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AND
HOW ART CHALLENGES WAYS OF SEEING

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I, ILGIN HANCIOĞLU; hereby declare

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- that this Master of Arts does not contain any material from any research submitted or accepted to obtain a degree or diploma at another educational institution;
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In addition, I acknowledge that any claim of irregularity that may arise in relation to this work will result in a disciplinary action in accordance with the university legislation.

Ilgın Hancıoğlu

_____

Date: 17/07/2023

to my family,

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ABSTRACT

From ancient optical tools to virtual images of the 21st century, humans have used devices to see, look at, and observe. The tools of vision we place between our bodies and the rest of the world are social more than mechanical. These apparatuses are both the outcome and the agent of human culture. While devices introduce images impossible to witness through bare human perception into our visual knowledge, they also impose their ways of seeing as ultimate. The reflective mechanisms, like the mirror, the lens, and the pinhole camera, create instantaneous moving images. However, they also abstract the three-dimensional world into two. The single-point perspective is accepted as a realistic depiction style; however, it standardizes and establishes a rigid, non-humanistic way of seeing. While capturing the flow of time like never before, photography also presents these frozen instants as evidence that would otherwise elude the human vision. The moving image, that is, the illusion of movement of sequenced still frames at a certain pace, immobilizes its spectators for its duration as the sole focus of their attention. While the screen refers to a virtual depth, its apparatus is concealed, meaning, the viewer observes the outcome of a mechanism they do not encounter. However, it is so ubiquitous that it is common to think and create moving images for camera vision instead of human perception. This study inspects these seeing devices not just as technical developments of visual culture but as shifts of the spectator's body and its regulation. It proposes art as an exceptive approach against established methods. The critical approach of artists, by revealing the apparatuses that elude human vision or by working against it, can provide new ways of seeing and inspire us to explore the world with a new gaze.

Keywords: Moving Image, Cinematic Apparatus, Spectatorship, Critical Art

HAREKETLİ İMGELER VE
SANATIN GÖRME BİÇİMLERİNİ ELEŞTİRİSİ

ÖZET

Antik optik aparatlarından 21. yüzyılın sanal imgelerine kadar insanlar görmek, bakmak ve incelemek için aygıtları kullanagelmiştir. Bedenimiz ve dünyanın geri kalanı arasına konumlandırdığımız bu aletler mekanik olmaktan çok sosyal yapılardır. Bu aygıtlar kültürün hem bir ürünü hem de şekillendiricisidirler. Bir yandan yalın insan algısıyla tanık olunamayacak imgeleri görsel haznemize kazandırırken bir yandan da kendi görme biçimlerini nihai yöntem olarak sunarlar. Aynalar, lensler ve iğne deliği kameralar gibi yansıtma mekanizmaları anlık hareketli imgeler yaratabilir. Ne var ki üç boyutlu dünyayı iki boyuta soyutlarlar. Tek noktalı perspektif gerçekçi bir temsil biçimi olarak kabul görür, ama aslında katı ve insan-dışı bir görme biçimini standartlaştırır ve yaygınlaştırır. Kendinden önceki hiçbir tekniğin yapamadığı bir biçimde zamanın akışını donduran fotoğraf, yakaladığı bu anları insan gözünden kaçan gerçeklikler olarak sunar. Sabit imgelerin belirli bir hızda ardışıklığı ile oluşturulan hareketli imgeler ise kendi süreleri boyunca tek odak noktası olarak izleyicisini hareketsiz bırakır. Ekran, arkasındaki sanal bir derinliğe referans verirken hareketli imgelerin gerçek aygıtları gizlidir, yani izleyici aslında karşılaşmadığı mekanizmaların çıktılarını gözlemler. Yine de hareketli imgeler günümüzde o kadar yaygınlaşmıştır ki insan algısı yerine kameranın bakışı göz önüne alınarak düşünmek ve üretmek artık genel geçerdir. Bu çalışma, görme aygıtlarını sadece görsel kültürün teknik gelişmeleri olarak ele almak yerine bunları izleyenin bedeni ve bu bedenin tanzimindeki değişimler olarak inceler. Sanatı, bu yaygın yöntemlere itiraz eden bir yaklaşım olarak önerir. Sanatçıların, insan algısından kaçan bu aygıtları açığa çıkaran, ya da onlara karşı üreten eleştirel bakışı bize yeni görme biçimleri sunabilir ve dünyanın geri kalanını yeni bir bakışla keşfetmemiz için bize ilham verebilir.

Anahtar Sözcükler: Hareketli İmgeler, Sinematik Aygıtlar, İzleyicilik, Eleştirel Sanat

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1. INTRODUCTION

Images as tools for leaving a mark, recording, communicating, imagining, and creating are omnipresent. Besides the visuals that are spread over the public sphere or cherished as personal items, images can also remain solely in one's mind as mediators of thinking, connecting, corresponding, or resisting. We think through images as much as we do through words. Therefore, our relationship with the world depends on our relationship with images and our visual perception. From the optical tools of antiquity to the computer-generated virtual images of the 21st century, humans have used devices for seeing clearer, viewing, observing, and creating new images. Although digital technologies are one of the main image production tools today, our relationship with images was determined long before their development. In fact, our contemporary ways of seeing are rooted in long-lasting modes of spectatorship.

Though not yet theorized, the lens and the camera's ancestor, the camera obscura, were both known in antiquity. The imagery created by their combination in Renaissance, the colorful, moving, and in-focus virtual window, determined both the status of spectatorship and the 'accuracy' of images for the upcoming centuries. Although previously vision and movement perceived the world in collaboration, the viewer of the camera obscura was confined in a dark room, separated from the rest of the world. Moreover, the image itself was isolated from its source and became measurable and dissectible. Thus, although it was not yet widespread among the general public, camera obscura was utilized by scientists and artists to explore new visualities. And the new imagery, coming from the camera obscura, was determined and accepted as the 'correct,' if not the 'ideal', way of seeing.

Single-point perspective is accepted as an 'invention,' developed around the same period as the combination of camera obscura and lenses. Although it is recognized as the 'realistic' way of representing depth, it is only one of the countless methods of depiction. The representation styles are influenced by cultural prospects, and they visualize the spatial and temporal relationship of their creators, as well as the way they

are positioned as subjects in the world. Single-point perspective, while defining a sense of depth behind the image surface, locates the viewer outside the image. Moreover, created according to a hypothetical, singular, and motionless eye that sees everything within an instant, it positions the viewer at the same location that it was depicted from. The singular point of view nullifies the critical vision and creates a distant and apathetic spectator that obtains all there is to know from one panoptic plane. The viewer restrained to this pregiven position, which is accepted as the 'ideal' angle, cannot imagine any other points of view. However, this presumption to believe that there can be an 'ideal' vision to see reality is the real obstacle against reaching it.

The acknowledgment of photography as a reliable way of recording also grants it the recognition as the correct way of seeing. However, the photograph *is* a form of abstraction, just like any other style of depiction. While subjective vision is intrinsically personal, the camera only recognizes the light reflecting from its surroundings. Human vision is in accordance with movement, and it is extended over time; photography, on the other hand, captures an instant from a singular location. Moreover, the mechanical reproduction of the photography redefined both the image and the viewer. Although the scenery presented by photography is not substantially pioneering, as it was pursuing a way of depicting preestablished by the camera obscura, photography revolutionized the act of recording by narrowing it to an instant reflex; and, by doing so, altered the perception of time. The suspension of time, and as a result, of movement, transformed the depiction styles of the preceding decades. While pre-photography representations of the movement were composed as individual poses that could convey the sense of motion, the photography cameras introduced serial still images, none of which can express action individually but recreate the image of movement when presented in a sequence. The discovery of instants, which would elude the bare human vision, put the era's artists in a dilemma of creating images that communicate the feeling of movement -which was recently found to be incorrect- or, of relying on the photographic image and depicting scientifically true visions -that are inadequate in expressing dynamism. Although the photographic image made us notice things that the human eye cannot see, the scientific truth of camera vision does not correspond to humanistic reality.

Even though the term ‘apparatus’ may indicate physical gears like tools and machinery, they are intrinsically social formations. Their existence is innate to culture, so much so that they are seldom recognizable. Each apparatus creates its own manners, its own standards, and its own mode of ‘subjectivity.’ Although these devices develop in accordance with the expansion of culture, their inclusion transforms culture in return. The history of vision and spectatorship cannot be considered separately from the history of its devices. However, based on their ‘reliability,’ optical tools determine a ‘standard,’ a ‘norm,’ an ‘ideal,’ and a form of ‘reality.’ The apparatuses operate as augmentations to human perception, and they not only alter their subjects’ observation of spatiality, temporality, and sense of body, but they also affect their discernment of the world. Moreover, as much as the tools perform as an extension of the body, the body itself is an indispensable part of the apparatus.

Apparatuses evolve rather than radically change. Thus, they not only recreate the mannerisms of their precursors but also share their subjects with other developments of their period. The cinematic apparatus emerged around the same era of industrialization. Mechanical productions’ prioritization of efficiency demanded undisturbed focus in factories. However, approaching perception and attention as quantitative circumstances affected the expectations of the viewer of the moving image as well. The linear flow of cinematic image, which does not slow down, stop, or can be interfered with, demands a subject who can concentrate all their attention on the screen. In addition to the physical restrictions mandated to prevent distraction, the moving image substituted human interaction with recording, fittingly to the industrialized world, presenting the audience with no points of seeing other than the camera’s perspective.

In the second half of the 20th century, alternative modes of moving image spectatorships arose. Expanded Cinema removed moving images from cinemas as a reaction to the conventional cinematic apparatus. The artists manipulated the cinematic apparatus to demonstrate the invisible components of the equipment and to reframe the viewer-screen interaction and stimulate human perception.

Despite the radical attempts of the 20th century artists, the contemporary moving image endures two grand dichotomies. The first is that of the time and movement itself. Although being intrinsically similar to time by its ever-flowing, unstoppable, and unrepeatable linearity, real movement can never be fully captured. While movement is bound to space and time, the cinematic illusion of movement nonlocalized and non-temporalized the image of movement. Moreover, the movement of images immobilizes the spectator. The cinematic movement is based on an illusion; the moving images actually consist of a succession of still images. However, the cinematic apparatus necessitates the 'invisibility' of these images in order to sustain the illusion. The sequential flow of these images not only creates the phantasm of motion, but also determines the duration of the film. While a picture can be viewed according to the viewer's temporality, the moving images present their own durations to the spectator; moreover, they ask the viewers to disregard their temporality in order to share the duration of the image.

The second complication of motion pictures is their paradox of physicality and the question of reality derived from it. The moving image is not on the same spatiality as its viewer. The screen, which separates the two, also defines clear borders around 'inside' and 'outside,' 'the moving' and 'the stagnant,' 'the immaterial' and 'the material,' and, 'the vibrant' and 'the passive.' The viewer in front of the screen is not only immobilized but also 'tamed' and disembodied. Their perception is on the virtual depth while their body is on the material space. The virtuality is supported by a sense of realism, which is derived from the apparatus being hidden. As long as both the machinery and the labor put into the creation of the image remain concealed, the illusion of the virtual image sustains.

The term 'virtual' will be recurrent throughout this research in relation to 'reality.' Just as the other visuality techniques this research deals with, the virtual picture predates contemporary imagery. Friedberg (2006, pp. 7, 142) states that describing and delimiting virtuality as digital imagery is erroneous, and adds that according to Bergson, the difference between reality and virtuality is their dependence on a subject; while the 'virtual' can be perceived just like reality, the 'real' does not depend on a perceiver to

exist. According to this definition, the reflections produced by mirrors and lenses, the light traversing through pinholes, and the sensation of depth indicated by linear perspective are as virtual as the 20th-century photographic and cinematic imagery and the digital sphere presented through augmented reality gears in the 21st century.

The scope of this research does not include neither virtual reality gears, nor the artificial intelligence image creating methods. First of all, the imagery of VR helmets is an extension of screen spectatorship, they operate with screens mounted in the head gear. And, even though the computer-generated imagery of current visual culture presents novel sceneries velociously, the images they generate are also tied closely to a long-standing tradition of image-making. And, furthermore one could argue that both the minuscule and grandiose universes one can get immersed in looking through lenses such as microscopes and telescopes are profoundly more progressive than the AI-generated graphics, as the pictures of the artificial intelligence is a cumulation of already existing images, a lens can still 'see' a scene that was never even imagined before.

Although optical devices provide us with new perspectives on the world, they are political and ideological forces rather than neutral instruments. This research aims at examining the state of spectatorship through apparatuses and proposes the critical approach of art as an opposition to the overbearing limitations of the status quo.

The 2nd Chapter of this research examines visual devices, the images that these create, and their relationship with the observer as continuous practices from antiquity to photography. The chapter categorizes the methods of seeing and visualization according to the imagery they create. While the images reflected by the pinhole of the camera obscura, lens, and mirror are in motion, their imagery flattens the three-dimensional world into two, framing it as a virtual image. On the other hand, even though their recording styles are vastly different from one another, both single-point perspective and photography create an image frozen in time. Intrinsically opposite to human vision, which observes the world within both motion and duration, both single-point perspective and photography create images from a stationary point of view. Overall, the

chapter aims at scrutinizing the widely accepted ways of seeing and at questioning their reliability over subjective vision.

The 3rd Chapter of this study examines apparatuses and their role in shaping society, perception, and subjectivity. Although optical apparatuses present us with new ways of seeing, they are not neutral instruments but political and ideological forces. Having intertwined relations to culture, apparatuses evolve rather than undergo radical changes. In the case of the cinematic apparatus, it emerged during the industrialization era, asking focused attention from viewers and substituting human interaction with recorded images. The chapter concludes with the example of Expanded Cinema, an art movement that emerged in the 1960s, questioning and dismantling the approaches of conventional cinema.

The 4th and final chapter of this research further examines the moving image apparatus based on its two big issues. The first is that cinematic movement is an illusion, separate from real movement, which is unrecordable, and the illusionary movement of the image immobilizes the viewer for a duration determined by the image itself. The second complication involves the paradox of physicality and reality; as the surface of the moving image separates the image and the viewer, it creates a sense of realism by hiding the machinery behind it. At the end of each concept, the work of an artist who has addressed this topic in some way is reviewed, not as a potential shortcut to break free from apparatuses altogether but to discover new ways of seeing.

2. TOOLS OF SEEING, DEVICES OF WATCHING

2.1 Reflections and Flattening the Image

2.1.1 Camera obscura, lens, and mirror

Camera obscura, which means ‘dark room’ in Latin, also known as the pinhole camera, is an optical phenomenon where light rays entering a room only from one small opening create an image. Although its existence was known since antiquity, as Aristotle allegedly observed an eclipse through one, the camera obscura’s principles were correctly theorized by Ibn al-Haitham in the 11th century (Lindberg, 1968, pp. 154–155).

Another development in seeing technologies parallel to camera obscura is the lens. Transparent “burning stones,” the mineral lenses that magnify the sunlight to kindle fires, were recorded dating back to the 5th century, namely in Aristophanes' (ca. 432 B.C.E./2015, p. 37) play The Clouds. However, Sabin (2019/2021, pp. 10–11) states that the 12th century is the earliest recording of the first systematically used vision; the reading stones; semi-sphere crystals, which are positioned on books and manuscripts on their flat side to magnify letters underneath. View-correcting spectacles were believed to be invented in the 13th century in Pisa, and by the mid-14th century, they became prevalent; as Hockney and Gayford (2016, p. 98) states, seeing glasses were one the most determinant innovations of the Middle Ages.

Although the production of glass and lenses were expensive, thus they were considered ‘luxury’ for everyday use, and their establishment to the scientific community introduced sceneries previously unimaginable to the visual culture; Friedberg (2006, p. 63) states that the observations of Galileo through a telescope redirected our “earthbound view toward the heavens.”

The images created by the camera obscura are both upside-down and inverted. Even though Leonardo suggested a solution to eliminate the horizontal inversion, to position the translucent drawing surface between the artist and the pinhole, thus refiguring the relation of the artist with the drawing surface, the problem was truly solved in the 16th century when lenses were mounted to the opening of the camera (Friedberg, 2006, p. 62).

Especially after the introduction of the lenses into the mechanism, the images that appeared on the dark surface of the camera were crisp and 'realistic.' The flattened reflection of the world created an image that was not only palpable but also 'within reach,' measurable and quantitative. Friedberg (2006, pp. 61–63) states that by the 17th century, camera obscura was prevalent amongst the scientist, and although it cannot be determined for certain, amongst artists as an observation device as well as an aid for recording. At this point, Hockney and Gayford (2016, p. 100) state that the speculations on the utilization of the device by the individual artists were irrelevant, as such an apparatus not simply provide a vision to be observed but, maybe more importantly, sets a standard for the 'correct' image; Hockney adds: "and once someone's made a camera picture, it will influence everyone else." The image created by the camera obscura was not only accepted as the scientifically correct way of seeing, but it also created a new ideal for of realism.

In the 17th century, Descartes used the camera obscura as a metaphor to explain the functioning of human vision (Friedberg, 2006, p. 62). Indeed, unlike the first photographs, which were blurry, black and white, and motionless, the images of the camera obscura were clear, colorful, and in motion. Moreover, the "orderly and calculable penetration of light rays" through the pinhole creates objective, reasonable, and neutral imageries, unlike the human eye, which is tainted by other senses (Crary, 1990, p. 43). Thus, according to Descartes, where human vision can be deceived, the camera creates reliable images. However, Crary (1990, pp. 27, 30) states that a much more extensive and complex structure of knowledge production and subjective vision is neutralized through the dependence on the imagery attained through apparatuses and

emphasizes that it is crucial to distinguish the observer's subjective vision from the images created by the camera obscura.

The colorful moving image of the camera obscura, unlike the photography's instances of the past, is in the present. The motion taking place on the brighter side of the hole appears on the darker side in real-time. Friedberg (2006, p. 61) defines the operation of the camera obscura as an "architectural exchange," as the surface of the wall is transfigured into a window. The pinhole brings the outside into the inside. However, by defining an indubitable inside and outside, the camera obscura segregates the two definitely. While referencing a camera obscura that he has built, Hockney states (2016, p. 216) that he felt isolated from the world and adds, "Everything is over there; you are cut off from what you are seeing." Moreover, as Crary (1990, p. 39) indicates, the viewer is enclosed in a "quasi-domestic space," seeing but not interacting with the life in the public space.

Even though philosophers of the 17th century argue that camera obscura creates images that are equal to, if not superior to human vision, the two operate distinctively differently. First of all, the human vision is "fluid;" it focuses and loses its focus as it constantly moves (Hockney & Gayford, 2016, p. 100). Yet, within the frame of the camera obscura's image, the world is not only flattened but also homogenous. Secondly, the observer of the world is in motion, as Merleau-Ponty (1961/1971, p. 162) indicates: "Vision is attached to movement… It is the natural consequence and the maturation of my vision." However, the viewer of the camera obscura is confined within a dark room, unable to communicate with the outside, let alone roam free. And finally, not only is the observer separated from the world, but also the virtual image on the dark surface, beyond being a representation, is disconnected and alienated from its source. As Crary (1990, p. 37) emphasizes, the image of the camera obscura is the visualization of an "optical regime that will a priori separate and distinguish the image from the object."

Humans have been using ocular devices for centuries. These devices not only deliver the vision of the world but also create their own imagery and their own version of spectatorship. Ancient Roman encyclopedia author Pliny the Elder (ca. 77-79/1989, pp.

213–215) noted that Emperor Nero did not watch the gladiator games bare-visioned but preferred to view the reflections through polished emerald surfaces, which had the most "delightful" color. However, a reflection is a virtual image that cannot be fully attained. Narcissus' adoration towards his reflection is aimed at the unachievable; when he tries to reach for the image, he gets drowned in his reflection. Yet observing the reflection of the world has been essential for artists for centuries; Hockney and Gayford (2016, p. 108) cite that Leonardo advises painters to evaluate their creations by holding them up to a mirror; and moreover, they add that "a mirror can make the real world look like a picture." The Claude glass, a slightly convex and green-tinted mirror, was used in the 18th century to gaze at the landscape. The mirror not only altered the vision of the observers but also set an "ideal" for the artists to consider when they were depicting the world (Hockney & Gayford, 2016, pp. 108–110).

Figure 2.1 Man using Claude Mirror

Note. Drawing; sketch-book, by T. Gainsborough, 1750-1755, The British Museum (https://www.britishmuseum.org/collection/object/P_Oo-2-27). The Trustees of British Museum.

As it will be further elaborated in Chapter 2.3 On Apparatuses, each seeing device creates its own way of seeing, as well as its version of subjectivity. Crary (1990, p. 39) defines the subject of the camera obscura as “isolated” and “enclosed,” the act of seeing is predetermined by the apparatus, so much so that the vision becomes de-corporealized. Hockney and Gayford (2016, p. 100) state that whether the observer is looking through a lens or at a mirror, what they actually see is a standardized “lens perspective.” However, the reliable imagery these apparatuses promise means the demise of all the other ways of seeing. Crary (1990, p. 38) states that camera vision became the prevalent way of obtaining new imagery, eradicating all the other ways of seeing within a few decades of the camera obscura’s integration with the lenses.

Our visual culture not only leads towards new apparatuses but also is shaped by the past apparatuses, and as Friedberg (2006, p. 70) asserts, the experiences of the lens and the camera obscura visions are “at the core” of contemporary moving image spectatorship.

2.2 Suspending the Movement

2.2.1 Single-point perspective

The ‘invention’ of single-point (or linear) perspective is generally accredited to a particular place and time; Florence, early 15th century, and a specific ‘inventor;’ architect Filippo Brunelleschi (Gombrich, 1950/1995, pp. 226–229; Hockney & Gayford, 2016, p. 94). The application of linear perspective in painting is treated as a breaking point in art history, leading the path of naturalism and realism, especially in the depiction of space. Florensky (1920/2002, p. 215) writes that the single-point perspective is accepted as the “ultimate scientific truth,” while the styles not following its rules are declared as “decadence, ignorance, savagery.” However, is the single-point perspective really the correct way of depiction? And, can the history of art be considered as a linear development?

If one considers “reality” as the “actual subjective optical” perception, Panofsky (1927/1991, p. 29) states that the linear perspective is a fairly “bold” and radical abstraction of it. While creating a two-dimensional depiction of the world, abstraction, and stylization are inevitable, as contrary to the painting’s surface, the real world is not flat. “Two dimensions don’t really exist in nature ... What’s really flat in nature? Nothing. So the flatness of a picture is a bit of an abstraction ... Everything on a flat surface is stylized” (Hockney & Gayford, 2016, p. 20). Sayın (2013, pp. 21–22) states that even if one ignores the passage of time as the fourth dimension, it is impossible to preserve shapes of the three-dimensional world in a two-dimensional depiction; as an example, a map can represent a place but can never communicate it fully. A depiction does not aim to be a duplicate of its subject. As Florensky (1920/2002, p. 259) writes: “The representation is always more unlike the original than like it.”

Some depiction styles can become prominent ones in some cultures. Hockney and Gayford (2016, p. 85) state: “There are, perhaps, as many kinds of space as there are kinds of pictures. Different cultures and different historical periods depicted space in

diverse fashions." While societies before Renaissance Europeans did not depict the world through single-point perspective, Florensky (1920/2002, pp. 216–217) confirms that this was a deliberate choice; the representation style did not imply that those artists lacked a sense of space and depth, but their appreciation of being "there and then" was different. Representation styles not only indicate visual traditions but also cue how different cultures make sense of the space, time, and the world they dwell in.

Before the single-point perspective's popularization starting in the 15th century, artists depicted space and depth in diverse manners. While introducing Chinese scrolls, Hockney and Gayford (2016, p. 89) state that the images are created according to a mobile focus, placing the viewer inside the painting; in this example, the spectator sees the bridge from a distance and from its right-side, but sees the houses and the road from the left as if they are on the bridge themself. Similar to the Eastern images, Friedberg (2006, p. 35) claims that Gothic paintings rely on the mental mobility of their observers. The viewer facing such a perspective traverses through it with their vision. In contrast, the single-point perspective is not penetrable, its surface is a barrier, and the viewer is placed still, outside the image, looking in.

Figure 2.2 Chinese scroll perspective

(Source: Hockney & Gayford, A history of pictures: from the cave to the computer screen, 2016)

In reality, the human eye does not see according to the perspectival rules. In an interview with Lund, Hockney (2011) assures that looking at a landscape is not a perspectival act; while observing its surrounding, the gaze constantly shifts, and the body moves. Marleau-Ponty (1961/1971, p. 162) states that vision and movement are akin; they are the outcome and the development of each other. However, the viewer of a single-point perspective painting is not only pushed outside of the painted realm but also immobilized; as Florensky (1920/2002, p. 210) indicates, they are confined and captivated, similar to the prisoners in Plato's cave allegory.

Perspective was, and still is, the taming of the eye. Both creating a depiction in accordance with the rules of single-point perspective, and to comprehend the depth of such a representation is only possible by getting accustomed to a series of intricate artificial circumstances. According to Florensky (1920/2002, p. 247), the tools that aid perspectival drawings mechanize the artist's gaze; they lack visual synthesis and criticality, so much so that in the end, the artist's vision becomes irrelevant. Friedberg (2006, p. 194) states that perspective is a "mental apparatus," a standardized manner of perception and representation.

Moreover, viewing in accordance with the virtual depth behind the picture surface is also a learned presupposition. The spectator has to share the singular point of view depicted by the artist. The viewer's inertia is the repetition of the artist's suspense, however unnatural for the instinctively flexible human vision it is. Friedberg (2006, p. 28) asserts:

> Perspectival representation was dependent on two important divergences from human vision. The mobility and binocularity of vision was reduced to a static, monocular "point" of view. The vertex of single-point perspective took on the monocular view of the painter and positioned the viewer to share its vantage.

Perspective, as a representation method, not only determines the depiction of space but also imposes the extent of the time expression within the image, as the "intellectual movement" (Friedberg, 2006, p. 35) of the spectator within the image is not only spatial, but also temporal. As Hockney and Gayford (2016, p. 158) suggest, the popularization

of perspectival techniques altered the narrative aspect of images. The viewer of a multi-perspectival painting, while "travelling" between multiple points of view, witnesses multiple narratives that take place in multiple temporalities. However, the single-point perspective's believability is also dependent not only on the immobility of the eye but also on the suspension of time altogether.

While conversing on Brunelleschi's depiction of the San Giovanni Baptistery, a now-lost painting accepted as the first single-point perspective painting ever, Hockney and Gayford (2016, p. 97) state that "The spirit of photography is much older than its history," the rules of the perspective suspended the flow of time long before stabilizing light on a surface via chemicals. Friedberg (2006, p. 36) states that "the Renaissance painting was thought to be rooted in a fixed moment of time, more like a photograph with its viewer: fixed and its image motionless." The single-point perspective is not the vision of the human eye but the vision of a camera.

People have to learn the techniques both to depict linear perspective and to understand the space it visualizes. Once the technique is mastered, as Friedberg (2006, p. 48) suggests, the world is no longer considered as a whole to be dwelled in or explored but becomes a "measurable object," a calculatable formula. According to Sayın (2013, p. 10), this disciplinary approach not only pacifies the vision but also domesticizes the world, making it easily monitorable. By this aspect, single-point perspective is not only the natural predecessor of camera obscura, but also it is the point of view of the panopticon.

Moreover, the preconditioned simplification of single-point perspective not only nulls the artist's active, human and critical point of view, but also creates an apathetic and distant spectator. According to Sayın (2013, p. 11), linear perspective assumes that there is only one possible way of seeing; the gaze that observes from multiple points of view is diminished into a preconditioned singular eye that lacks personality. Florensky (1920/2002, pp. 211–212) writes that the viewer facing the single-point perspective is in front of a "facile experience of the world, devoid of a feeling for reality and a sense of responsibility, that sees life as just a spectacle, and in no sense a challenge."

As a point-of-view, single-point perspective draws the line between what can be known, and what is unreachable. Everything there is to know is depicted within the reach of this panoptic gaze. However, neither the artist, nor the spectator can explore beyond this plane. The depicter of a linear perspective is not an active body in space. They are "reduced to a mathematical point," as Hockney and Gayford (2016, p. 103). They are frozen in accordance with an imaginary horizon line. Steyerl (2012, p. 14) states that this horizon defines the limits of comprehension; behind this hypothetical line, there is only "muteness and silence."

Friedberg (2006, p. 26) asks whether the perspective is a "practical formula" or an "epistemological metaphor," a "symbolic form" that transcends history, a "visual system" that originated from Italy and sprawled over Europe and then the rest of the world or a "technique for painters" and architects. Florensky (1920/2002, pp. 261–263) identifies perspective as a representation style, among countless other styles, a style that creates a certain sense of illusion of depth in space. However, there are several rules and preconceptions to be followed for the illusion to work successfully. To create a linear perspective, the artist looks at a motionless world that can be simplified into geometric shapes from a singular point of view with a stable single eye, moreover, freezes it onto the surface without any time passing, the scenery changing, the artist's body, or even their gaze changing. However, in reality, the artist resides in a world full of motion and change and usually sees their subject from multiple points of view; even if they keep their body still, their gaze always shifts. In a conversation with Martin Gayford, David Hockney (2016, p. 103) states: "The eye is always moving; if it isn't you are dead." In light of these rules, it is evident that the single-point perspective in drawing and painting is not the "ultimate scientific truth" as accepted, at least not the truth of human vision. According to Steyerl (2012, p. 20) the acceptance of its correctness makes the linear perspective the suppresser of the "truth it had so confidently proclaimed."

Although our understanding of the perspective has changed since the 15th century, with new ways of seeing, such as the development of aerial viewing and surveillance technologies that grant the viewer a "God's-eye view," as Steyerl (2012, p. 14) defines, the relationship between the viewer and the established image still endures.

2.2.2 Photography

In the 21st century, image production is far from being solely dependent on a 'naturalistic' style; however, images created by cameras similar to single-point perspective images may be accepted as the 'natural' and 'correct' way of both seeing and recording. This dependence on photography's verisimilitude was ever-more prevalent while photography was newly emerging and becoming widespread. De Duve (1978, p. 115) indicates that in the 19th century, when expressing the "visual reality," photography was perceived as a criterion. The accepted 'objectivity' and 'accuracy' of photography are similar to the single-point perspective images. Indeed, Baudry (1970/1974, p. 41) indicates the photography camera modeled after the camera obscura of the previous centuries not only recreated the perspectival rules of the Italian Renaissance but also reestablished and fortified the "ideology inherent in perspective."

However, as discussed in the previous chapter, all the two-dimensional representations of the world are a form of abstraction and stylization, including photography. While conversing with Gayford, Hockney expresses that in nature, nothing is really two-dimensional as the world has depth; he states (2016, p. 20), "The flatness of a picture is a bit of an abstraction. ... Everything on a flat surface is stylized, including the photograph. Some people think the photograph is reality; they don't realize that it's just another form of depiction." And like all the other depiction methods, photography cannot represent what the human eye actually perceives.

While discussing why the photographic image cannot be considered as the 'truth' of human vision, Hockney and Gayford present several reasons; first of all, a camera records simply the light, revealing nothing but the geometric shapes it is directed at, while for humans seeing is a psychological act (2016, p. 24). As a result, while human vision sifts, elects, and corrects the appearance of its surroundings, the photographic image includes everything, putting "too much in" (2016, p. 270). Moreover, similar to the single-point perspective, the photographic image suspends movement, recording everything within an instant and freezing the appearance of a fragment within the passage of time (2016, p. 83).

When photography was invented, the photographic image was not a new way of seeing; on the contrary, it was already accepted and established via inventions like camera obscura and depiction styles like single-point perspective, which formulated the expectation of 'realism' in art. And although the photograph's invention may seem to confirm the 'correctness' of naturalistic styles, Hockney affirms that this assumption is erroneous. About the methods of the pre-photography era artists, he claims: "Their vision was coming out of the camera. But if you don't know that, it looks as if the artists got their pictures right, and the photograph came along and proved it" (Hockney & Gayford, 2016, p. 236).

Although the first photographs were black and white and blurry, the images created by camera obscura were both in color and in motion (Hockney & Gayford, 2016, p. 199). Still, by the 19th century, the camera vision was already settled. Photography was not a new way of seeing; it was a new manner of recording and reproducing. What was revolutionary in photography was marking the visuals on the surface mechanically. According to Barthes, this process was more scientific than artistic; he (1980/2006, p. 80) states: "It is often said that it was the painters who invented Photography … I say: no, it was the chemists."

This mechanical reproduction transformed the process of recording; reducing it to a reflex of a finger and an eye. Benjamin (1955/1986, p. 219) writes: "For the first time in the process of pictorial reproduction, photography freed the hand of the most important artistic functions which henceforth devolved only upon the eye looking into a lens." The mass production of photography redefined the status of the image as a "commodity" which traverses the free market at high speed; and the viewing subject as a 'consumer' (Crary, 1990, p. 13).

However, the mass replication of photography not only altered the meaning of image and viewer, but also settled 'realism' as the 'reality.'

2.2.2.1 Photography as an other kind of truth

By the late 19th century, lenses, such as telescopes and microscopes, have already introduced distances that are too far away and particles that are too small for the bare human eye to see to our visual knowledge. So, although cameras and photography immobilized and mass-produced the images that "escape natural vision" (Benjamin, 1955/1986, p. 220) photography did not exactly introduce a never-before-seen realm to our field of vision. It rather captured instances from the previously uninterrupted flow of time. Gunning indicates (2003/2007, p. 21) that Muybridge "conquered time … as he exposed the tiniest intervals of motion."

The development of light onto surfaces mechanically created a shift in human consciousness; Deleuze classifies this deviation in history as privileged instants of antiquity and any-instant-whatevers of modernism. Deleuze (1983/1997, p. 4) states that the privileged instants are static, yet comprehensible components that allude to movement. Before the invention of photography, the sense of movement was expressed through extremities that are certain poses impossible to perform in real life, yet they convey the feeling of the flux of action.

The invention of photography introduced the previously unperceived instants, as Deleuze names them any-instant-whatevers. These any-instant-whatevers are the visual documentation of a movement frozen in equidistant intervals. When observed sequentially at a certain pace, they create the illusion of cinematic movement.

However, although film and serial photography may seem to derive from the same origin point, Stimson claims that they are essentially different; while film records time and duration and reproduces their image over and over, serial photographs such as those produced by Muybridge and Marey serve as the "mechanically amplified the power of our sight" and aims at a better comprehension of space and time (Stimson, 2006, p. 38).

Photography solidifies instants which would fleet within the flow of time, as Rim (1930/1989, p. 38) suggests: "Photography has given material guise and body to time, which otherwise eludes our human grasp." Benjamin names this phenomenon "the

optics of unconscious," as these photographs reveal what eludes the bare human vision. Benjamin (1955/1986, p. 237) states:

> Even if one has a general knowledge of the way people walk, one knows nothing of a person's posture during the fractional second of a stride. The act of reaching for a lighter or a spoon is familiar routine, yet we hardly know what really goes on between hand and metal.

The sequential recording of instances was developed by Eadweard Muybridge and Jules-Etienne Marey in the late 19th century. These early examples were considered as purely scientific developments, thus being granted as objective reality. Stimson (2006, p. 34) states that there was a general consensus that the "emerging apparatus of serial photography would itself be simply and transparently neutral."

Considering the sequential snapshots as the scientifically neutral way to depict movement positioned the artists of the era in a dilemma; basing their figures on the newly discovered still images or depending on their own vision to create the feeling of action. De Duve (1978, p. 115) states that the artists were in a position where they could not "express reality" and follow photographic rules simultaneously because the galloping horses in Muybridge's serial photographs captured the movements of the animals but not their sensations.

But, if the camera and sequential photography reveal the otherwise unseen fragments of time, can it still be the 'truth' of human vision? Moreover, Gunning (2003/2007, p. 22) questions how does this expression apply to the images that the human eye cannot perceive without the use of a lens; "What in a photograph makes it evidence, and in what way is this evidence visual?"

The serial photography's depiction of the movement is not the 'truth' of human vision. Hockney (2016, p. 11) states that the relationship between a human's two eyes and brain makes sense of the world in a way a lens could never perceive. According to Stimson (2006, p. 41), what serial photography reveals is an "another kind of truth" that is solely accessible in the transition from one picture to the other; it is in the space between

pictures. As Deleuze states, real movement cannot ever be captured, recorded, or reproduces via cameras and snapshots; he (1983/1997, p. 1) indicates: “You cannot reconstitute movement with positions in space or instants in time,” because no matter how close to each other the instants are, the real movement will always take place in the latent gap between them.

As Merleau-Ponty (1961/1971, p. 184), the bodies seen in sequential imagery might appear in different locations; however, photographs do not present the viewer the motion in between. Rodin (1957/1983, p. 34) finalizes the artists’ dilemma on expressing reality or relying on their personal gaze announcing: “It is the artist who is truthful and it is photography which lies, for in reality time does not stop.”

The development of photography altered our perception of space and time through its mass production and wide accessibility. What was once distant, both in the sense of space and time, approached our immediate presence. When cameras started to record not only instances but the flow of movements, the meaning of “here and now” has changed. Rim (1930/1989, p. 38) defines the invention of photography as humanity’s triumph against time; “its most redoubtable enemy,” and adds that because past instants are solidified like never been done before; “yesterday is no more than an endless today.” As an apparatus camera adapts our expectations of images and alters the way we see the world. Photography, neither still nor serial can constitute “correct” or “natural” movement; however, it can be utilized as a tool for understanding our surrounding; a tool for “regrounding in the world” (Stimson, 2006, p. 42).

2.3 On Apparatus

The optical tools, which may be used to obtain a better understanding of the world, define a political field of action where they are not only utilized by authorities to control and govern but also define a mode of spectatorship that is rigid and unalterable. However, as Baudry (1970/1974, p. 40) indicates, the technological and practical charms of these devices and organizations may ascend them to an undeserved neutral position, hiding the political environment that both creates and reinforces them as well as the ideological effects that they sustain.

Although an apparatus can be defined as a set of equipment, tools, or machinery, i.e., physical gears that aid in performing a series of actions, according to Agamben, the term's meaning exceeds its tangible comprehension. Apparatuses are not simply mechanical instruments that ease actions, but they are the formations that enable the functioning of society. However, the practicality of apparatuses makes them a tool of authority. Agamben (2006/2009, p. 12) defines an *apparatus* as an accumulation of behaviors, customs, policies, and organizations that are used to regulate, rule over, control, and direct not only the actions but also the way of thinking of the people.

According to Agamben's definition (2006/2009, pp. 5–6), apparatuses are imposed on individuals by an external force; however, they are not easily recognizable as they are deeply internalized. The scope of the apparatus encompasses each formation of human culture.

Apparatuses are not simply the by-products of culture. They play an essential role in its establishment. As Agamben (2006/2009, p. 15) indicates, the apparatuses are "rooted in the very process of 'humanization'." The apparatus' relationship with civilization is twofold and intertwined. Cultures create apparatuses, and apparatuses shape culture. Therefore, Deleuze (1986/1988, p. 39) states that "machines are social before being technical."

The ‘reliability’ of the apparatus alters our perception of existence. Crary (1990, p. 9) claims that the understanding of ‘reality’ has changed throughout history. The culture, which both affects and is affected by the apparatuses, determines the borders of the ‘standard,’ the ‘norm,’ the ‘ideal,’ and the ‘reality.’ Benjamin debates that humanity’s perception of the world has shifted throughout centuries as a result of the transformations of culture. Benjamin (1955/1986, p. 222) writes:

> During long periods of history, the mode of human sense perception changes with humanity's entire mode of existence. The manner in which human sense perception is organized, the medium in which it is accomplished, is determined not only by nature but by historical circumstances as well.

Crary (1990, p. 6) claims that it is futile to examine solely the history of vision, as it cannot be considered separately from the multitude of considerations and regulations of each era. It may be more relevant to examine the history of the plane of vision, instead of the history of vision itself. And the plane of vision is influenced by the tools of seeing. From lenses to cameras, humans have used vision devices for centuries. And now, in the 21st century, the apparatuses have long been a natural extension of the way we see. The apparatus, which is not simply the mechanical tools but also the social consensus, determines the way we perceive the rest of the world. As Zummer indicates (2001, p. 73), the apparatuses that are inherent to our visual culture alter our perception of space, temporality, scale, distance, and of our own bodies.

Moreover, as much as the apparatus augments the human body and its perception, the body itself is an inseparable part of the apparatus. Similar to the discussions of the single-point perspective, seeing devices create their own version of spectator and spectatorship. Each seeing device not only alters the way we perceive our surroundings and ourselves, but also creates a distinctly new “seeing body.” According to Crary (1990, p. 5), defining modernism as a form of the ‘new’ happening upon a previously unchanged observer is erroneous.

Apparatuses not only define a new observing body but determine the ‘subject.’ As Butler (1997, p. 2) indicates, authorities not only control and govern their subjects; but

the identity of the subject, whether it takes an obedient or rebellious stance, is formed according to the authority. As authoritarian tools, apparatuses determine the behavior and presence of their interactors. Agamben (2006/2009, p. 11) indicates: “apparatuses must always imply a process of subjectification. that is to say, they must produce their subject.”

Although apparatuses define a new form of knowledge production, set of reality, and state of subjectivity; the development of these devices is altered accordingly with the already settled cultural practices. While the ‘norm’ is defined, settled, and idealized according to the culture created by the period’s technology, the upcoming developments are bound to the era’s established culture. The “idealist – hence disembodied” spectator of both the cinematic and “post-cinematic” spectator is determined long before the projection of the first moving image (Friedberg, 2006, p. 65,80).

2.3.1 The subject of the moving image

As stated earlier, mechanical reproduction reformed the meaning of images, diminishing their “aura,” as Benjamin (1955/1986, p. 229) states, and redefined their value as conventional assets, as Crary (1990, p. 13) emphasizes. The redefinition of the medium simultaneously altered the viewing body; as Steyerl states, the new image demanded a subject as a consumer. However, the mechanical developments of the 19th century were not limited to the innovations of image recording and reproduction. The high-speed machinery, like the train wheels and factory mechanisms, stimulated new discussions on visual perception, like the after-images and the persistence of vision. Moreover, industrialization generated an emphasis on productivity. According to Crary (1990, pp. 101–102), this new priority on efficiency and the “quantification of attention” was most apparent in two organizations: schools and factories. The prefiguration of both the students’ and factory workers’ attention span not only determined the characteristic of expectancy within the “measurable and regulated” time spent in these institutions but also reestablished them as the fields of discipline.

However, the contemporary screen-viewer-consumer is not free from the goal of efficiency and discipline. While defining their subject as stagnant, passive, and

alienated, the moving images also demand their viewers' full attention. As Benjamin (1955/1986, p. 239) indicates, while the observer of space is distracted, the screen spectator has to be entirely concentrated. The demand for uninterrupted focus repositions the viewer as a laborer, as Steyerl (2012, p. 65) states: "In this economy, even spectators are transformed into workers."

Moreover, the authoritarian scope of an apparatus is not limited to its physical relationship with the individuals, but also, as discussed in the previous chapters, the reliance on the 'correctness' of tools presents their way of seeing superior to human vision (Friedberg, 2006, pp. 64–65). The high regard for these apparatuses' way of seeing and recording as the 'neutral' and 'correct' eradicates all the other perspectives, including subjective vision. Crary (1990, p. 132) states that these optical tools define, solidify and reinforce their way of correctness, and "they make no claim that the real is anything other than a mechanical production."

Benjamin (1955/1986, p. 224) indicates that the discussions on whether photography is an art form or not eliminate a much more critical controversy; the question of how photography changed the notion of art. According to him, mechanically reproduced art lacks the "now" and "here" or the "aura" of the original piece. This change eliminates the "holiness" of the artwork and politicizes it at the same time. Benjamin (1955/1986, pp. 230–232) continues this discussion by stating that a similar state of blindness takes place with the development of moving images. What does a film really reproduce? The movement and the action recorded through a camera are so fascinating that the moving images' real effect gets overlooked. Benjamin states that cinema is the ultimate apparatus of the industrial revolution. Cinematic apparatus is "a response to rather than an expression of the alienated experiences of the industrialized metropolis." (Marchessault & Lord, 2007, p. 10) It shapes not only the society but also the mode of spectatorship shaped by the industrialized society.

The spectator in a movie theatre is not in the general facility of the actor; instead, they view the actors' interactions with a machine (that is, the camera) through a machine (that is, the projector). In the darkened chamber of cinematic apparatus, similar to the

viewer of linear perspective replicating the immobile position of the artist, the spectator is stripped from their critical and unrestrained movement; rather, they are positioned and suspended where the camera once was. Moreover, even more controlling than the gallery space of single-point perspective paintings, the viewer in the cinema hall is detached from their surroundings. As Baudy (1974, p. 44) indicates, the cinematic apparatus can tolerate "no exchange, no circulation, no communication with any outside."

2.3.2 Expanded cinema

The apparatus of moving image, that is, looking from a certain distance at still images that follow one another at a certain pace, creates the illusion of movement with an assumption to see a narrative different from what one would see in the pure passage of time in the world formulates the established viewing conditions. However, the understanding of cinematic spectatorship was abolished by the 'Expanded Cinema' artists of the '60s and '70s. At that time, even though the venues where moving images met with spectators were still mainly the movie theaters, the means of creating sequential frames to emulate the feeling of the movement were utilized by artists to create works to be screened outside the "black box" of the gallery space. Although its roots can be traced back to abstracted light plays of Bauhaus artists, the term emerged in the mid-1960s (Rees et al., 2011, p. 21); 'Expanded Cinema' can be considered as an umbrella term, expanding from re-evaluating the mechanical and technological components of projection itself such as the consecutiveness of images at a certain rate, by-passing the contribution of a camera or the role of the light bulb in the machine, structural investigations like manifestoed scripts and the process of editing, challenging the role of the spectators and the singularity of the image, to architectural structures that merge physical space with virtual ones to create seminal perceptions.

Although its aspirations can be summarized as changing the mode of moving image spectatorship, the expanded cinema has changed throughout the centuries. EXPORT (2011, p. 288) defines the contemporary expanded cinema as the "simulation of reality," whereas the expanded cinema of the 1960s, under the influence of the political

atmosphere of the era and the student movements, was the “deconstruction” of reality as an authoritative force.

According to Reutner (2010, pp. 216–217), an impactful cultural breakthrough that took place in the 1960s was a new prioritization of how the world is experienced, more than the scientific, objective, and measurable facts about the world and its dynamics such that it would be recorded by a camera; “the demand for mediation of reality took precedence over the demand for reality itself.”

As perception and human experience became the prevalent considerations, the artists aimed at scrutinizing the legitimacy of the “objective perception” captured by film. About the ‘new’ art of the 1960s, EXPORT (2011, pp. 288–289) states: “Its aesthetic was aimed at making people aware of refinements and its shifts of sensibility, the structures, and conditions of visual and emotional communication, so as to render our amputated sense of perception capable of perception again.”

3. ART AS A CRITICAL WAY OF SEEING

As presented in Chapter 2.3 On Apparatus, seeing devices are not only mechanical tools that present a new kind of imagery, but they are also social and political formations that have far-reaching effects. Each apparatus not only creates its own mode of viewing but also produces its own subject, its own norm, its own ideal, and its own reality. Accepting the images of these optical tools as the standard or correct way of seeing invalidates the subjective human view. However, the methods of the apparatuses should not be instantly disregarded, as artist Paul Sharits (1978d, pp. 36–37) states that it is futile to be overwhelmingly "concerned with the intentions that formed the system."

Apparatuses can record and present visuals that cannot otherwise be perceived through pure human vision. We see not only explore and get to know our world with their assistance, but also our consciousness is enriched by their contribution. These otherwise inconceivable images advance our visual vocabulary. According to Merleau-Ponty (1961/1971, p. 178), our visual field, which even reaches "the sun and the stars," determines the realm we can not only interact with but also learn from and dream accordingly. The images presented to us through apparatuses are realities that we can get ourselves immersed in. Zummer (2001, p. 74) writes that the scientists looking through electron microscopes find themselves in an "alien landscape" such in a physical manner that understanding and re-representation of these "invisible topographies" is no different from perceiving landscapes by actually being there. Vision is not only optical; it is also somatic and haptic.

Moreover, the apparatuses have been a part of our visual culture for such a long time that they are an integral part of our ecology. As Merleau-Ponty (1961/1971, p. 178) indicates, our devices are the detachable parts of our bodies. Our vision can no longer be considered without apparatuses, and the "prosthetic perceptions" coming out of our seeing devices are not distinguishable from our own bare perception (Zummer, 2009, p. 4). As a filmmaker himself, Pasolini (1967/1980, p. 3) indicates that although the point

of view of a camera is always “abstract and non-naturalistic,” the film is still “seen and heard as if by a flesh-and-blood subject (that is, one with eyes and ears).”

Our relation to the apparatuses is not limited to tangible instruments, like the projector, the screen, the pixels, and the cathode ray tubes. Not even duration, which is determined by the watched material, is decisive because the intricate relationship between the viewer and the moving image exceeds this limited time frame in a Bergsonian manner via callbacks, anticipations, and derivations. The spectator dwells in the reality that they are watching on the surface. The outcome of any spectatorship can be far greater than what is being watched.

Moreover, moving images as a form of apparatus has been especially emancipatory for minorities and other oppressed individuals in the society. Meigh-Andrews (2014, p. 9) states that video art was embraced by feminists starting from the 1970s as, unlike mediums like painting, it was a field with no established form of practice. Moreover, the non-locality of the medium allowed it to be distributed with ease, encouraging non-Western artists to adopt it as a medium. Meigh-Andrews (2014, p. 248) adds that this unrestricted exchange of “ideas and experimentation” led to a new visual culture that is enriched by “cross-fertilization of influences and approaches.”

In conclusion, although Agamben (2006/2009, p. 3) correlates apparatuses with authorities and control mechanisms, the apparatus of spectatorship can also be its main objector. At this point, art is one of the main practices that can not only uncover the dynamics that would otherwise remain unnoticed but also present new possibilities by utilizing the tools of the apparatus. By its nature, art tackles, scrutinizes, problematizes, and explains the aspects of existence that are not even recognized yet. Benjamin (1955/1986, p. 237) states, “One of the foremost tasks of art has always been the creation of a demand which could be fully satisfied only later.”

3.1 Camera, Time and Spatiality (Movement, Stillness, Time and Duration)

As stated in chapter 2.2.2, photography revolutionized our perception of time by fixing it on a surface within an instant, allowing us to capture and manipulate its linearity and realize the hidden intervals of motion that are invisible to the human eye.

"What then is time?" asks St. Augustine, "If no one asks me, I know" (ca. 397-400/2006, p. 369). According to Wilmes (1999, p. 122), time cannot be read through a static object. The passage of time becomes visible through movement and the change that is brought about by this movement. However, movement, by its nature, is ephemeral and resists being recorded. Deleuze (1983/1997, p. 1) emphasizes that movement is not the same thing as traversed distance or space. While space can mathematically be broken down into an infinite number of smaller units, and the tiniest intervals of time can be captured with photography, ‘movement’ is an indivisible and single flow. As indicated in the Photography chapter, no matter how narrowly the space can be divided or sequentially the instants be captured, the real movement will always take place in an interval between them. Thus, just like the time that is passed cannot be reexperienced, movement can never be reconstituted.

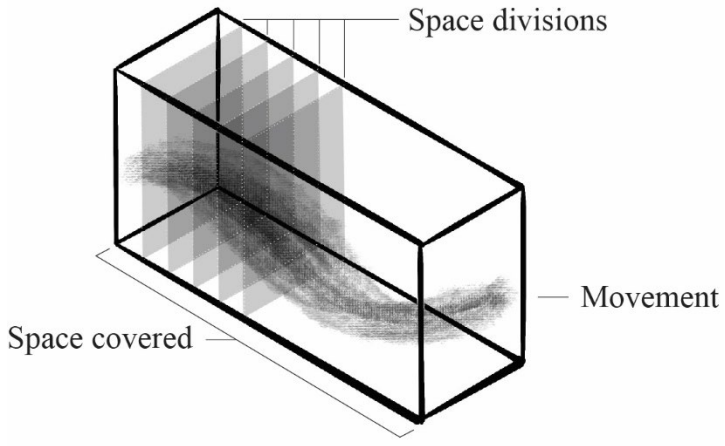

Figure 3.1 The difference between movement, space, and time

On the mechanically generated works, Benjamin (1955/1986, p. 220) writes: “Even the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be.” At this point, Deleuze (1983/1997, p. 5) defines the role of the camera as an “exchanger” or a translator of movement. The instants recorded by a camera can be transported from one place to another. However, even if the recorded movement can last as long as the original action, they are intrinsically different. While movement takes place in duration, the time recorded through a camera is abstracted and detached. Deleuze (1983/1997, p. 1) formulates this situation as “real movement - concrete duration” and ‘immobile sections + abstract time,’” the cinematic illusion created by this formula is “impersonal, uniform, abstract.” Moreover, real movement cannot take place without its spatial conjunctions, while the mobilized moving image breaks the ties of motion, place, and time. Thus, movement can neither be captured nor repeated; what is captured, duplicated, and presented on the screen is the phantasm of an action; as Bergson (1907/2005, p. 39) states, while “the real action passes through, the virtual action remains.”

While discoursing with Gayford, Hockney (2016, p. 310) states that, in actuality, a moving picture is nothing more than a series of still images. However, the essence of moving images *is* movement. In order to create the illusion, some form of motion is necessary, yet, as indicated above, the moving images actually consist of still images. In actuality, the movement is not derived from the images, but as Bergson (1907/2005, p. 265) states, it is attained from the apparatus. Throughout the process, the motion of the machinery remains invisible, yet it reveals the documentation of the past movement the camera witnessed.

About the still fragments of the moving images, Deleuze (1983/1997, p. 1) remarks that in 1907, a few years after Marey’s and Muybridge’s experiments on serial photography, Bergson named this new sense of motion the “cinematographic illusion.” However, Friedberg (2006, p. 143) asserts that Bergson considers serial photography not as the “images of motion” but as the paralyses of movement.

At this point, Bragaglia (1913/1989, pp. 287–290) proposes “photodynamism” as an opposition to both the “chronophotography” of Muybridge and Marey and cinematography. To distinguish these three terms, Bragaglia uses the example of a clock; photography captures minutes, and cinematography captures even smaller instances and represents them afterward; photodynamism, on the other hand, is concerned with the circular path the mechanism of the clock defined as time passes. While both cinema and instantaneous photographs aim at a precise “reconstruction of movement” and reproduction of reality, photodynamism rejects representation and aims at making the sensation of the flux visible through its otherwise unseen trajectory.

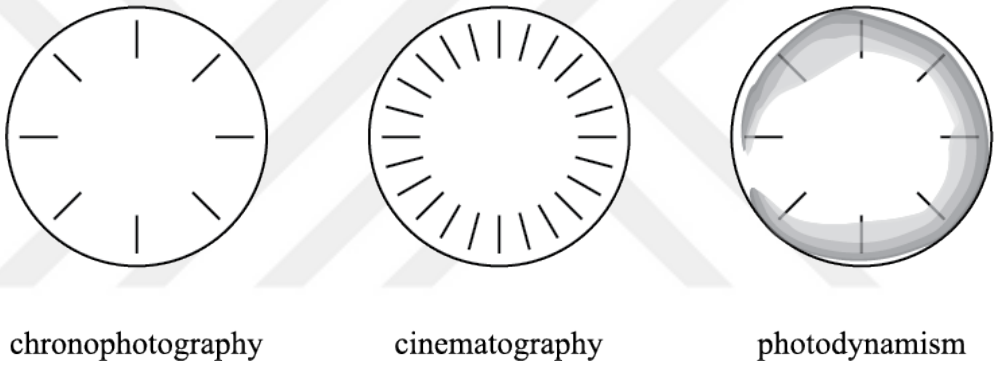

Figure 3.2 Chronophotography, Cinematography and Photodynamism

However, as discussed in the Photography chapter, the development of serial photography emerged with a break in the representation of movement; the “privileged instants” of the pre-modern era, where each pose depicting an idealized state in the flux, and “any-instant-whatevers” which are images captured by a camera at equal intervals in the flow of the movement, each equidistant from the next one, whose purpose is not to convey the feeling of motion individually but to create an image of movement when seen sequentially (Deleuze, 1983/1997, pp. 3–4).

These “any-instant-whatevers” are not created as autonomous images, and they are not intended to be viewed as such; Netta (1999, p. 160) states that when a moving image is paused, “the image appears frozen” because it is just one element of an ongoing flux,

and individually it does not include any indicators of neither its duration nor its whole. Moreover, not only the "any-instant-whatevers" are not perceived as "privileged instants," they are intended to *remain invisible* in the moving image apparatus. In order to understand the whole, the spectator has to remain unaware of the single frame.

Architect Hiroshi Sugimoto's 'Theaters' collects the individual frames that are never seen individually in the first place into a single frame. The series is composed by recording the entire duration of a feature film within one frame by photographing it with long exposure. While moving images are formed by the succession of single frames, the work reverses this relationship by 'summarizing' the duration by a single shot. The results abstract the image, visualize the cinema screens as light-emitting planes, and as Friedberg (2006, p. 166) explains, they "expose time."

Figure 3.3 A movie within an instant

Note. U.A. Play House [Photograph], by H. Sugimoto, 1978, Hiroshi Sugimoto (Source: https://www.sugimotohiroshi.com/new-page-7)

Moving images are viewed in a different temporality than still images. While a still image, such as a picture on the wall, shares the *presence* of the viewer, the extent of a moving image is determined by the medium itself. A still image's spectator determines the duration, and this temporality allows distractions, callbacks, and imagination; observing a still image is a non-linear act. However, the moving image unfolds in a linear continuum; the viewer has to remain still, silent, and completely focused on the screen to see the continuous and linear act.

Moreover, the moving image apparatus not only dictates its duration on the viewer but also it submerges the spectator into the narrative realm behind the screen, away from the "present time and local space" (Uroskie, 2014, p. 5). The content of the moving image may not be linear; however, the cinematic apparatus *is*; and the viewer of it has to disregard their personal sense of time and presence while watching the image. For an extent of time predetermined by the content, what is expected from the viewer is to remain immobile and wait for the unfolding of the story.

Friedberg (2006, p. 150) states that the paradox of "mobility" and "immobility" is at the core of moving image spectatorship. While the images pass through and depict action on the screen, this is only a "virtual mobility" (Friedberg, 2006, p. 160), and the spectator is completely frozen. Merleau-Ponty (1961/1971, p. 162) states that in space, the movement and vision operate accordingly; they not only discover their surroundings in coordination with one another, but also determine the perception of the viewer. On the other hand, the vision of the cinematic subject is dematerialized, unbound to their own body or earthly time; the sequential images that they watch are no longer constituted by their movement. And, it is not only the cinematic spectator who remains motionless; screen spectatorship requires a stagnant observer, including computers, smartphones, and even giant advertisement boards in public spaces that halters the movement of the human body.

In conclusion, beginning with serial photography, moving images changed the way we think about temporality and the representation of movement. Cinema sets the duration of the image as the ultimate regulator and fixes the viewer's body, demanding their full attention. This proposition later became the nature of spectatorship, being repeated in upcoming forms of moving image representations. The artworks presented in this chapter aim at questioning these accepted standards and present moving images to be seen in different mobilities and temporalities.

James Coleman's *La Tache Aveugle* distinguishes the single frame, which is not only an "any-instant-whatever," thus composed as an element of a flow and not as an individual image, but also is bound to remain invisible in the cinematic spectatorship. Moreover,

the extremely stretched-out duration of each frame, from 1/24th of a second to almost 40 minutes, overrules the cinema's constant demand for the viewer's attention.

Douglas Gordon's *24 Hour Psycho* relies on the viewers' memories of the widely recognized original piece, Hitchcock's *Psycho*, and creates an environment that makes the complete viewing of the narrative. Moreover, it prevents the otherwise unrecognized instants and gestures which became visible via the camera, as Benjamin noted, from becoming invisible again in the flow of the cinematic apparatus.

And lastly, Christian Marclay's *The Clock* questions the passive role determined for the spectator in front of the screen, completely immersed in the narrative and unconscious of the passing time by creating a timepiece. The narrative sequences that compose the work are bound to remain incomplete, unable to make the viewer forget their temporality; on the opposite, they perform as constant reminders of time.

3.1.1 La Tache Aveugle, James Coleman

While the perception of movement is an essential part of the cinematic illusion, *La Tache Aveugle* denies its viewers this phantasm. Instead, Coleman focuses the attention on the single frame, that is un-autonomous, abstract, and undecipherable without being seen in relation to its predecessors and successors. The work not only demonstrates but also monumentalizes the undetected part of the cinematic apparatus: the single frame.

The first version of the *La Tache Aveugle*, created in 1978, adopts 13 frames from James Whale's 1933 movie, "The Invisible Man." The scene Coleman handles is towards the end of the movie, when the Invisible Man gets cornered in a barn, gets shot, and loses his invisibility. As Tarantino (1999, p. 139) depicts it, in the context of the movie, it is one of the least significant scenes of the original screenplay, and when the story abruptly reaches its conclusion, it is already "forgotten."

The cinematic apparatus demands the full attention of the spectator (Friedberg, 2006, p. 168); since the narrative of a movie unfolds within a persistent linearity, the distracted audience is bound to miss the content. In *La Tache Aveugle*, the 13 frames, which lasted

about half a second in total in the original movie, are extended for more than 8 hours, making each frame projected on the grand screen for more than 36 minutes. The duration of each frame makes it impossible to focus 'cinematic attention' throughout its duration. Fisher (1993, p. 49) defines the piece as "outrageously attenuated and inexorable" and adds, "virtually nothing happens."

Figure 3.4 La Tache Aveugle

Note. La Tache Aveugle [Still image projection], by J. Coleman, 1978-90, MACBA https://www.macba.cat/en/art-artists/artists/coleman-james/tache-aveugle-1978-90 MACBA Collection. MACBA Foundation

The work monumentalizes the single frame; firstly, by stretching the duration of each frame, which would otherwise be rushed off of the screen in 1/24 of a second to almost 40 minutes, thus individualizing each frame which would otherwise be unnoticed within the flow of narration, and secondly by projecting the images as big as a cinema screen which under regular conditions would be seen from a certain distance, but in the context of this work can be scrutinized closely by the gallery viewer.

The title of the work does not directly indicate the source of the images. "La Tache Aveugle" means "The Blind Spot." It is a term derived from biology, marking a section in the anatomy of the eye that lacks light-detective cells. It is accepted that the blind spot in the eye does not hinder one's capacity to see since the brain is accustomed to correcting the vision. It is a term also utilized by philosophers to indicate a condition

that is habitually overlooked but nonetheless essential for conception. Bataille (1954/1988, p. 110) claims that while the ocular blind spot is negligible, “the nature of understanding demands that the blind spot within it be more meaningful than understanding itself.”

In cinema, the movement is displayed through the succession of images at a certain pace; however, not all the micro-instances of a movement are neither recorded nor represented; the standard for moving images is only 24 frames per second. As Deleuze indicates, mathematically, time can be divided into smaller intervals indefinitely, which means that there are an infinite number of unrecorded instances between each frame. However, the illusion of movement is not impaired due to these infinite missing frames. On the contrary, Friedberg (2006, p. 92) states that what is ‘not presented’ is as important as what is; the reconstitution of the moving image is based on the invisible “darkness between the frames,” and it relies on the human eye’s ability to complete the missing image.

Movie stills do not narrate the same way as the autonomous, static image does. While the narrative of a movie is unfolded in time, a classical narrative painting contains its whole meaning, dormant within its frame. The spectator of a moving image has to rely on the continuation of a piece to get a hold of its meaning, whereas the viewer of a static image determines the duration of their encounter with the piece. Even though Coleman’s work creates an opportunity to dwell on a fragment of the movie which would otherwise go unnoticed, neither the screen’s size nor the duration of each frame make the images easier to comprehend.

In this work, Coleman treats the moving image stills, “any-instant-whatevers” as Deleuze names them, as privileged instants, yet, as Fisher (1993, p. 49) addresses*, La Tache Aveugle* presents none of the narrative conclusions one can look for in a classical painting, still image, photography or conventional movie. Gaensheimer (1999, p. 40) states that the single frame, whose only role in a movie is to provide a sense of movement, becomes independent from its context. The frame departed from the

narrative flow loses its ties to the narrative whole, and becomes alienated and abstracted.

Coleman refuses the instant identification, the grasp of the linear narrative, and the straightforward flow of time by creating a piece that focuses on what is overlooked. Instead, the viewer inescapably comes across and becomes aware of the otherwise unseen essential of the cinematic apparatus; the single frame.

3.1.2 24 Hour Psycho, Douglas Gordon

Douglas Gordon's 1993 video installation, *24 Hour Psycho*, is a slowed-down adaptation of Alfred Hitchcock's 1960 movie, *Psycho*. Based on the wide recognition of the original piece, Gordon does not expect the viewers to see the whole duration of the piece. Instead, the extremely slow pace of the work grants the audience the time to move around the gallery space. The narrative is bound to the pace; thus, the work invalidates the narrative unfolding of the story, emphasizing the individualized gestures and movements within the feature film. The work abolishes not only the narrative time but also the institutional viewing time, demonstrating that neither of these apparatuses determines the viewer's relationship with the cinematic image.

The work silently projects its source material on a modest three-by-four-meter screen. The film is visible from both sides of the screen. While the original film is 24 frames per second, *24 Hour Psycho* decreases it to 2 frames per second, elongating the 109-minute runtime of the movie to 24 hours.

Due to the pace of the film, and the arrangement of the gallery space making the reversed image visible, the piece encourages the spectators to move around, instead of watching it from a fixed point, as in a cinema theater. Balsom (2013b, p. 139) states that with the work, the relationship between the screen and its spectators is reversed, since the ever-stopping pace of the cinematic apparatus forces the spectators to sit still, the extreme slowness of movement encourages the

viewers to be mobile. The immobility of the image promotes a moving spectatorship.

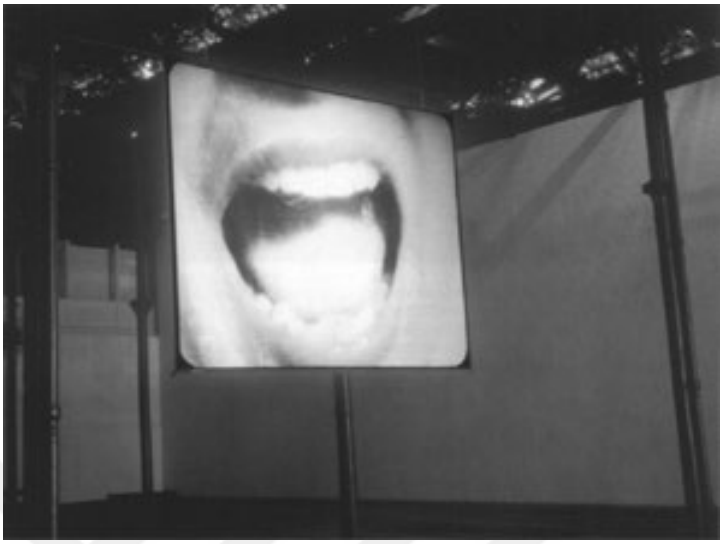

Figure 3.5 24 Hour Psycho

Note. Twenty Four Hour Psycho [Photograph], by C. Dercon, 2002., Vertigo Magazine https://www.closeupfilmcentre.com/vertigo_magazine/volume-2-issue-2-spring-2002/gleaning-the-future/

Although the delay of the frames may be similar to *La Tache Aveugle*, the impact of the two pieces is vastly different. Coleman's installation individualizes each frame and distinguishes the still image, which would otherwise be submerged in motion. *24 Hour Psycho*, on the other hand, extracts motions, gestures, and expressions from the wholeness of the narrative. As Benjamin (1955/1986, p. 237) indicates, as the camera records the instances that are embedded in the flow of the movement, it makes visible what the eye cannot see naturally. The sequential instances, when slowed down, reveal gestures, mimics, and flows that cannot be captured in the real flow of time. Gaensheimer (1999, pp. 41–42) emphasizes that the viewer's attention is focused solely on the "individual components: An embrace, a scream, a look of fear." The slowness of the piece dissolves the narrative, takes the emphasis off the plot, and relocates it on the abstracted, lingering motions.

While the focus on each stagnant gesture may help the viewer to appreciate "new details and connections in the now slightly estranged original" (Mondloch, 2010, p. 43), Hitchcock's *Psycho* is originally a horror, mystery, and thriller movie. Therefore, the

slowness and the silence of the piece overturn the narrative development; while the viewers are waiting for the unfolding of the plot, the "anticipation brings frustration" (Balsom, 2013b, p. 143). The pace, the quietness, and the nervous wait intensify what is depicted on the screen. Tarantino (1999, p. 135) states that "slow" sequences get even more faded, while the "fast" scenes, like the murder in the shower, get even more violent, so much so that it "may surpass the original."

The original feature is recognized by the viewers instantly, even if they have never actually watched it (Mondloch, 2010, p. 43). The fame of the movie is so widespread that it creates a sense of lore around it. Gordon states that this "mythology around the film" was more decisive for him than the actual film itself; he recalls in an interview: "I heard much more about it than I saw of it … It was talked about in the school playgrounds for many years before I ever had a chance to see it." (Sylvester, 2001, pp. 159–161) Since the movie has a significant place in the communal memory, the viewer recalls their memories of it, and remembers the events that will take place in the slowly approaching scenes instead of waiting for the movie's narrative.

The source material, *Psycho*, is a feature that's narrative heavily depends on pacing and time. Balsom (2013b, pp. 138–139) narrates that Hitchcock demanded movie theaters to only accept the audience who attend the screening on time, presumable because he didn't want the spectators to arrive at the hall at any point of the film, which was the common practice of the period, and miss the relatively early death of the heroine. However, with *24 Hour Psycho*, neither showing up on time nor staying for the duration of the picture is practically accomplishable. Balsom (2013b, p. 139) states that "viewing the work is a necessarily fragmentary experience" as viewing it for the duration of the original feature, which is 109 minutes, less than ten minutes of the narrative can be seen. Douglas Gordon's brother David assures that his brother is well aware of the impossibility of watching the film in its entirety. However, for Douglas, the allure of the work is to think of a hypothetical "someone" who comes across the work, sees a part of it, remembers the bit of the narrative, and then leaves, only to re-remember it later, David Gordon (1998, p. 83) writes: "it would be interesting for that 'someone' to

imagine what was happening in the gallery right then, at that moment in time when they have no access to the work."

Mondloch (2010, pp. 43–44) states that due to the duration of the piece, the "institutional screening time" is no longer applicable. The spectatorship of the *24 Hour Psycho* is not bound to the narrative time either. "Completing" the movie from start to finish is not the appeal of the work. With *24 Hour Psycho*, Gordon emancipates the narrative from the duration of the screening time and spreads it outside the movie screen into the spectators' memories. This distinction between completion and perpetuation is the difference between entertainment and enjoyment. In an interview, Gordon states: "Entertainment gives you an end, an ending - but enjoyment goes on long after. Enjoyment is in your head but entertainment stops when the curtain closes … I hope that art, like enjoyment, doesn't stop" (Sylvester, 2001, pp. 169–171).

3.1.3 The Clock, Christian Marclay

Christian Marclay's 2010 video installation, *The Clock*, is a grand time-piece that consists of a multitude of film clips. It presents real-world time through the representation of clocks in movies, questioning the relationship between narrative time, institutional time, personal time, and linearity by colliding the cinematic spectatorship's oblivious manners with a constant awareness of the passage of time.

The Clock consists of more than one-thousand movie clips extending over an extensive period of film-making history that sums up to twenty-four hours. On the screen, the viewers follow various timepieces synchronized with real-world time. The artist specified the physical conditions of the display; a grand cinema screen and projector, a dark room with comfortable large seats, as well as the number of spectators that would be allowed in the viewing area, which may be one of the reasons for the infamous queues to see the work (Levinson, 2015, pp. 106–107). Although some museums and galleries hold overnight events to showcase the work (Balsom, 2013a, p. 185), like Gordon's *24 Hour Psycho*, staying for the piece's totality can be challenging. According to Balsom (2013a, pp. 180–181), the similarities between the two artworks go beyond their technical properties and their runtimes; they relate to each other with their "new

relationship with the historical institution of cinema" and, moreover, their ability "to be understood quite immediately and without recourse." Indeed, *The Clock*, considering its screening conditions, its grandiose dimensions, its material, and utilization of "established codes of narrative cinema" (Balsom, 2013a, p. 180), doesn't seem to question the role of the cinema spectator at first glance. Balsom (2013a, pp. 188–189) quotes that in a conversation with Michael Snow, Marclay states in order to make the piece approachable and delightful, he “embraced the vocabulary of cinema.” The relationship of the audience with the film is the core of the cinematic apparatus (Zummer, 2001, p. 76). However, as Krauss (2011, p. 213) indicates, commercial movies are only technical materials for Marclay. As *24 Hour Psycho* decelerates the narrative into gestures in order the reach out from the limits of the screening time through suspense and memory, *The Clock* evokes similar interests of anticipation and familiarity and tackles the question of spectatorship itself by deviating narrative fragments into time and duration.

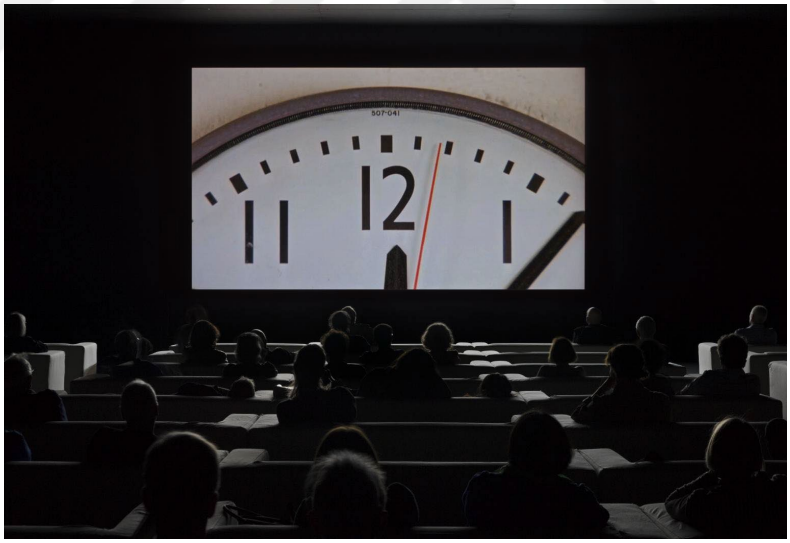

Figure 3.6 The Clock

Note. The Clock [Photograph], 2010, Tate https://www.tate.org.uk/art/artworks/marclay-the-clock-t14038

Time, measured by a clock, is homogenous, linear, and irreversible. In many aspects, the mechanical indication of the passing time on a clock is similar to the apparition of a moving image in a cinematic sense; both are functioning on equally distanced units, following each other sequentially in an unalterable and irretrievable order. However,

Bergson opposes the definition of continuous and uniform time as mechanically estimated by clocks. Levinson (2015, p. 91) conveys that in Bergson's philosophy, time is not evenly sequenced and measurable points, but it is a subjective and "indivisible whole." Time, in the human mind manifests as durée or duration, and unlike the measurements of a clock, it can accelerate, or decelerate, as it is always in an "interpenetrating flux" of the time gone by, existing time and time to come (Levinson, 2015, p. 90).

As the work itself is a grand timepiece, Levinson (2015, p. 107) highlights, "time is both the structural schema and the subject matter of *The Clock*." However, the correlation between the work and the notion of time is multifold. The heterogeneity of the time indicated through the clocks is constantly questioned through the implications it inherits from its source materials, the essence of their narrations, the familiarity of the spectator with the original movies, the feelings of commemoration and anticipation, the new-found meanings of the re-arranged pieces, the dichotomy between represented time and perceived duration, oblivion and awareness of the passage of it.

The cinematic apparatus, despite initially appearing to create spatial dualities, such as "here" and "there," it also causes temporal dualities. Friedberg (2006, p. 6) states that "the cinema freed its spectators not only from the bindings of material space but also from the bindings of time." Whether viewing a period film or simply a movie from an earlier era, the audience gets submerged into different temporalities. *The Clock* consists of a multitude of cinematic (and seldom television) movie clips that span over decades. Levinson (2015, p. 102) defines those chosen fragments as "ethnographic elements" that describe the customs and world views of their eras or at least the representation of those social standards in the media. Movies are the archives of their periods' visual and cultural paradigms; they document the "sociality and collective memory" (Balsom, 2013a, p. 180). Apart from each segment showcasing the cues of their production era, they also depict the understanding of the time they are set in, and the narrative time of their storyline.

The continuity of the film fragments in *The Clock* is determined based on their placement on the circadian rhythm, which creates a discontinuity between narrative and production periods. However, the viewer of *The Clock* is bound to experience more than what they physically encounter through the screen. Following Bergson's notion of time and duration always intertangled with the past and the future, the spectator recognizes the narratives of cult classics and remembers the forbearing incidents and the results of the projected segment, at least until the upcoming minute introduces a new line of narrative to the audience. Sitting in front of *The Clock* is a process of never-ending commemoration and suspense.

While watching the passage of time, the spectators are unable to determine their position in relation to the narrative. Before an action has a chance to be completed, a new one commences, and the plots remain unresolved. Levenson (2019, p. 129) writes;

> Conclusion is refused – not only grand conclusion, but even local resolution (is the smile returned? the hint taken?). No time is given to mourn the truncated tea party at 2:45 pm, because we are already on to a car heist at 2:46.

Still, cinema spectatorship is a condition that is learned over years of movie viewing. Historically, narratively and geographically discontinuous segments humorously create a new narrative continuity when processed by a spectator.

And lastly, the work operates as a timepiece itself. The conventional cinematic apparatus demands the viewer to be oblivious to the passage of time (Mondloch, 2010, p. 64) as days, years, and even decades of events unfold within a few hours. Opposing the numbing narrative, *The Clock*'s spectator watches the exact time they arrive, the whole duration that they stay, and the time they leave, as what they are constantly following on the screen is a clock. However, Levinson (2015, p. 89) describes the experience of spending hours and hours watching the piece as a delightful paradox; to be fully aware yet unconcerned with the passage of time makes the viewer realize "how symbolic time, as marked by clocks, is often out of sync with imaginary time." The time measured by the clocks may be homogenous, but its sensation depends on the narration

of the scene, the theme of its source material, as well as the perception of it by the spectators.

Without a narrative completion to look forward to or an end credit to roll, attending the piece and choosing the time it ends solely depends on the spectator. Where the passage of time is the core of the spectacle, the visitor is perpetually aware that they are in front of a ceaseless loop, and it is their decision to remain a spectator to watch one more minute or to call it quits.

Cinematic apparatus aims at attracting all the attention on its surface, or rather on the virtual depth behind its surface. The viewers remain oblivious not only to their surroundings but also to the passage of real-world time. However, in *The Clock*, seeing the passage of time assessed by various clocks embedded in diverse narratives, action scenes, somber moments, thrillers, or lethargic scenes, is a ceaseless notice. The work constantly reminds the inevitable existence yet unattainability of time. Marclay is reported saying, "I've always thought of this piece as a giant memento mori" (Johnson, 2011)

3.2 Camera, Objectivity and the Sense of Reality (Perspective, Space and the Spectator's Body)

Whether projected or screened, moving images are viewed on surfaces. Even 3-D holograms and VR helmets need surfaces to function. The surface that these images are seen on is material, within reach, and thus can be interacted with; however, the image they present is virtual, distant, and unapproachable. Cornwell (1974, p. 26) states that: "In the traditional film viewing situation, the screen exists as part of a wall and thus part of the architecture" where the rectangular surface of the moving image functions as a "window to the world."

'Window', as Cornwell names it, is not just an opening that makes the exterior visible, but also a seeing practice that has its specific conditions. Friedberg (2006, p. 5) asserts that ever since Alberti introduced the window as a metaphor for perspectival thinking, 'perspective' and as its allegory, the 'window' has remained prominent in "theorizations of the space of vision." The window, the surface of a linear painting, and the screen define a definite 'inside' and 'outside' and separate the viewer and the image from one another.

Positioning the image and the viewer into separated sides predates moving images and cinema. Baudry (1970/1974, p. 41) states that cinematic spectatorship is "fabricated" according to the rules of camera obscura. The pinhole vision recreates images in accordance with the linear perspective. Just like single-point perspective does, cinematic spectatorship distances the image from the viewer; as Fried (1998, p. 171) states, "the film itself is projected *away* from us."

The persistence of the perspectival illusion demands an immobile spectator, as a mobile gaze would not be able to sustain the belief of depth. Legge (2009, p. 54) defines the status of the cinema viewer as a "passive focal subject" that is paralyzed by the "screen's Medusa-like image." In the presence of the cinema screen, the spectators are not only stagnant but also disconnected from both the outside world and each other; moreover, they are unaware of their silent captivity (Baudry, 1970/1974, p. 44).

Moreover, even though cinematic apparatus performs in space similar to a perspectival opening, Friedberg (2006, p. 2) claims that it operates even more determinant on the position of the viewer in relation to the still image, as a viewer in front of a painting is free to move around at the cost of breaking the illusion while the spectator in the movie theatre is unable to move altogether. Just like single-point perspective, viewing a screen within the cinematic apparatus is a state of taming of the eye and the body. Marchessault and Lord (2007, pp. 9–10) state that "The context of viewing is cleansed of its multidimensionality so that the eye is trained to look in one direction only: the screen."

Between the physicality of the plane that they are watching and the virtual depth behind the screen, Friedberg (2006, p. 150) states that the spectator encounters a dilemma of "materiality" and "immateriality." While the viewer is on the tangible side of the border, the movement takes place on an impalpable virtual field. The images presented behind the screen are so intangible that according to Uroskie (2014, p. 30), the viewer is dubious whether the films are 'real' or not; "films do not age. Or rather … films do not even exist."

The separation of the viewer from the image creates an unresponsive, alienated, and passive subject. The position of the cinematic spectator according to the distanced image is so strictly defined that, in the end, the necessity of an individualized subject's body is diminished; as Cavell (1979, p. 24) states: "What does the silver screen screen? It screens me from the world it holds--that is, makes me invisible."

The disembodied viewer shares the vision of the camera and encounters the presented image behind the screen as a new reality to dive into; as Uroskie (2014, p. 5) exemplifies, the movement of images "transport the viewer away from her present time and local space, into the narrative space of the cinematic world on screen." However fictional or extreme the narrative, the sequences, and the angles that are recorded by the camera may be, as discussed in Chapter 2.2.2 Photography, the recorded images are so convincingly realistic that they are considered as the 'objective reality.'

However, the documentation of a camera is never objective to begin with. The ‘camera vision,’ on the one hand, is mechanical and cannot represent what is perceived by a human in totality, yet on the other hand, every camera, even the most ‘practical’ ones such as the security cameras and the satellites are either operated by a human, or their scope is predetermined by one. Pasolini (1967/1980, p. 3) states, “It is impossible to perceive reality as it happens if not from a single point of view, and this point of view is always that of a perceiving subject.” Even if the camera records events without missing any details and unclouded by personal biases, its point of view is still determined by an individual; thus, the outcome of the recording is subjective.

Neither completely ‘objective’ nor ‘subjective,’ the camera, as Baudry (1970/1974, p. 40) states, occupies a middle ground, equidistant to “objective reality” and the final product, which is the moving image; in this intersection, the camera apparatus performs as a translator between the prior and the latter. However, the cinematic apparatus does create a sense of ‘reality,’ not only due to the perspectival illusion but as a result of limiting the spectator’s position to the camera’s former position.

Benjamin (1955/1986, pp. 232–233) explains that the recording of a film does not offer its spectator any perspectives where the apparatuses involved in the process, i.e., the “camera equipment, lighting machinery, staff assistants” are visible, and adds: “The equipment-free aspect of reality here has become the height of artifice.” To make sure that the cinematic illusion is achieved, the viewer has to be repositioned where the camera once recorded from. In the cinematic apparatus, as long as the viewer’s gaze is positioned in the camera’s past location, which is the only point of view the cinematic image can offer, the tools, the interventions, and the labor put into the production of the moving image remains completely invisible.

Cinematic illusionism requires the viewer to overlook the conditions that it imposes in order to sustain its believability. Friedberg (2006, p. 81) states that the enjoyment of spectatorship turns into a state of alertness in the instance that the viewer is aware of the apparatus. In order for the spectators to remain immersed in the virtual realm behind the screen, all aspects of the apparatus have to be left unnoticed. The material components

such as the singular frame, which becomes visible in Coleman's work, *La Tache Aveugle*, the 'image frame,' the projectors, and even the screen itself have to remain unseen; otherwise, they would perform as a "' prick' to the bubble of illusion," as Friedberg (2006, p. 81) states. Moreover, the intangible aspects of the moving image also remain unnoticed, such as the process of shooting, the guidance of the director, and the post-production edits.

Continuing a long-standing tradition, the screen strictly separates its two sides; the front of the screen is material yet stagnant, silent, and almost disembodied in order to sustain the illusion of reality. However, the spectator's paralysis is only partially sufficient to continue the 'objective reality' of the camera. In order to preserve the illusion, the viewer has to remain oblivious to the components of the cinematic apparatus. The artworks presented in this chapter aim at uncovering not only the tangible aspects of the cinematic apparatus but also exposing the deep-rooted conditions of moving images and their spectatorship.

Paul Sharits' *Soundstrip/Filmstrip* eliminates the perspectival depth of projection by presenting the surface itself as the focus. The work breaks the cinematic illusion not only by showcasing the materiality of the filmstrip, but also by unavoidably visualizing the projection apparatus and forcing the viewer to see the work by pacing the studio space in order to both hear the audio and see the projection.

Michael Snow's *Two Sides to Every Story* play on the idea of film production being an unseen process of cinematic apparatus by presenting it on the 'other side' of the screen. Additionally, viewing the work from both sides distorts the linear perspectival image of the screen spectatorship.

VALIE EXPORT's *Ping Pong* requires the viewer's physical body in order to see the work. The active participation of the viewer includes; playing ping pong with a shadow opponent, seeing one's own shadow as a component of the moving image, and demonstrating one's participation as part of the image to be seen by the others.

Bruce Nauman's *Mapping the Studio* disregards the editing process and presents the raw footage recorded in the artist's studio. Instead of presenting a virtual depth that can be seen only through a 'window' on the wall, the work re-figures the studio and invites the audience to not 'watch' the work, but spend time in space.

Hito Steyerl's *How Not to be Seen* is a 'video lecture' on becoming invisible, not just from human vision, but also from the cameras, which are considered 'more reliable' than the human eye. The video includes tactics such as becoming as big as one pixel, which would elude the contemporary digital cameras' vision, and using green bodysuits, which would be eliminated in the post-production process. Moreover, the work redefines the subject of the digital era as data, and presents solutions to escape from this identification.

3.2.1 Soundstrip/Filmstrip, Paul Sharits

Paul Sharits' 1971/1972 installation *Soundstrip/Filmstrip* questions the cinematic illusion of depth by focusing on the projected light itself instead of referring to a virtual space behind the screen and dismissing traditional spectatorship styles by demanding the viewer's active participation to be comprehended.

The work is presented through four projectors encased in four large boxes placed in the middle of the dimly lit gallery space and accompanied by four speakers implanted in the back of the room. The images projected through these four projectors are adjacent to one another and form a single panel on the gallery wall, however, the visibility of this wall is interrupted by the large boxes in which the projectors are mounted. The speakers located at the back of the space narrate the syllables of the word "miscellaneous."

Although making films preceding 1965, Sharits (1978a, p. 69) states that he destroyed those works as a devotion to his new understanding of art and film. In the mid-70s he manifestoed his ideals for the "locational" films. In his statement, Sharits (1978b, p. 79) declares that the social role of an artist is not limited to creating beauty, but it is to also create an inclusive structure for the work to reach the "general public."

For the democratic locational films, Sharits (1978b, pp. 79–80) defines several essentials. First of all, opposing the cinematic settings that are based on illusionistic preconditions, authoritarian, and demanding an immobile viewer, the screenings must take place in public spaces. Secondly, the moving image should not dictate its duration to the spectator, which means the viewer may join in or leave as they choose, which also means that they should not feel the need to wait for the resolution of a narrative. As a result of the second condition, thirdly, the movement of the images should not determine a narrative because, in nature, the motion takes place without defining a story. Furthermore, finally, the projected images should not hide their mechanics; on the contrary, they should make visible that the film is not just the flicker of colorful lights but also exists as an object in space.

Soundstrip/Filmstrip is a work Sharits completed in 1972 and can be defined as one of his "locational" films that he has been developing since the middle of the 1960s. The "locational" films, as Sharits (1978b, p. 79) names them, do not aim at "suggesting-representing other locations." Opposing to considering the screen as a linear-perspectival surface, *Soundstrip/Filmstrip* does not refer to a virtual depth behind the screen surface. Instead, as Krauss (1978, p. 90) indicates, the work "muralizes the field of projection." Mondloch (2010, p. 8) emphasizes that this focus on the projected surface, rather than a non-existent space that lies behind it, problematizes the perspectival presuppositions that cinematic illusions are based upon and raises the question "What does it mean to be denied entry into the film's illusionist space?"

Sharits (1978d, p. 35) states that the cinematic spectator is in a dilemma between "the movie" and "the projection," and ask if a projector were to emit pure white light, would the viewers think they were watching a white filmstrip, or there was no film in the projector to begin with? Considering the projection surface not as a barrier withholding an image behind, but as an autonomous entity, blurs the distinctions between the light emitted from the projector and the film itself. Michelson (1978, p. 84) quotes Sharits that spectatorship occurs "when one looks at screens, not through them," as he presents the projection surface as the main focus of attention.

Unlike cinematic illusions, the "locational" films are not depictions of reality; instead, they exist autonomously; they are a component of reality and not a mere representation of it (Sharits, 1978d, p. 30). The debate of “film as reality” opposing “film as the representation of reality” raises the question of whether or not seeing a movie simply as the intangible play of light on a surface can be considered more “real” than physically holding the film ribbon at hand. Sharits (1978d, p. 35) states that he considers film both as the projected image, as well as the physical material simultaneously.

Considering “film as material” rather than “film as illusion” sparks the attention to regard the basis of the cinematic approach. As mentioned in the previous chapter, the fundamentals of cinematic illusion lie in the movement of still images, not on the camera or projector. Michelson (1978, p. 87) indicates: “Of all the filmmakers of this last decade, Sharits has made the most systematic attempt to explore and objectify the dynamics of the recording process and the materiality of film.” In Sharits’ approach, the film is not separated from its materials; on the contrary, the physicality of the filmic material frameworks the film. In *Soundstrip/Filmstrip*, the color of the light beaming out of the projector is not delivering a narrative; it is not referencing towards an outer meaning, rather it is the primary aspect of the work itself.

Soundstrip/Filmstrip makes the materiality of the film visible, as Sharits considers film not just as the projection of light on a surface but as a physical material. The work itself is the outcome of a double shoot. While producing the work, Sharits scratched the light-sensitive emulsive coat of the film surface, and projected this image so that the sprocket holes, the perforations pinched into either side of the film strips to both stabilize and progress the flow of the film ribbon, are visible. Sharits later reshot this projection and re-scratched the surface of the second film. While watching *Soundstrip/Filmstrip*, the viewer sees two sets of scratches from two different instances. One is the filmed documentation of a previous etch; the second one is not a recording but is a physical mark on the film surface. Krauss (1978, p. 92) defines that these “two generations” of the scratches make the viewer realize the materiality of the film; as the first generation is blurred, and the second one is clear, one is “distanced from us in time,” the other is present.

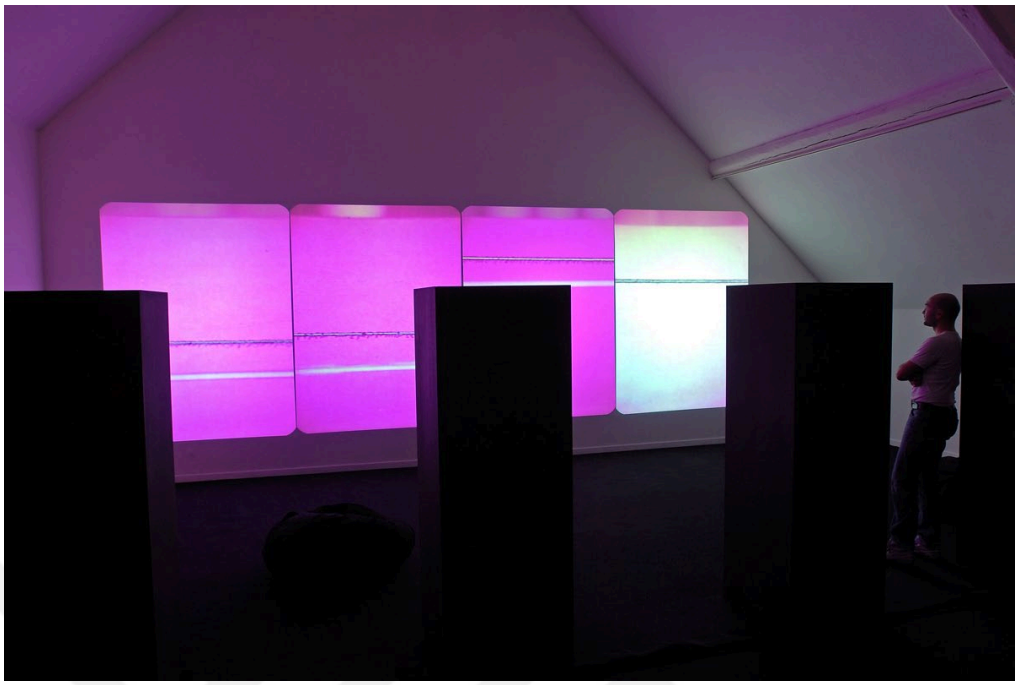

Figure 3.7 Soundstrip/Filmstrip

Note. Sound Strip / Film Strip [Photograph], n.d., Espace Multimédia Gantner https://www.espacemultimediagantner.cg90.net/en/oeuvre/sound-trip-film-strip/

By the time he completed *Soundstrip/Filmstrip*, Sharits had been delving into the ontological side of film production for a while. Sharits (1978c, p. 13) states: “After several years of "experiments" with film, in 1965, I discovered that "Cinematic" was an "expression" meaning more than "creative editing" … "Cinematic" meant "cinematic treatment" of a non-filmic “subject”.” Sharits (1978d, p. 37) defines this approach as the recognition of the elements that are taken for granted in both the production and the spectatorship of the moving images, like the process of recording, the light, the editing, as well as the process of experiencing. However, his experiments aimed not only towards a better understanding of the filmic structures, but also intended to deconstruct cinematic spectatorship from the “very particular frame of reference” (Sharits, 1978a, p. 69).

Soundstrip/Filmstrip not only breaks the cinematic illusion with its emphasis on the filmic surface instead of the perspectival depth, but also by revealing the apparatus utilized to create the illusion. The projectors and the large boxes that they are mounted

in are permanently stationed between the viewer, and the screen. Krauss (1978, p. 91) comments that opposing to the cinematic spectatorship where the viewer is unaware of the hidden apparatus and caught up in the "filmic illusion," the viewer of *Soundstrip/Filmstrip* is encountering the conditions of moving image; the projector and the projection, and witnessing the "birth of the illusion."

In the semi-lit gallery place where the *Soundstrip/Filmstrip* is presented, the viewers are not only allowed to move freely, but also encouraged to do so in order to see the images obscured by the projector boxes. Mondloch (2010, p. 10) states that it is the "active participation" of the viewer that makes the encounter with the work possible. The spectator's encounter with the work takes place in a space not only determined by the limits of the gallery structure, nor is it behind the screen, rather it is defined between the real ground the viewer paces, the filmic apparatus and the screen itself. Mondloch (2010, p. 10) emphasizes that Sharits' work creates a new sense of spatiality; "film is considered to be a space."

Another aspect of the work is the four speakers, each emitting a syllable of the word "miscellaneous" placed at the back of the gallery space. While recalling the production period of *Soundstrip/Filmstrip*, he remarks that "music's spatial dimension" was one of his main motivations. Writing about using sound and images together, Sharits (1978d, p. 42) states that the two should be autonomous yet prosper the same "structural principle." The viewing conditions of the work make it impossible to see it from a stationary point. Similarly, the sound vocalized by the speakers only makes up the word when the spectator paces in the room. The multiple projections fill up the whole wall, and the viewers are encouraged to walk from one side to the other to see the light-mural behind the projector boxes, and the meaning of the scattered sounds of the word is reunited through this movement.

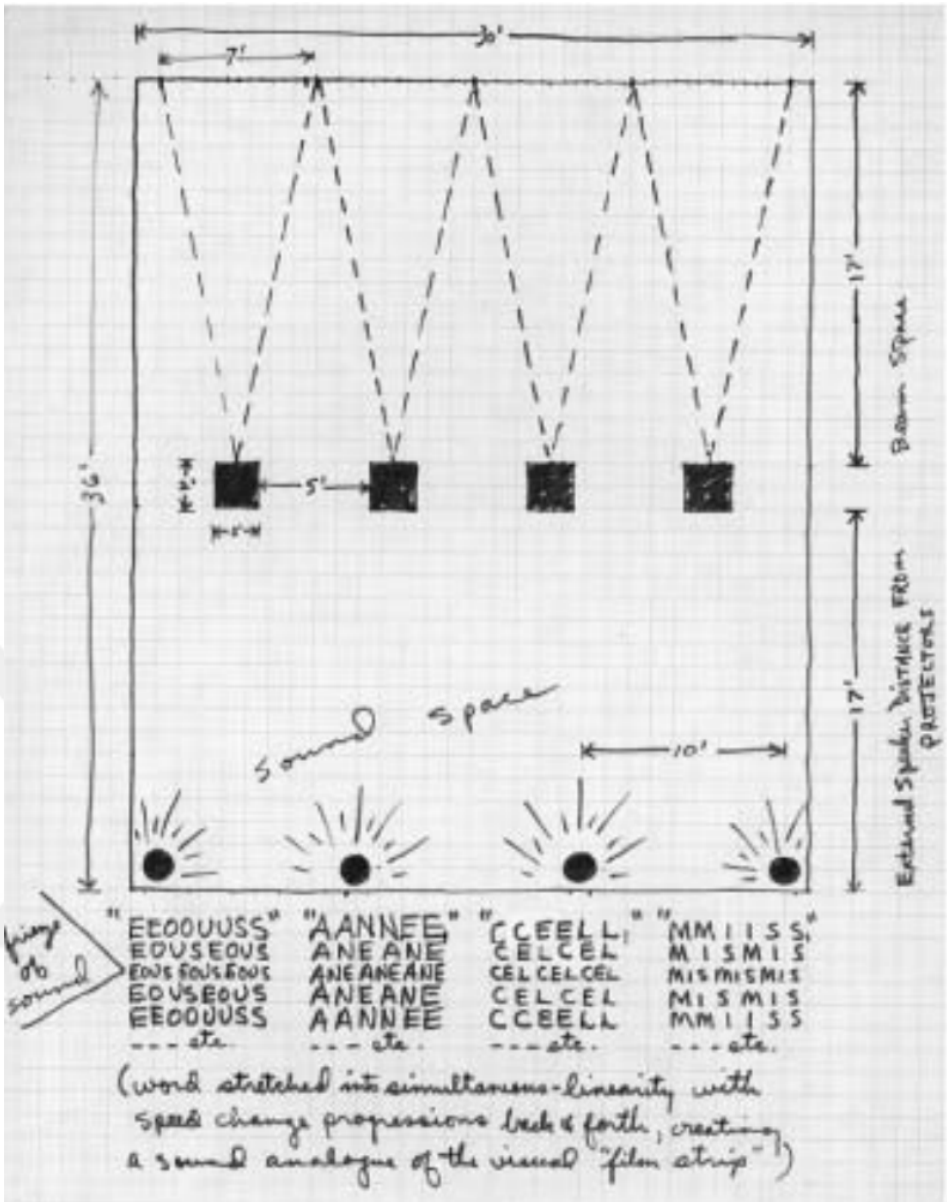

Figure 3.8 Soundstrip/Filmstrip spatial configuration

(Source: Kate Mondloch, Screens: viewing media installation art, 2010)

All and all, *Soundstrip/Filmstrip* suspends the illusion of cinematic apparatus by focusing on what is shown on the projection surface, and not what lies behind it; by not only revealing the material components of moving images but also basing its structure completely on film being a physical material, and relying on the active participation of its visitors instead of imposing its mobility or duration onto passive spectators.

3.2.2 Two Sides to Every Story, Michael Snow

Benjamin claims that the real impact of an apparatus is usually overlooked by its illusion. He claims that while the film may seem impressive in its ability to reproduce the image of movement, what it really achieves is estranging the viewer from the actor. In the cinematic apparatus, the actor performs in front of a machine, the camera, rather than the real audience, and the spectator witnesses the performance through another machine, the projector replacing the position of the camera. “The audience's identification with the actor is really an identification with the camera” (Benjamin, 1955/1986, p. 228). Just like in the single-point perspective, the interaction of the spectator with the work is predetermined as they are chained to the location once occupied by the camera. *Two Sides to Every Story* considers the moving image not as the virtual field that lays behind the screen but also as a physical entity that shares the spectator’s reality, and by doing so, not only initiates the motionless spectator to physically engage with the image surface but also reveals the unseen aspects of the apparatus utilizing its own tools.

Michael Snow’s 1974 installation *Two Sides to Every Story* consists of two video pieces, each lasting approximately for 10 minutes. The work is the recordings of the same set of actions documented via two cameras facing each other approximately 12 meters apart. The footages are projected on each side of a thin metal sheet suspended in the center of the semi-lit gallery space, also approximately 12 meters apart so that the projectors recreate the cameras’ relative distance from one another. One side of the projection portrays a woman following the orders of an invisible director; interacting with a transparent plastic sheet, getting blocked by this invisible surface, painting it, and thus creating a green circular shape that seems to float on air, breaking it apart, moving within the room and blocking the view of the camera. The other side of the projection reveals the director who is giving the orders. On each recording, the cameras and the operators who are recording the scene from opposite sides are also included in the scene, so that both pieces of media chronicle the production process of each other (Mondloch, 2010, p. 12).

In the cinematic apparatus, the moving images consist of nothing but colorful lights projected on a surface and have a nonphysical presence in space. Mondloch (2010, p. 15) elaborates on the "radical non-materiality of the filmic image" and quotes from an interview Snow gave to Nicole Gringas in 1998 that the film, as the projected image on a completely flat screen is an "almost nonexistent" matter; still it represents the depth of a space convincingly.

Figure 3.9 Two Sides to Every Story

(Source: Screenshot from Two Sides to Every Story)

For Snow, the materiality of the image, or rather, its possibility to be embodied as a physical material in space is as crucial as the message it delivers. Païni (1997/2004, p. 44) states: "It is the screen, essentially the screen, more than an abstract filmic material, which is Snow's burden," however he continues to state that the screen is "nothing but the surface of an apparatus."

Although the projected image is merely the movement of light, its surface acts as a border between the real space and the virtual field it demonstrates; as Cavell (1979, p. 24) indicates, "It holds a projection, as light as light. A screen is a barrier. What does the silver screen screen? It screens me from the world it holds." However, in *Two Sides to Every Story*, Snow utilizes the projected surface not as a solid and impenetrable boundary between the physical space and the virtual, but presents it as a filter where the

depth of the virtual space can be recognized. As Païni (1997/2004, p. 44) states, the work manages to "penetrate the depth beyond the screen and tear it if necessary. And it is necessary!"

In *Two Sides to Every Story*, the viewers sequentially witness the performance being acted out, and the otherwise imperceptible elements of the production of a film, such as the machinery behind the production and the relationship between the director and the performer. The uncovering of the filmic apparatus is achieved through not only the demolition but also the appropriation of the linear perspective. So, on one side of the screen, the viewer observes the screen according to the rules of the single-point perspective as a barrier between them and the virtual field across; on the other side uncovers the production process of this way of seeing. Cornwell (1974, p. 30) defines this duality as the "isomorphic relationship between making and perceiving."

Moreover as Mondloch (2010, p. 15) states, the mobility of the spectator is a major threat against perspectival illusion; since it can be only achieved when the spectator views the screen straight forward, and as soon as they change position, the images get distorted. In a 1978 interview with Pierre Théberge, Snow (1994, p. 196) defines the work's effect as "plastic skepticism" and continues: "You see the illusion more than the realism as you move around the sides. The image gets flatter and thinner, and thinner and thinner."

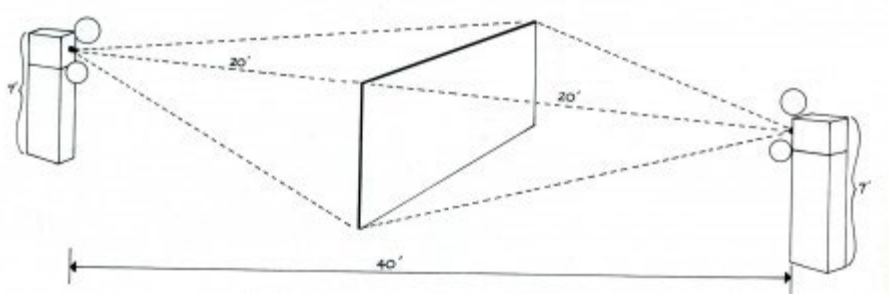

Figure 3.10 Two Sides to Every Story spatial configuration

Note. Two Sides to Every Story [Diagram], 1974, Walker Art Gallery

(Source: https://walkerart.org/magazine/artists-cinema-projected-images)

The work does not break the linear perspective by its nature, but leads the viewer to see through the flatness of the image surface and gaze behind it. In an interview with Cornwell, Snow (1974, p. 30) declares that the work is not rejecting the depth of the perspective, but makes use of it. Cornwell (1974, p. 33) continues: “In Snow's piece, the camera eye suggests the imagination. The illusion is projected onto the real plane and accepted by it. … Though we know the truth, we believe the lie and espouse it.”

In *Two Sides to Every Story*, this immaterial lightwork is projected on a thin metal sheet which, as Mondloch (2010, p. 14) states, “seems almost to disappear” as the viewer paces around it. However, despite its thinness, the metal sheet has two very distinctive faces with two different narratives. The complementary difference between the two sides encourages the viewers to move around the projection surface. While screen spectatorship sets forth an immobile spectator facing moving images, the work mobilizes the viewer to observe the other side of the story.

Unlike the linear perspective vision, where the static body can observe the totality of a scene from a fixed point of view, in Snow’s work, the viewer is led to change their position, relocate themselves in relation to the image, and even then, they are never granted a total vision over the image, as Mondloch (2010, p. 15) states; “mastery of the visual material remains perpetually just out of reach.” *Two Sides to Every Story* can never be seen completely; however, it can be unrevealed by an active body circling around the screen and through the time it takes to do so. Païni (1997/2004, p. 45) states: “It is a temporal as much as spatial connection. It is the screen, its hair-fine thickness that is the seal.”

As indicated by Agamben (2006/2009, p. 11), apparatuses create their own subjects and their own sets of reality. However, the apparatus that is utilized by the authorities to control and govern can be manipulated by artists to scrutinize the otherwise unseen sets of relations and open up discussions of new modes of existence. *Two Sides to Every Story*, in this aspect, identifies the problems of the spectator-moving image relationship without overlooking the perspectival aspect of screen-space, but amplifying its possibilities. The projector replaces the camera not just to recreate the vision of the apparatus, but also to reveal the unseen relations it conceals.

3.2.3 Ping Pong, VALIE EXPORT

EXPORT extends the cinematic limits not only spatially or durationally but also bodily. With her work Ping-Pong, EXPORT invites the viewers to interact with the screen; to hit in with a ball in a game of ping-pong. However, maybe the most potent aspect of the apparatus remains eluded, the omnipresent directions and control of an unseen director.

EXPORT's 1968 interactive installation is made up of a table-tennis ball and a paddle, a Ping-Pong table that is cut into two that is leaning against a white wall, and a 3-minute-long video loop. The video piece is projected onto the white wall that the half table is abutted against, and it showcases black dots on a white background, appearing and disappearing successively. When the viewer is positioned between the projector and the table, their shadow is cast on the screen; when they pick the paddle up so does their shadow. Although it is completely up to the viewer whether to start playing the game, or just to watch the images come and go, the black dots that pop up at different parts of the screen/wall are invitations for the spectators to challenge against; which is also indicated on the film's subtitle: "Ein Film zum Spielen, ein Spielfilm," meaning "A Film to [Be] Play[ed]" (Mondloch, 2010, p. 65).

EXPORT (2011, p. 288) states that since the mid -1960s, she has been defining her main practice as "Expanded Cinema," which is not only the transgression of the filmic process into space and time; but also the inquisition of the human body "as a code for social and artistic expression." The presence of the body and its physicality is crucial in EXPORT's practice, as *Ping Pong*'s contemporary *Touch Cinema* (1968), where the artist both presented and hid her bare chest in a box and behind a curtain, perhaps being her most famous oeuvre (White, 2011, pp. 30–31). EXPORT (2011, p. 295) states that the involvement of the human body, either the spectator's or the director's, brings an emancipation from the industry's standards and expectations.

In 1970, Sharits (1978d, p. 35) proposed an hypothetical situation where the viewer is presented with a white screen and asks, in this case, would the spectator assume the film roll is absent or the filmstrip is there but just pure white? In EXPORT's work, more than in *Soundstrip/Filmstrip*, the role of the projector as a light source is actuated. Just

like Sharits' speculative question, the screen is mostly white, but when the viewer approaches the ping-pong table, their shadow appears on the other side, as an opponent. Here, the projector is not just a tool for moving images, but also, on a very mechanical level, it is a light source; and the transparency of light being blocked by the viewing body's opacity completes the image on the screen.

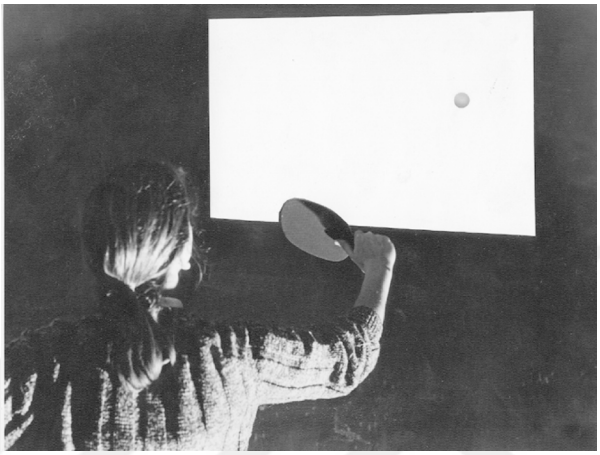

Figure 3.11 Ping Pong

Note. Ping Pong. Ein Film zum Spielen - ein Spielfilm, V. EXPORT, 1968, Valie Export https://www.valieexport.at/jart/prj3/valie_export_web/main.jart?rel=de&reserve-mode=active&content-id=1526555820281&tt_news_id=16)

Mondloch (2010, pp. 66–67) states that the work takes place on two "conflicting spaces," the game partner is on the virtual field, while the action takes place on the "typically neglected space in front of the screen." Instead of proposing the materiality of the projection surface against the virtual depth of the cinematic illusion, EXPORT appropriates a distant and unapproachable, yet interactive field behind the screen/wall. The work exists in a duality; while the opponent is imaginary, the game is real. The interaction depends on the illusion, as much as the presence of the spectator's body.

Sichel (2010, p. 207) claims that EXPORT's Ping-Pong predates all video games. Although this claim might be a stretch, it is a fact that EXPORT's video piece was created four years before Atari's popular arcade game PONG which was created in 1972 (Wolf, 2012, p. 2). While the video game PONG's interactivity is accomplished

with a computer software, EXPORT's work is technically pretty simple. It utilizes the cinematic apparatus to create a double of the spectator to take the role of the opponent. Widrich (2011, p. 54) defines the work as a "mixture of live action and film" since the validity of it depends literally on the active participation of the attendants. Mondloch (2010, p. 65) indicates that the experience is "haptic", as much as it is visual. EXPORT (2011, p. 294) highlights: "Without the action of the viewer, the film remains incomplete." By participation, the spectator turns into the spectacle; as they not only watch their own shadow on the screen, but present their presence to the other visitors as the image to be seen as well.

EXPORT (2011, p. 294) notes, in 1968 she wrote that the interaction between the screen and the audience is based on "stimulus and response." Sichel (2010, pp. 208–209) indicates that such an interplay hadn't been cultivated prior to EXPORT and adds that the work "amplified the possibilities of arousing the still-lethargic art viewer." However, although the work creates an active spectator, its premise is not the total emancipation of the viewer (Mondloch, 2010, p. 68). The screen is no longer the apparatus of a numbed spectatorship; however, it still is a surface where the director's intentions become visible.

Although the work mobilizes the otherwise stagnant viewer, their actions are still predetermined by the director. Even though the screen and the spectator may seem like equal partners partaking in a game, they are actually elements in a precomposed work of art. In order to play the game, the visitor should obey the rules determined by the artist. EXPORT indicates: "*Ping Pong* makes explicit the dominant relationships between the producer/director/screen and the consumer/viewer…no matter how much the viewer also enters into the game and plays with the screen, his status as a consumer is altered very little."

In the end, the spectators may have been broken free from their still position, and interact with the screen, but the real apparatus – the intention of the director – is still omnipresent.

3.2.4 Mapping the Studio, Bruce Nauman

Mapping the Studio is a seven-channel video projection of the artist's studio at night time, when no one is in it except for the field-cum mice, the artist's tailless black cat, and a few bugs. For recording the footage of the piece, the artist documented seven different locations of his workplace in one-hour intervals over forty-two non-consecutive nights using a camera with night-vision (Auping, 2001, pp. 398–400). The final piece is unedited except for successively compiling the recordings of the exact locations of the studio. Also, the projected time in *Mapping the Studio* is unaltered, as Nauman explains in his interview with Auping (2001, p. 399), that he wanted to present a non-narrative "real-time."

The documentation of real-time and the everyday actions it contains is reminiscent of Nauman's Studio Films in the late sixties. The Studio Films showcase Nauman performing mundane actions such as walking, dancing, and exercising on the perimeter of a square on his studio floor, jumping in a corner, bouncing balls between the floor and the ceiling, and playing violin (Kraynak, 2003, pp. 14–15). Each of the actions in Studio Films lasts for one hour, and their titles not only define the work but also are instructions (Riley, 2007, p. 188). About the origin of his Studio Films, Nauman states that he believes what an artist does in the studio is art, and at this point, "art became more of an activity and less of a product" (Wallace & Keziere, 1979, p. 194).

The Studio Films materialize the time spent in the studio. The time can be filled with repetitive and straightforward actions, but still, they can be pondered upon. According to Lewallen (2007, pp. 82–88), Nauman affirmed that "all human activity, no matter how commonplace, is worthy of being examined." Created about thirty years after his Studio Films, *Mapping the Studio (Fat Chance John Cage)* originates from a similar place to the Studio Films. In the interview with Auping (2001, p. 398), Nauman recalls that at a point when he was unsure what to do next, he found himself in his studio, with his cat, the mice, and an infrared camera, he continues: "so I set it up and turned it on at night when I wasn't there, just to see what I'd get."

What the camera recorded was real-time surveillance of the studio (Taylor, 2009, p. 45). In the projected images, not many events take place. Schjeldahl (2002) depicts them as basically “still-life” images, occasionally coming to life by the animals and nocturnal bugs in the studio, their glowing eyes and the atmospheric sounds. Even though there is movement, Mondloch (2010, p. 45) states that these movements don’t have a “storytelling” intent. The piece does not revolve around a narrative; however, there is an eerie side to it. Inside the studio, between the cat and the mice, there is a constant tension between the prey and the hunter. In an interview with Auping (2001, p. 402), Nauman characterizes: “We think of them as light-hearted performers, but there is this obvious predator-prey tension between them.” Moreover, the sounds of an unseen exterior world, the hum of the traffic, a train, barking dogs, and coyotes are constant reminders of the dangers of the outside (Auping, 2004, pp. 15–17).

The *Studio Films*, recorded with a stable camera similar to *Mapping the Studio*, documenting the artist’s relation with his environment and his ability to adapt to its borders. Unlike the *Studio Films*, in *Mapping the Studio*, Nauman himself doesn’t appear on the camera except for a few short glimpses. Instead, in the nighttime, it is the mice and the cat who roam the studio. The camera “record the eponymous activity—mapping—by mice, bugs, and a cat. Little by little, the critters visit and trace just about every object and every contour of the given spaces” (Schjeldahl, 2002). The seven directions of the camera, recording the animals moving around the borders of the studio, outline the space in its totality. Nauman remarks (Auping, 2001, pp. 398–399): “The camera was eventually set up in a sequence that I felt pretty much mapped the space.” In the gallery space, the projectors replicate the camera positions in order to recreate the closed environment of the studio (Mondloch, 2010, p. 47). When the spectator is between the projectors, they are placed within the studio space.

The viewing duration of *Mapping the Studio*, if dependent on the projected time, would take almost two days. Schjeldahl (2002) states, “It would take roughly forty hours and fifteen minutes to miss nothing in any of the projections.” In this manner, the piece “eliminates the prospect of a “complete” viewing altogether” (Mondloch, 2010, p. 45). Nauman states that the duration of the piece is intentionally this excessive so that the

viewer does not get the impression that they should watch it from start to finish; he emphasizes: “I wanted that feeling that the piece was just there, almost like an object, just there, ongoing, being itself... I like the idea of knowing it is going on whether you are there or not” (Auping, 2001, p. 399).

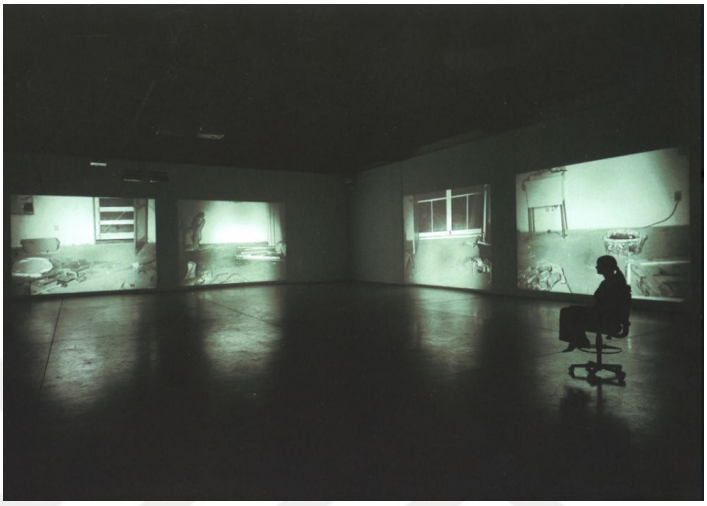

Figure 3.12 Mapping the Studio

Note. Mapping the Studio I (Fat Chance John Cage), by S. Tyson, 2001, Dia Art Foundatiın (Source: https://www.diaart.org/exhibition/exhibitions-projects/bruce-nauman-mapping-the-studio-i-fat-chance-john-cage-exhibition)

The time spent “in” the piece is not predetermined by the artist; instead, it is intended to be limitless in time, like an object in space, leaving room for the spectator to decide the duration that they will spend watching it, not considering a narrative. Just like the piece’s duration is undetermined, so are the details to be caught up. Nauman (Auping, 2001, p. 402) states that watching the piece is almost like a meditation, and if one tries to grasp it, one will lose the point; instead, he suggests the viewer to unwind and simply let the time pass in the studio: “If you try and concentrate on or pay attention to a particular spot in the image, you’ll miss something. So you really have to not pay attention and not concentrate.” A static picture reveals its details with duration. According to Benjamin (1955/1986, p. 239) images are to be viewed in concentration, whereas architecture is sensed in a “state of distraction.” In this regard, *Mapping the Studio (Fat Chance John Cage)* is more similar to the real-time spent in space in the architectural term instead of a video piece.

3.2.5 How Not to be Seen, Hito Steyerl

How Not to Be Seen: A Fucking Didactic Educational .MOV File" is a 2013 video essay by Hito Steyerl, comprising five lectures that last 15 minutes combined. The lessons concern not only not to be seen by people, but also to avoid the gaze of the cameras. The work enduringly questions the difference between mechanical and biological; through their social constructs, regulations, and abilities. Moreover, the work scrutinizes the subjectivity of surveillance and the meaning of invisibility in the age of digitalization.

The authorities utilize the techniques of image recording and recognition as a tool of control, governance, and surveillance, like the CCTV cameras gazing over the public sphere. However, the scope of public regulation is not limited to urban space; Steyerl (2012, p. 167) states that the proliferation of social media and smartphone cameras have expanded the sphere of reciprocal mass monitoring; the 'online subjects' perpetually record, tune and share the images of themselves and each other. In addition to the ceaseless image flow to the internet, the websites and apps collect the data of their users. Althoff (2019, p. 94) states that even the demand of not sharing one's information is considered as data, making it almost impossible to become invisible.

In the 21st century, the internet is one of the main domains we encounter with images. However, Steyerl (2014, pp. 32–33) states that the internet is not just a medium but an "environment," and it may be one of the most authoritarian ones of all, as Steyerl adds: "it is obviously completely surveilled, monopolized and sanitized." The internet user, while looking at images, is also 'looked back at.' However, the act of looking is not always performed by people; as Steyerl (2014, p. 34) emphasizes both the internet users, and internet surveillants are only partially human, and the rest is algorithmic. In fact, not all the content on the internet is curated by humans as well; when writing about spam images, Steyerl (2012, p. 171) states that it is created, distributed, flagged and eradicated by machines; it "circulates endlessly without ever being seen by a human eye." Thus, Lütticken (2014, p. 50) offers a better verb for this act of surveillance as he states; under the digital panoptic gaze, "we become scannable." The subject of the

online moving images is alienated yet interconnected, immobile yet in a constant flow, not biologically human, but data.

In the most elemental regard, the work *is* a video lesson. As Benjamin (1955/1986, p. 228) states, starting from the industrial era, machines have been the prominent mediator between individuals. The performer is no longer present neither spatially nor temporally. The viewer sees the performance acted in front of a machine, through a machine. Here, in this work, not only is the 'student' learning through a screen, but the teacher's humanity is also compromised; the lecture is given by a slowed-down digital voice.

The tactics presented by the digital voice are not primarily concerned with becoming invisible to the bare human eye, but elude the gaze of a camera. The camera does not 'see' the world according to relations and dynamics, but according to light reflecting on surfaces; the world of a camera consists of images. Thus, although the tactics include acts such as hiding, disappearing and erasing that would succeed in opposing the human vision, they also encompass avoiding the resolution range, reflection, and stepping out of the image frame.

While analog cameras record this light chemically on surfaces, digital cameras process images as pixels. A pixel is the most miniscule identifiable component of a digital raster image. So, avoiding being seen by a digital camera, like the ones on smartphones is possible by being as small as one pixel. The digital voice in the work quotes: "Resolution determines visibility; whatever is not captured by resolution is invisible" (Steyerl, 2013, 0:01:37). However, the definitions of a pixel have changed throughout the years; the same mechanic voice states that while in the 20th century, one pixel for the satellite view equated to 20 meters in the 21st century it is reduced to 3 meters (Steyerl, 2013, 0:05:24), causing to escaping the vision of a satellite become more challenging.

Another suggestion to deceit the camera vision is using a certain green color; Steyerl is seen putting green paint on her face and green costumed figures interact with their surroundings throughout the piece. While the green screen is part of the post-production

process; creating a ‘blank spot’ to manipulate the image, the tactic does not succeed for the human vision. As the viewers, we clearly observe the figures in bodysuits, though we might think that we should not see them, or try to imagine already eliminated figures which are previously deleted in post-production.

Figure 3.13 How Not to Be Seen: Disappear with green paint

(Source: screenshot from How Not to be Seen: A Fucking Didactic Educational.MOV File)

Another tactic, although not verbally presented in this video, but implied throughout, is becoming an object; as suggested by Steyerl in her book *‘The Wretched of the Screen’* one year prior to *How Not to Be Seen.* Even though admitting that throughout history freedom was associated with being a subject, and people take issue with being ‘objectified,’ Steyerl (2012, p. 50) states that the subject is even more limited than the object; “The subject is always already subjected.” The object, on the other hand, is free from subjectification; it is neutral. Moreover, the object is free from representation; about becoming invisible, that is to say, becoming unidentifiable behind a mask Steyerl (2012, p. 131) pleads: “How can we express a condition of complete freedom from anything, from attachment, subjectivity, property, loyalty, social bonds, and even oneself as a subject?” The mask’s freedom derives from its ambiguity; it is no longer represented as a subject, but as an object.

Figure 3.14 How Not to Be Seen: The ‘cracked’ pixels

(Source: screenshot from How Not to be Seen: A Fucking Didactic Educational.MOV File)

Like the mask rejecting identification and representation, the poor image is emancipated, stripped from its narrative aspects, unrecognizable, and abstracted back into pixels (Steyerl, 2012, p. 32). About the fractures on an old resolution range concrete, the mechanical voice states: “Rouge pixels hide in the cracks of old standards of resolution. They throw off the clock of representation” (Steyerl, 2013, 0:12:02) For Steyerl, becoming invisible in the digital age is not simply to hide from human eyes, nor is it to elude the camera gaze, but it is being free from constant representation. As Lütticken (2014, p. 50) emphasizes, none of the tactics aim at fooling the constant surveillance, but they are “reminders that we all are data-objects and we’d better start acting on that knowledge.”

4. CONCLUSION

In conclusion, apparatuses are deep-rooted into our visual culture and have become an integral part of our perception ever since the dawn of time. Our vision is now inseparable from seeing devices. However, the scope of these devices extends beyond the physical support they provide our vision. Apparatuses define social and political formations. Their influence encompasses habits, customs, and policies and, when misappropriated, can be and is used to regulate and control.

However, apparatuses are not necessarily in need of an authoritative figure to become a domineering phenomenon. They have profound effects on society, perception, and subjectivity. Apparatuses not only offer a way of seeing, but they set that way of seeing as a standard and marginalize the rest. These tools determine the ‘standard,’ the ‘norm,’ the ‘ideal’ and the concept of ‘reality’ itself. As a result, our perception of the world is mediated and shaped by the apparatuses we interact with. Moreover, even more eerily, the presence of apparatuses is barely noticeable, as they are internalized by individuals and become deep-rooted in culture. Cultures create apparatuses, and in turn, apparatuses shape culture. This reciprocal relationship highlights the fact that machines and apparatuses are not solely technical, and that they possess a social dimension that precedes their technical function.

Humans utilize apparatuses as an extension of their perception; however, the apparatus depends on the human existence as much as humans need apparatus. Each device not only defines its way of seeing but also regulates its version of a ‘seeing body.’ As the optical apparatuses develop as components of culture, they are altered in accordance with the changing cultural practices, and their version of the ‘seeing body’ changes as well. For instance, the emergence of cinematic apparatuses during the industrialization era was driven by the prioritization of efficiency and the quantification of attention. As a result, the viewer's role was transformed into a concentrated observer closely tied to the camera's perspective.

This research suggests that art can challenge and reveal the dynamics of these apparatuses, presenting new possibilities for perception and understanding. Through artistic exploration, new requirements and perspectives can be created, paving the way for transformative experiences and engagement with the world.

Moving images are viewed in a different temporality than still images; that is the viewer of a still image determines the duration of interaction, whereas a moving image makes the image's duration the ultimate regulator of the viewing duration. James Coleman's *La Tache Aveugle* reframes the moving image as a still one, and restitutes the temporal relation between the viewer and the image. Douglas Gordon's *24 Hour Psycho*, on the other hand, completely rejects the time-based spectatorship by stretching out a widely recognized cult classic into 24 hours, and relies on the audience's personal memories about the movie in order to 'complete' the work. Regarding image time/subjective time, Christian Marclay takes a radical approach by creating a timepiece out of moving images that corresponds to the clock time of the viewer. The spectator, while watching the piece, does not surrender to the duration that is imposed on them; on the contrary, they not only are in full control of their duration but also observes it the whole time.

Although the conventional screen spectatorship demands the spectator's uninterrupted attention, James Coleman's *La Tache Aveugle* eliminates the fully attentive audience with each frame remaining on the screen for almost 40 minutes, encouraging the viewers to take their time trying to make sense of the abstracted projected image. Bruce Nauman's *Mapping the Studio*, on the other hand, aims at not being perceived as a screen altogether. The 'mapped' projection of the artist's studio creates a spatial viewing environment and suggests the visitor to 'lose' their focus altogether.

Although conventional moving image projection pursues the notion of a 'perspectival window' in space, depicting a virtual depth, out of reach and behind the screen; Paul Sharits' *Soundstrip/Filmstrip* eliminates the perspectival depth by presenting the surface itself as the main focus. Bruce Nauman's *Mapping the Studio* not only utilizes the perspectival depth of the screen but exploits depth while reconfiguring the studio space in the gallery. On the other hand, Michael Snow's *Two Sides to Every Story*, although

not rejecting the perspectival depth of the surface, pushes it to an extremity, presenting two spaces embedded in the opposite sides of the screen, thus not only positioning the screen as a barrier between the viewer and the image but also presenting it as a blockade between two virtual spaces. Moreover, ironically, the work requests the viewers to walk around the piece to see both sides, thus distorting the perspectival image as a consequence.

The cinematic screen's perspectival illusion depends on the spectator's immobility, as seeing the image from its extremities would distort the image as in the work of Michael Snow. Although installations allow the viewer to pace in the space and view the piece from different positions in general, Bruce Nauman's *Mapping the Studio* locates the screen in such a way that the visitor senses to *be* in a space, not immobilized in front of a screen. Paul Sharits' *Soundstrip/Filmstrip* 'necessitates' the audience to move around the gallery space, not only to see the colorful projected image obscured behind the large projection boxes but also to make sense of the sound coming from the four speakers located in the back of the space. When walking from side to side, the audience completes the word 'miscellaneous' in which each syllable is emitted from four speakers. VALIE EXPORT's *Ping Pong*, on the other hand, not only invites the viewers to be active in front of the screen but also sets up a game to be played.

In the context of cinema, the spectators are not only immobile and completely focused, but also unable to communicate neither with one another nor with the screen. VALIE EXPORT's *Ping Pong* redefines the spectator as part of the spectacle, as the player participating in the game not only perceives their own shadow as the opponent, but also presents their game as the image to be watched by the other visitors. Moreover, ping pong, by nature, is a competitive game, and the screen in this context is not just a surface beyond reach, but it is an opponent to be defeated by hitting the surface countless times.

In the cinematic apparatus, the only point of view presented to the spectator is the camera's perspective. Paul Sharits' *Soundstrip/Filmstrip* disposes of the camera altogether by utilizing and manipulating the filmstrip itself. While Michael Snow's *Two*

Sides to Every Story demonstrates the cameras involved in the recording of the film as a central point of his work, Hito Steyerl's *How Not to be Seen* is a piece produced with the camera vision in mind instead of a human gaze. While the undisputed belief in apparatuses' reliability is prevalent in general consensus, the maneuvers Steyerl advocates prioritize human vision against the machinic one, as the tactics she suggests throughout the video such as becoming as small as one pixel, are strategies that would succeed in opposing a modern digital camera, whereas the human spectators are able to see the 'hidden' pixels nonetheless.

The singular point of view accessible to the spectator in cinematic apparatus is a 'blind spot' where the apparatus remains completely invisible; thus, the validity of the virtual image's 'reality' endures. James Coleman's *La Tache Aveugle*, opposing to remaining blind-sighted against the singular frame, which is invisible in the cinematic illusion, presents and monumentalizes the still frame. However, neither the movement of the original source nor the image it demonstrates is decipherable in the image, as the single frame was not composed to be viewed individually in the first place. Christian Marclay's *The Clock* opposes the narrative time that makes the viewer disregard the real world's temporality by creating a compilation that is a constant reminder of the passage of time. Paul Sharits' *Soundstrip/Filmstrip* destroys the cinematic illusion by displaying the fragile materiality of the filmstrip by scratching its surface, as well as by inevitably presenting the projection equipment as a barrier between the viewer and the screen. VALIE EXPORT's *Ping Pong* not only visualizes but also utilizes the light-emitting aspect of the projector in order to present the work. Michael Snow's *Two Sides to Every Story* depicts the generally unseen production process of the work and the overruling control of the director on the 'other' side of the screen. At the same time, Hito Steyerl's green-suited figures in *How Not to be Seen* directly remind the audience of the post-production process.

All in all, the artists' critical approach not only reveals the deep-rooted yet unrecognized crises of apparatuses but also offers us ways of seeing that we could never have imagined otherwise.

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