



When Gravity Shall Set You Free

A Review of

Gravity (2013)

by Alfonso Cuarón (Director)

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Reviewed by

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Commercial films about humans in space go back to the early years of film history. These include silent films such as *A Trip to the Moon* (1902) directed by Georges Méliès; *The First Men in the Moon* (1919) directed by Bruce Gordon and J. L. V. Leigh; and *Woman in the Moon* (1929) by the film director titan Fritz Lang. The work of Méliès and Lang is cited as influential by *Gravity*'s director, Alfonso Cuarón, along with Ron Howard's *Apollo 13* (Grazer & Howard, 1995); John Sturges's *Marooned* (Frankovich, Capra, & Sturges, 1969); and *2001: A Space Odyssey* (1968), directed by Stanley Kubrick (Kubrick, 1968; Roper, 2013). One thing that binds these movies together is the identification of what may be timeless or not about human nature and the concurrent challenges in space. Even space films like Edward Bernds's *Queen of Outer Space* (Schwalb & Bernds, 1958) featuring Zsa Zsa Gabor and a trailer promising "voluptuous Venutians [at least one with a Hungarian accent] giv(ing) battle to spacemen from earth" engage in such identification and challenges, perhaps through self-parody.

Dr. Ryan Stone, an engineer and main character of *Gravity* who is played by Sandra Bullock, is no Zsa Zsa Gabor. Much like screen siren and actress Hedy Lamarr, who codeveloped a patent for something called frequency-hopping that could facilitate torpedo effectiveness, sonobuoy communication, and later the development of Bluetooth and global positioning systems (Rhodes, 2011), Stone has real brains. Of course, the Austrian Lamarr had the real thing, whereas Bullock is just playing at rocket science, but she did have a German maternal grandfather who was a rocket scientist (IMDb, n.d.). Like her colleague, astronaut Matt Kowalski (played by George Clooney), Stone also has much courage. These observations bring about a conundrum of *Gravity* as it is viewed by the general public and by psychologists.

The story of *Gravity* seems simple enough. Humans in space are on a mission. Things are fine, then they're not. There are repercussions for the mission and for who makes it back to Earth. But is this the whole story? Early reviews and reactions to *Gravity* have focused largely on technologies—how the movie was made and the perceptual consequences for the viewer. This involves the digital filming, three-dimensional computer graphics, cinematography, other visual effects, and musical score. In fact, the Canadian film director James Cameron, who directed *Aliens* (Hurd, Carroll, Giler, Hill, & Cameron, 1986) as well as hits such as *The Abyss* (Hurd & Cameron, 1989) and *Avatar* (Cameron & Landau, 2009), has

told the Hollywood staple *Variety* that *Gravity* has “the best space photography ever done” (Cohen & McNary, 2013). It’s as if what might have been designed to further the story may be the story.

Of course, the phenomenon of technology as story has a long history, going back to filmgoers seeking out talkies, Technicolor, wide-screen viewing, and surround sound, as well as computer graphics. I remember as a 10-year-old going to the neighborhood theater and hoping to be terrified by the Percepto! (vibrating devices planted in some of the theater chairs) of William Castle’s (1959) *The Tingler*. Although I hardly remember anything of what many would call the plot, I do remember that the devices were to activate anytime a human parasite that feeds on fear was, presumably, on the loose in the theater. I imagine that psychologists interested in and knowledgeable of research related to sensation and perception might tingle at the experience of space served up by *Gravity*—a tingling constituting what Edmund Burke in 1757 called the sublime (Burke, 1757/2009).

However, as to the conundrum, there are two bodies of psychological research more closely related to the story as intended by *Gravity*’s director, Alfonso Cuarón. According to Cuarón,

It’s a film about a woman . . . who is a victim of her own inertia and who lives in her own bottle, and she confronts all of this adversity that brings her further and further away from human connection, and a sense of life and living. All of these other elements are voices that are part of her own psyche. . . . Your brain can be telling you, “I’m giving up,” but there’s something that makes species keep on going . . . [and] . . . you can see this as a metaphor for an internal journey for a woman. Instead of taking this story and placing it in a city, in an apartment . . . it’s in space. (Radish, 2013, Comment 9 by Cuarón)

Here the film would speak, “I Am Woman,” not a space action flick with special effects.

So one huge body of research relevant to the film is on the psychology of women: what it takes to overcome all that needs to be overcome; how to cast off chains to alternative becomings and beings. This research, often synergistic in nature, covers topics such as patriarchy, sexism, abuse, stereotypes, mental health, social justice, and constraints on gender identity and sexual orientation. I first became aware of these issues as a teenager in the 1960s through public lectures by the likes of Betty Friedan, Flo Kennedy, and Gloria Steinem that helped constitute the second wave of feminism. A recent review by Eagly, Eaton, Rose, Riger, and McHugh (2012) and two of my favorite classics (Chesler, 1972; Gilligan, 1982) instantiate psychology’s contribution to these issues.

In *Gravity*, Stone—like Major Tom in David Bowie’s *Space Oddity* (Dudgeon & Bowie, 1969)—has really “made the grade” through her privileged profession, expertise, and achievements. Unlike Major Tom, who, when faced with unexpected disaster, seems bizarrely unconcerned as Bowie softly sings “and there’s nothing I can do . . .,” Stone is plenty concerned and does what has to be done. Yet, ironically, she receives necessary, if not sufficient, help from a man—both the actual and a hallucinated version of Matt Kowalski. The film does not allow her to go it alone. As a converse to the cliché, there’s still a good man behind the successful woman.

There’s also a much smaller research literature relevant to the film on human functioning in extreme environments—with significant overlap especially in space, beneath the sea, or in

frigid environments. Topics include the quest for the right stuff—if it exists; if so, what it is and how to select, train for, and maintain it; performance factors affecting human–technology interaction; development and optimization of habitats for space and other extreme environments; essentials for physical and psychological support; adaptive communication within, between, and among space farers; and speculations on space politics, economics, and cultures. Three of the most recent works on such topics are by Harrison (2001), Kanas and Manzey (2008), and Suedfeld (2005). In the history of scientific psychology, a seminal work on the psychology of extreme environments is by Grinker and Spiegel (1945).

In *Gravity*, two very different people—Stone and Kowalski—work very well together. Perhaps with a bit too much pathos, Stone’s memories of and attention to a personal tragedy—the death of her daughter in a schoolyard accident—are presented as a challenge that needs to be worked through before resolution of a crisis in space becomes likely. She cries, asks aloud for a dead compatriot (Kowalski) to say hello to her daughter in heaven—“She’s my angel”—and then gets on with taking care of business. I also will posit that the film underlines the necessities of superb training, the overlearning of knowledge and tasks, and the resulting foundation for creativity and improvisation when one is facing the unexpected. And with all the rigorous selection and training, there’s the human all too human (pace, Nietzsche) that precludes the total predictability of behavior.

In conclusion, as a member of the general public, one would find *Gravity* delivering big-time on sheer entertainment value. As a psychologist—above and beyond the special effects and implications for human sensation and perception—one would find representations of a woman’s plight and the human challenges of space evocative of research questions and tentative hypotheses. Cuarón directed, coproduced, cowrote, and coedited *Gravity*. Mr. Cuarón, thank you for 91 minutes that will continue to linger in the human soul.

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