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'Go Ahead Touch this Dinosaur Fossil': The Rhetoric of Interactivity in Museum Culture

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GO AHEAD TOUCH THIS DINOSAUR FOSSIL: THE RHETORIC OF
INTERACTIVITY IN MUSEUM CULTURE

A Thesis
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
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ABSTRACT

In this essay, I will problematize the narrative housed within the Creation Museum in order to question the function of interactive exhibits and sensation in the museum space. The Creation Museum, like many science centers, utilizes displays with sensory triggers under the guise of visitor empowerment, yet their exhibits are sensational rather than interactive. Playing on conventions of science centers and the supposed visitor agency permitted by interactive exhibits, the Creation Museum asserts a narrative informed by the Bible and fueled by sensory stimulation. My analysis of the Creation Museum reveals the degree to which sensation for AiG is not a conduit for visitor agency, but rather a rhetorical strategy for imposing creationist ideologies upon visitors. Although other science centers likely intend the type of empowerment disallowed by AiG, these institutions likewise preclude visitor experimentation and agency by providing answers to the scientific questions raised and proposing ideological narratives based upon institutional notions of scientific theory and progress.

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CHAPTER ONE

THE ARK ENCOUNTER

Phase 1: build Noah's Ark. Phases 2-9: create petting zoo, stage for live animal programs and children's area, Tower of Babel, rides through the plagues of Egypt, first century village, drama theaters, pre-flood village and amphitheater. According to Ken Ham, President and founder of young earth creationist group and nonprofit ministry organization Answers in Genesis (AiG), these phases comprise the construction of the Ark Encounter, planned to open in Kentucky as soon as funds are raised. An extension of AiG's Creation Museum opened in 2007, the Ark Encounter serves as a sort of biblical amusement park, simultaneously entertaining and scaring visitors into compliance with biblical mandates as interpreted by AiG. Although not positioned as a museum, AiG clearly states the correlation between the Ark Encounter and the Creation Museum, including an Ark exhibit outside of the Creation Museum to keep anxious soon-to-be Ark visitors at bay, thereby validating the Encounter through the authority of their more explicit museological venture. For Ham, the Ark Encounter, much like the Creation Museum, helps people "have an encounter with God's word and so to help people have an encounter with the message of salvation" and, for only \$2000, an individual visitor can secure lifetime access to both God's word and the message of salvation by purchasing the Charter Lifetime Boarding Pass, good for limitless passage on Noah's Ark and lifetime membership to the Creation Museum (AiG *Ark Encounter*). Only available before the Ark Encounter opens its hatches, Charter Passes, as well as peg, plank and beam sponsorships, will contribute to the \$24.5 million fund raising efforts needed to create

Noah's Ark and its accompanying amusements. Although the Ark Encounter is geographically distinct from the Creation Museum, AiG's intention for the attraction is much the same: provide a mixture of pseudo-interactive entertainment and didactic creationist education in order to viscerally convince visitors about the truth of the Bible and the need for salvation.

In this essay, I will problematize the narrative housed within the Creation Museum in order to question the function of interactive exhibits and sensation in the museum space. The Creation Museum, like many science centers, utilizes displays with sensory triggers under the guise of visitor empowerment, yet their exhibits are sensational rather than interactive. Playing on conventions of science centers and the supposed visitor agency permitted by interactive exhibits, the Creation Museum asserts a narrative informed by the Bible and fueled by sensory stimulation. My analysis of the Creation Museum reveals the degree to which sensation for AiG is not a conduit for visitor agency, but rather a rhetorical strategy for imposing creationist ideologies upon visitors. Although other science centers likely intend the type of empowerment disallowed by AiG, these institutions likewise preclude visitor experimentation and agency by providing answers to the scientific questions raised and proposing ideological narratives based upon institutional notions of scientific theory and progress.

CHAPTER TWO

CULTURAL AUTHORITY AND EPISTEMOLOGICAL FORMATIONS IN THE MUSEUM

Culturally situated as centers of learning filled with scientifically proven facts, science and natural history museums have long been perceived as spaces of incontrovertible knowledge. Beginning with early American science and natural history museums which exhibited their own research and were often influenced by governmental patronage, museum epistemologies are largely equated with a sense of educational import and validity. Traditional museums utilize specific aesthetics to assert a sense of edification over entertainment as exhibits are often filled with glass cases which simultaneously highlight and separate museum patrons from a given artifact and informative placards with the name and origin of the specimen on display. Visitors are typically bombarded with this simplistic form of exhibition that promotes a perception of factual, scholarly information about artifacts, yet the way in which most museums organize their specimens creates an institutionally biased narrative by which patrons can formulate some conception of scientific theory and progress. This traditional model of producing and presenting scientific and historical knowledge has largely stayed intact from the time of early American science and natural history museums; however, since the mid-twentieth century, many museums have attempted some degree of interactivity and sensory stimulation of visitors. Emphasis on interactive exhibits ultimately marks a change in museum culture as glass cases are removed and patrons are encouraged to

partake in multiple sensory experiences produced by the artifacts and displays housed in the museum.

Attempts at interactivity between visitor and exhibit necessitate logistical rethinking of some displays, yet interactive museums have largely retained enough of the aesthetic designs of early museums to allow them to utilize the label of museum effectively as well as the accompanying cultural authority. By allowing visitors to touch artifacts, creators of interactive museums are not only outwardly inviting patrons to participate in their epistemology and providing some degree of visitor choice, but are also encouraging visitors to produce a reaction to the museum beyond that of logical reflection and interpretation. Interactivity allows visitors to touch, smell, taste, hear, feel and generally use senses outside of mere vision to interpret displays and interactive exhibits often outwardly encourage museum goers to push buttons, touch artifacts and participate in workshops in order to allow them the sense that they are participants in museum epistemologies. Different museums utilize varying forms and degrees of interactivity, yet this practice largely foregrounds sensory experience as a medium through which visitors can garner some understanding of museum exhibits, artifacts and theories.

While interactivity ostensibly allows visitors the power of choice in regards to the artifacts and theories on display, interactive elements also cause a breakdown in the seemingly cohesive narratives presented in traditional museum exhibits. Science centers promote sensory experience for their visitors and, in doing so, have ultimately opened a gap in their narratives as individual visitor interpretation permits various narratives to

form, possibly differing from those intended by curators. Visitors are given the chance to decide to what degree they want to interact with exhibits, whether they will agree with the scientific conclusions drawn by certain experimental displays and, more inadvertently, the way in which their body reacts and interprets the sensations put forth by interactive exhibits. The very idea that visitor choices, such as various museum pathways and the option of pushing or not pushing a button in an exhibit, can exist within interactive museums suggests that there are curatorial narratives set forth by museums, constructed to outwardly indicate the possibility for visitors to create a personalized museum experience. These sorts of choices within the museum suggest to visitors that alternative routes and the possibility for decision are available and, more implicitly, reveal the degree to which some institutional or curatorial force ultimately constructed these possibilities and narratives in order to allow for the very impression of options. As institutional compositions rather than absolute truths, museum narratives can be deconstructed and rearranged, by curators, institutions and visitors alike, to allow for the creation of other, possibly differing narratives. By allowing visitors the chance to engage with artifacts through multiple sensory faculties and potentially reach conflicting and skeptical conclusions about scientific and museological practice and theory, science centers not only expose the constructed nature of their narratives, but also reveal the degree to which all museum displays are shaded by rhetorical choices. Gaps in traditional museum narratives permitted by interactivity give way to skepticism and, ultimately, provide a means by which other institutions previously unacknowledged by scientific

discourses can effectively appropriate museum conventions in order to promote competing scientific narratives and epistemologies.

Departing from the scientific theories portrayed in most natural history and science museums, AiG's Creation Museum espouses a creationist stance in opposition to the evolutionary theories promoted by most museums. A young earth creationist group, AiG believes the Bible is factual and literal. The organization indicates the earth is 6,000 years old, rather than the millions of years purported by most scientists, humans and dinosaurs cohabited the earth and one day in *Genesis* is a 24 hour period rather than a mere representation of a geological age (Byassee). AiG claims the Bible's "authority is not limited to spiritual, religious, or redemptive themes but includes its assertions in such fields as history and science," ultimately rendering secular education invalid (AiG *Creation Museum*). In order to assert the factual nature of the Bible, AiG claims that God created the Earth and humans and dismisses the Big Bang theory as well as widely-accepted theories that humans are evolved primates. AiG allows for natural selection in their creationist argument but ultimately claims that natural selection can merely be seen in the expansion or contraction of breeds of a given animal and does not actually involve "molecules-to-man evolution," or the spontaneous creation of man. For AiG, human and earthly creation are crucial to their argument as creationism is entirely contingent upon posing God, rather than atoms, as the sole progenitor of earthly life. Ultimately basing their non-evolutionary claims on a literal reading of *Genesis*, the Creation Museum presents a brand of Christian Science supplemented with sensory exhibits and the testimony provided in the Bible.

The Creation Museum functions as a hybrid of science center, amusement park and natural history museum, appropriating both traditional and contemporary museum conventions in order to subvert widely accepted scientific theories. Utilizing the interactivity and scientific methodologies of science centers in order to explain some degree of human natural history, AiG situates the museum as grounded in both scientific and historical rhetoric. The Creation Museum makes use of the cultural validity of science centers by employing a variety of interactive exhibits, pseudo-scientific artifacts, workshops and other attractions with sensory triggers to persuade visitors about the historical reliability of scripture and to explain the supposed misconceptions surrounding conventional notions of human existence on earth. By situating their theories in a museum, claiming scientific legitimacy, and using certain museum aesthetics to frame their ideologies, the Creation Museum asserts a certain degree of legitimacy and demands a position in scientific, museum and phenomenological discourses. As AiG posits the Creation Museum as both a science and natural history museum, they not only promote visitor interaction and sensory experiences, but also encourage patrons to make semi-educated decisions based upon the didactic information presented and sensory cues internalized, thereby feigning some degree of visitor choice and empowerment. Posing the Bible as the ultimate authority in their argument for creationism, AiG suggests both the importance of textual meaning as well as faith, implying the necessity of logical interpretation as well as visceral belief.

By ostensibly providing visitor choice and experimentation, museums that make use of interactive exhibits attempt to distance themselves from the supposedly didactic

and ideologically biased museums of the past. Concurrently appropriating the cultural authority of museums and rejecting their esoteric, instructive nature, interactive museums suggest that while they are as valid as conventional museums, they ultimately differ in their willingness to allow visitors to reach conclusions based on experimental capabilities and sensory faculties. This outward denunciation of conventional museum epistemologies suggests that interactive museums are somehow free of ideological biases, thereby exonerating them from accusations of visitor indoctrination or the presentation of anything other than impartial scientific theory and practice. In turn, visitors perceive their sensory body within the interactive museum as an agent capable of participating in scientific processes and museum epistemology. While visitor experiences likely vary, patrons are necessarily subject to the carefully crafted sensory-triggers within interactive museums as these displays and exhibits are largely interwoven with museum narratives.

AiG posits the Creation Museum as educational and factual, yet their emphasis on entertainment and undeniable use of sensory triggers suggests that the museum augments visitor sensation in order to more effectively introduce their creationist ideologies. In this way, interactive exhibits in the Creation Museum, and in science centers at large, do not function as an attempt at visitor empowerment that might allow for a digression from museum intention but rather they are complicit with museum narratives. By appropriating the aesthetics and language of interactive museums, which have appropriated the aesthetics and cultural authority of conventional museums, AiG ultimately posits the Creation Museum as a legitimate, educational and, most significantly, empowering institution. Allowing visitors to touch a stray fossil and push a few buttons, the Creation

Museum presents the illusion of interactivity, a process that grants patrons a type of controlled agency. Unlike many interactive museums which present a higher degree of visitor interaction, AiG merely provides sensation-producing exhibits that appear interactive, thereby superficially utilizing the authority of interactivity while attempting to impact the way in which visitors eventually rationalize the sensations aroused by these exhibits. AiG's brand of interactivity, then, does not empower visitors to reach any possible conclusion about earthly creation, but rather uses seemingly interactive experiences as a rhetorical instrument to distract visitors from their more didactic strategies and shortcomings of argument.

Exhibits which call for multi-sensory interpretation not only function under the guise of empowerment, but can actually inform and enhance the ways in which museum patrons receive more explicit messaging in a museum. In *Chaos, Territory, Art: Deleuze and the Framing of the Earth*, Elizabeth Grosz proposes a means of considering various art forms that departs from the realm of signification and elucidates the effectiveness of AiG's curatorial tactics. While she does not deny the power of either explicit meaning or some sense of symbolism, Grosz suggests that meaning is merely a byproduct of art as she illustrates the ways in which art can produce sensation in a manner often far more dynamic than signification. Sensation, then, encompasses the instinctive, visceral reactions bodies produce in response to a given stimulus, such as a museum exhibit. An experience or feeling largely undergone before conscious thought or deliberation, sensation is capable of influencing the body in a dynamic, instinctive manner. Although Grosz regularly employs the term art, she makes clear that her theories are meant to apply

to art broadly, as any sensation-producing item or activity that has some sensory impact on the body. For Grosz, art can be considered as “all forms of creativity or production that generate intensity, sensation or affect” and, in this way, the Creation Museum and its exhibits which provoke and promote sensation can be read through Grosz’s theories of art and sensation (3). The dioramas, special effects theater, animatronic characters and other such exhibitionary strategies which utilize sensory triggers within the museum can be considered art, as their seeming functionality lies in the realm of sensation-production. Exceeding some degree of logical processes of comprehension, these exhibits affect viewers viscerally, inevitably causing a bodily understanding of exhibit or museum intentions which surpasses solely rational functions.

While logical and sensory faculties are largely interwoven and cannot be considered a binary opposition as such, Grosz places a clear emphasis on considering art as it functions beyond a consideration of signification and symbolic decoding. I will consider the Creation Museum and its effects, then, not as solely or distinctly rational or visceral, but rather as initially, and therefore primarily, instinctive and sensory. As sensation-producing exhibits are widespread and strategically employed by AiG, I contend that their intention is to reach visitors at their most primal, vulnerable state, a place which trumps, and even subverts, a desire to logically process signification. Ultimately, sensation and the act of inducing sensation are political activities as they, like text, symbols and meaning, are able to be manipulated and used to further various ideological notions. While in the Creation Museum sensation is used frequently and strategically, it is significant that sensation is interwoven with more traditional museum

conventions which rely upon signification and explicit messages to advocate creationism. The Creation Museum's constant reference to the Bible coupled with the sensational exhibits within the museum implies that AiG aims to foreground visceral experience. By using sensation-producing exhibits, rather than a mere reliance on science and the believability of their creationist theories, AiG suggests the degree to which their version of science requires a supplement reliant upon the visceral experience and sensory vulnerability of Creation Museum visitors.

CHAPTER THREE

CHANGING MUSEUM CULTURE AND THE POLITICS OF INTERACTIVITY

Although interactivity and some degree of sensation-production are commonplace in contemporary science museums, early iterations of science and natural history museums provided a far more structured and didactic framework for their exhibitions. Curiosity cabinets often incorporated a variety of seemingly unrelated specimen in some exhibitionary format, yet early American science and natural history museums took specific care to organize and contextualize their artifacts in such a way that they were clearly separated from mere curiosities, commercial pursuits and “other disreputable displays of objects” (Conn 40). According to Steven Conn, these early museums distinguished their displays from non-museum exhibitions by “presenting museum objects in a way that enabled them to be examined but not in a way that caused them to titillate, excite or otherwise amuse” (40). This type of presentation provoked an emphasis on informative descriptions and a simplistic style of display that intended to highlight an object, rather than the way it is framed. Taking the shape of glass cases, strategic artifact mounting, informative placards and, overall, clear placement of and emphasis on each specific artifact, these types of displays were meant to educate in a manner that was direct and clear to visitors at all levels of education. For nineteenth-century curators, “understanding natural history depended on the application of one’s senses; it was not intended, however, to be in any way sensual” (Conn 41). Although these early displays were dependent upon visitors using their sensory faculties to see objects and read information, curators systematically avoided eliciting sensations from visitors in excess

of logical processing. Distinguishing the sensory from the sensual, curators promoted the use of the senses to arrive at a seemingly rational conclusion, one which diminishes the type of sensational effects which Grosz attributes to art. This stylistic simplicity and pedagogical emphasis ultimately became a standard by which other early museums who sought validity to structure their artifacts and exhibitions.

As a response to the seemingly univocal and strictly didactic nature of many science and natural history museums, curators and museum founders began to experiment with approaches which allowed for a degree of visitor choice and interactivity in the mid-twentieth century. Starting with such museums as the Exploratorium in San Francisco and more contemporary and commonplace science centers, museum organizers began to rethink museum epistemologies by assuming “new technologies of display, new interpretive experiments and new concerns with... visitors and communities” (MacDonald, “Exhibitions” 14). Rather than simply telling visitors what they should know, science centers were largely designed to allow visitors to interact with artifacts in order to arrive at their own conclusions regarding scientific theory and the displayed objects. As Sharon Macdonald notes, science centers “are more concerned with universal laws and principles which transcend particular times and places” and this emphasis is intended to break down the oft perceived esoteric leanings of scientific research and knowledge (MacDonald, “Exhibitions” 14).

Andrew Barry notes the political implications of such a shift as he suggests, “in museums of science, interactivity can have a particular significance, drawing together concerns with...public ‘participation’, ‘empowerment’ and ‘accountability’” (98).

Science centers function similarly to early science and natural history museums in their push for a democratization of knowledge, yet the possibility for visitor choice in these centers suggests an outward sense of empowerment absent from early museums. Barry contests, “the technology of interactivity has a function in the context of broader changes in political thinking on both the Left and the Right. Contemporary political thinking is increasingly skeptical of the political and economic competence of the State and, in its stead, relies on the self-governing capacities of the individual, family, the enterprise or the community” (101). Bruce Ferguson has also noted this skepticism of the state and the ideological apparatuses thereof and, ultimately, the ways in which museums as such systems have increasingly become sites of criticism. In turn, skepticism about government and museum intentions has catalyzed the change to a museum culture which outwardly promotes visitor agency. Instead of forcing certain institutionalized ideologies about science and the natural world on museum visitors, science centers and interactive museums endorse their epistemologies as dependent upon visitor sensory experience.

As traditional museums often presented one clear model of human and scientific progress, changes in museum culture have catalyzed a transformation in the ways in which scientific theory and practice is conceptualized in some museums. Although less overtly interactive in the ways of science centers, Latour has noted a shifting paradigm in museums of natural history that focuses on a more heterogeneous approach to the display of scientific methodologies. Writing specifically about the American Natural History Museum, Latour considers the exhibit of horse fossil history which shows both a traditional, linear conception of horse evolution and one which takes into account the

complexities inherently intertwined with the evolutionary process. Presenting the conventional conception of evolution in tandem with fossil outliers that do not neatly fit into this “straight line” approach, the Natural History Museum suggests the degree to which the scientific process shown to museum visitors is often tidier than the research and complexities behind it (Latour 4). Latour observes of the exhibit, “the whole floor is punctuated by videos of scientists at work, little biographies of famous fossil-hunters at war with one another, with even different reconstructions of skeletons to prove to the public that ‘we don’t know for sure’ – a frequent label in the show” which, for Latour, ultimately suggests “the more recent conception of science has led us from a rigid exhibition of the final fact of paleontology to a more complex, interesting and heterogeneous one” (4). This approach, much like the interactive displays of science centers, allows museum visitors to partake, or at least view, some portion of the scientific process and the ways in which scientists develop their theories and conclusions. Framing the horse fossil exhibit as one which reveals the intricacies of evolution, the Natural History Museum acknowledges the need for a multivocal, comprehensive display while opening their epistemologies to criticism. Although Latour finds this skepticism of scientific processes unwarranted given the checks and balances of the scientific method, he inevitably notes this sort of heterogeneity or equivocalness necessarily gives way to some gaps in cohesive scientific and museological theories. The Natural History Museum seems to intend for some transparency about the complexities of the scientific process at large, yet, in doing so, they permit, if not invite, certain deconstructive tendencies from skeptics.

While visitor agency and choice seem desirable for the promotion of multivocal historical and scientific epistemologies in museums, interactivity and heterogeneity can beget certain breaks in a museum narrative which can be problematic for curators and museum institutions. These gaps help visitors rethink the degree to which politics have been and, inevitably, continue to be entangled with museum displays as they are able to recognize that traditional museum exhibits have been intentionally shaped to command authority and promote specific theories and ideologies. Additionally, these narrative breaks potentially give way to misunderstandings of exhibits and provide a means by which visitors and other institutions can recognize the constructed nature of museum narratives. According to Barry, “Critics [of science centers] pointed to the lack of historical or industrial contextualization of many interactive exhibits and the frequent absence of any explanation of what scientific principles were supposed to be revealed through the process of interaction. Some exhibits, it was said, can be interpreted in ways which lead museum visitors to *false* conclusions” (105). As a lack of supposedly proper contextualization for interactive exhibits leads to some misinformation, or at least information counter to museum narratives, it is clear that there is a definite answer at which visitors are supposed to arrive and, thus, a definite narrative set forth by a given museum is confirmed.

The Center of Science and Industry (COSI) in Columbus, Ohio, employs a variety of interactive exhibits which work to illustrate various scientific principles and theories, from a weighted unicycle on a high wire that teaches mass-related principles to a faux-female breast that welcomes visitors to feel for lumps. Although the placards on most

COSI exhibits seem to function in the realm of empowerment by asking open ended questions such as, “Grab the rim of the bowl while it is vibrating. What happens?” or “Step back and stare at the middle of the spinning disk. After about 30 seconds, look down the hall, Does it look different in any way?” these exhibits nonetheless provide specific instructions for interaction and provide some semblance of an answer to the questions proffered on the very same placard, thus precluding true experimentation (*COSI Ocean, Trizonal Space Warper*). The Trizonal Space Warper, or spinning disk, may ask visitors to stare at the disk then look down the hall, but the name of the exhibit, the way the question is worded and the explanation provided for the inevitable difference in perception suggest that the museum seeks, and expects, one answer from visitors. Based on the question, visitors can discern that the hallway should appear different after staring at the Space Warper and, should they choose to either not interact with the Warper or read the answer to this particular conundrum pre-interaction, the hallway will necessarily appear warped. While visitors likely may have enacted the prescribed interaction as it was curatorially intended, both the name of the exhibit and the rhetoric of the placard prevent any genuine and unbiased experimentation.

Likewise, *Progress*, one of COSI’s several larger exhibits, names the very theme of the museum narrative before allowing visitors to reach conclusions about the scientific information presented. Upon entrance into the staged town of Progress, a sign informs visitors, “Each generation lives with the knowledge that the future is undecided and new technologies are certain to change our way of life. How we react to and take control of these changes is what Progress is all about” (*COSI Progress*). Visitors are then

confronted with the façade of a Midwestern town from 1898 that houses such businesses as the Amalgamated Telegram Office and Raker's Hardware. Running into the intersection of Hope and Fear Streets, visitors are then led into the same town in 1962 where they see the old businesses have been converted into WBRD Radio and Bailiwick's Department Store. Signs along the path continuously inform visitors that technological change is necessarily accompanied by "hope and fear" and incorporate such directives as "...consider how science and technology affected the people of this time. What might have caused hope or fear for them?" and "Consider your life today. How might the streets of Progress look now for you? What are your hopes and fears? What do science and technology mean to you?" (AiG *Progress*). As these last questions are presented after the tour through both time periods, the answers to these inquiries seem clear: science and technology induce hope and fear but, ultimately, progress. From the very moment visitors see the name of the exhibit, they know that no matter the theories and artifacts displayed, progress, or some notion of gradual betterment, is necessarily encased within. For COSI then, despite some cultural discomfort with or fear of technology, advancements in this field are essentially linked to progress and, through the evidence of a town persisting despite change, visitors can rest assured that technological development is ultimately to their benefit.

While museum patrons are positioned as empowered agents in such science centers as COSI, this empowerment seems to be a bit of a ruse as even science centers have clear narratives and answers to scientific conundrums. COSI hints at certain scientific ambiguities in their exhibits and explicitly recognizes the fear often associated

with science and technology, yet their narrative of hope and progress figures as an attempt to squelch visitor fears regarding scientific doubt, leaving some degree of interactivity as a narrative device, rather than a crack in their theories. The very possibility of multiple interpretations made possible by science centers, recognized and partially obviated by such exhibits as COSI's *Progress*, reveals the degree to which museums rely upon consistent and unbreakable narratives to promote their particular ideologies. As Latour notes, cynicism about the scientific process and the ability to know anything with certainty may be unwarranted, yet the mere suggestion of museum and scientific uncertainty leaves room for visitor skepticism and narrative breaks. When these narratives begin to unravel through differing visitor experiences and conclusions, it becomes apparent that museums employ constructed stories based on a string of artifacts, exhibits and displays. While each individual artifact may not be imbued with a particular political or cultural significance before its situation in a museum, placing these items in a glass case with an informative placard inevitably incorporates them in a politicized narrative. As visitor acknowledgement of constructed museum narratives creates a clear problem for museum pedagogy, breakdowns in traditional narratives allow institutions with loose scientific affiliations to appropriate museum aesthetics to promote their own ideologies with an air of scientific validity.

CHAPTER FOUR

INSTITUTIONAL BIASES IN THE MUSEUM

Although the narratives expounded by museums vary somewhat based upon institutional sponsorship, every museum display and exhibit is inevitably wrought with ideological branding and political messaging (MacDonald). Much as COSI asserts certain notions of scientific and technological progress, early American museums proffered a distinctly religious message, made possible by an ostensibly cohesive Christian narrative. According to Conn, “When the natural scientists observed and categorized nature, arranging it all with taxonomic order, they held up a mirror not only to creation but to the Creator... this work served the higher purpose of illuminating God’s plan for the world and humans’ place in it” (42). While these museums posited themselves as distinctly scientific, their religious narratives suggested a promotion of Christianity and, further, an institutionalization of religious ideologies, even within scientific discourses. Structured as educational centers which possessed definite answers about the natural world, these early museums suggested an unbreakable link between a metaphysical creator, nature and mankind. As this particular ideology seems to rely in part on faith, early museums had to carefully pose their artifacts as somehow logically supporting the existence of both physical entities and metaphysical theories. Since museums were culturally and politically instilled with a degree of validity and factuality, the types of messages set forth by museums were largely viewed as legitimate and their reliance upon some degree of faith did not seem to complicate their otherwise rationalist stance.

While ideologies differ depending on museum and have mostly developed and changed over time, the ability, and even unavoidability, of politics and narratives in museums suggests that no museum sets forth artifacts and exhibits without also espousing some other, more implicit meaning. For, as Sharon Macdonald notes, “science displays are never, and have never been, just representations of uncontested facts. They always involve the culturally, socially and politically saturated business of negotiation and value-judgment; and they always have cultural, social and political implications” (“Exhibitions” 1). Mary Beard also confirms the inevitable, yet infrequently recognized, political nature of the museum space as she suggests the actual museum building “serves to offer some identity to a baffling and disparate collection of objects which, without frame, would scarcely find identity at all” (529). It is this very frame which not only houses artifacts and exhibits, but maintains a certain commercial and institutional story, made ostensible through gift shops and marketing materials and solidified by the metonymic presence of the building on museum souvenirs. The museum, then, comes to stand for the institutional story within its walls and, due to the politics entangled with any type of display, museum visitors are left vulnerable to the will of the institutions that sponsor and organize a given museum and, no matter the message, patrons are inevitably privy to indoctrination.

CHAPTER FIVE

THE RHETORIC OF SENSATION

As Sharon Macdonald, Carol Duncan and other museum scholars have suggested, museum displays are necessarily political and rhetorical. This rhetoric, however, is not merely confined to the ways in which artifacts are arranged to create narratives, but it also incorporates how these displays function on a sensory level. Although early museum curators attempted to avoid stimulating bodily sensations beyond logical cognition, science centers have made sensation acceptable and even desirable. Beyond an attempt at visitor empowerment, encouraging sensory interaction with museum displays has the potential to arouse pleasurable sensations that operate at the level of entertainment. Combining education with amusement, interactive museums can gather larger crowds and make their brand of knowledge more digestible for viewers. Grosz suggests that art, particularly music, can generate vibrations within the body and she contends that “There is something about vibration and its resonating effects on material bodies that generates pleasure, a kind of immediate bodily satisfaction” (32). In this sense, sensation is not a by-product of sensory, scientific experimentation, but rather a strategy for dispensing information in a way that is pleasurable for museum goers. Alternately considered as a source of entertainment not readily linked with edification, sensory exhibits seem somehow disentangled from the rhetoric of display. Underestimating the impact of interactive or sensation-producing exhibits, however, only permits their rhetorical prowess by dismissing them as mere amusements. While sensation-production might be used as a means of supporting museum narratives through entertainment or

supplementary educational material, sensation ultimately calls for consideration apart from didactic, signifying artifacts and placards as it can be manipulated rhetorically, often by a less detectable and more impactful means than signification.

As a rhetorical tool, sensory exhibits and, through these exhibits, sensation, are effective in their ability to be felt by the visceral body before they are fully considered through rational or cognitive processes. For Grosz:

sensation is the bloc of indeterminacy between subject and object, the bloc that erupts from the encounter of the one with the other. Sensation impacts the body, not through the brain, not through representations, signs, images, or fantasies, but directly, on the body's own internal forces, on cells, organs, the nervous system. Sensation requires no mediation or translation. It is not representation, sign, symbol, but force, energy, rhythm, resonance. (73)

Grosz imagines sensation as something felt by the subjective body during an encounter or interaction with a given object. As she specifically proposes that sensation primarily impacts the nervous system rather than the brain, she contests that sensation is an immediate force, uncontrollably and inevitably influencing and impacting the body. Unlike written, verbal or pictorial arguments within museums, interactive exhibits, or those which command attention from the body, produce an effect that is unmediated by intellectual processes. Reflection and rational processing necessarily involve value judgments, shaped by personal ideologies, cultural norms and other biases. Sensation, alternately, is felt before these biases can be processed and used to filter or influence

argument and meaning. As an unmediated and direct force, sensation, then, proves to be potentially more significant in the way it shapes museum visitor experience.

Both the museum space and the individual exhibits housed within the museum constitute a type of sensational experience for visitors. Grosz figures art as “the regulation and organization of its materials – paint, canvas, concrete, steel, marble, words, sounds, bodily movements, indeed *any* materials – according to self-imposed constraints, the creation of forms through which these materials come to generate and intensify sensation and thus directly impact living bodies, organs, nervous systems” (4). Museum walls and exhibits frame sensation and, while some spaces may aim to induce sensation more than others, each design comprises a rhetorical, and largely sensational, move. While the act of experiencing sensations may occur without some form of rhetorical manipulation, the purposeful gathering and arranging of materials within the museum renders the museum space wrought with rhetorically crafted sensation-producing exhibits. According to Grosz, “art is at first architectural because its cosmic materials require demarcation, enframement, containment in order for qualities as such to emerge, to live, and to induce sensation” (16). With each seemingly innocuous aesthetic design and readily explicit interactive choice, curators and museum planners inevitably inform the way a visitor’s body will receive museum messaging. Art, architecture and design are entangled with both sensation and rhetoric and, as such, the museum space always influences sensation reception. Interactive museums practically brand themselves as sensation-producers and, by professing this status, they not only admit their use of sensation as a rhetorical strategy, but also suggest that sensation is integral for

participating in scientific epistemologies. Claiming the necessity and educational value of exhibits that command full sensory participation, interactive museums ultimately assert the significance of the sensing body in processing scientific and ideological concepts.

CHAPTER SIX

SENSATION AND RHETORIC IN THE CREATION MUSEUM

In order to counter highly scientific and seemingly uncontested evolutionary theories, AiG makes use of what Sharon Macdonald calls “the politics of display,” incorporated in both explicit messages and implicit sensational Creation Museum exhibits. Although early natural history museums in America gathered and presented artifacts as a means of glorifying a metaphysical creator, the rise of Darwinism has led most scientists to accept and propound evolutionary theories, effectively forcing curators to use many of the same artifacts to create a new, and quite different, museum narrative (Conn). Likewise, AiG rethought artifact usage in order to revive creationist narratives and subvert evolutionary theories. For as Mark Looy, vice president of AiG’s ministry relations, explains, “an evolutionist looks at a dinosaur bone and says it must be 65 million years old. We look at the same bone and say that creature was probably covered by a global flood about 4,400 years old. Same evidence, same bone, just a different interpretation” (qtd. in Asma). As most contemporary museums present natural history and scientific theories as dependent upon evolution rather than religion, the Creation Museum harnesses the cultural authority of museums and the sensationalism made valid by science centers to destabilize current scientific theories and promote faith-based ideologies.

Encompassing conventions of early natural history and science museums as well as the interactivity of science centers, the Creation Museum simultaneously validates their creationist narrative and feigns some degree of visitor empowerment through their

sensational, interactive exhibits. Positioning their house of biblical messages, glass cases and strobe lights as a museum, AiG asserts the factuality and educational value of their displays. The very title of “museum” allows the Creation Museum to, at least superficially, appear valid and attract audiences on the premise of education. In order to appear much in line with traditional science and natural history museums, the Creation Museum appropriates traditional museum conventions, from the aesthetics of the lighting and glass cases to the rhetoric of scientific language used on artifact signage. Constance Classen suggests, “Museums and galleries have always served a number of purposes other than the evident one of enabling visitors to appreciate their collections of art and artefacts. They are a site for social interaction and for acquiring and conveying an air of cultural authority” (897). As museums are often conflated with cultural authority, attendees may be more receptive to AiG messaging as they attribute expertise and weight to the creationist group upon viewing artifacts in glass cases. The inclusion of interactive exhibits and workshops as well as highly sensory features only augments their clout as AiG appears confident that even when they give visitors the seeming opportunity to arrive at their own conclusions, these assumptions will likely parallel those espoused by the Creation Museum.

In order to assert the Creation Museum as some semblance of a traditional, and therefore valid, museum, AiG utilizes museum aesthetics, conventional scientific artifacts and even select scientific theories. Although there are potentially different points of interest a Creation Museum visitor could choose to visit first, they must take the “Walk through Biblical History” if they wish to experience the bulk of the museum. This walk

quite literally leads visitors through AiG's version of Biblical history, beginning with dinosaurs and ending with an explanation of human purpose on earth. Before entering this route, visitors are faced with walls of glass cases filled with fossils and accompanying scientifically-phrased descriptions with biblical contextualization. This display sets the tone for the museum experience, as visitors likely expect a barrage of scientific explanation and expertise to follow.

The first major display in the Walk is an archaeological dig, attempting to explain the creationist timeline as well as the place of dinosaurs in AiG theories. A placard accompanying a hadrosaur leg bone explains to visitors that "fossils don't come with tags on them that tell us how old they are," thus there is no scientific means of assessing fossil age as all scientists perform experiments and tests with certain "starting assumptions" (*AiG Walk through Biblical History*). This fossil is not enshrined in a case and the placard actually suggests to visitors: "Go Ahead, Touch This Dinosaur Fossil." By encouraging visitors to touch the hadrosaur bone, AiG attempts to incorporate an interactive element which would both establish their legitimacy as participants in scientific discourse and display confidence that touching the fossil could only lead to creationist conclusions. Touching the bone, however, only proves that this artifact is, in fact, physically present. Ultimately, a written explanation informs visitors that this fossil, as well as all others, could not be millions of years old:

God was there from the beginning and He wrote down in the Bible when and how He made everything. The Bible says God created everything in 6 days. He created people and land animals on Day 6. Dinosaurs were land animals, so they were

created on Day 6. Adam was the first man. He was created on Day 6. By adding up the ages of Adam, his sons, their sons, and so on, we see that the Earth is about 6,000 years old. (AiG *Walk through Biblical History*)

Consequently, visitors are immediately confronted with the knowledge that the Creation Museum's theories are dependent upon a certain blend of creative logic, selective science and Biblical close reading. According to this display, one of the first and most prominent in the Walk, definite scientific conclusions cannot be reached with research because scientists are not trustworthy and, furthermore, this research is unnecessary because the Bible holds all answers. Interactive artifacts in this case augment AiG logic by demonstrating a certain ideological confidence through a willingness to let visitors ostensibly partake in their scientific logic and process, as if simply touching a fossil dramatizes the entirety of scientific methodology. AiG reasoning seems to suggest to visitors that as long as the museum encourages interaction, they must not have an ideological agenda to conceal.

It seems the material evidence of dinosaur fossils might prove to be a stumbling point for AiG, yet dinosaurs actually serve as a sort of mascot for the museum. A trail of dinosaur tracks leads from the parking lot to the museum, visitors are asked to pose in front of a green screen feigning fear of an impending dinosaur attack upon museum entry, dinosaurs are nonchalantly incorporated in dioramas in ways that would be deemed anachronistic by paleontologists, dinosaurs are featured on an endless array of merchandise and pamphlets, and dinosaur toys litter the souvenir gift shop, aptly named "Dragon Hall Bookstore," a nod to AiG beliefs that dinosaurs were mentioned in the

Bible as “dragons” (AiG *Creation Museum*). This barrage of dinosaur sightings can largely be attributed to what Stephen Gould refers to as “dinomania,” or resurgence in interest in dinosaurs brought about by the likes of such films as *Jurassic Park* (1993). For Gould, dinomania seems mostly to appeal to children, which ultimately suggests a creative marketing strategy by AiG as children will likely find interest in various dinosaur memorabilia and be more readily affected by the primal nature of the sensation-producing exhibits. Likewise, Conn notes the display of dinosaur skeletons in early natural history museums garnered large crowds as he argues of museums, “exhibit dinosaurs and [crowds] will come” (45). AiG could not feasibly claim the skeletons were fake or nonexistent and still believably appropriate museum and scientific conventions since fossils have been utilized as a foundation of scientific proof and legitimacy from the time of early science and natural history museums.

As fossils are interwoven with museum culture at large, their existence and display is essential for the validity of AiG exhibits in the Creation Museum. Rather than deny the historical presence of dinosaurs and discovery of fossils, AiG merely utilizes the figure of the dinosaur and, through some creative science, uses the existence of dinosaur fossils as a means of promoting their theories. This very move suggests that not only can the same artifacts be used to tell different, and possibly contrasting, stories, but it reveals that all museums must construct narratives in order to contextualize artifacts for visitors. While the creationist narrative may not be believable to all Creation Museum visitors, the knowledge that the same fossils can be used for competing narratives problematizes the epistemologies and incontestability of all museums. This creative logic may not produce

creationist converts but it destabilizes the validity of all museums, including those promoting evolutionary theories. For AiG, dinosaur fossils are not a scientific artifact that proves evolution or an earth age in the billions, but rather they are complicit in indicating the truth of the Bible. Ultimately, fossils are posed in the Creation Museum as supplements to scripture as their very presence substantiates the history provided in the Bible, a narrative, AiG implies, no less valid than those espousing evolution.

Although AiG disrupts the epistemic notions of museums with competing ideologies, their use of scientific conventions also challenges logic within the Creation Museum. Through the appropriation of such scientific artifacts as fossils, AiG problematizes their own employment of scientific customs as they virtually dismantle the very epistemology upon which they rely for validity. Describing AiG's rhetoric, Ella Butler suggests that each fossil description "begins with what might be termed a scientifically neutral descriptive statement about the specimen under discussion, then it poses a problem that science is apparently puzzled by, suggesting that it is 'not fully understood', and then the text forecloses that problem with the key explanatory evidence provided by the Bible" (239). This method combined with AiG skepticism about scientists' "starting assumptions" reveals a distrust regarding the scientific community. As scientists seem either unable to reach conclusions about scientific conundrums or incapable of reaching conclusions untainted by their starting assumptions, AiG suggests that scientific theories, and therefore other science museums who espouse these theories, present biased information. While this approach might garner their creationist stance some converts, their very usage of certain scientific theories which they find useful for

their purposes as well as their appropriation of science museum aesthetic and practice, suggests they are undermining their own epistemologies. As long as AiG simultaneously partakes in scientific discourse and advocates skepticism about this discourse within the Creation Museum, they challenge the ways in which they have formulated and displayed their arguments. While this seems to be an obvious error in their methods, it does not appear readily apparent to many museum goers and it does not seem to dissuade supporters of AiG from championing the creationist cause. The seeming fallibility of this pseudo-scientific rhetoric is likely overlooked as the Creation Museum bombards visitors with points of distraction made valid, and even expected, by the rise of interactive science centers.

Superficially, the Creation Museum seems to appropriate science center epistemology, yet the Creation Museum ultimately disallows the type of empowerment and experimentation intended by science centers. According to Barry, interactivity promotes visitor use of sensory experience as “the visitor is expected to make scientific principles visible to themselves through the use of touch, smell, hearing or the sense of physical effects on their own bodies” (100). Intending interactivity to be a tool for visitor experimentation which dramatizes or imitates some form of the scientific process, science centers use visuals, textures, sounds, lighting and other technologies to allow visitors some degree of participation in scientific testing. For the Creation Museum, however, the apparent use of interactivity is not fully interactive, as it does not demand that visitors participate, but rather that they merely serve as receptors to their sensation-producing exhibits. Visitors are encouraged to touch a few items throughout the museum, yet this

simple touching does not actually incorporate them in any process of scientific discovery. Unlike the Sensorium of which Carolyn Jones writes, where sensation and sensory experience are highlighted in order to produce some degree of reflexivity and consideration of the ways sensory experience can impact and influence museum goers, the Creation Museum integrates sensation-producing exhibits in such a way that does not call upon audiences to notice that they are affected viscerally. Sensation, in this way, is used by AiG as a hidden strategy that not only supplements the weaknesses of their creationist narrative but actually reaches museum goers in a primal manner, often without visitor recognition of this sensory rhetoric.

The primary sensation-producers in the Creation Museum are not interactive, then, but merely loud, bright, large, and even wet, for the sake of entertainment and sensation-stimulation. Sensation is called upon by AiG not as a means of visitor empowerment, but as a way of appealing to visitors on a visceral level. Before reaching the Walk through Biblical History, visitors are confronted with a special effects theater, one of many theaters in the museum, which plays a film entitled *Men in White* on a loop during the entirety of museum hours. A faux campfire and moving mannequin are positioned in front of the screen and viewers are quickly informed that this mannequin is Wendy, a student at Enlightenment High School who is unable to reconcile evolutionary theories with her belief in God. As the film progresses, viewers learn that Wendy takes issue with the faulty starting assumptions of the scientists who performed radio isotope dating in order to discover the age of the earth and a variety of other issues which supposedly unravel the foundations of evolution. The men in white, two casually-dressed,

colloquialism-using, young men, take on Wendy's cause by asking hard-hitting questions of evolution-preaching teachers, Mr. Plumsure and Mrs. E Certainty. After using some creative logic to outsmart these teachers, the men in white ultimately prove to Wendy and audience members that evolution, or "Goo to you," does not make "sense." Likewise, the description of Wendy on the Creation Museum's website also suggests that sense, not just faith, is essential for creationism: "this intelligent young woman has heard the constant barrage of evolutionary ideas about the world, but the more she thinks, the more she sees that what she's been taught doesn't make sense" (AiG *Creation Museum*). While the emphasis on "sense" and intelligence seems to imply that AiG's main strategy relies on logic, the "special effects" during the presentation suggest otherwise. As the men in white explain the rationale behind creationism, they take viewers through creationist history, centered on Noah's Flood. Flood victims by proxy, audience members experience motion sickness and a dousing as their seats move and previously hidden nozzles of water spray the crowd during this portion of the presentation. Clearly not intended as an appeal to some sort of rational faculty, these special effects provide a supplement to the verbal argument offered by the men in white. Experiencing on a much smaller scale the sensory effects of the flood, viewers are viscerally linked to the creationist argument.

For AiG, sensation does not merely function as a source of crowd entertainment but it actually augments creationist arguments and even works to scare visitors into compliance with Christian doctrines. While the certainty of Noah's Flood is essential to AiG theories, the museum explains that this flood was catalyzed by Adam and Eve's sin. According to museum displays, Eve's misdeed induced venom, death, disease,

carnivores, red tooth and claw, scavengers, cosmic aging, conflicts, poisons, weeds, burdensome work, suffering and generally all other negative earthly phenomena (AiG *Walk Through Biblical History*). Although this list provides another appeal to logic through causal relationships, it also functions as a means of persuading museum goers to follow biblical doctrines as to not induce more human pain. Not just presented in textual form, the Walk exhibits elaborate dioramas of man closely cohabitating with all sorts of animals, including pineapple-munching, herbivorous dinosaurs, to suggest the pleasantries existing before human sin. This diorama greatly contrasts with the following rooms which present scenes of Eve persuading Adam to disobey God, then, post-sin, the museum displays somber rooms with strobe lights and black and white photographs of natural disasters, carnivorous wolves, malnourished children and a man screaming on a hospital gurney: all apparent consequences of man's disobedience of God.

The Creation Museum narrative, then, does not merely function on a textual level, but also incorporates a type of sensory rhetoric, made possible by lighting, color and visuals. Starting with colorful, pleasant scenery enabled by Godly compliance, the Walk then emphasizes the ramifications of sin through the harsh and antagonistic flashing lights and the dark, barren rooms filled with images of violence and suffering. Visitors are encouraged to comprehend the narrative as they progress, yet they are confronted with such intense sensory triggers that they would feel the negative development of the creationist story even without text and characters. Flashing lights and dark imagery likely create a sense of anxiety for visitors, allowing them to feel not only the initial

ramifications of Original Sin but to garner a sense of the potential consequences of their departure from scripture.

By presenting highly sensory exhibits, AiG demands visitors form a bodily link with their creationist narrative and this link is particularly necessary due to the faith-based content of their argument. While AiG outwardly attempts to foreground their brand of science and some attempt at logical argumentation, the multifarious sensation-inducing exhibits throughout the museum ultimately inform the way in which visitors receive AiG's ideological and highly religious messaging. Visitor indoctrination is dependent upon sensation-production as sensation provides some connection with the unknown forces to which AiG attributes earthly creation. According to Grosz:

Sensations, affects, and intensities, while not readily identifiable, are clearly closely connected with forces, and particularly bodily forces, and their qualitative transformations. What differentiates them from experience, or any phenomenological framework, is the fact that they link the lived or phenomenological body with cosmological forces, forces of the outside, that the body itself can never experience directly. (3)

Since humans are unable to ascertain scientifically the true nature of human life or the beginning of the universe, they can only gain an understanding of these forces through bodily sensation. The Creation Museum aims to bridge this gap between epistemology and cosmologic conjecture by providing full sensory immersion which relies upon sensation for the crux of persuasion. Offering a theory for understanding cosmological forces or, more specifically, man's existence on earth, AiG plays on the sensation

produced by the exhibits within the Creation Museum in order to more effectively introduce religious content.

CHAPTER SEVEN

THE PLACE OF SENSATION IN MUSEUM CULTURE

Although AiG utilizes seemingly logical arguments and attempts to construct a narrative based on some semblance of scientific rhetoric, their employment of and emphasis on exhibits that generate sensation allows them to occupy a museological position made possible by science centers. Without sensation as a strategic distraction and supplement to their theories, the logical gaps in AiG's arguments would be made more apparent, thereby challenging the Creation Museum's place as a museum. As the title of museum has garnered AiG a degree of validity and as the acceptance of science centers in museum studies has allowed a place for sensation in museum culture, the Creation Museum finds a place among museums, inadvertently, and somewhat paradoxically, dismantling the epistemologies and legitimacy upon which AiG relies. The believability of AiG's scientific argument within the museum ultimately seems contingent upon their pseudo-interactive rhetoric, rendering visitor sensation paramount. Sensation, then, while potentially empowering in some science centers, is used by AiG to distract from gaps in their creationist narrative and to allow visitors a sense that they are internalizing and feeling the presence of some metaphysical creator.

Although political in its implications, the use of sensation within a museum setting is a rhetorical choice that cannot fully tender a particular political ideology. Mixing sensation with explicit messaging allows some degree of political indoctrination, but it mostly works to destabilize any scientific or historical epistemologies through a potential disagreement between logical conclusions and bodily reactions or assumptions.

The disparity between cognitive processes biased by cultural norms and instinctive, bodily reactions, seems to contest the certainty with which any absolute, cohesive truth can be known. According to Grosz, “Unlike politics, sensation does not promise or enact a future different than the present, it en-forces, impacts, a premonition of what might be directly on the body’s nerves, organs, muscles. The body is opened up now to other forces and becomings that it might also affirm in and as the future” (80). As political or ideological messages explicitly relate or portend a moment of historical or future difference, sensation provides an indication that some other bodily feeling is possible. This prospect of visceral difference is not a political assurance, but rather a primal certainty that change is feasible, even likely. Sensation is able to provide a guarantee of difference or becoming where politics and signification can only gesture toward the possibility. In this way, sensation is a progenitor of bodily difference that is immediately and uncontrollably powerful, rather than a signifying narrative or ideological message that must be consciously accepted and internalized as explicit messages are necessarily delayed and shaded. Visitors are given the opportunity to feel difference and, through this feeling, internalize and remember the impact of interactive exhibits.

Curators are able to ensure sensation-production through interactive exhibits yet they cannot fully control the way in which sensation is processed, suggesting that arousing highly sensory experiences in visitors always allows for the possibility of gaps in museum narratives. Sensation can be used rhetorically, not to set forth a specific message, but rather to engender feelings and imprint sensory memories. While the intention for interactivity in science centers may be visitor empowerment, the curatorial

tactics within the Creation Museum suggest the degree to which the act of sensing does not necessarily allow museum goers to partake in museum epistemologies. Likewise, science centers may allow visitors to ride a unicycle on a high wire and experience the principles of mass, but this type of exhibit accomplishes little more than proving scientific properties explained more explicitly elsewhere. Just as potential concerns about technological developments and scientific uncertainties raised by COSI exhibits are likely nullified by *Progress*, science centers largely tender didactic, scientific information as an accompaniment to seemingly interactive exhibits in order to ensure the cohesion of their narrative and the assertion of their ideologies. This process is effective for corroborating museum narratives but it does little to allow visitors to patch together their own conceptions based on a scientific process. The faux-interactivity within the Creation Museum is made apparent by the scientific failings of AiG arguments and the recognition of the lack of truly interactive exhibits within the Creation Museum reveals the degree to which science centers are often not fully, or even partially, interactive. This absence or scarcity of actual interactivity does not necessarily indicate a lack of validity or factuality, but merely suggests that despite attempts to empower museum visitors through choice, interactive museums actually provide the same sort of institutionalized narratives as traditional museums. Interactivity, or some attempt at sensation-production, reveals that museums at large are ideological structures, imbued with institutionalized notions that can be proffered through both logical and sensational means.

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