

Scaling Nature on the Giant Screen

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To experience a giant screen¹ film is to experience hyperbole. Marketed as “the ultimate movie experience”² and “Bigger. Bolder. Better.”³ these films are exercises in scale. Giant screen boasts the largest film format of any kind, as well as the largest theater screens and super-large, ultra-clear images. And now, with the advent of digital remastering (DMR), giant screen can boast of being the place to watch fan-boy based blockbuster films.⁴

The blogosphere has continued to be very active about “fake” IMAX screens after Aziz Ansari’s vitriol-laden 2009 blog rant about an upcharge to see *Star Trek: The IMAX Experience* which was shown on a screen just slightly bigger than the standard movie screen and not on an IMAX screen.⁵ Building upon this recognition of screen size as key to the IMAX experience, this essay considers the impact of scale on the traditional giant screen films that focus on nature and the natural world. In the United States today, it is argued that the consistent decline in nature-based recreation such as visiting parks, camping, hiking, and other outdoor activities has been replaced with video games, Internet, and media interactions.⁶ Although this trend is disputed by a study that saw rising attendance in a larger dataset geographically of protected areas around the world, and argued that the static or declining attendance at US national parks was due to carrying capacity and a move to

international tourism, respectively, the media is still heavily responsible for perceptions and understanding of the natural world.⁷ For many people, giant screen films serve as the ultimate nature ride, literally taking them places they have never been before.

Giant screen films developed out of an experiment in vision at Expo '67 in Montreal, Canada. The first giant screen theater opened in Canada in 1971 and in the United States in 1973. Giant screen theaters were traditionally associated with cultural venues such as science museums, science centers, and historical sites, and they have a history of being considered educational films. Even the typical 40 minute length of the films is structured to the educational, in that the film length is key to the institution being able to offer a film viewing on the hour (allowing for the required 15 minutes or so required to rewind the film) to fit into the planned school visit. Scaled to fit into the viewing time, careful planning and focus on how much can be absorbed both visually and cognitively in the run time is key in the design of the giant screen film. Ultimately, these films are characterized by their spatial scale and spectacle-centered focus which results in an experience of "extremities and special effects."⁸

Watching a giant screen film is an immersive, often visceral experience, as the large images of the films generate an affective response in which the film viewer feels like he or she is a part of the action on the screen. This sense of being incorporated or immersed in the filmic action is created through the combination of the screen size, the audience's position in relation to the screen,⁹ and the surround sound systems which allow the sound "to mimic the directionality of the visual stimuli."¹⁰ Known as presence, this affective response to giant screen films is likely based in the evolution of the human brain which is wired to respond to all visual inputs as real objects. Size in particular has been called "one of the most primitive cues we have for what's happening in the environment"; if we see something large, moving, and potentially threatening, we respond emotionally (affectively) before cognitively.¹¹

Key to the spatial impact of the giant screen is the fact that humans respond socially and naturally to media, both consciously and subconsciously.¹² In giant screen cinema, this response is magnified through the visual strategies linked to unconscious responses to size.¹³ We are more aroused by images on a large screen¹⁴ and have greater recall and retention of messages.¹⁵ This can be seen in the responses of US astronauts to the giant screen film, *Destiny in*

Space (dir. Burt, 1994), when astronauts commented that “in many respects it was actually better [than reality], because they didn’t have the restricted view of being in their helmet,” and in consequence, the viewing “replac[ed] their own real memories of what it had been like in space.”¹⁶

Very few of those who watch giant screen films can relate directly to the images of space. But when we focus on giant screen nature films, we can consider how scale affects our perceptions of the natural world we inhabit. The films about nature have been described as environmental postcards highlighting the majesty of the natural world: charismatic megafauna both current and extinct (bears, wolves, chimpanzees, dinosaurs), ecosystems (outer space, undersea environments), and natural forces (volcanoes, hurricanes etc.).¹⁷ Like the images on the screen, these stories tend to be larger than life, emphasizing stories about prehistoric predators, natural disasters and extreme environments. Yet even when the subject matter is tiny, such as in the film *Bugs!* (dir. Slee, 2003), it is difficult to recognize the small in something like a 40-foot praying mantis. In giant screen cinema, animals threaten and are threatened, natural forces destroy human systems, and extreme environments challenge human capabilities; in effect, the stories themselves tend to be as large as the screen. Sweeping panoramas, glorious vistas, and shots of wildlife that cannot typically be encountered not only fill the screen, but focus the storyline.

Yet, it is not just the size of the images but the construction of the film itself that impacts the sense of scale. Given the technological constraints imposed by the medium, giant screen films are typically constructed with longer-than-normal average shot lengths (ASL; by Hollywood standards) and longer camera shots (that is, the perceived distance from the viewer to the objects on screen). Longer ASLs are typical in giant screen films as they are needed to provide time for the audience to scan the large images which fill the human visual field with a frame almost ten times larger than that of the 35mm film, as well as emphasize drama and audience engagement. Traditional giant screen films have been shown to have ASLs ranging from 7.3 seconds for *Alaska: Spirit of the Wild* (1997),¹⁸ 10.7 seconds for *Yellowstone* (1994),¹⁹ 19.1 seconds for *Blue Planet* (1990), and 21.1 seconds for *Destiny in Space* (1994).²⁰ By comparison, the giant screen DMR versions of *Dark Knight* (2008) and *Transformers: Revenge of the Fallen* (2009) have ASLs of 3.1 and 3.4 seconds respectively.²¹ Additionally, In contrast to the regular use of close-up shots in nature films,²² giant screen films emphasize

the drama of nature through greater use of long shots, which generate a distance between nature and humanity.

In the film *Yellowstone* (1994), which has been in continuous showing outside the Yellowstone National Park since its release in 1994, not only does the long shot predominate, but in those moments of presenting nature (as opposed to depicting explorers, native dwellers or scientific inquiry), narration is minimized. Multiple long shots are accompanied by one or two lines of dialogue: three shots are combined in one long epic sweep, accompanied by only a single line of narration and the background sounds of howling, splashing, and stampeding feet: "The elk, the bison and the bear reclaimed their quiet kingdom."

Focused through the technological limitations of the giant screen medium, the long shot lengths and greater ASLs combine to position the giant screen viewer within a space where humanity is not only separate from nature, but at a scale which takes "the world out there and enlarges it to gigantic proportions, heightening the sensation of virtual presence and haptic immersion."²³ Regardless of whether the films focus on the entire world (*Blue Planet*, dir. Burt, 1990), endangered ecosystems (*Tropical Rain Forest*, dir. Shedd, 1993), the universe (*Cosmic Voyage*, dir. Sillick, 1996), or whether they are locally specific in their scope (*Yellowstone*, dir. Merrill, 1994), the films cannot help but present a giant-scale view of the world. In giant screen cinema, the images are "both illuminating and terrifying, underscored by the contradictory appeal of the infinite. Its seductive force invites surrender to its wonders as well as to its disordered horror...the threat and promise of the image overtaking us compels us to look and also to be fearful, less of what we will see but how we will feel when we see it."²⁴ We are humbled in the giant screen vision of the natural world, but humbled such that we cannot see our place in the scale of nature. The giant screen experience places us in a position of knowing but not experiencing nature; of seeing but never fully understanding nature. We watch it, we are in awe of it, we want to preserve it, but we do not have, or perhaps even want, to be in it. Our ability to create the "reality" of nature in giant screen film does not offer us the insight and true knowledge that we need to make decisions about the complex realities of our direct interactions with the natural world.

However, in this age of portable, hand-held media, taking giant screen cinema from the theater space and putting it on the small screen diminishes the impact of the films. Gloriously shot and edited for the giant screen (which

can be either domed or flat), these films do not readily translate to the television, the iPad, the smartphone, YouTube, or to any other mobile device. This may be a consequence of our faster-paced vision (the MTV effect): We are used to fast-moving films that don't allow us to linger; on the small screen giant screen films become slow-paced and lumbering. The towering giant becomes reduced to the shambling dwarf and with it, the sense from giant screen that we do not have a place in nature. Nature images made for the giant screen but scaled down to fit the personal or home device may no longer separate us from nature, but instead fail to capture our attention. The time and effort made to capture these fantastic images of the natural world may be wasted when attempting to move down the screen scale, and in consequence, giant screen films may be the one format that cannot take advantage of this new world of cross-platform media sharing.

Notes

- 1 Giant screen is commonly called IMAX. Like Kleenex or Xerox, the audience has come to know giant screen films by the name of the corporation that developed the technology. With their use of DMR to remaster 35 mm films, IMAX no longer considers itself simply a giant screen company, but rather "the best immersive experience on the planet" (LF Examiner, <http://www.lfexaminer.com/20081016.htm>).
- 2 IMAX, 2011, <http://www.imax.com/impact/>.
- 3 Giant Screen Cinema Association, 2011, <http://giantscreencinema.com/MemberCenter/BiggerBolderBetter.aspx>.
- 4 David Lieberman, "IMAX Blames Bad Films For Dramatic 2Q Earnings Decline," 2011, <http://www.deadline.com/2011/07/imax-blames-bad-films-for-2q-earnings-shortfall/>.
- 5 Aziz Ansari, "Aziz is Bored," 2009, <http://azizisbored.tumblr.com/post/106587114/reblog-the-fuck-out-of-this-warning-amc-theaters-are>.
- 6 Oliver Pergams and Patricia Zaradic, "Evidence for a Fundamental and Pervasive Shift away from Nature-Based Recreation," *Proceedings of the National Academy of Sciences USA*, 105 (2008): 2295–2300.

- 7 Andrew Balmford, James Beresford, Jonathan Green, Robin Naidoo, Matt Walpole, Andrea Manica, "A Global Perspective on Trends in Nature-Based Tourism," *PLoS Biology*, 2008, <http://www.ncbi.nlm.nih.gov/pubmed/19564896>; Ralf Buckley, "Parks and Tourism," *PLoS Biology*, 2008, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2694279/>.
- 8 Andrew Ross, *The Chicago Gangster Theory of Life: Nature's Debt to Society*, (London: Verson, 1994), 82.
- 9 Tim Recuber, "The Rationalization and Reenchantment of Cinematic Space," *Space and Culture*, 10.3 (2007): 315-330; Tana Wollen, "The Bigger the Better: From Cinemascope to IMAX," In *Future Visions: New Technology on the Screen*, ed. Philip Hayward and Tana Wollen, (London: British Film Institute, 1993), 10-30.
- 10 Eric Crosby, "An Aesthetic of Wonderment: IMAX and Affect" *The Journal of Moving Image Studies* 2007, http://www.avila.edu/journal/2007/crosby_imax_affect.pdf.
- 11 Byron Reeves and Clifford Nass, "Image Size," In *The Media Equation: How People Treat Computers, Television and New Media like Real People and New Places*, (California: CSLI Publications, 1996), 164.
- 12 Ibid.
- 13 Dacher Keltner and Jonathan Haidt, "Approaching Awe, a Moral, Spiritual and Aesthetic Emotion," *Cognition and Emotion*, 17 (2003): 297-314.
- 14 Benjamin Detenber and Byron Reeves, "A Bio-Informational Theory of Emotion: Motion and Image Size Effects on Viewers," *Journal of Communication*, 46.3 (1996): 66-84.
- 15 Maria Grabe, Matthew Lombard, Robert Reich, Cheryl Bracken and Theresa Ditton, "The Role of Screen Size in Viewer Experience of Media Content," *News Photographer*, 99.54 (1999): 4-11; Reeves and Nass, "Image Size."
- 16 Recuber, "Rationalization and Reenchantment of Cinematic Space."
- 17 Charles Acland, "IMAX Technology and the Tourist Gaze," *Cultural Studies*, 12.3 (1998): 429-445; Joanna Ploeger, "Techno-scientific Spectacle: the Rhetoric of IMAX in the Contemporary Science Museum," *Poroi*, 3 (2003): 73.
- 18 Eric Crosby, "An Aesthetic of Wonderment."
- 19 Mary Nucci, "Large Format and Mediation of the Natural World: Vision, Technology and the Sublime," (Ph.D diss., Rutgers, the State University of New Jersey).

- 20 Crosby, "An Aesthetic of Wonderment."
- 21 Cinemetrics, 2010, <http://www.cinemetrics.lv/database.php>.
- 22 Derek Bouse, *Wildlife Films*, (Philadelphia: University of Pennsylvania Press, 2000); Jim Corbett, *Communicating Nature: How we Create and Understand Environmental Messages*, (Washington: Inland Press, 2006); Colin Turnbull, "East African Safari," *Natural History*, 90 (1981): 26-32.
- 23 Alison Griffiths, *Shivers Down Your Spine: Cinemas, Museums and the Immersive View*, (New York: Columbia University Press, 2008), 95.
- 24 Haidee Wasson, "The Networked Screen: Moving Images, Materiality, and the Aesthetics of Size," In *Fluid Screens, Expanded Cinema*, ed. Janine Marchessault (Canada: University of Toronto Press, 2007), 85.

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