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Entertaining, Informing, Persuading: Figures of Speech to Prepare for Health and Safety

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Abstract: The public mandates science center exhibits that are entertaining as well as informative. In addition, exhibits can also be performative, in that they act back upon the visitors with an injunction to change their ways. We give examples from two exhibits that not only inform, but also open up space for changes in behavior and perception, particularly in arenas of public health. We look at two recent and ongoing exhibits at MOSI – “Disasterville” and “The Amazing You” - and examine the affordances suggested by figures of speech such as eponymy, hyponymy, hypernymy and reonymy. Tropological research into museum exhibits appears to open up new lines of scholarship for understanding persuasion.

Keywords: Science Center, Museum of Science and Industry, Public Health, Affordances, Tropes, Persuasion, Indexicality, Performativity

Introduction to “The Amazing You” and “Disasterville” at MOSI

The blue mirrored IMAX dome that greets vehicles on the south side of Tampa’s Fowler Avenue is usually the first thing visitors to The Tampa Museum of Science and Industry (MOSI) will see. Inside are 58 K square meters containing 450 hands-on edutainment activities. In addition to IMAX, MOSI boasts the Saunders Planetarium, the BioWorks Butterfly Garden, and “Kids in Charge.” Right up the street from the Busch Gardens theme park and just off the 1-4 corridor (land of Disneyworld and Universal Studios) MOSI finds itself uniquely situated to heed the sometimes paradoxical injunction that science centers be entertaining as well as educational. Two exhibits at MOSI that appeal to curious and fun-seeking visitors from various demographics are an occasion to research persuasive health and safety communication. In this short essay we wish to set up a frame for further research into this apparently under-researched area.

Where theme parks are mostly focused on entertainment, MOSI persuades guests to consider important choices such as disaster preparedness and smoking cessation. Two of MOSI’s permanent exhibits, “Disasterville” and “The Amazing You”, apprehend visitors at the level of their own health and safety. “Disasterville”, on the second floor of MOSI, allows visitors to experience metal plates vibrating under their feet in simulation of an earthquake. A glass cylinder emits hurricane strength winds. “Disasterville” reaches out to the visitor at the bodily level, with such fearful simulations of the physical force and power of natural disasters. One flight up, there is another exhibit that reaches for visitors at the bodily level, by addressing them as embodied beings. “The Amazing You” takes visitors on a temporally themed walk through the stages of human life, from infancy, to adolescence, adulthood and old age. “The Amazing You” frames each visitor as a specific instance of a species-wide generality, capable of experiencing all the life stages of being a person. The proverbial “you” can be a reference to sub-systems of the human body (like respiration, circulation, digestion and reproduction) or to life stages (such as zygote, infant, adolescent, adult and senior).

These exhibits do not only impart important information, they address visitors who experience natural disasters and health conditions as embodied participants. The visitor to MOSI is positioned as an active agent who, by virtue of individual volition, can determine the quality of their lives and the length of their life spans. As such, these exhibits have a tripartite mandate to

educate, entertain, but also encourage behavioral changes towards health and safety. These two exhibits, in addition to imparting information and being entertaining, may also affect a discursive force that could be broadly conceived of as being *performative* (Austin 1962)—that is, those messages that motivate and persuade visitors into action.

Fun with Affordances/Indexicals

There exists within museum scholarship a debate about the proper entertainment to education ratio. Genevieve Bell asks about museums “are they the arbiters of cultural values or just another theme park...?” (Bell 2002, 3). Sue Allen refers to the “constructivist dilemma” (Allen 2003, 18), which relates to museum exhibits that strike the right balance between entertainment and education. With science viewed as an experimental process, science centers have had success by framing the visitor as an experimenter, imbued with curiosity, and capable of a ‘eureka’ moment. Allen suggests that exhibits in science centers should offer “immediate apprehensibility” (Allen 2003, 20) meaning that visitors should be able to meet content at the level where it affects them. Allen likens immediate apprehensibility to the concept of “affordance” (Allen 2003, 21) or those interactive properties of exhibits that contain implicit instructions about how they should be used. Buttons want to be pushed, and knobs want to be turned, so that no written instructions need be required. Such affordances make an exhibit apprehensible to people of various ages and backgrounds. The idea of affordances is that objects contain properties that hail certain classes of actors into acting upon them. While James Gibson considered affordances to be objective properties of objects (Gibson 1979), Don Norman posits a concept of “perceived affordances” which are constructs of actors (Norman, 1999).

The interactivity allowed by the buttons and knobs at science centers have made the “affordance” descriptor apt. Thinking about affordances in exhibits brings to mind other forms of instructions and indicators that are implicit in signs, symbols and symptoms. Indeed, figures of speech can be considered as affordances that contain tacit instructions as they indicate a range of specificities from a generality. Indexicals are those things that—within context—indicate something else. Affordances can be seen as “causal indexicals” (Cambell 1993), because they indicate a specific action potential. Words with a prefix of *syn* or *sym*, (meaning *with*, or *together*) are varieties of indexical expressions indicating something else. The word ‘sign’ comes from *signe* meaning signature or mark, and *signum* meaning token or indication. “Disasterville” and “The Amazing You”, while ‘infotaining’ guests, are also rife with a foreshadowing of potentialities, from probable to certain. A skull and crossbones on a bottle of solvent signify ‘do not drink’ cross-culturally, yet naturally occurring phenomena can act as sign systems as well, with implicit instructions about a course of action.

For example, the sight of a volcano emitting soot is an indexical that precedes its eruption, in the same way that the characteristic dark spiral forming on the distant horizon signifies an approaching tornado. Each of these ominous indexicals indicates an action step: seeking safety and getting out of harm’s way. The way that a fever and body aches portends the onset of influenza reminds us that symptoms in medicine are indexicals of disease. The difference between the indexicals, icons and symbols that make up C.S. Peirce’s ‘second trichotomy’ (Peirce 1955) is that indexicals are less open to interpretation than symbols and icons. In Peirce’s formulation, an indexical forms the shortest distance between signifier and signified. The exhibits at MOSI have a way of being indexical to the human visitor as a species. When it comes to including a diverse swath of visitors, appealing to species-being at the level of the body and mortality is one way to get people to stop and take notice. A natural disaster makes people seek safety and shelter, and the human body is widely understood by people of different languages and cultures, even without an owner’s manual.

Figures of Speech to Inform, Entertain, and Persuade

Figures of speech can be understood as sign systems that gesture towards generalities from specifics, or from specifics towards generalities. “Disasterville” addresses, not only Floridians wary of the next tropical storm, but also a great many global populations, when it makes natural disaster its *topoi*. Natural disasters like floods, hurricanes, tornados, earthquakes and tsunamis always capture headlines because they have affected the health and well-being of populations by the millions. As of this writing, Hurricane Isaac makes its way up the Gulf of Mexico, rekindling omens of the spectacular destruction wrought by Katrina seven years ago. Therefore, “Disasterville” is a form of neologism that indexes specific instances of disaster for visitors, each one begging some sort of action or interaction.

Similarly, “The Amazing You” makes a bid for the visitor’s attention in its eponymic interpellation of “you,” that is, *me*, *we* or *us*. While “Bodies...The Exhibition,” “Body Worlds” and their offshoots are exhibits that display the human body as inert, dissected, plastinated objects to behold, “The Amazing You” invites visitors to recognize themselves in personified form. “You” becomes a unique version of anthropomorphism that invites audiences to behold themselves in the abstraction of a science center exhibit. While looking at Mr. Potato Head toys in various facial configurations demonstrating inherited characteristics, or getting underneath an oversized dome that lights up in reference to your brain, placards with text placed throughout the exhibit emphasize that what you are witnessing is you, yourself. You are an infant, an adolescent, *and* an elderly. You are a circulatory, nervous, and digestive system. All at once, the categorical abstractions that piece out our entire being co-exist in you, in me, or in any person.

Both exhibits hail the visitor, apprehending them with *topoi* that speak to their being as persons, embodied and susceptible. Appealing to the personhood of the visitor can be understood as a sensationalistic rhetorical strategy that enhances learning and enjoyment, but also as a third horn that we will argue makes up the constructivist dilemma: Persuasion. The exhibits are unique because they seek to persuade visitors to change their behaviors. Stock up the basement with potable water and canned goods in the event of a disaster. Quit smoking and remove your family from the dangers of second hand smoke. Incorporate regular exercise into your week and get benefits for all organs of the body. These, and the usual litany of self-care exhortations are all to be found at “Disasterville” and “The Amazing You”. Visitors are addressed, point blank, as the primary agentic force in determining their own health and wellness outcomes—although within a roulette wheel of odds dealt by genetics or unavoidable environmental factors. These exhibitions construct expectations for a locus of control partly left to chance but often within the behavioral choices of each living being.

In the next section we will give some specific examples from the “The Amazing You” exhibition that show how figures of speech are used to construct certain subject positions and the ways that visitors are summoned to identify with them. The figures of speech we will focus on are *eponyms*, *hyponyms*, and *retronyms*. These three figures of speech allow for the communication of health risks, both general and specific.

Eponyms, Hyponyms and Retronyms at “The Amazing You”

An eponym is something named after a person. “The Amazing You” is named after the visitor who beholds it. The second person singular/plural pronoun “you” effectively interpellates the object as a subject. The sign that greets visitors at the beginning of “The Amazing You” exhibit reads:

YOU begin here. During our journey through life we gradually begin to understand ourselves. In each life phase there are new wonders to behold and new discoveries to make. YOU are amazing. Welcome to the AMAZING YOU!

“The Amazing You” is predicated on an eponymic trope, where “You,” the visitor, is being addressed. Unlike “Bodies...The Exhibition,” which, through the plastination of corpses, turned persons into inert objects, “The Amazing You” summons the visitor as the living subject of the exhibit. The trope here is temporal (The words “journey”; “gradual”; and “life phase”). The temporal construal affects a distanciation from life events, depending on the demographic of each visitor. Visitors start at the conception end of “The Amazing You”, and then traverse a linear path through life stages exhibited on each side of the comb-like interstices. A child is at the far end of the timeline from degenerative diseases at the far end of the exhibit, while grandpa and grandma are a long ways from the pubescent acne that awaits the child. It is the eponym, “You” that effectively bridges these temporal construals, including discrete stages of life within a unified trope. As such, “The Amazing You” also typifies another type of figure of speech, namely, a hypernym.

Because it is a blanket term that can cover a whole lifespan of various subject positions, “You” can be interpreted as a hypernym. A hypernym is a general term that can cover numerous subtypes. Just as the word “disaster” refers to many different sub-categories of ordeals (from a hurricane, a tornado, or tsunami) the hypernymic “You” can be used to encompass a variety of life stages. As required, hypernymic tropes can be the entryway from genus to species, or from general to specific. Where hypernyms lack specificity, another type of trope, called a retronym, can be employed.

One exhibit within “The Amazing You” exhibition explains the health risks of pollution by employing a retronym, or a term with a modifier providing needed specificity. The title reads “WHERE DOES URBAN AIR POLLUTION COME FROM?” Pollution is a blanket term that includes air, water and noise pollutions. Within the retronym “air pollution”, further specifications can be required, such as air pollution resulting from a forest fire, or air pollution resulting from automobile exhaust. Even more distinctions can be required, such as the forms of urban air pollution resulting from mobile sources (like engine exhaust) and that which emanates from stationary sources (like smokestacks). Hyponymy is a way of talking about figures of speech that move from general, to specific and back. A hyponym is a word with a more specific meaning than another, more general word, of which it is an example. For example, ‘lung’ is a hyponym of ‘organ,’ and ‘dust’ and ‘second hand smoke’ are hyponyms of ‘pollutants.’ Air pollution can be from volcanic ash, or from the chlorofluorocarbons that are byproducts from refrigeration and air conditioning. The quotient of specificity in the tropes employed makes risk into something that can be mitigated within a range of consumer and lifestyle choices. Hyponymy is a way of describing health communication that needs rhetorical range, invoking generalities as needed when defining the exhibitory topoi, and then branching off into hyponymic and retronymic specificities for explanatory and illocutionary impact. This movement across a semantic continuum positions the visitor as an actor with a certain degree of volition within environmental constraints.

From Specific, to General, and Back

For those scholars and practitioners concerned with inclusivity at museums, tropes such as hypernymy can be effective for panning out, as it were, for a wide-angle take on the diverse subject positions found among museum visitors. Physical characteristics of the body and of natural forces come to resemble a trans-subjective human experience, seldom fashionable in an era of postmodern identity politics. In a bid for inclusivity across gender, class, racial, and ethnic identities, there is a risk of exhibitors subsuming differences under a contrived universal. Exhibits such as “Bodies...the Exhibition” have been criticized for superficial universality (Hsu & Lincoln, 2007, p. 17). Skinless bodies, in various states of dismemberment, fitted with blue and green glass eyes, are posed with props such as an American football. Human remains of vague provenance are thus refashioned using an ethnocentric idiom. The human body, in the

course of plastination and exhibition, undergoes a disfigurement from specific person, to human being *sui generis*, albeit accessorized with ‘American’ signifiers. This is an example of effacing cultural differences in a bid toward representing the human being as a universal specimen. This process of inscribing anatomical specimens, from specific, to general, and back, is one way that figures of speech, like hyponymy, describe the datum that gets left out in a contrived reach towards universality.

A focus on tropes in science museums may provide a way of posing seldom asked questions about the rhetorical power of exhibitions throughout their conception, design, and reception. Preliminary research into the use of metaphor at MOSI suggests that metaphor is vital for communicating health and safety suggestions. For example, both “Disasterville” and “The Amazing You” use a roulette wheel to signify risk probabilities. A spin of the wheel and the ball lands upon any one of natural disaster subtypes, or an array of birth defects. The force—that is, a centrifugal operation of the spin afforded by the wheel—acts as a performative force encouraging mitigation and preparedness strategies for disaster, or behavioral regimens for pregnant women. Another metaphor used is balance. At “The Amazing You” visitors balance wooden blocks on a scale. Some blocks are named after health liabilities (such as watching too much TV or smoking) while other blocks are named after health assets (like exercise and sleep). As such, the force of gravity becomes a root metaphor undergirding a rhetorical gambit of self-discipline and moderation.

Concluding Hopes for Understanding Performative Exhibitions

We hope that these preliminary researches may be useful to exhibit designers, educators, docents, as well as visitors and those who research visitors. In conclusion, we pose a question for what is an ongoing research project. What other kinds of tropes concerning health risks have been used to entertain, inform, and exhort visitors to modify their behavior? A rhetorics of display that summon the visitor into action, using signs and symptoms with discursive affordances—this may present new opportunities for public health communication research in science center settings, immediately apprehensible at MOSI and elsewhere.

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REFERENCES

- Allen, Sue. 2003. "Designs For Learning: Studying Science Museum Exhibits That Do More Than Entertain." *Science Education*. 88" S17-33
- Austin, John. L. 1962. *How to do things with Words: The William James Lectures delivered at Harvard University in 1955*. Ed. J.O Urmson, Oxford: Clarendon
- Bell, Genevieve. 2002. "Making Sense of Museums: The Museum as 'Cultural Ecology.'" Intel Labs, 1-17
- Campbell, John. 1993. "The Role of Physical Objects in Spatial Thinking" in *Problems in Philosophy and Psychology*, ed. Naomi Eilan, et al. Cambridge: Blackwell, 65-95.
- Cameron, Fiona. 2011. "From Mitigation to Creativity: The Agency of Museums and Science Centres and the Means to Govern Climate Change." *Museum and Society*, 9, 2, 90-106
- Gibson, James. J. 1979. *The Ecological Approach to Visual Perception*. Boston: Houghton Mifflin
- Hsu, Hsuan & Lincoln, Marsha. 2007. "Biopower, Bodies...the Exhibition, and the Spectacle of Public Health." *Discourse*, 29, 1, 15-34
- Johnson, Davi. 2008. "Psychiatric Power: The Post-museum as a Site of Rhetorical Alignment." *Communication and Critical/Cultural Studies*, 5, 4, 344-362
- Malone, Meredith. 2006. "Nouveau Realisme: Performative exhibition strategies and the everyday in post-WWII France" *Doctoral Dissertation*.
<http://repository.upenn.edu/dissertations/AAI3211108>
- Norman, Donald. A. 1999, "Affordances, Conventions and Design." *Interactions* 6,3, 38-43.
- Peirce, Charles S. 1955. *Philosophical Writings of Peirce*. New York: Dover

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