"This is what most of Space Looks Like":
Visualizations of the Planet Earth -from "Powers of Ten" to Space Travel and Earth Selfies

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Abstract

In a recent book about the role of visual media in the production of a vision of the planet, Nicholas Mirzoeff (2015) describes the present day world picture as an ever more detailed and complex digital composite: in fact, just a pseudo-photoshot of planet Earth. The genealogy of this totalizing but composite image of the planet Earth extends to moving pictures and demands a careful analysis of the role continuity illusion played in the process. From documentary TV to Hollywood sci-fi, one finds a typical treatment of the "pale blue dot" in motion media: a recurrent tracking shot that helped transform the planet Earth into a matter of vision at speed. In this genealogy, we will work with the crucial films "Powers of Ten" (1968-1977) by Ray and Charles Eames. This paper aims to show how the differences between the two adaptations of a Dutch comic book called Cosmic View: The Universe in 40 Jumps, released almost ten years apart, encapsulate two approaches, opposed in nature and meaning, to the representation of cosmic perspectives of space and macro-spaces in cinema and audiovisual media since then. My argument aims to show how the decisions made by Charles and Ray Eames for the final version of Powers of Ten were decisive for the language of the medium of film or audiovisual media - visually defining movement in space to a certain degree, while hiding the "40 jumps" and fully embracing illusion. The Eames case - later adapted to several feature Hollywood films (including Contact), TV shows, IMAX and mobile apps - will help us demonstrate how the tension between abstract spatial representation and pseudo-photographic image-truth (ever present in digital images and a post-photographic era) is at the center of the Powers of Ten 1968 to 1977 work progress and also in treatments of space travel thereafter.

From early on in the history of space travel, photographic views of planet Earth, mixing science and fiction, in a myriad of entertainment and institutional context, reveal an intricate ideological apparatus where making political sense of the planet starts and ends with framing, picturing, visually organizing and photographically coding the land in a certain way. They equate spatial truth and scientific reality with photographic truth, even in digital, post-photographic contexts. Functioning as aggregators of all the pictures of space and place, these totalizing photographs are used: to materialize both global capitalism and ecological movements; to depict the Anthropocene and eerily foretell the end of the planet; to convey, in radical ways, the urgency of either the total minimization or the total maximization of the political. In this context, we will analyse two case studies of Earth selfies. It could be argued

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that photographic self-portraits with views of the Earth - or Earth selfies - an early practice of space travel photograph by astronauts, encapsulate this ultimate symbolic gesture of an aggregation of all images of the world, the almost invisible ideologies that surround these photographic practices, and the self.

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