the basis of functional and perhaps aesthetic criteria, or because of a specification or convention" (Turnbull 6). Monmonier expresses a wariness when describing distortions resulting from the Mercator projection, which he feels is a "demonstrably bad choice" in projection for any map "not related to navigation" (*Mapping it Out* 53). As chapter five describes in greater context, the Mercator projection is most useful in sea navigation, wherein a straight line represents the actual compass bearing. This projection, however, "so grossly distorts areas and distances that the poles lie off the map at infinity" (Monmonier, *Mapping it Out* 48). No other projection, Monmonier feels, has been "so abused in the pursuit of size distortion" (*How to Lie with Maps* 94).

Maps Constitute Ways of Seeing

Maps are thus context-bound and create meaning through their selectivity, their use of particular cartographic conventions, their imposition of the grid, the expectation that at least *some* aspects of the landscape are represented, and their use of both iconic and symbolic features. How, then, may the map be defined? For Turnbull, "[m]aps are graphic representations that facilitate a spatial understanding of things, concepts, conditions, processes, or events in the human world. [. . .] [The map is a] graphic representation of the milieu, containing both pictorial (or iconic) and non-pictorial elements" (3). Maps are then partial, selective representations of the world; they are always in flux and respond to their shifting contexts and relations. Their use of lines, colors, and other graphical features are likewise responses to particular social and cultural contexts and "relational engagements" (Harris and Hazen 51). Crampton also views the act of mapping as a relational cultural practice, one that needs to look outside of itself as much as it looks within; in other words, he is interested in the contexts and conditions that allow for different types of cartographic meaning to come into being (52).[7] Crampton understands the map not only from the vantage point of its work as an inherently ideological document but also as one that goes on to invite interpretation and various contextualized readings. These contextualized readings may happen outside of the discipline that produced the artifact, and while those disciplinary practices must not go unchecked, the cultural work of the map extends far beyond the site of its production to influence the material worlds and bodies that it represents. Pickles also understands cartographic practice as functioning beyond the production of the artifact itself (an idea supported by Finnegan as well), and as tied to the larger project of understanding how space influences embodied experience. Here, Pickles quotes from Denis Wood when he notes that "the practice of map use is not to send a message, but to bring about a change in the way another person, or group of people, see the world. It is 'out of their interaction in the social worlds they inhabit that people bring forth cultural products like maps'" (qtd. in Pickles, *A History of Spaces* 66). One example of a map that has arguably brought about a change in how people see the world is photo 22727.

The Rhetorical Work of NASA Photo AS17-148-22727: The Blue Marble

NASA's photograph *AS17–148–22727*, taken during Apollo's final journey in December of 1972, is an ideal image through which to briefly demonstrate the connections between visual rhetoric and cartographic representation (Figure 1).

Figure 1: NASA Photo *AS17–148–22727*, 1972. "View of the Earth seen by the Apollo 17 crew traveling toward the moon." (Courtesy NASA and NSSDC Photo Gallery.)

The photo was taken by the astronauts aboard Apollo's final flight on December 7, 1972.[8] It was released by NASA on December 23, 1972 and was published on the front page of newspapers across the country over the Christmas weekend (Hartwell). The photo decenters Europe and privileges the Southern Hemisphere, thus working against the historically ethnocentric view of the globe that Monmonier has often critiqued (*How to Lie*). As geographer Denis Cosgrove has described in his study of photo 22727, the image depicts a "perfectly circular earth within a square frame [. . .]. The edges of the floating globe seem to dissolve into the surrounding black, an impression produced by the earth's atmosphere" (*Apollo's Eye* 260). The photo is predominantly composed of brown, white, and blue tones, which serve to "clearly define the landmasses of Africa and the Arabian peninsula, the South Atlantic and Indian Oceans, and the island continent of Antarctica" (260). The image functions as a complex artifact of visual rhetoric. Recognized by many as a widely reproduced, iconic photo, it is also a map of the whole earth and thus an object of cartographic practice. Further, the social and political contexts in which the image was situated when it was first introduced to the public in 1972 can help us understand the power and knowledge dynamics at work in its circulation and thus its rhetorical power as both iconic image and cartographic representation.

The Image as Both Iconic Photo and Cartographic Representation

Photo 22727 fits within the baseline criteria articulated by Hariman and Lucaites for what counts as an iconic image. Reproduced throughout the years in various forms of print and electronic media, the photo of the whole earth is "widely recognized and remembered," associated with the "historically significant" final flight of Apollo 17, and may be read as "activat[ing] strong emotional identification or response" in its audience (Hariman and Lucaites 27). Introduced during a period of time in which the environmental movement of the United States was just beginning to emerge, the image has become associated with the idea of environmentalism, has been appropriated by environmental groups, and has arguably shaped perceptions of how the earth is imagined within public discourse. Cosgrove helps us understand how the photo works rhetorically both as an iconic image and as a cartographic representation. On the one hand, he says, photo 22727 may be understood primarily as an iconic photo, for "the frequency with which photo 22727 is reproduced in reverse or inverted suggests that its status is iconic rather than cartographic. While it is instantly recognized as an image of the earth, few register its precise geographical contents. Most respond primarily to its cosmographic and elemental qualities" (*Apollo's Eye* 261). On the other hand, Cosgrove seems to

implicitly understand the image as both iconic photo and object of cartographic practice when he notes that "the image's *geographical*, compositional, and tonal qualities give it unusually strong imaginative appeal, aesthetic balance, and formal harmony" (260, emphasis added). Moreover, if we consider Cosgrove's definition of the practice of mapping, we can see that an iconic, geographic image such as photo 22727 indeed accomplishes cultural work that influences our understanding of the world and shapes the geographic imagination: "to map is in one way or another to take the measure of a world [. . .] in such a way that it may be communicated between people, places or times. The measure of mapping is not restricted to the mathematical; it may equally be spiritual, political or moral" (Cosgrove, "Mapping Meaning" 2). Thus, in moving away from traditional notions of cartography as positing neutral, correct, relational models of the terrain, we can begin to understand how images of the earth like photo 22727 function as mappings that cultivate critical thought or reflection among its viewers. Likewise, Cosgrove understands mapping as a knowledge-making practice that encourages us to step outside of our traditionally held assumptions in order arrive at new imaginings of our world: "Acts of mapping are creative, sometimes anxious, moments of coming to knowledge of the world, and the map is both the spatial embodiment of knowledge and a stimulus to further cognitive engagements" (Cosgrove, "Mapping Meaning" 1). Indeed, interpretations of photo 22727 enable cognitive engagement with the idea of how we understand our world.

Ways of Seeing Photo 22727

Photo 22727 dramatically displays Earth as a singular entity, surreal and lacking the context of broader surroundings; it presents the viewer with the "whole, unshadowed globe floating in the blackness of space and given NASA number AS17–22727" (Cosgrove 257). From the perspective of the photo as a cartographic, rhetorical artifact, we might consider the power of its small scale, which seemingly marks a territory encompassing "the whole of creation": "In scale, mapping may trace a line or delimit and limn a territory of any length or size, from the whole of creation to its tiniest fragments; notions of shape and area are themselves in some respects a product of mapping processes" (Cosgrove, "Mapping Meaning" 2). The apparent vastness of the map's territory, its small scale, and its perfect circularity contribute to its feeling of disembodiment, and may initially spark interpretations along the register of what Cosgrove terms the "one-world discourse" (*Apollo's Eye* 263). That is, Cosgrove notes that interpretations of photo 22727 have generally been framed by two "related discourses": what he terms the "one-world" discourse on the one hand and the "whole-earth" discourse on the other (262–263). The one-world discourse, he says, is concerned with ideas of communication and interconnectedness, but focuses more on the "global surface [. . .]. It is a universalist, progressive, and mobile discourse [. . .]. Consistently associated with technological advance, it yields an implicitly imperial spatiality, connecting the ends of the earth to privileged hubs and centers of control" (263). In contrast to this more imperialistic, disembodied view, the viewer may also come to understand the image as representing "the globe's organic unity" and "rootedness," in accord with what he terms the "whole-earth" discourse, which "emphasizes the fragility and vulnerability of a corporeal earth and responsibility for its care. It can generate apocalyptic anxiety about the end of life on this planet or warm sentiments of association, community, and attachment" (262–263). To fully oppose the one-earth discourse to the whole-earth discourse, however, is to fail to recognize the middle-ground between the two, and the ways in which each fosters different representations of connectivity. Moreover, appropriations of images of the earth contain variations that may be read in terms of both the one-world discourse (as more totalizing and universalizing, signifying networked communication and globalization) and the whole-earth discourse (as more inclusive and rooted, signifying local knowledge and individual accountability).[9]

While photo 22727 has come to be associated with both discourses, its initial reception was more readily associated with the social contexts of the emerging environmental movement of the United States in the 1970s. Its continued appropriation by environmental groups affords it a strong association with environmentalism even today. As Cosgrove describes, the photo's "apparent absence of cultural signifiers has made it a favored icon for environmental and human-rights campaigners and those challenging Western humanism's long-held assumption of superiority in a hierarchy of life" (*Apollo's Eye* 261):

> [T]he image [. . .] radically destabilizes the cultural part of the conventional meaning of Earth. [. . .] [I]t is no longer regarded as primarily the 'home of Man.' Earth is viewed as having

> an intrinsic life, even its own intelligence as a homeostatic system, and all of its different species accorded dignity equal to that of humans. Humanity is decentered, and by regarding humans as merely one among a multitude of species the cultural variety which is a distinctive feature of our species is suppressed. (Cosgrove, "New World Orders" 128–129)

The image may then invoke in the viewer a sense of responsibility and kinship as opposed to distance or disembodiment. Again, the growing discourses of environmental conservation in the United States in the early 1970s contributed to such interpretations of the photo.

Contextualizations and Appropriations of Photo 22727

The publication of Rachel Carson's *Silent Spring* in 1962 is widely understood as one of the primary catalysts for contemporary environmentalism in the United States. Subsequently, in the decades following publication of *Silent Spring,* the public witnessed the steadily growing momentum of the environmental movement. While photo 22727 has the sort of staying power that has enabled its iconic status among environmental groups and with the public generally, it is important to recognize that it is just one of many rhetorical artifacts and objects of discourse associated with the emergence of environmentalism during that period. A general understanding of the social and political contexts surrounding the emergence of the photo helps to situate its rhetorical power and the associations it both reflected and perpetuated.

Just two years prior to circulation of photo 22727 on April 22, 1970, for example, the United States held its first Earth Day celebration, an event spearheaded by Democratic Senator Gaylord Nelson of Wisconsin. In 1971, just one year later, polls showed that "25 percent of the U.S. public declared protecting the environment to be an important goal, a 2,500 percent increase over 1969" ("Earth Day History"). Thus, according to Senator Nelson, "Earth Day launched the Environmental decade with a bang" ("Earth Day '70"). Soon after, photo 22727 became appropriated as the logo for subsequent Earth Day celebrations in the United States. Other appropriations of the photo include its use by the environmental group Friends of the Earth "to convey a message of global dwelling, care, and fragility," as well as its continual use in "antinuclear, environmental, and animal-rights campaigns" (Cosgrove, *Apollo's Eye* 263). In many ways, the photo has become a metonym for environmentalism. As Hariman and Lucaites describe, to view the image of the earth as a metonym for environmentalism would involve a "reduction of a more general construct," such as environmentalism, "to a specific embodiment," such as the photo of the earth, or the "Blue Marble" (89). As they describe, "[s]uch compositions have to be simultaneously personal and impersonal. [. . .] They depend on a thorough-going realism, but they motivate action in response to the general condition being represented rather than to the specific event of the picture" (89). Photo 22727 fits the bill well in this regard; the image of the earth portrays a convincing realism through its sharpness, its color, and the familiarity of the landforms; its small scale and circular shape also make it easily recognizable as an image of the earth. But it is not necessarily this realism that stirs the emotions; in fact, the photo's realism helps convey a distancing effect, or a sort of disembodiment that speaks more so to the one-world discourse. Rather, it is the condition being represented more generally, the implicit beauty and fragility of the planet, conveyed also by the informal naming "Blue Marble," that sparks feelings of personal responsibility and allows viewers to integrate their individual perspectives with their interpretation of the image. Viewers then employ their own experiences and understandings in their interpretation of the image, though these understandings are inextricably linked to the social and political contexts in which the image was presented. That is, photo 22727 first circulated in 1972, at a point when unprecedented acts of environmental legislation contributed to the growing discourses of environmentalism. In 1970, for example, the National Environmental Policy Act and the Clean Air Act were passed, Congress authorized creation of the Environmental Protection Agency, and the National Resources Defense Council was created. In 1971, the Animal Welfare Act was passed. In 1972, Congress passed the Federal Water Pollution Control Act, the Coastal Zone Management Act, the Ocean Dumping Act, and the Marine Mammal Protection Act. In 1973, Congress passed the Endangered Species Act (Kovarik). Outfitted with knowledge of new environmental legislation and organizations, the public's understanding of these discursive contexts likely helped shape their interpretation of the photo at that point in time. Conversely, the photo helped "communicate social knowledge [. . .] by tap[ping] into the tacit knowledge held by the audience as they are members of society" (Hariman and Lucaites 10).

In addition to understanding the image largely in terms of the "whole-earth" discourse around which it has been interpreted by its viewing publics, Cosgrove also acknowledges the vantage point of the Apollo 17 crew, who first witnessed the view that eventually became photo 22727: "Those few humans who actually witnessed the revolving terracqueous globe and who produced photo 22727 describe their experience in terms of awe, mystery and humility. The axis of world order, if it existed for them, stretched infinitely above and below the global surface" ("New World Orders" 130). This description of the astronauts' experiences in first viewing the earth from space not only reinforces understandings of mapping as a relational process but also helps to bring before our eyes a version of the image that is surreal and almost spiritual in nature. Cosgrove wants us to imagine the image of earth through the astronauts' eyes, invoking a sort of ekphrasis that transports us to that moment of witnessing prior to the photo's having been captured with the camera. Understanding the photo not only through the public lens of the whole-earth discourse but also from the vantage point of its producers affords yet an additional way of seeing that takes into account the astronauts' embodied experiences at a specific cultural moment, one that precedes even the production of the artifact itself.

As Hayles has described, experiences of embodiment are always enmeshed within a culture; they are contextual and linked to experiences of the world around us. To understand artifacts of cartographic practice and visual rhetoric as embodied knowledge allows us to consider the ways in which visual artifacts help provide more intimate understandings of or connections to a place, and in doing so, perhaps a closer relationship and feeling of responsibility toward it. An analysis of photo 22727 begins to show that to better understand the consequences of the rhetorical work of visual and material artifacts in the world, we must understand visual rhetorics as also attentive to studies of space, place, and the body.

Visual Culture, Space, and the Body: A Move Toward Materiality

Understanding photo 22727 as an artifact of visual rhetoric clearly helps demonstrates Cosgrove's view that "geography's words and images have always had a certain power to construct as much as to reflect

the orders which it represents" ("New World Orders" 130). That is, as Pickles and others have pointed out, artifacts like the map participate in situated practices of visuality and are part of a broader visual culture. Understanding the significance of the artifact beyond its immediate function in the rhetorical situation is integral to framing visual rhetoric as a project of inquiry engaged in the practices of visuality. In this way, Olson et al. define visuality as referring not only to "images or visual media but [to] the totality of practices, performances, and configurations of the visual" (xvi-xvii). Compatible with the discussion earlier in the introduction, Carolyn Handa describes visual culture "as a subfield of cultural studies [that] focuses on vision as a starting point for tracing the ways cultural meanings form" (377). Visual culture is again implicated in the study of visual rhetoric, which she defines more broadly "as a discipline that focuses on the visual elements that persuade, taking culture as just one element among many: culture, along with images, sounds, and space, work together rhetorically to convince an audience" (377). A holistic approach to the study of visual rhetorics must then attend not only to these visual elements of persuasion but also to the situated and often multimodal practices in which they are immersed.

Also acknowledging the connections between visual culture and spatiality, Irit Rogoff writes that to open up "the field of vision as an arena in which cultural meanings get constituted, also simultaneously anchors it to an entire range of analyses and interpretations of the audio, the spatial, and of the psychic dynamics of spectatorship" (381). This understanding of spatiality as implicated in visual culture is likewise of interest to Handa, who writes: "If space, as Rogoff argues, is part of the intertextual mix that needs to be studied, we can learn much from those who critique, imagine, dictate, and analyze how space is inhabited" (378). Prelli too notes that built structures and places are "disposed rhetorically in their physical design so that their arrangement works to dispose the attitudes, feelings, and conduct of those who visit, dwell within, or otherwise encounter them" (13). Spatially-based, rhetorical artifacts such as maps, places, and built structures then tap into and rely on visual culture, which Kathryn Henderson further defines as "a way of seeing that reflects and contributes to the specific manner in which one renders the world," or "a particular way of seeing the world that is linked to *explicit material experience*" (197–198, emphasis added).

In understanding ways of seeing as tied to explicit material or corporeal experience in the world, Henderson broaches the idea of how visual culture affects contextualized, bodily experience. Gregory Clark describes a similar idea when he explores Kenneth Burke's theory of identification through the lens of American tourism. Here, Clark examines the ways in which national identity is shaped by public experiences of symbolic landscapes. Clark demonstrates how "the rhetorical power of a national culture is wielded not only by public discourse, but also by *public experiences*" (4). He describes identification with a place as necessarily tied to personal experience, when he writes eloquently of Burke's eventual meditation "on the way one's sense of self and possibility are transformed by the wordless symbols that constitute the experience of being present in a place" (29). Finally, Greg Dickinson and Casey Malone Maugh more explicitly address the connections between visual and material rhetorics in their analysis of visual rhetoric, place, and the Wild Oates Market, when they write that "buildings, and the institutions they house do not simply respond to the contemporary through visuality, instead they draw on the fully embodied subject" (260). Dickinson and Maugh go on to write that "how a definition or theory of visual rhetoric should address materiality is a complex problem, a problem for which we have, at best, partially constructed solutions" (260).

In this acknowledgement of the need for visual rhetoric to address materiality and the embodied subject, Dickinson and Maugh take a crucial step in moving toward an embodied, visual-material rhetoric that is attendant to the impact of space and place on the body. For, as they note, to understand visual, multimodal representations and physical structures as concerned with more than their immediately apparent features—to understand them also as embodied—allows us "to locate our bodies in relation to other bodies in the world" (Dickinson and Maugh 272). This act of locating allows us to engage in a richer mode of rhetorical analysis that considers the broader consequences of the rhetorical situation—that allows us to understand visual-material rhetoric as a project of inquiry. As Dickinson and Maugh also note, to incorporate materiality into the study of visual rhetoric, or conversely, to incorporate visuality into the study of material rhetoric, can pose a challenge, for it requires once again a nuanced interpretive lens that can accommodate multiple ways of knowing and multiple sites of inquiry. It is thus one goal of this book to take up such a challenge.

To this end, I propose a methodological framework for understanding visual-material rhetorics that applies and extends Carole Blair's theory of material rhetoric and merges that theory with Michel Foucault's concept of heterotopias. Foucault's concept of heterotopias focuses on understanding spaces as heterogeneous, selective, contested, and culturally situated. Blair's theory of material rhetoric then helps us better understand the consequences of different spaces on the body. While Blair speaks primarily of physical, material spaces, I describe how we may extend her theory to also account for visual and multimodal spaces and artifacts. In the next chapter, I take a closer look at discussions related to material rhetoric, situating among them Blair's theory of material rhetoric and Foucault's concept of heterotopias. I understand the ideas of Blair and Foucault as stepping stones that allow for a point of entry into the more important question of how a visual-material rhetorical approach can provide a window into the larger consequences that these artifacts have in the world. I maintain that an approach that merges and extends their theories can provide the foundation for a visual-material rhetoric that not only accounts for the multimodal, spatially-situated artifact but is also mindful of its impact on the embodied subject. Again, it is the acknowledgement and understanding of embodiment that I feel begins to situate visual-material rhetorics as a continued project of inquiry as opposed to a more insular and immediately available analytical tool.