

The Five-Step-Model of Vilém Flusser - A 360° interpretation

Julia Wiesner (Berlin)



[The Five-Step-Model of Vilém Flusser](#) from [Jule.Wie](#) on [Vimeo](#).

We must get used to the fact that alternative times and spaces exist. With a technology that allows us to project scenes comparable in their specificity to the scenes we perceive with our senses, we are forced to philosophize alternatively. (Flusser 1991: 11–12 [transl.: MC])

Fulldome is a dome-based video projection environment. Since 2000, more than 990 planetariums all over the world – more than twenty in Germany – have invested in this digital projection system¹. There are also several types of mobile dome constructions and domes for temporary or long-term media presentations in museums and at trade fairs.

An elaborate beamer technology projects onto an enclosed, hemispherical surface, creating a visual space that fully surrounds and embeds the audience at the center of events.

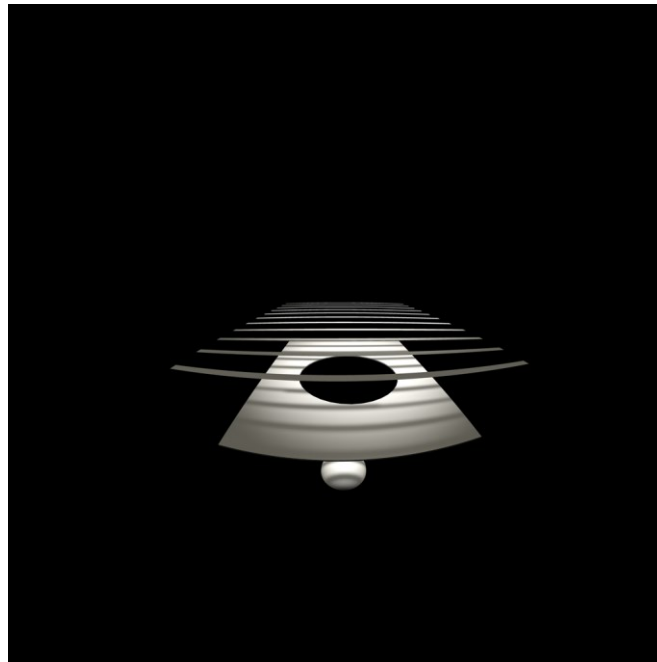
The video format required for these venues is called *Dome Master* and projects a fish-eye spherical image with a resolution between 1k (1024x1024) and 8k (8192x8192). Depending on the system and the size of the dome, the data format and frame rate can also vary.

Producing real footage to fit the format is still fairly complicated, therefore computer generated 3D content produced with *Cinema4D* or *After Effects* offers a wider range of possibilities. Thus these films are far more commonly found. They often apply virtual 5 camera rigs or special *Fulldome* cameras and distortion filters.

I.

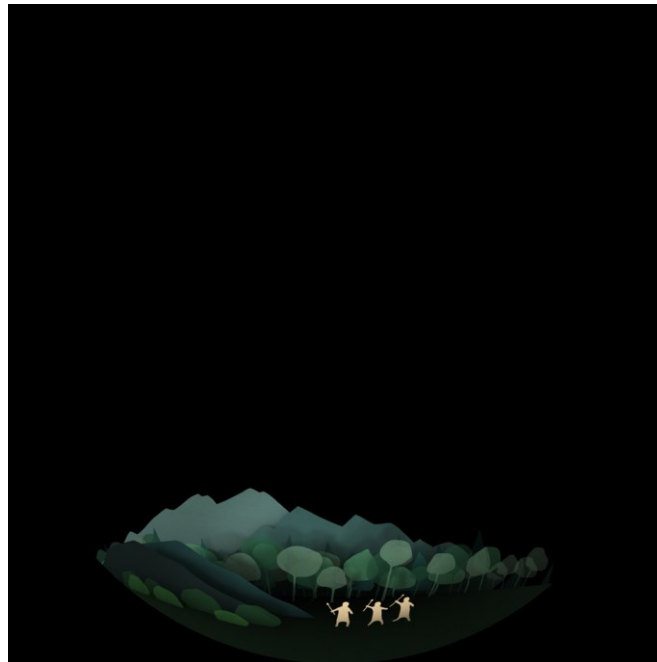
Since 2010, The University of Applied Sciences Potsdam (FH Potsdam) has been allowed to use the dome of *Wilhelm Foerster Planetarium* in Potsdam. The projection system, installed with the support of *Fraunhofer FIRST Institute*, is a customized system, which allows the presentation of interactive real-time projections next to the common *Dome Master* format.

Due to the context and setting of the planetarium, the majority of professional dome film productions are informational or educational films from the field of astronomy and other natural sciences.



Filmstill from *The Five-Step-Model* of Vilém Flusser, 360°-Fulldome shortfilm by Julia Wiesner, 2012.

The film projected onto the dome completely surrounds the viewer, thus creating a visual space that exceeds the 180° binocular human field of vision. As a result a fundamentally different set of rules applies to the creation and reception of dome films than to regular cinema films. The latter assumes a fixed point of view, which is set into a certain frame. Each image is specifically composed to reflect this. From an early age, we learn to recognize and accept the produced images as representations of reality. Shots and counter-shots, close-ups and zooms, pans and tracking shots guide us from scene to scene, and together form a complete story. Since the invention of film, there is an ongoing renewal of compository conventions and rules, which depends on the respective visual culture. We, as viewers, have internalized these rules and continue to subconsciously adapt them as we watch new films. Many of these conventions are difficult, or even impossible, to translate onto a dome-shaped screen. Close-ups are quickly too close, too many cuts become confusing, and movement appears faster than on a flat screen. The biggest difference, however, is in what way and how deeply we are immersed in the film.



Filmstill from *The Five-Step-Model* of Vilém Flusser, 360°-Fulldome shortfilm by Julia Wiesner, 2012.

Following Matthew Lombard and Theresa Ditton's thoughts on immersion, we can speak of two types, 'perceptual immersion' and 'psychological immersion' (Lombard / Ditton 1997). The former term refers to the quality of the medium. The greater the number of senses that are addressed, the more the real, physical environment will be excluded from perception. Therefore, a *Fulldome* theater offers a high degree of 'perceptual immersion'.

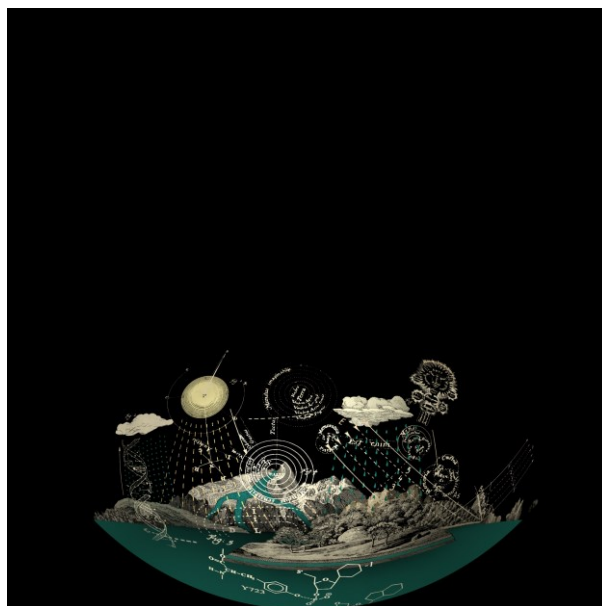
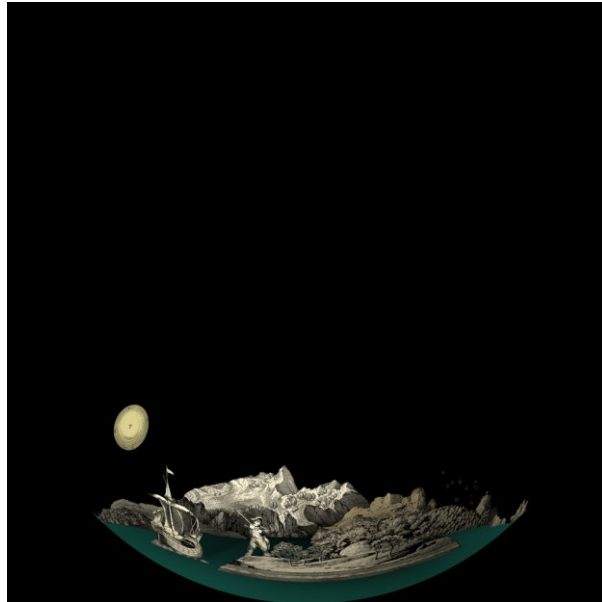
'Psychological immersion', on the other hand, addresses the receptive experience of the viewer. When reading a book, for example, a person requires more imagination to become fully submerged in the world of the book than when watching a film. This, in turn, requires more imaginative effort than becoming immersed in the fully enveloping experience of a *Fulldome* film.

II.

The aim of most *Fulldome* productions is to use image concepts, optical illusions, surround sound, and content-related strategies such as suspense and captivation to achieve the highest possible degree of immersion.

However, this can become detrimental when trying to convey information. The combination of seemingly all-encompassing actions, sounds and a narrator explaining complex information can easily overstrain and overstimulate audiences.

In my master thesis (written at FH Potsdam under prof. Klaus Dufke and Ralph Heinsohn), I explore alternative ways of knowledge transfer in immersive environments. Based on Vilém Flusser's theories, I critically investigate the medium *Fulldome*.



Filmstill from The Five-Step-Model of Vilém Flusser,
360°-Fulldome shortfilm by Julia Wiesner, 2012.

Two central terms in Flusser's work are the phenomena of communication and the media used for this purpose. A five-step model forms the core of his ideas, describing cultural history as a process of increasing abstraction and alienation (Flusser 2011: 6–7). In a lecture

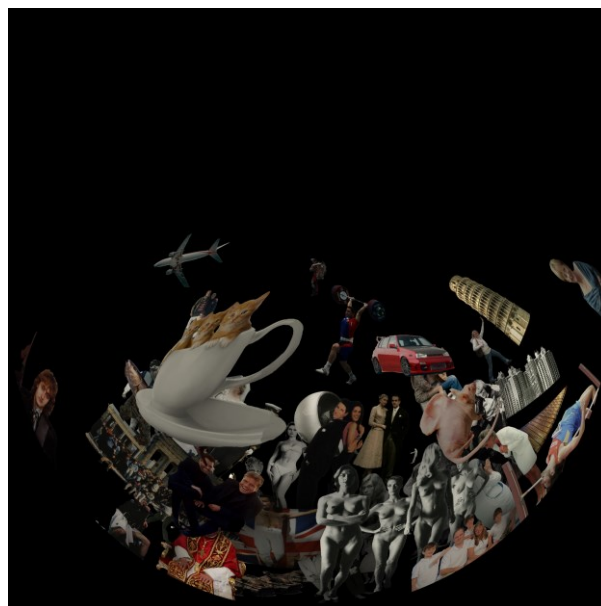
held by Flusser in Budapest in 1990, he explained his model. Using this lecture as the outset, my 360° *Fulldome* film *The Five-Step-Model of Vilém Flusser* elaborates and illustrates the concept.

Due to the complex production process of *Fulldome* films, my film could be no longer than six minutes. Thus, it should not be mistaken for a comprehensive representation of Flusser's theory. It should rather be considered an impuls to spark the audience's interest in the theorist's media-philosophical concept. A magazine accompanying the film provided further information and research material.

The aim was to use the specifics of the medium for the filmic illustration of Flusser's elaborations on his five-step model. His explanations require a fair amount of concentration from the audience and thus the visuals should aid the spoken words and illustrate them. The film focuses on the third, fourth, and fifth stage of Flusser's model.

Each stage is marked by an individual design, but there is also a connecting element between them: All are depicted as sceneries with several layers spread out on the spherical screen. This evokes a sense of two-dimensionality in a three-dimensional space.

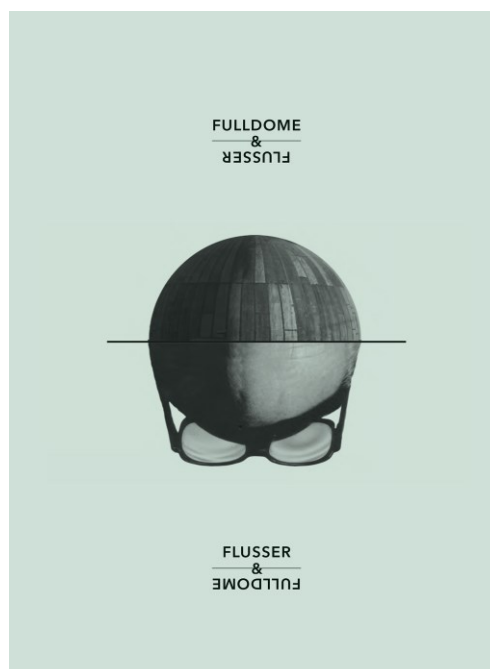
At first the camera consistently zooms out. The audience becomes more and more distant from the scenery, thus taking the quoted "step back" and looking at the world from outside. This first step back already means that we are no longer part of the world. From this point onward, the act of distancing slows down, but the process does not stop until shortly before the film ends.





Filmstill from *The Five-Step-Model* of Vilém Flusser, 360°-Fulldome shortfilm by Julia Wiesner, 2012.

Flusser was skeptical about the illusionary potential of media. He criticized their ability to manipulate recipients. I continuously had this thought in mind while developing the visual form of the film. As a result, the audience is only fully immersed in a 360° image at the beginning of the film. Soon viewers can detect the illusion: landscapes are constructed as surfaces, depth is created by layering these surfaces, and movements purposely feels artificial, as if on tracks. What is represented in no way aims to be conceived as real. Instead, it reveals the constructed and represented projection.



Translation: Margarethe Clausen

References

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Flusser, Vilém interviewed by Florian Rötzer (1991), in: Röller, Nils and Silvia Wagnermaier, (eds.): *Absolute Vilém Flusser*, Freiburg 2009: 6– 21.

Lombard, Matthew and Theresa Ditton: "At the Heart of it All: The Concept of Presence". In: *Journal of Computer-mediated Communication*. Vol. 3, issue 2, September 1997.

¹ See: <http://www.lochnessproductions.com/lfco/lfco.html> (accessed on Feb 3, 2016)