TRACING VISION

The Emergence of Subjectivity in Landscape

by
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TRACING VISION

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ABSTRACT

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The main objective of this text is to question and research the relevant historical context of the ways in which vision is constructed and content is utilized to (re)present the flow and accumulation of subjective experiences based on vision.

The dissertation especially meditates on the use of linear perspective in depictions of landscape and the configured relationship between vision, representative forms, reality and the position of the eye and observer beginning from pre-Renaissance and reaching towards the modern era.

Lens-based images, due to their indexical nature is readily taken as a duplicate of reality. Following this, the text explores possible means of shifting this documentarian burden and contextualizing photography and video as tools for the construction of subjective realities.

This paper aims to offer a textual basis for a number of photographic and videographic works that I have produced within the last two years. In the core of these works lie the concepts of subjectivity, multi-perspectivity and the transformation of space and vision through time.

Looking at traditional and modern art forms that exclude linear perspective and avoid representing space in realistic manner, it investigates how conceptual features of these forms can be applied to contemporary digital moving image practices.

Keywords: Vision, Landscape, Linear Perspective, Re/presentation, Photography, Video

ÖZET

GÖRMENİN İZİNİ SÜRMEK

Manzara Tasvirinde Öznelliğin Oluşumu

Begüm Yamanlar

M.A., Görsel Sanatlar ve Görsel İletisim Tasarımı

Haziran 2015

Tez Danışmanı: Murat Germen

Bu metin tarihsel altyapısı içerisinde görmenin nasıl inşa edildiğini ve görmeye dayanan öznel deneyimlerin sunumunda ve/veya tasvir edilişinde görsel içeriğin ne şekillerde değerlendirildiğini sorgulamayı amaçlamaktadır.

Rönesans öncesinden başlayarak modern çağa uzanan bir dönemi kapsayarak manzara tasvirlerinde lineer perspektif kullanımı, görme, temsil biçimleri, gerçeklik, gözün ve gözlemcinin pozisyonu arasındaki ilişkiye odaklanmaktadır.

Lens bazlı görüntüler, dizinsel yapıları gereği kolaylıkla gerçekliğin bir kopyası olarak algılanır. Bu görüş doğrultusunda, metin fotoğraf ve videoyu belge niteliği taşıma yükünden uzaklaştırıp öznel gerçeklikler inşa etmeye olanak sağlayan yöntemler araştırıyor.

Bu tez görmenin ve yerin zamana bağlı olarak dönüşümü, öznellik ve çoklu perspektif gibi kavramlar çerçevesinde son iki yıl içerisine ürettiğim işlerin okumasını yaparak, metinsel altyapısını sunmayı amaçlamaktadır.

Lineer perspektif kullanımını ve realist temsil biçimlerini dışarıda tutan geleneksel ve modern sanat formlarını inceleyerek, bu formların kavramsal özelliklerinin çağdaş dijital hareketli görüntü pratiklerine nasıl uygulanabileceğini araştırmaktadır.

Anahtar Kelimeler: Görme, Manzara , Lineer Perspektif, Tasvir, Fotoğraf, Video

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INTRODUCTION

The World Observed

> "... the observer is the field on which vision in history can be said to materialize, to become itself visible. Vision and its effects are always inseparable from the possibilities of an observing subject who is both the historical product and the site of certain practices, techniques, institutions, and procedures of subjectification." (Crary, 1992, 5)

As a practitioner who works with photographic still and moving images employing computer generated imagery techniques, I find it important to take attention to vision and its historical and cultural construction, therefore I will mainly discuss the traditional and modernist models of vision.

Today, the dominant and dramatic progression and diffusion of the use of computer graphic techniques, has changed the culturally configured relationship between the observer and modes of representation.

Jonathan Crary lists several examples of the techniques which separate vision from the human eye/human observer as; "computer-aided design, synthetic holography, flight simulators, computer animation, robotic image recognition, ray tracing, texture mapping, motion control, virtual environment helmets, magnetic resonance imaging, and multispectral sensors.." (Crary, 1992, 1)

Although today former ways of seeing still exist aside these techniques, the historically important position and function of the eye is now replaced with visual practices that no longer insist on signaling the position of a 'real' observer located in a 'real' optically perceivable world.

To understand this kind of a break and alteration in the nature of visuality, it's crucial to observe the historical background -especially in the 19th century- of what kind of models of vision are left behind, and why and when the former 'realistic' and classical models of vision and observer lost strength.

Timothy Mitchell claims, Bergson's introduction of duration as the fourth and inseparable dimension in viewing reality has proven to be especially influential for this paradigm shift. (Mitchell, 1977, 176)

Many of the evaluative narratives on visual art and culture beginning from the 19th century claim that impressionism, post-impressionism, cubism and such modernist movements introduced new models of vision, perception and visual representation, claiming a rupture with Renaissance and its dominant perspective based model of vision.

Although these narratives suggest "the end of perspectival space, of mimetic codes and of the referential, they usually coexisted uncritically with another very different periodization of the history of European visual culture according to Crary. (Crary, 1992, 4) These latter models basically bear upon the invention and proliferation of photography and other related forms of 'realism' in the nineteenth century. These developments are widely introduced as part of the extension of the former Renaissance-based model of vision; in which photography and cinema (because of their mimetic capacities) are accepted as subsequent forms that represent perspectival space and perception. Thus, it seems as if a double-headed model of vision and exists in the nineteenth century; on the one hand radical, new and avant garde; and on the other hand the former classical one concerning mimetic and referential codes and realism. (Crary, 1992, 4)

In the light of these, I will meditate on several models of vision from Renaissance and the 19th century to create a historical background for works that I've produced concerning the position of the observer, the eye and issues centered around (re)presentation and subjectivity.

CHAPTER 1

CONSTRUCTION OF VISION AFTER 15TH CENTURY

1.1 Landscape and the Introduction of Linear Perspective

Before looking at exemplary works, it may be necessary to delve into the specific meaning of terms ‘landscape’ and ‘linear perspective’. Landscape denotes “a picture or representation” of a view, a section or expanse of a scenery; usually extensive, and mostly seen from a single viewpoint.

Although linear perspective - a mathematical system to map three-dimensional physical space on a two dimensional surface using lines and vanishing point(s) - is the most widely accepted norm of achieving an illusion of depth by showing how the apparent size of an object diminishes with distance, it is not the sole system that can be used to represent the world. (Florenski, 1920, 132)

Throughout the 14th century a new secular world vision based on naturalism and humanism started to rise. Within the art context, the School of Giotto was accepted to provide the first practical indication of this secular vision related to the ideas of naturalism and humanism. Giotto, the Italian painter and architect from Florence, made a decisive break by rejecting the cannon of reverse perspective associated with the Medieval period and introduced linear perspective in his drawings and paintings. Alongside Giotto, painters like Cimabue, Lorenzetti, Donatello, Masaccio were all experimenting with the concept of linear perspective to establish more realistic and naturalistic relationships between figures and their background. Their depictions did neither involve the use of a vanishing point nor a systematic geometry, and thus resulted in not fully accurate applications of linear perspective.

> “These pre-perspective urban landscapes show not so much what the towns looked like as what it felt like to be in them. We get an impression of the towns not as they might have looked to a detached observer from a fixed vantage point but as they might have impressed a pedestrian walking up the streets and seeing the buildings from many different sides. (Cosgrove, 1985)

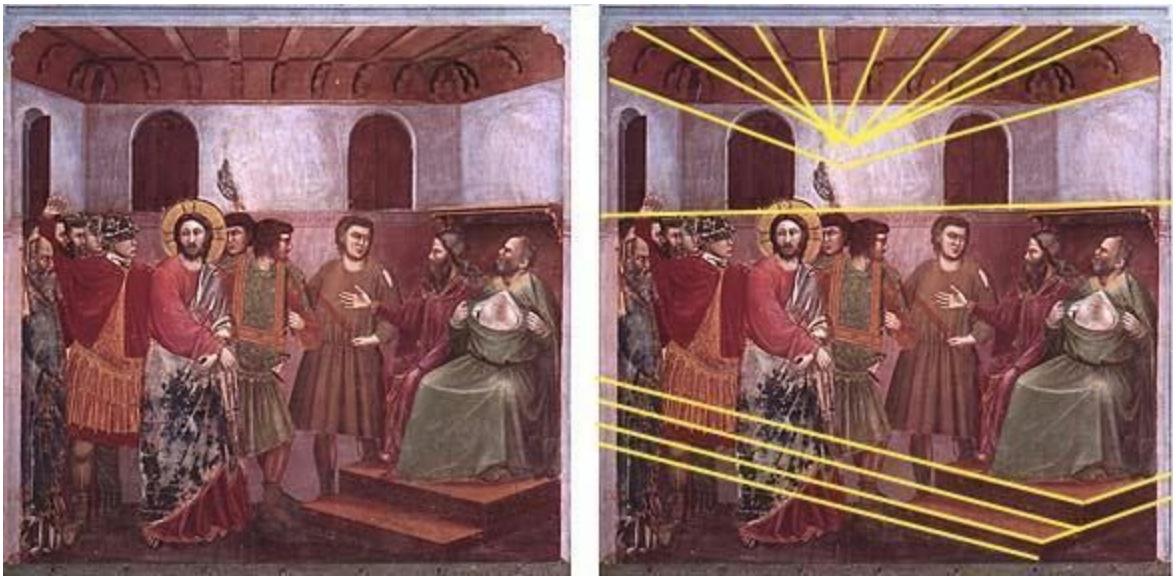

Fig:1. Giotto di Bondone. Jesus from the Caif, Scrovegni (Arena) Chapel, Padua, Italy. 1305

Fig:2. Ambrogio Lorenzetti. Good Government in the City, detail from Palazzo Pubblico. Sien. 1340.

After initial experiments to use the system of linear perspective in the 15th century at around 1420, Filippo Brunelleschi, a technologically innovative Florentine architect and an artisan-engineer, introduced influential optical experiments regarding the rediscovery of linear perspective. While standing in front the Baptistery of San Giovanni he illustrated an exact copy

of the Baptistery employing linear perspective by putting a small hole in the center of a panel. He held the panel in front of his eyes, with the illustration facing away from him and took a mirror and secured it in between the panel and the real building. By whisking the mirror he proved that the lines of the real Baptistery and of the illustration are well coordinated. Thus he scientifically rediscovered the method of perspective.

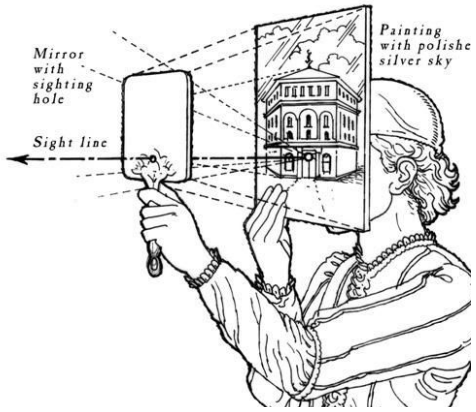

Fig.3 Illustration of Brunelleschi's Window-Mirror

This optical experiment was regarded as a milestone in terms of being the first manifestation of an accurate geometrical perspectival construction, however there was no primary written evidence up until the publication of Leon Battista Alberti's *De Pictura* in 1435. Alberti's book was widely accepted as the first expository, written treatise on painting and served as a foundation for the method of 'correct geometrical construction' for perspective. (Lubbock, 2006, 179).

By replacing Brunelleschi's window-mirror with a gridded window, Alberti provided a methodical and theoretical foundation for Renaissance humanism as "it structured all images of reality to address a single spectator who, unlike God, could only be in one place at a time." (Berger, 1973, 16)

The application of Alberti's scientific theory of knowledge concerned solely with representing what can be seen. In *De Pittura* he describes his painting practice as "I inscribe a quadrangle of

right angles, as large as I wish, which is considered to be an open window through which I see what I want to paint." (Alberti, 1435, 56)

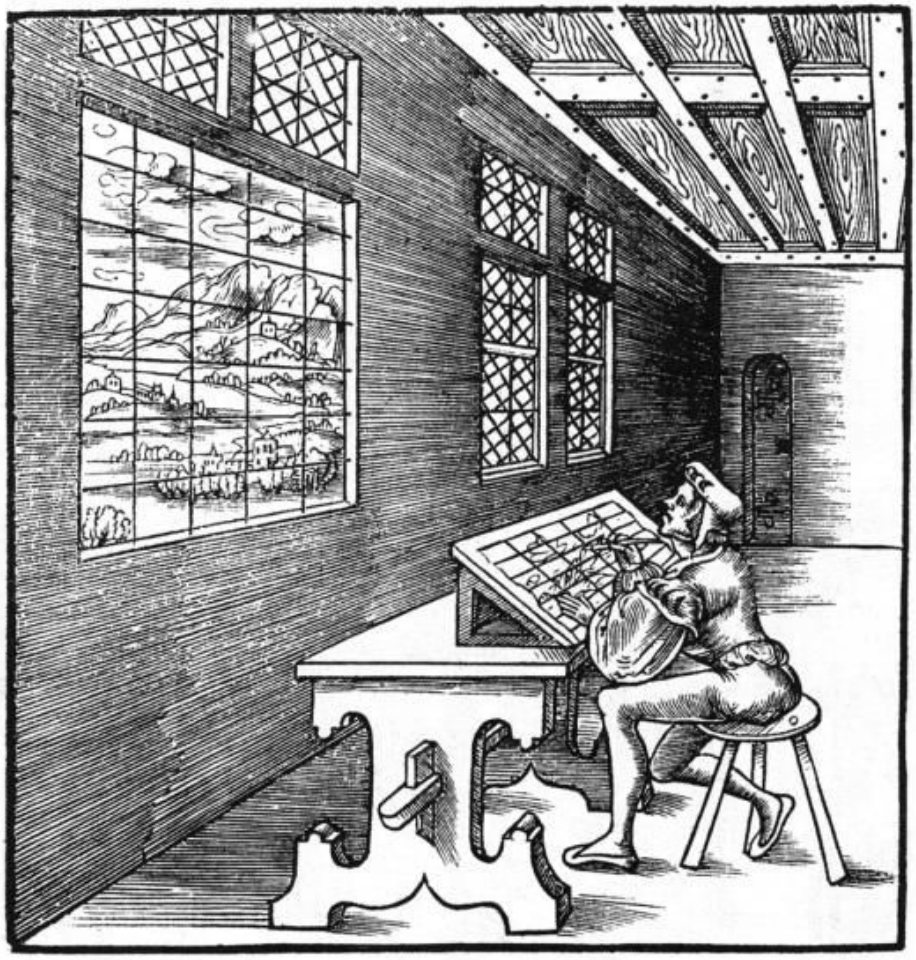

Fig.4 Count Johann. Interpretation of Alberti's Idea of Equipping the Picture Frame with a Grid. 1531

Reverse perspective used for the representation of Biblical scenes employs a multi-centered system which distinguishes it from linear perspective. This kind of representation stages a scene from many different angles as if the eye of the observer is mobile. (Florenski, 1920, 43) The eye and the body collaborate "in" the painting together unlike the observed duality that linear perspective creates. In linear perspective the body and the eye are separated from each other and the eye sees the represented space as a 'body' that stands in front of the eye. It no longer strolls

“in” the painting. The image with a linear perspectival point of view mimics a scene that is seen from a 'stable' eye position.(Sayın, 2001, 10) In reverse perspective the size of the objects and their relative importance diminishes towards the frontal part of the image while in linear perspective the size of the objects diminishes towards the rear part.

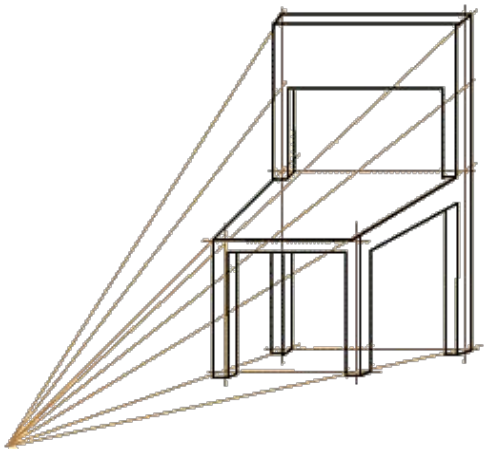

Fig:5. Reverse Perspective

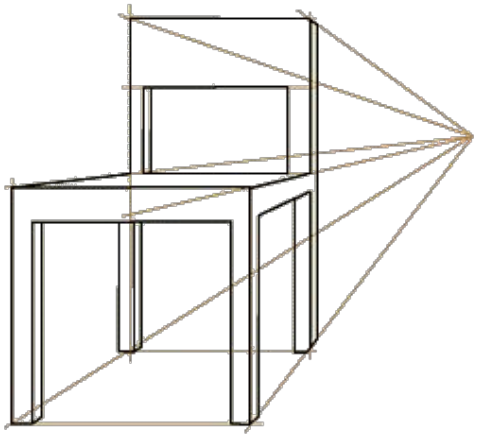

Fig:6. Linear Perspective

Visualization of the notion of being enlightened with holy light radiated from the icon towards the spectator’s eye can be thought of as one of the reasons that reverse perspective is used in Biblical icons. Rather than representing how the eye of the painter/spectator sees ‘God’, reverse perspective invites the eye inside that holy light suggesting that God does not exist in a particular place, and is not observable from a particular point. God as depicted by this convention was omnipresent and thus could be seen from anywhere at any given time, and this was considered the only way that ‘truth’ or ‘God’ can be understood. (Sayın, 2001, 16)

Fig: 7. The Cambrai Madonna (Notre-Dame de Grace). 1340

In contrast to this, the dominant way of seeing intrinsic to modern age is mainly based on the mathematical system of linear perspective. In the foreword that she has written for '*The Inverted Perspective',* Sayın claims that Florenski poses the eye as the patron of the world during the Renaissance period. The eye-centered worldview based on linear perspective makes it possible to classify objects according to their distance and proportions. This system, representing the apparent size and shape of objects and their relation with each other and the background, is an extension of the sovereignty of Cartesian thought. This way of seeing and representing, positions the world as an observable, tameable and controllable entity and assigns the eye the role of its patron.

Although this illusionary point of view made man feel safe because of a perceived sovereignty over the objects, it assigned the eye a position similar to that of the chained prisoner of the cave of Plato. Beginning from the end of Middle Ages, the rise of the use of linear perspective, then the invention of camera obscura, stereoscope and panopticum; supported this eye-centered worldview that separated the object from the subject, the inside from the outside, the eye from the body. (Sayın, 2001, 10)

By the 15th century, the eye located at a given position and at a particular time was already becoming the main convention in creating 'realist' representations of space in Western painting. (Cosgrove, 1985) As Denis Cosgrove confirms, this pictorial form and its relation to reality was not questioned until the nineteenth century:

> The artist, through perspective, establishes the arrangement or composition, and thus the specific time, of the events described, determines in both senses the 'point of view' to be taken by the observer, and controls through framing the scope of reality revealed. Perspective technique was so effective that the realist conventions which it underlays were not fundamentally challenged until the nineteenth century. (Cosgrove, 1985)

Descartes considered camera obscura and its images the proof of the real and perspectival existence of the outer world. Camera Obscura altered the outer world into a property and diminished it into a scene in front of the stable eye. In doing so it excluded all other subjective and mobile models of vision situated outside this one and only convention that is solely based on rationality. Perspectival system accepted as an objective process assigns an absolute authority to the artist which he practices by "varying the parameters of station point, direction of gaze, angle of view, and distance and inclination of the picture plane relative to the station point. (Mitchell, 118, 1992)

1.2 Miniature and Multi-Perspectivity

I consider the local historical context and its unique conventions significant as to question why my practice bears upon vision and multi-perspectivity this much. While in Europe, Renaissance and Humanism were on a rise and representative methods based on perspective were being introduced, synchronous formal values associated with Ottoman Empire featured multi-centered points of view. Regarding those images Murat Germen writes, "...it is possible to say that the Ottoman miniature making process was not originally envisioned as an art form, but rather as objective (as possible) documentation having a subjective language." (Germen, 2012, 17)

In miniature perspective, there lies an understanding based on the wholeness of the eye and the body meaning that the painter's eye is 'in' the painting instead of being in front of it resembling the paintings with reverse perspective. The aim is to depict a scene that may be observed from multiple-points at the same time so that no single eye position does create a hierarchy over the others. These representations do not involve "objective" resemblances to the real world. (Sayın, 2001, pp. 26-28) While trying to simultaneously depict the unseen parts of a figure or a building, they suggest an omni-present point of view for presenting the 'truth'.

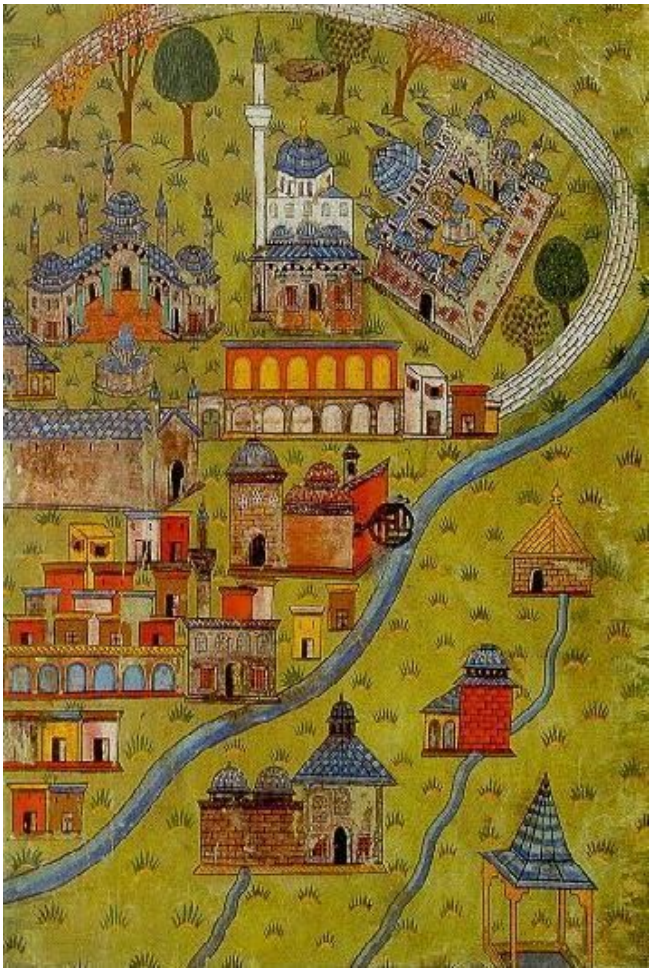

Fig:8. Matrakçı Nasuh Efendi. Eskişehir. 1537-1538

Third dimension, foreshortening, shadowing and such visual relationships did not really interest miniature painters. The aim was to depict objects completely and direct attention to the central figure and its integral relation to the others. Important figures like The Sultan were always depicted larger than other figures. Social hierarchical structure of the era are quite apprent in

these images; after God, there sits The Sultan and following him everyone else has the same relative importance. The multi-perspectival point of view mimics the omni-present look of God who sees everything from everywhere. (And, 1974, 101)

Fig:9. The Accession of Mehmet II at Edirne (Lokman's *Hünername*). 1584.

Another important point to do with miniatures, is the site at which they are displayed. Unlike many paintings, miniatures are found in books. These images are created to be read rather than to be looked at. Traditional Islamic culture integrates the world and 'The Book' together. Sayın elaborating on manuscripts, argues that in most of the Islamic representative forms, seeing and

reading are accepted as complementary to each other. Instead of trying to create a pictorial space that separates the eye from the body, and the world from the book, textual and visual components come together to create holistic meanings. (Sayın, 2001, pp.24-25)

Although some critics mischaracterize the lack of linear perspective in miniatures as a mistake or inefficacy, those images assert to occupy different positions on the surface of the painting. From Egyptian civilization onwards, many civilizations were aware of the notion of linear perspective, but instead of creating a similarity between the 'visible' and the 'invisible' and establishing a sovereignty over them, they had an infantile infatuation with 'the invisible', up until the New Era. (Florenski, 1920, pp.52-53) As Florenski claims, the reverse or inverted perspective is not the result of a lack of capacity to create mimetic representation forms, but rather a different way of comprehending the world. (Florenski, 1920, 43)

The Tanzimat Reform Era in Ottoman Empire was instigated by Sultan Mecit in 1839 and introduced vast changes within the Ottoman society involving a transition from an autocratic monarchy to a modernist, constitutional nation state. During this period, customary and religious laws were replaced with secular and European ones.

One of the outcomes of this modernist reformation was the increasing appearance of representational codes based on linear perspective due to the emergence of a French-oriented generation of artists, particularly the so-called 'military-painters' who were sent abroad for their military training during which they were exposed to the canons of Western Art.

Thus, a distinctive, hybrid representation of space was developed through a clash and combination of linear perspective and former spatial conventions used in miniature paintings. The landscape painting of Şeker Ahmet Paşa from the end of the nineteenth century is entitled, *Woodcutter in the Forest*. (See Fig.8) Şeker Ahmet Paşa was one of the military painters during the Tanzimat Reform Era. The first painting classes with Western influences were scheduled in the Military School of Engineering in 1795. Şeker Ahmet Paşa was initially thought here and then sent to Paris where he was mostly influenced by Courbet and the Barbizon School. He worked in the studio of Gustave Boulanger and afterwards in the studio of Jean-Leon Gerome at the Academy of Fine Arts. (Tollu, 1967)

Although Şeker Ahmet Paşa was influenced by these well-known 'realist' painters, most of his paintings, including the work being discussed here, namely the *Woodcutter in the Forest*, contains a bizarre approach to perspective that is not simply depicting the subject as it would be considered to exist in relation to a third person's objective reality incorporating linear perspective.

Fig:10. Şeker Ahmet Paşa. Woodcutter in The Forest. 1900/6.

As John Berger argues, although the texture and the tonality of the painting are very similar to the paintings of Rousseau or Courbet, there is a peculiar sense of gravity. The relationship between the size of the woodcutter and the far edge of the forest are contradictory to each other. The tree that is furthest from the viewer is situated on the far right upper corner, while at the same time it seems that it is nearer than anything else in the painting. Thus, in the depiction of the forest there is an inconsistency regarding the point of view, which suggests a hybrid way of seeing; "you make your way through the forest and simultaneously, you see yourself, as from outside, swallowed by the forest". (Berger, 1980, 81)

> "The trajectories of the painting's viewing are thus—as Berger does not quite precisely specify—plural. Appealing to the sense of a split in vision, between looking from here and looking back from afar, the painting offers up pathways for the eye that

> cannot be taken all at once. It does so in ways that are to be recommenced each time, leaving us with a series of modes of looking which may not be resolved into a single meaning." (Johnson, 2014, 23)

Although it is ambiguous whether this inconsistency was created intentionally or not; it can be asserted that the painter brought together two different ways of seeing: Western and Eastern;

> "For Şeker Ahmet the decision to change from one language to another must have been far more problematic than might at first appear to us. It was not just a question of observing what he saw in the Louvre, for what was involved was a whole view of the world, man and history. He was not changing a technique, but an ontology." (Berger, 1980, 83)

The space in his painting, is not a physical one. Its more like a spiritual space. Şeker Ahmet does not see himself in front of the painting space, rather he positions himself "in" the forest just like the woodcutter. So the eye of the painter or the spectator is not hierarchically placed above one another. Unlike the one-point perspective based ways of seeing inherent to the New Age, he does not suggest a distinction between the subject (the eye of the painter or the spectator) and the object (the body, the painting).

The technical and visual features of the painting give clues for the ontological difference between two opposite ways of seeing that he is trying to reconcile. Although at first look, the tonality, colours and the subject itself signal influences of western realist paintings, scrutiny leads to the painting taking on a more complex meaning, that is inviting the spectator to experience the forest from within, and simultaneously observe him/herself from an elevated view outside of the same forest.

CHAPTER 2

DOUBLE-HEADED VISION IN NINETEENTH CENTURY

"The landscape thinks itself in me and I am its consciousness."

Paul Cézanne

Going back to the Western world and its dominant visual culture, I will briefly consider several important movements with reference to a number of works and talk about relevant discoveries in optics and technology that are thought to extend ways of seeing and vision in general. Issues concerned with the presentation of subjectivity in vision; multi-perspectivity, fourth dimension as time and the re-location of the observer freed from his/her stabilized position are given special attention.

Although the representative and mimetic formal values associated with Renaissance are subsequently followed by the introduction of photography and cinema; the rise of modernist ideologies, especially romanticism and the rejection of the rationality-based ideas of Enlightenment in visual culture, is interpreted by many critics as the replacement of a realist, traditional and classical set of formal values by those of non-traditionalist, innovative, abstruse and abstract ones. With Romanticism they claim, starts an unexpectedly critical period that targets the reliability of technology and classical science which is a reaction against the political and social norms of the preceding era based on rationalism.

Draaisma claims in '*Metaphors of Memory':*

> "Romanticism provided the negative of the orientation which dominated science that exists before and after it; trance and dream as opposed to lucid thought, vision as opposed to logic, harmony and unity as opposed to analysis, intuition as opposed to reflection, and unconsciousness as opposed to waking consciousness." (Draaisma, 1995, 73)

Crary introduces an even more critical argument in ' *Techniques of The Observer'* by discussing the existence of a single social surface with overlapping and complementary components on which vision began to be modernized :

> "When examined closely, however, the celebrated rupture of modernism is considerably restricted in its cultural and social impact than the fanfare surrounding it usually suggests. … In a sense, however, the myth of modernist rupture depends fundamentally on the binary model of realism vs. experimentation.. But it's not enough to attempt to describe a dialectical relation between the innovations of avant-garde artists and writers in the late nineteenth century and the concurrent 'realism' and positivism of scientific and popular culture." (Crary, 1992, 5)

Keeping these points in mind, I would like to move on to Carl Gustav Carus and Caspar David Friedrich, both of whom plays a critical role in the formation of the conceptual framework that surrounds my artistic practice.

Carl Gustav Carus (1789-1869), a late German Romantic scientist and painter explored and analysed the links between scientific, artistic and psychological events as an embodiment of the idea of organic unity and kinship among the events in nature and what happens in the soul simultaneously. His writings on landscape were a direct reference to the soul and his lectures on psychology were based on events taking place in nature.

Caspar David Friedrich (1774- 1840) a leading artist of the German Romantic movement of the early 19th century and a close friend of Carl Gustav Carus, reconsidered perception of space in Western art and challenged the norms based on linear perspective and the projection of the eye of the observer that are taken for granted since the Renaissance era. In "View from the Artist's Studio", (see Fig.11.-12.) Friedrich depicts a scene similar to what Alberti's window suggests; the observer stands central to the picture plane and is able to survey the totality of objects that exists at that given moment. However, whereas an individual and singular position was enough for Alberti to represent reality, Friedrich revisits this idea of a dominant and stable position for the observer by pairing two different views of the same window and in doing so directs attention to a "comprehensive coverage for individuality in perception". (Vaughan, 2004, 52)

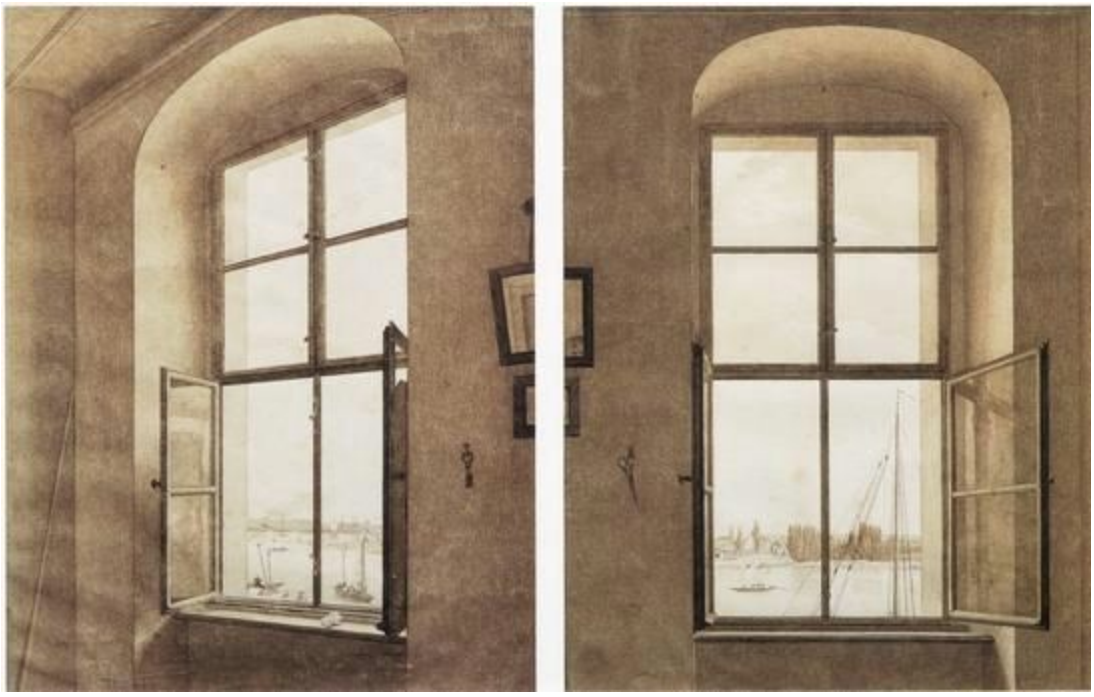

Fig.11. Caspar David Friedrich. View from the Artist's Studio, Left Window. Galerie im Belvedere. 1805-6

Fig.12. Caspar David Friedrich. View from the Artist's Studio, Right Window. Galerie im Belvedere. 1805-6

Friedrich's landscape paintings as early as the beginning of 1800s included figures as a result of his belief that the painted landscape could only emanate a specific meaning or pass a certain emotion by featuring a human drama. Thus he tried to master how to use figures and postures in order to express feelings while progressively observing nature. (Vaughan, 2004, 45) Though he distanced himself from the convention of figurative painting, by acting out those dramas through the use of figures, he created a unique visual language that is able to express subjective experiences and moods.

Fig.13. Caspar David Friedrich. Monk by the Sea. Staatliche Museen, Berlin, Germany. 1809

It can be said that he later on replaced his early landscapes with a new kind of 'mood' landscape by combining his mastery of light, tonality and transitions between allegories based on the transience of life. Even if it might not be possible to assign absolute meanings to these deep metaphors, his painting were widely assumed as an effort to convey the spiritual experience of life by a considerable amount of art historians and visual critics;

> "He projected his passions and dreams freely into the landscape until the outer and the inner became reflections of each other. He let the landscape serve as a metaphor for his own soul….Friedrich's *Der Mönch am Meer* inspired Von Kleist to write about the people who looked at it: as through their eyelids had been cut off. No wonder they saw their own introspection in paint. Their own soul was hanging on the wall, in a frame". (Draaisma, 1995, 75)

19th century, in the visual arts context is thought to feature another break to do with the representation of the "invisible" to the naked eye. Although it seems as if science and art becomes polar at this point, their relation remains open to question.

The invention of photography was widely acclaimed to free painting from its documentarian burden by the first half of the 19th century, the accustomed relationship between the stable eye and the representation of reality started to be questioned. The methods of representing reality was extended with milestone approaches emerging after the second half of the 19th century such as impressionism, cubism, futurism and surrealism.

Leonardo lists the basic principles of a painting as; the point, the line, the surface and the body which is enclosed by these components. Mitchell establishes a relation between this statement and more recent schools of painting;

> "The impressionists, then even more rigorously Georges Seurat, conceived of three dimensional scenes as collections of colored points. Perspective drafters conceived of scenes as collections of lines in space, which are to be projected onto the two-dimensional picture plane. Renaissance painters were much concerned with depicting the shapes and shadings of surfaces. Paul Cezanne advised painters to "treat nature in terms of the cylinder the sphere, the cone, all in perspective": he conceived of scenes as collections of solids in space." (Mitchell, 1992, 121)

Following Cezanne's thoughts it can be said that Impressionists, Post-Impressionists, Cubists and Surrealists were all interested in depicting the outer world and the relationship with the inner, through perception. Rather than representing the physical phenomena itself, they presented their subjective, visual experience of the world: the world perceived.

> "By remaining faithful to the phenomena in his investigation of perspective, Cézanne discovered what recent psychologists have come to formulate: the lived perspective, that which we actually perceive, is not a geometric or photographic one." (Matthews, 2002, 134)

Rauschenbach introduces this system of perspective as 'perceptual perspective' which includes certain effects by the brain during visual perception along with the visual properties of the human eye. In comparison to linear perspective, in depictions with perceptual perspective the sizes of the distant images are larger, the sizes of the near objects are larger and physically straight lines are shown curved. Actually, if we one is looking for a representation closer to 'truth' then it might be argued that the system of perceptual perspective is more successful than

linear perspective which leads to a more distorted representation. Linear perspective exaggerates the depth of field by enlarging the foreground objects and reducing the ones that are located in the background. In favour of the perception of spatial elements, “Cezanne intuitively employed the underlying concepts of perceptual perspective that provide a rational basis for explaining the geometrical oddities noted in his paintings”. (Rauschenbach, 1982, 31)

Fig.14.Paul Cezanne. .L’Estaque. Musee D’Orsay, Paris, France. 1870

Cubism, building upon this approach mainly problematised the idea of painting as depicted by an eye frozen in a given time and space. The multi-perspectival way of representation that Cubists employed, introduced a fourth-dimension, the time. Cubist painters divided the canvas into partial planes or particular zones as if to suggest that the eye is moving around the objects depicted. These partial plains allow the spectator to approach the represented object from different points of view at slightly different moments providing references to metaphysical ideas of Bergson with respect to nature and its constant state of change. According to Bergson, the reality is a flux of changing, moving, and growing phenomena, and nothing is absolutely still. A representation of the real that is meant to refer to this constant flux is achieved by pairing a

temporal vision with a multiplicity of perspectives within Cubist practice. (Mitchell, 1977, pp. 177-183)

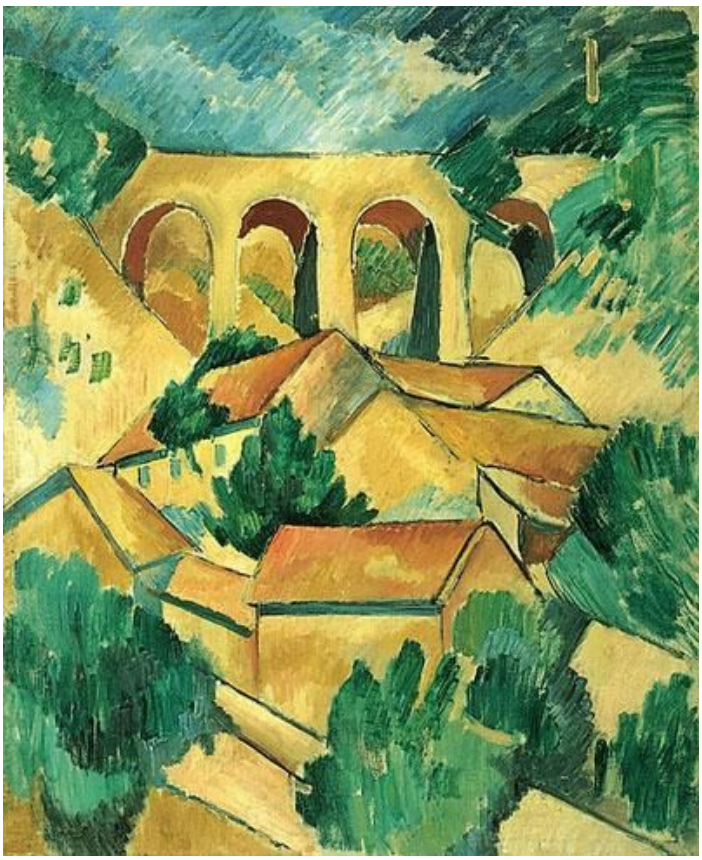

Fig.15. Georges Braque, *Le Viaduc à L'Estaque*, (The Viaduct at L'Estaque), Musee National d'Art Moderne, Paris, 1908.

The invention of photography in 1839 was accepted as a milestone in achieving and storing referential, mimetic, perspectival and thus objective representations of reality that provided a continuity with the formal values of Renaissance. Although "..early photography continued the trend towards the imprisonment of the subject and the object of representation" (Manovich, 2001, 107) the technical innovations which led to the development of the snapshot camera allowed for instantaneous, blurred, accidentally cropped and non-traditionally composed images.

These images influenced impressionists who intended to “capture” the instant, fugitive impression of a scene cast upon the eye to create a sense of immediacy, spontaneity and movement.

However, there are some controversial claims regarding the relationship between impressionism and photography. As Solso puts it; “... impressionist art emerged in reaction to the newly invented camera, which portrayed real scenes with startling fidelity. ….they (impressionists) developed instead a new style of art in which the principal effect is obtained through one’s emotional reaction to a painting, rather than through one’s sense of visual correctness. They harshly criticised and rejected the use of linear perspective which depicts a “world of inflexible, restrained and immobile objects, inhabited by people frozen in time and space”. (Solso, 1996, 220)

Mauritz Cornelis Escher, the Dutch graphic artist who was intuitively inspired by mathematics and applied mathematical principles into his visual language, interrogated the traditional forms of representation and perspective within the concepts of perception, reality, gravity, relativity and infinity.

Some of his drawings superposes both two and three dimensional objects reminding one of the relationship between dimensionality, reality and representation. He constructs landscapes within irregular perspectives providing the observer a multistable perception in order to question the boundaries of the illusion of three dimensionality and perception. The reversion of figure and ground and the irregular perspectives he constructs are the major determinants leading towards the multistable visual perception of the observer.

In Gestalt theory, “the reversion of figure and ground, the change in the boundary function of a contour, the multistability of perspective or of direction of apparent motion, and the ambiguity of meaning is understood as a paradigmatic tool..” (Kruse, Stadler, 1995, 70)

The multistable characteristic that comes into light with Escher’s drawings thus challenges the strong relationship between reality and vision and therefore the relationship between reality and perceptual changes.

Fig. 16. M.C. Escher, *The Waterfall,* 1961

CHAPTER 3

RECONFIGURATION OF VISION

The avant-garde “New Vision" movement of the 1920s employs mobility using a different strategy in producing still and moving images that challenge former conventions of vision in visual arts. Members of this movement, Moholy-Nagy, Rodchenko, Vertov to only name a few, investigated the potential of photography for altering traditional models of vision and their after-effects by approaching everyday, familiar objects or scenes from unexpected vantage points, positions, and perspectives.

Besides introducing a new way of seeing unconstrained by formal values of representation that try to mimic “reality” and the vision of the ‘Eye’; photography put to such use extended vision itself by making use of the potential of its mechanical features. Laszlo-Moholy Nagy lists eight varieties of photographic vision as:

> “ ..abstract seeing by means of drawing in light (photogram) in both color and b/w; exact seeing by means of “normal” fixation of forms of appearance (reportage); rapid seeing by means of an especially quick fixation of movements (snapshots); slow seeing; intensified seeing by means of macro lenses and various filters; penetrative seeing (e.g. X–rays); simultaneous seeing by means of superimposition of transparent and translucent materials (semi–automatic photomontage); and distorted seeing by means of prisms and chemical manipulation”. (Nagy, 1928, pp.78-79)

These varieties enabled the eye to get accustomed to the flux of phenomena in ways that are unique to camera-made images, and suggested a mobile and temporal version of vision.

Photo-collage is another technique in which fragments of images are transformed and combined to create new compositions that lack consistency of time and space. The history of photo-collages goes back to 1850s, that feature combination printing as a method to overcome the narrative limitations of the medium. The first examples of combination printing were achieved by producing multiple negatives of objects, figures or scenes with masking out some parts manually. Almost synchronously after the invention of photography seamlessly combined

images such Oscar G. Reijlander's *The Two Ways of Life* (1857) or Henry Peach Robinson's *Fading Away* (1853) appear.

Fig.17 Oscar Gustave Rejlander, The Two Ways of Life, The Royal Photographic Society Collection at the National Media Museum, 1857.

Though these combined prints were generally produced within the conventions of the former perspectival system, in terms of content they moved beyond trying to represent the 'real' by combining fragments of it in order to create a new photographic reality.

Photomontage is another related technique that is based on the combination of cut and paste elements of photographic images. This technique was widely popular among Dada circle in 1920s understood as a tool for expressing a critical stance against the dominant social and political structures created by the World War I. Dada artists produced photomontages to "attack the bourgeoisie back with distorted versions of its own communicative imagery."(Rubin, 1968, 42) The technique underlines the socio-politically constructed and mechanized nature of vision by embracing the unintentional, accidents, distortions, and multiplicity.

A more recent figure David Hockney (1937-) also works with the idea of fragmentation by assembling panoramic images from a number of polaroids in a fashion that directly reveals discontinuity. By introducing multiperspectivity into his images, Hockney refers to the ways human vision works.

Fig.18 David Hockney. Merced River,Yosemite Valley, Sept. 1982

Although, photography incorporated the use of montage, superimposition, long exposure or any such experimental technique from its very beginning, the rise of digital imaging technologies marks a new threshold in reconfiguration of the relationship between representative forms, reality and the eye.

“ ..the inventory of comfortably trustworthy photographs that has formed our understanding of the world for so long seems destined to be overwhelmed by a flood of digital images of much

less certain status. Beyond that, it has generated its own ways of seeing and gave rise to the discovery and gradual perfection of a new art". (Mitchell, 1994, 19)

Mitchell suggests that with the emergence of digital imagery an ontological leap regarding the status of photographic images takes place. The relationship between reality and its image is irreversibly redefined.

> "The visual discourses of recorded fact and imaginative construction were conveniently segregated. But the emergence of digital imaging has irrevocably subverted these certainties, forcing us to adopt a far more wary and more vigilant interpretive stance...Today as we entered in post-photographic era, we must face once again the ineradicable fragility of our ontological distinctions between the imaginary and the real, and the tragic elusiveness of the Cartesian dream. We have indeed learnt to fix shadows, but not to secure their meanings or to stabilize their truth values, they still flicker on the walls of Plato's cave." (Mitchell, 1992, 225)

Although digital image processing techniques seem to follow the established alliance between painting and science, they also provide a wide range of opportunities in expanding vision through the use of synthesized perspectives. With the emergence of inexpensive computer-graphics workstations during the 1980s, synthesized perspective renderings brought along inaccessible variations for the human gaze. It is only after the close-up images of planet surfaces are put together by digital means, the resulting image that has no real observer starts to make sense to the human eye. Vision is alienated from the human eye and is relocated and constructed at another level.

Even though the ways in which vision can be able to cover multi-perspectivity and time are questioned beginning from the 19th century on, the introduction of moving images alters the relationship between the observer and the subject once again.

Towards the end of 19th century, a number of experiments investigating the phenomena called "persistence of vision" induced a new understanding to do with visuality and perception of motion. The default, stable vision of the observer looking at still images was challenged with the addition of a fourth dimension (duration), enabling her/him to wander in different spaces, directions, positions, and viewpoints through the flow of time.

This resulted in the eye of the observer becoming identified with the camera eye. While the body remained stable and the eye became mobilized in a virtual space. Although the problematic

relationship between the immobile position of the observer and his/her mobile vision is of crucial importance regarding the history of the construction of vision, it won't be discussed further in this text as it requires a further investigation including the nature of VR technologies.

Since moving images are made up of still images played consequently at a particular rate, their relationship with reality also resembles those of still ones. Although both still and moving signifiers can be broken down to indexical (actual contiguity), iconic (similarity) and symbolic (social conventions) components, spatio-temporal size of the lexis, according to Metz, is the most crucial difference. Metz asserts that being 'a silent rectangle of paper' or "a kind of screen" constitutes the lexis of photography, while in moving images the lexis is enlarged by the presence of supplementary components like sound, movement and duration. (Metz, 1985, 83)

"As theorized by Vertov, through [temporal] montage, film can overcome its indexical nature, presenting a viewer with objects which never existed in reality."(Manovich, 2001,140)

The early history of film and video, just like that of photography, nests a double-headed vision; on one hand, narrative cinema which aims to present a realistic experience, and on the other hand experimental cinema and video that seeks subjective and multi-perspectival ways of seeing.

Also associated with the "New Vision" movement, Dziga Vertov (1896-1954) was another key figure trying to shatter the perceived limits of representation and perspective by employing numerous innovative camera and editing techniques.

Vertov's masterpiece *Man with a Movie Camera* (1929), challenged the given perception of vision, mobility and time and furthermore constituted a guide to possible ways of transforming vision and perception of the outside world through a creative use of effects and techniques.

> "He mounted cameras on the roof of a building and a moving automobile; he slowed down and speed up film; he superimposed a number of images together in time and space (temporal and montage within a shot). *Man with a Movie Camera* is not only a database of city life in the 1920s, a database of film techniques and a database of new operations of visual epistemology; but it also is a database of new interface which together aim to go beyond simple human navigation through physical space…..In the hands of Vertov, a database, this normally static and "objective" form, becomes dynamic and subjective. More importantly, Vertov is able to achieve something which new media designers and artists still have to learn — how to merge database and narrative into a new form." (Manovich, 2001, 236)

Fig. 19. Dziga Vertov. Still from *Man with a Movie Camera.* 1929

Bill Viola (1951), the contemporary video artist who works with electronic sound and imaging technologies, is another important figure challenging the perception of time and space. Viola meditates on the concepts of the flow of time, the ongoing cycle of nature, and the interaction between the outer world and the inner realm. By using the techniques of temporal and spatial montage, he reconstructs perception of time and space conceptually. Slowing down, speeding up and reversing become means to signify an irregular and peculiar flow of time.

Fig.20-21-22. Bill Viola. Stills from *The Reflecting Pool.* (1977-79)

His early piece, *Reflecting Pool* (1977-79) combines different real-time recordings of his walking out, jumping and freezing in the air with the empty space and pool to reconstruct a single landscape in which the figure appears and disappears into. The pool activity is only recognizable by surface reflection. In an interview with Raymond Bellour he describes this as;

> "There is also the suggestion of the events of this world's being illusory, or transient, since they are only visible as reflections on the surface of the water. The direct reality is never perceived-like Plato's cave...
>
> ...The key element in the piece is the frozen action. There is a transformation that's all based on the original decision to give up; I think it relates to death in some way, or letting go of the things that you know, just releasing everything. The image I have is of a cliff, you're right at the edge, and you have to decide to go ahead or go back. I think we must jump." (Bellour, Viola, 1985, 97)

CHAPTER 4

On Works

All the background information was based upon different types of vision and correspondingly perspective, position of the observer and visual perception. In the core of the works that i produced in the last two years there lie the relationship between nature and culture and innerself, multi-perspectivity and transformation of space and vision through time.

The works made up of photographic still and moving images, question the ways in which the indexical content is utilized to (re)present the flow and accumulation of subjective visionary experiences based on vision and time. All the works includes audial, minimal and repetitive layers as to complement the visual experience and create a holistic atmosphere distant from the outer world.

4.1 Territory/ Toprak

Made up of black and white photographs, this video aims at distorting the point of view and the sense of time of its observer in order to dwell on the desire of man to own and transform nature. Within the temporal montage the indexical nature of photographs became replaced with presentation of an illusory perception and experience of time which never existed in 'reality'.

During the process, my intention was to question the ways in which the limits of photographic vision become extended by the inclusion of supplementary components like mobility, sound and duration. The key element that I was trying to reach was to involve duration and transformation in a subtle and unrecognizable way to cast doubt on the vision and perception of time of the observer, thus suggesting questions about the relationship between the vision, perception and reality.

The desire to view the world from above seems to be an innate human desire. From the moment a child understands the discrete wholes with a gestalt that is greater than its parts, there comes the desire to view space from a broader point of view. In the core of the depictions with a view from above there lie the motivation of transforming space into known and meaningful, controllable place.

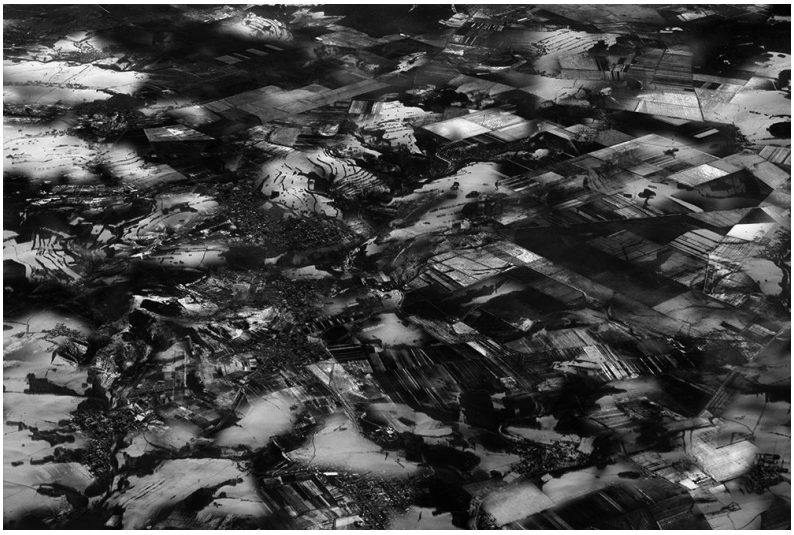

Fig. 23-24-25. Stills from *Territory*. 2013

From the beginning to the end, within the omni-present point of view, it suggests an extension of the capacity of the human vision to perceive the world, however it plays a trick on the observer by challenging the ability to perceive the transformation of nature through time.

4.2 Island/Ada

The video piece constituted by consecutive photographic images aims at questioning the relationship between inner and outer world through the transformation of vision and the position of the observer. It takes the name of *Island* as a reference to a piece of land on which humans live and leave their traces. It focuses on the cyclic structure of nature and the relationship between human, nature and the universe and how we perceive them and the notion of time.
Influenced by the philosophy of Confucius, it considers the whole and the creation as composed of the shift between complementary and interacting elements like earth-sky, day-night, nature-culture, inner-outer. As earth and sky, night and day transform into each other with this reconstructed notion of time, they start complementing each other, becoming each other's continuity provider. now having ceased to be able to be perceived as real or optical, calls for an intuitional comprehension that is as inherent as it is subjective.

Fig. 26-27-28-29-30-31. Stills from *Island.* 2015

From the beginning to the end, it repositions the vision of the observer in an ever-transforming flow between earth and sky. It begins with a narrow point of view in which we see a piece of land, within the reconstructed flow of time the point of view becomes distanced and relocated in front of a landscape which seems familiar to human-centric vision. Towards the end, the observer faces an elevated view and a shift of scale in which she/he is no longer the center of the

phenomena she/he observes but just a part of a greater whole -the universe- that she/he becomes aware of. Thus, the unstable position of the observer becomes the referent of the subjective experience of the outer world.

Although the images constituted of indexical traces of 'real' spaces and times, the reconstructed world inside the video signals the existence of multiple realities that is based on subjectivity.

It tries to relocate the eye vision in another dimension in which it no longer insist on signaling the position of a 'real' observer located in a 'real' optically perceivable world. By distorting the time and space consistency it suggests an unstable point of view and tries to shift the limits of visual perception.

4.3 Traffic/ Trafik & Stream/Nehir

The ongoing series constituted of video-collages, focuses on the relationship between nature, culture and human. Rather than the traditional temporal montage, the reconstructed moving images are made up of video footages with spatial montage which replaces the singular, sequential frame structure.

Different events and spaces thus time periods are (re)presented as taking place within a single pictorial space thus enables to wander around separate "micro-"narratives" within a single image. In the core of these micro-narratives there lie the subjects of the transformation of nature through time, the constant flux of culturally constructed signs and human as a wanderer centered around these environments.

Although at first look, the tonalities, colours and the composition does not give clue about an inconsistency within the pictorial space, with a deep focus the peculiar sense of gravity and dimensionality begins to appear and invites the observer to wander around spaces.

Fig.32-33-234. Stills from *Traffic*. 2015

In both *Traffic* and *Stream* the position of the observer is stable with a quasi omni-present view, including multi-perspectivity due to the combination of images within varied point of views in order to distort the perception of space. In *Traffic* the relationship between the scale of the pedestrians and the far edge of the landscape -the forest part- are contradictory to each other, while in *Stream* the floating cars inside the stream and the scale of the trees are contradictory to each other.

Regarding the multiplicity of point of view, they suggest a peculiar, inconsistent figure-ground relationship in order to focus on the power dynamics between nature, culture and human.

Fig.35-36-37. Stills from *Stream.* 2015

CONCLUSION

Main purpose of this text was to analyze the concepts of vision and perspective theoretically within the historical context of the landscape and their reflections on my work.

I attempted to focus on the use of linear perspective in depictions of landscape and the configured relationship between vision, representative forms, reality and the position of the eye/observer beginning from pre-Renaissance and reaching towards the modern era.

Starting my theoretical research with a focus around the concepts of landscape, subjectivity and perspective, I recognized, in time, that in the core of these concepts lie another major one; vision that constitutes and affects our perception of the outer world.

Looking at traditional and modern art forms that exclude linear perspective and avoid representing space in a "realistic" manner, I tried to investigate how conceptual features of these forms can be applied to contemporary digital moving image practices.

That being my purpose, I tried to trace some of the approaches that aim to extend vision and introduce multi-perspectivity as a means to signal the existence of multiple subjective realities; a limited compilation of works pulled from the history of art that influenced and inspired my own creative process.

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