

# The Matter of Space, Time and Interaction

Linthe van Rooij

s3989429

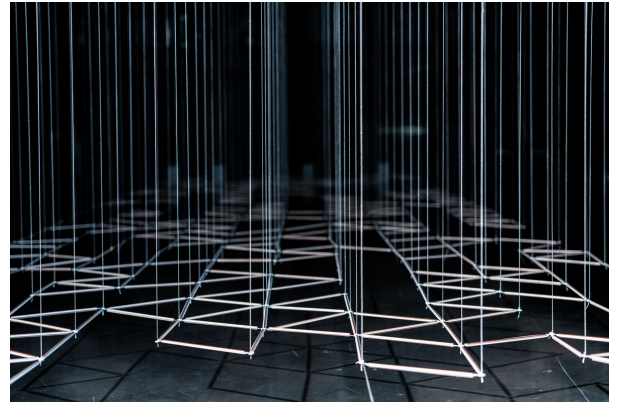
Leiden University

s3989429@vuw.leidenuniv.nl

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Figure 1: (A) Richard Serra, *The Matter of Time* (2005). Photograph derived from: Guggenheim Museum. (B) Fillip Studios, *Auxetic Landscapes* (2022). Photograph derived from: Fillip Studios.

You are looking at two artworks that are not very alike from the outside (Fig. 1). Although they may differ in appearance, they both share similar points of view, deriving from a minimalist strategy. The experience of both artworks is crucial to their meaning, creating an impressive experience. Despite the differences in the outcomes of these experiences, the artworks share similarities as well. Therefore, in this essay, I will compare *The Matter of Time* and *Auxetic Landscapes* from a minimalist perspective, outlining their key similarities and discussing their contrasting viewpoints.

Located in the Guggenheim Museum in Bilbao a combination of eight giant pieces of steel form Richard Serra's *Matter of Time* [3]. The artwork is part of the museum's permanent exhibition. It was designed to fit in a specific room of 130 meters, filling the entire space with massive amounts of steel [1]. Each piece is curved and tilted in a specific way, forming a rather abstract combination that can be viewed from multiple points of view. Not as massive but yet impressive is the artwork *Auxetic Landscapes* by Fillip Studios [4]. This artwork was part of an exhibition in 2022 at the Jan Cunen Museum. The artwork consists of multiple tubes hanging on thin wires. These horizontally oriented tubes form basic geometric shapes, combined in a complex auxetic structure [2]. Auxetic structures differ from normal structures due to their unique behaviour of expanding when stretched and contracting when compressed, as explained in Figure 2. An algorithm generates a horizontal pattern using the location's coordinates as the primary input for shaping the structures [4]. Without interference, the structure remains abstract. However, with the viewer's presence, the installation starts to move, forming different shapes in the structure.

The use of basic geometric shapes and raw material, while eliminating unnecessary elements is an important aspect of the minimalism strategy. The nature of *The Matter of Time* consists of a substantial amount of tilted and curved steel filling the room with its physical presence. The specific shapes and forms of the material are crucial to

the viewer’s experience, as the steel is angled and curved in unexpected ways. Similarly, in the absence of viewers, *Auxetic Landscapes* appears as a minimalist structure due to its repetitive geometric shapes that together form the auxetic patterns. Only necessary materials and forms are used in these structures to fulfill their function. The structure becomes more complex only in the presence of viewers, but in essence, it remains minimal.

Moreover, both artworks’ location sites are essential for their creation. In *The Matter of Time*, Richard Serra’s focus on creating site-specific artworks is executed perfectly, as the entire room is contributes to the large pieces and their multiple perspectives [3]. The location site of *Auxetic Landscapes* is also crucial in its creation process. The coordinates of the location serve as algorithmic input [4], arranging the tubes and wires corresponding to this location, thus creating a basic landscape.

Another similar effect seen in both *The Matter of Time* and *Auxetic Landscapes* is the experience based on your position relative to the artworks. Both artworks rely on the viewers’ engagement and observation; they do not exist without their viewer’s experience. In *The Matter of Time*, this effect is seen based on different perspectives of the sculptures. Observing it from above can make it challenging to perceive the artwork’s true scale. The perception of scale is influenced by the positions and shapes of the used materials. However, moving in and around the sculptures creates an overwhelming sense of its giant sizes. When distancing yourself from *Auxetic Landscapes*, the pattern remains static and abstract. By moving closer to the artwork, the algorithm reacts to its viewer’s presence, forming hills and valleys through the auxetic patterns. While both artworks remain abstract and static from a distanced perspective, they will reveal different meanings when viewers are close, showing the complexity of the works.

While both artworks need their viewer’s experience to reveal their meanings, the experience they cause is completely different. The large scale of steel and the positioning of the different sculptures invite the viewers to take a closer look, moving in and around them. *The Matter of Time* primarily plays with the illusion of space and sense of time due to the shapes of the steel sculptures. Disorientation and altered time perspectives are the most commonly mentioned experiences when walking through the sculptures. In contrast, *Auxetic Landscapes* creates this effect through the viewer’s presence. The experience lies in the forming of landscapes in space, revealing the meaning of the artwork – altering nature with the presence of humans.

Adding to that, the main visible effect causing the experience is different as well. The massive amounts of steel in *The Matter of Time* remain static when approached, affecting only the viewer but not changing the structure. *Auxetic Landscapes* on the other hand, is dynamic and reacts to its viewers. The artwork comes to life by moving its material, creating hills and valleys in the landscape. This interaction represents human involvement in a landscape or even nature. It also shows that the landscape – nature – can restore itself when viewers are leaving again.

In conclusion, both artworks share similar views on their basic geometric shapes, site-specificity and engagement in the artwork. The role of the viewer is essential to both artworks. However, the result of this experience differs. *Auxetic Landscapes* changes dynamically in space due to its auxetic patterns and algorithm by presence of the viewer. *The Matter of Time* on the other hand, creates an illusion in space and time due to its specifically shaped steel when moving in and around the sculptures. Both artworks will therefore create an impressive experience, fulfilling the precise goal of the minimalist strategy.

## References

- [1] Javier Barrallo, Santiago Sánchez-Beitia, Francisco González-Quintial, et al. “Geometry Experiments with Richard Serra’s Sculpture”. In: *Proceedings of Bridges* (2013), pp. 287–294.
- [2] Carlos Sáez Comet. *Auxetics: materials that become thicker when stretched*. Materiability Research Group. 2023. URL: <https://materiability.com/portfolio/auxetics/>.
- [3] Guggenheim Museum. *The Matter of Time*. 2005. URL: <https://www.guggenheim.org/artwork/21794>.
- [4] Fillip Studios. *Auxetic Landscapes*. 2022. URL: <https://www.fillipstudios.com/project/auxetic-landscapes/>.

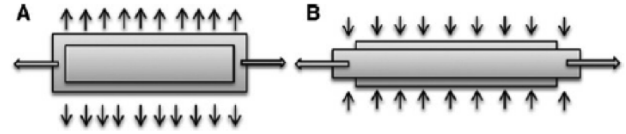


Figure 1: (A) Auxetic vs. (B) non-auxetic behavior of materials.

Figure 2: Auxetic behaviour of materials. Photograph derived from: Materiability Research Group.