

Repositorium für die Medienwissenschaft

Andreas Treske, Ufuk Onen, Bestem Büyüm u.a. (Hg.) Image, Time and Motion. New Media Critique from Turkey

2011

https://doi.org/10.25969/mediarep/19269

Veröffentlichungsversion / published version Buch / book

Empfohlene Zitierung / Suggested Citation:

Treske, Andreas; Onen, Ufuk; Büyüm, Bestem u.a. (Hg.): *Image, Time and Motion. New Media Critique from Turkey.* Amsterdam: Institute of Network Cultures 2011 (Theory on Demand 7). DOI: https://doi.org/10.25969/mediarep/19269.

Erstmalig hier erschienen / Initial publication here: https://networkcultures.org/blog/publication/no-07-image-time-and-motion-new-media-critique-from-turkey/

Nutzungsbedingungen:

Dieser Text wird unter einer Creative Commons -Namensnennung - Nicht kommerziell - Keine Bearbeitungen 3.0/ nl/deed.en_GB Lizenz zur Verfügung gestellt. Nähere Auskünfte zu dieser Lizenz finden Sie hier: https://creativecommons.org/licenses/by-nc-nd/3.0/nl/ deed.en_GB

Terms of use:

This document is made available under a creative commons -Attribution - Non Commercial - No Derivatives 3.0/nl/deed.en_GB License. For more information see: https://creativecommons.org/licenses/by-nc-nd/3.0/nl/ deed.en_GB







EDIT BY ANDREAS TRESKE, UFUK ÖNEN. **BESTEM BUYUM** AND I. ALEV DEĞIM IMAGE, TIME AND MOTION NEW MEDIA CRITIQUE FROM TURKEY (2003 - 2010)

Theory on Demand #7

Image, Time and Motion

New Media Critique fromTurkey, Ankara (2003 - 2010)

Edited by: Andreas Treske, Ufuk Önen, Bestem Büyüm and I. Alev Değim.

Design: Katja van Stiphout DTP: Margreet Riphagen Printer: 'Print on Demand' Publisher: Institute of Network Cultures, Amsterdam 2011 ISBN: 978-90-816021-5-0

Contact

Institute of Network Cultures phone: +3120 5951863 fax: +3120 5951840 email: info@networkcultures.org web: http://www.networkcultures.org

This publication is available through various print on demand services. For more information, and a freely downloadable pdf: http://networkcultures.org/theoryondemand.

This publication is licensed under the Creative Commons Attribution Noncommercial No Derivative Works 3.0 Netherlands License.

No article in this book may be reproduced in any form by any electronic or mechanical means without permission in writing from the author.

CONTENTS

Introduction Andreas Treske	5
PART I Finding Art in the Labyrinth of Media	
Introduction by Ufuk Önen & Andreas Treske	11
"Street Museum": Thinking About Interactivity and Artworks in a Work That Not Use New Media	Does
Fulya Ertem	12
The Vicious Circle of Changing Media, Methods, Products and Experiences Architecture	in
Deniz Hasırcı	16
The Structure of Seeing: Reading David Hockney's 'Joiners' Through Space Time	and
Bilge Demirtaş	30
Two Questions / Interpreting Signatures: 'As If The End of the World has All Come and Gone'	ready
Çağrı Barış Kasap	36
PART II Jump, Run and Take your Seats: Film, Narrative, Interactivity and 3D Introduction by I. Alev Değim & Andreas Treske	47
Analysing Run Lola Run: Mixed, Interactive-Like but Limited, Complex, Cha Unstable, thus Technically Perfect	otic and
Funda Şenova Tunalı	48
Play, Create and Unite: Cognitive Participation as Interaction in Films	
Pelin Aytemiz	56
Three Dimensional Television as a New Medium	
Didem Özkul	62
AVALON: Legend of Future	
Rıfat Süha Koçoğlu	73
A Perspective on Sound for 'Traditional' and 'New' Media, Audio Profession Composers, and Interdisciplinary Education	nals and
Ufuk Önen	79

PART III Participatory Culture in the Age of Internet	
Introduction by Bestem Büyüm & Ufuk Önen	92
Collective Memory and Video-Sharing on the Internet	
Segah Sak	94
The Significance of Participatory Culture in the Age of Media Convergen	се
Zeynep Koçer	104
Identity Construction in Facebook: A Lacanian Analysis of Profiles and Generated Games	l Facebook
I. Alev Değim	111
What is Blogging: Towards a Definition	
Rıfat Süha Koçoglu	119
PART IV Touch, Look and Feel: Delving into the Realms of Virtual Reality	,
Introduction by Bestem Büyüm & I. Alev Değim	125
Computer Screen, Virtual Reality and the Frame	
Ayda Sevin	126
There Isn't There	
Leyla Önal	131
What is Absent in Telepresence?	135
Umut Sumnu	
Biographies	139

INTRODUCTION ANDREAS TRESKE

In 2001 MIT press published Lev Manovich's The Language of New Media. As an eager reader and filmmaker I could easily relate to his ideas. Dziga Vertov's The Man with the Movie Camera, cited throughout Manovich's text, factored in long discussions with my friends at Middle East Technical University and Bilkent University in Ankara. Aras Özgün and Ulus Baker referenced the film at various times and helped me to discover it again as source of inspiration.

In 2002 I prepared a new course called "Image, Time and Motion" for our faculty's graduate program at Bilkent University. It was clear to me then that, having worked as a film editor, I would relate film and the moving image to practice even in a theoretical environment; I would also operate in a practical environment by applying theory. Living through the changes of various media technologies, from 35 mm film till digital video, my practice already forced me to think across media and to approach the computer technically as well as conceptually. The computer for me was not just another simple workhorse sitting on the desk in front of me. Every crash told me a different story and provided another experience, of course. Sometimes nostalgically I still find myself recalling the Steenbeck flatbed or the KEM table. I know I wouldn't have missed them if I hadn't known them. On the other hand, since my first Sinclair, I've maintained a playful curiosity towards computers as something. I never knew exactly upon what, but the dream that by entering a room and my being there would adapt the environment to my wishes, seems today still a cool thing for me.

One more source of inspiration comes to my mind: Glorianna Davenport's concept of evolving documentaries and interactive cinema excited me when I first heard about it at her Munich lecture in the '90s. While working on a documentary, I find that one of the really sad tasks is deciding on a finished version of a single linear film. Most of the documentary films we worked on always had multiple versions or allowed many ways to view and tell them. Why shouldn't the audience build their own documentaries rather than keeping them locked in their minds? My friend Thomas Balkenhol always reminds me that there are many other versions he could have edited from all the films he worked on.

2001 was also the year I had the chance to participate in a SAGA workshop on interactive storytelling. I met people like Eric Zimmerman or Greg Roach, Jeffrey Shaw and Volker Kuchenmeister - just to mention a few. I also had the chance to visit the ZKM museum in Karlsruhe several times, as the workshop was held in the same building.

All of these experiences were not without consequences. My course plan clearly focused on making movies with computers, theorizing upcoming paradigms, finding the edge of cultural developments every time a new form appears, and trying to localize it and embed it in academic discourse.

"Through digital technology our moving image culture is being redefined. The computer enables the mixture of images captured through many different means (cinema, stills, and drawings), and enables new levels of representation. Video gave the birth to simultaneity; the computer extends simultaneity to multiplicity. 'Cinema becomes therefore a particular branch of painting - painting in time. No longer a kino-eye, but a kino-brush.' Will this shift through technology change the way we organize time and space to create forms of narrative, or are we developing new kinds of vertical narratives? This course will engage students to make meaningful generalizations for interpreting or evaluating local experiences and practices in digital media, art and communication. I believed that a theory on what was called new media would evolve, becoming more influential. With a new theoretical discourse possibly beginning, this two part graduate seminar could create students' awareness towards the shift and "changes created through digital technologies, while looking at representation and reproduction techniques developed in the last century, and in particular the development of cinema as the key cultural form of the twentieth century."

Lev's book appeared as a kind of entrance, a bridge between a cultural and film studies approach and an inter- and cross-disciplinary expansion of the term 'media' and of media theory.

Of course, theorizing an object or a phenomenon, which was and is still present, and being looked at in that present, makes it difficult to move beyond the state of simple observation towards a critical reflection based on knowing. It might have been Bloch who wrote about this present blindness (of which I am very well aware). But these rapid changes in technology call for the need to stop the progressing timeline, to slice it up vertically and to try to understand what appears as change.

Usually I asked my students in the very first meeting for their ideas about the course "Image, Time and Motion". As the students came from various disciplines, with a majority from philosophy, sociology and literature, their answers made a philosophical and abstract reading of the related three terms. Sometimes I felt irritated, sometimes refreshed by the answers. Then I usually turned to the description of cinema as a function of space and time, a position in a twodimensional panel changing over time. But what is behind or beyond that? People from various disciplines might be able to agree on the idea of space and time, very roughly. But they might not really talk about the same thing.

I like to quote Jean-Luc Godard: "There are no more simple images. The whole world is too much for an image, you need several of them; a chain of images."

We cannot think anymore about simple images. Maybe we also can't simply think anymore about single images. The single, framed image has become a rarity, a rarity known as origin. As the origins blur, what is original becomes historical and archeological and therefore an expression of an ancient power. We somehow need to define images as at least dual, at least as a sequence, and to expand this thought to image space and image spaces to navigate in. This thinking not only adds cinema's time component, but also the ability to expand in manydimensional space.

I always like to ask where is this image or these images? Where do we talk about it/them? Where do we speak to it/them? If cinema is an image moving in time, what kind of a cinema is it? 'Images moving in time' is an expression still closely related to a very modern understanding of the historical figure of the avant-garde film.

Godard's 'chains of images' still seem to be a very linear approach. It is a single layer of images, contrary to our daily experience of multi-layered images. The chain of images might belong to an event, but the event includes a multiplicity of image-chains. The chains are multiplied. The single chain suggests a very Eisensteinian sense of an image connected or juxtaposed to another image. A change in perspective, a change in relation towards or from the event refers immediately to another string with another direction. The event takes place and is described in a graphical space. This space builds on a classical coordinate system, a Cartesian system of reference.

Cinema suggests that images are organized in a linear chain, one image juxtaposed to the other and so on. We might call this cinematic chain a horizontal chain oriented or directed on an x-axis in the graphical representation system. Movement means moving along this chain horizontally, to advance forward in time on one horizontal level. At the same time as we are moving we would experience a vertical extraction or extension at every point of the chain. Multilayering of chains over, below, and in each other would create at every point in time a vertical chain to cross as well.

The Steenbeck 35mm flatbed-editing table I mentioned before had no possibility for vertical layering as it supported only one narrative track. Nonlinear editing software flooded the editing scene with multiple tracks. Only software, which could handle multiple nestings inside and settings on top, survived these last years. A flattened image is an image which once consisted of multiple layers on top of each other or below or inside as a nest. An Adobe Premiere promotion once showed 99 tracks of video, while the AVID promotion showed it handling only 24 tracks, with each of them having 24 nested tracks, so 24 times 24 tracks. So far for the early 2000s... How many narratives can there be?

Thinking in 3D wouldn't feel right as 3D is not necessarily multi-layering the narrative or its strategy. It does not build a parallel or an intersection. Single objects of the image composition seem to be pushed outside the screen towards the audience space. Narrative quality will only develop when this created space becomes navigable.

Returning to the single image, this way of thinking is hard to accept any longer. There is no purity in it. The image must be viewed as part of another construct. The only singularized way would be seeing the image according to the one who recorded it, and to see the image according to the one who perceives it. The 'meaning' is not given by the image itself; it is in the use or production of the image or with its placement as a module. Here modularity seems a very handy and neat idea to introduce, necessary for referring to the digital.

The 'digital' complicates another very simple case: the question of true and false. The photographic image can be easily manipulated. A photo of a bombing of Beirut with increased contrast and slide enhancements of dust enhances the appearance of the event and therefore its political and social dimension. Photoshop might be a useful discovery tool but also might cover something up. It is not so easy to make a clear statement about the trueness or falseness of something photographed. For years we might have used photographs as evidence of a thing's presence at some place – the object depicted must have been there. The photograph is a trace. The discovery of the photograph as being a constant process, and not just a processed image, shifts this practice. Only the multiplicity of the trace in more diverse photographic objects would be able to confirm anything.

So what happens when we digitalize images? What happens when these images are not anything else but processes?

In this exercise, I now narrow the scope from cinema to image then expand again beyond cinema. What we have in, or what we understand as cinema is a chain of images, not simply a horizontal chain with a beginning, middle and an end, and a direction towards that end.

Cinema in its pure form is not much more than a hundred years old. It was born with a dual existence: The Lumière brothers vs. George Méliès, inventors vs. magicians, the depiction of reality vs. the depiction of fantasies. A Trip to the Moon (Le Voyage dans la lune) did not exist in

the 19th century because humans were not yet able to travel to the moon. Except for a small group of very select people, this is still not possible in 2010. It is just a fantastic approach, a fantastic construction, a wish which Méliès depicts in a scene, and projects to the screen in front of us.

The Lumières are far from depicting something other than what is in front of their apparatus. What they put on the screen seems not to be constructed or set up in the scene. It seems to be recorded as what happened in real time at a real place with real people. It is the presentation of existenz, the confirmation of existenz, the proof. But they also manipulate and trick the viewer. A real train enters the station. Real, but at the same time a mise-en-scène. The people at the train station are all family members and friends. The people who come out of the factory are again all friends and family members of the Lumières. The train, the place and the event are real, but the players are called in to control the event, to reproduce what was observed before, so that the Lumières can record it again.

What is cinema doing in this moment? Trying to depict reality would be a very simple, straightforward answer. What is Méliès, in contrast, doing when he produces his first films? He is trying to depict fantasies. Saying that Méliès is making our fantasies real would be a simplification of the same kind.

We've known how to reproduce images since the development of the camera obscura. Dagguere, for us Europeans, invented photography. His name, translated from French, fortells what he would see his invention used for – 'war'. We know that photography was not invented to make portraits. Dagguere's principal idea was military observation. That is what his invention aims at. Our cinematic technologies, which are based on photographic image production, are very strongly connected to the activity of war, and with this to mobility and transport.

Cinema is created from and based on the photographic image and its transportation. The transporting technique in the kinematograph is based on the transport technology of bullets in the Colt, which we have seen in western movies a million of times. The machine gun, and especially the Colt, is the granddaddy of cinema.

In cultural studies today I am not aware of many looking at cinema from the point of its technological development and base of inventions. The history of technology still seems left to engineers. That some films are made only because a certain technology is available is mostly not discussed, or maybe it is just too obvious. In the early days of cinema the studios used three or maybe four actors to create the impression of entire armies. Griffith was the first director to shoot thousands of people outside of the studio in The Birth of a Nation. Griffith also created the narrative model used today in what we call Hollywood cinema. Now, once again special effects make armies with only three or four actors.

Many people attemped to redefine and describe cinema during its short history, even making declarations of its death. Cinema appears to have had multiple deaths. A dead body delivered over and over to its audience or a body transforming into something new which was not already there, connecting with other modes of production, creation, expression, communication.

My discussion originated from Manovich's simple statement that digital technology redefines our culture of the moving image. Video gave birth to simultaneity. The computer extends simultaneity to multiplicity. "Cinema becomes therefore a particular branch of painting. No longer a kino-eye but a kino-brush."

Will this shifting technology change the way we organize time and space to re-create known forms of narrative, or are we developing entirely new forms?

What is hypertext? Hypertext, fashionable in the computer world, is used for making

interactive, non-linear texts, hypertexts. Narratives that are not in one strain, stories with multiple components, that go forward and backward.

What explains Quentin Tarantino's success? Tarantino did nothing else with Pulp Fiction than cutting the story. Tarantino might have read the citation by Godard very well: "Every story has a beginning, a middle and an end, but not necessarily in that order." A story has a beginning, a middle, and an end. Tarantino is not doing anything other than that. Hollywood, after Tarrantino, is not doing anything other than that either. The narrative is still Griffith's. In cinema the light is on, you sit, and the light goes off. You are isolated, your senses are sharpened.

Kafka hated cinema, as I remember. Kafka said that the cinema disturbed the fantasy. It shuts down our brains, like steel curtains, cutting the fantasy. Cinema violates our senses, concentrating our senses onto itself.

What is the nature and identity of digital cinema? The language of cinema and the language of multimedia? How does the language of cinema change with multimedia?

The development of montage.

The use of mobile cameras in cinema and games.

Do we really need cameras? Why do we need them? Everyone in the Western society can own a camera. The camera is an accessory of daily life. When I entered film school in the '80s, it was a privilege to shoot a 35mm film, and sometimes we paid for it out of our own bank accounts over years. Today digital media is absolutely accessible; you can create films with a mobile phone. It's just incredible. But should everyone make films, and can we understand what these activities mean? Why do the 1500 out of 2000 students in our university want to make films at least once? Why do we want to depict ourselves into/onto moving images? What is that urge?

Some years ago the New York Times published an article that asked "Is a Cinema Studies Degree the New M.B.A.?" In addition to science and literature, everyone should have a cinema studies course. The University of Ohio and New York University seriously considered requiring every student to take cinema. Simply imagine that moving images are on our fridges, where we store our food. Then required courses in media literacy should be obvious.

But why turn video into cinema? Can't we do something else with it? True video is much closer to actuality, life, observation, survelliance. The technological question posed by video and television is how can we reproduce images and store them at the same time? Simultaneity and immediacy are much closer to video than cinema. The possibility of carrying video on us like our clothes makes cinema archeological.

The world I am describing here is strongly related to the cultural object 'cinema', my experience of creating and working through it in practice, as well as through theory. Manovich's Language of New Media fused a cinematographic perspective with the phenomenon of new media, developing a cinematographic tool of analysis. It fails to include net culture or to describe media art in its rich forms, its differentiation and its resistance to categorization. If visual culture and cinema are the fundamental roots of new media technology, others with at least the same weight are telegraphy, the history of radio and telephony – leading to the on-going merge of television and the internet, and freeing video from its cultural cage.

All that I describe or explain or mention so far are fragments of the introductory lecture to 'Image, Time and Motion'. The lecture was mainly improvised and every year updated according to my actual research interests, which dipped into various pools and developed very dynamically.

The students in this course came from a wide range of disciplines studied at some of the

universities located in Ankara. Their backgrounds were mainly architecture, literature, philosophy, sociology, computer engineering, and very rarely media or cultural studies. They brought their various viewpoints and methods and they tried to integrate their observations and understandings in the course, as well as to fold discussions on the influences of digital media technologies back into their own disciplines, where their new terms and theories wound up strangely questioned by colleagues in their disciplines.

The following collection of essays is a selection of papers written between 2003 and 2010 for "Image, Time and Motion". Three of the former participants, to whom I am deep indebted and very thankful, Ufuk Önen, Alev De im, and Bestem Büyüm, not only supported me, but also dug through my course archive and helped me select a wide range of papers. Together we contacted the authors and asked for their permissions, updates and extensions. The topics here range from discussions of telepresence, interactivity, virtual reality, participatory culture, blogging, gaming, 3D-TV and Facebook, to sound, architecture and film analyses.

These papers document the process of digital media discourse in the present. Their variety, their curiosity, their depth as well as their descriptiveness build a small archive of media theory, one that is very active, fresh and light.

Ankara 2010

PART I FINDING ART IN THE LABYRINTH OF MEDIA INTRODUCTION BY UFUK ÖNEN & ANDREAS TRESKE

How do new media technologies and art intersect, use, merge, expand or contradict each other? In this group of papers the authors explore and elaborate on this question.

Fulya Ertem analyzes the Cambalage Collective's project "Street Museum", which was exhibited in the Istanbul Biennial of 2001. Ertem wants to question the relationship between interactivity and the work of art, separating therefore interactivity from the supposed technicality to reach to conclusions about its nature.

Deniz Hasırcı relates and analyzes the influences of new media on architecture. In her paper she aims to discuss the changes in working and production methods and the changes in media as they have an impact on architecture, environment, and human behavior. Hasırcı dwells on tools, methods, and how they shape architecture with examples from old and new works of particular architects like Eisenman and Gehry. In a more exploratory approach, she wants to understand how the changing of the medium has changed the methods of working and architecture. Following Galofaro she defines the new role of the architect as a communicator between an inevitable technology and us as human beings.

For Bilge Demirta through deep reading we can find older media or concepts referenced in the new. Examplary through a reading of David Hockney's 'Joiners' through space and time she aims to reveal a structure of seeing.

Çağrı Kasap questions the concept of *Gesamtdatawerk* in the explanation of his installation project "As If the End of the World Has Already Come and Gone" and proposes an installation to solve the dilemma he found through the word-play with Wagner's term of *Gesamtkunstwerk*.

This section, by referencing to both newer and older forms of media, investigates and discusses the relationship between interactivity and various forms of art, on one hand, and the influences of new media methods on the artists, on the other, within a discourse that is not focused only on the supposed technicality.

"STREET MUSEUM": THINKING ABOUT INTERACTIVITY AND ARTWORKS IN A WORK THAT DOES NOT USE NEW MEDIA FULYA ERTEM

Nowadays, there is an increase in the usage of the new media technologies in artworks in order to create an experience of interactivity where the observer becomes the participant of the work. However, despite the increase in the usage of these technologies, there exist interactive artworks that do not base themselves on new media technologies. This paper is analyzing such a work, namely Cambalage Collective's project entitled "Street Museum" and exhibited in the Istanbul Biennial of 2001, in order to question the relationship between interactivity and artworks, and to discuss whether interactivity can have a different aspect in works that does not use new media. In that respect, the essay starts by giving a general account of interactivity while discussing the term's conception before and after the emergence of new media technologies. It then discusses the relationship between interactivity and artworks in terms of new media based artworks. Lastly, it analyzes "Street Museum" as a different but still interactive artwork, and by departing from this analysis it attempts to reach to some conclusions about the nature of interactivity.

1. What is interactivity?

Interactivity is a concept that is commonly used in our contemporary culture to define an important characteristic of multimedia. For some writers such as Randall Packer, multimedia (the unification of all media within a single work or interface) has its roots in the theories of Richard Wagner who praised the opera as the ultimate art because of its unification of different art forms such as music, dance, poetry, visual arts, and theatre. However, different from the Wagnerian opera, today's new media based technologies seem to provide us with something more than the blurring of the differences that existed between traditionally separate mediums and disciplines, that is, a different form of experience that also blurs the hierarchy between the spectator and the artwork.

According to Lev Manovich, interactivity existed before the emergence of new media. All classical and modern art was interactive in a number of ways. For example, theatre and painting were relying on techniques of staging and composition, which ruled the viewer's attention, requiring him/her to focus on different parts of the display. Sculpture and architecture were pushing the viewer to move his/her whole body to experience the spatial structure. Even narrative techniques such as film montage of the 1920's for example, were forcing the audience to bridge the mental gaps between unrelated images.

In a similar way Dadaist and Futurist abstraction in visual arts were requiring the viewer to reconstruct the represented objects from a set of incomplete representations (a contour, a few patches of color, part of an object etc.). But in all of these examples interactivity seems to appear as a physical and/or psychological encounter between a user and a media object where the interaction is not so clearly visible. Are new media technologies making this interactivity more visible? According to Manovich, since the 19th century, there is a belief that the difference of modern media technologies lies in their ability to make visible the interaction happening between the subject and the object, by externalizing the process happening in the mind. This idea of external-

izing the functioning of the mind is indeed an idea that has a long history. For example, according to Sergei Einsenstein, film could be used to externalize and control thinking. Or, for the 1980's Virtual Reality pioneer Jaron Lanier, Virtual Reality is capable of transparently merging with mental processes. Lastly, the current claims on new media technologies argue that computer based digital technologies can equate mental processes with external visual effects such as dissolves, composite images, and edited sequences.

In all of these arguments there is the belief that interaction is a physical encounter between a user and a media object, and, there is an attempt of equating the psychological interactivity, such as the process of filling in, with objectively existing structure of interactive links, such as pressing a button or choosing a link.

However, despite these conceptions of interactivity Randall Packer argues that what should be understood by interactivity is rather the ability of the user to alter the media or the work that he/she comes into contact with. In other words, be it physically or psychologically, interactivity is something more than an invisible interaction or a simple encounter with an object. Interactivity happens when the observer is transformed into a participant, when the user can explicitly manipulate or affect his/her experience of the media and when he/she can directly transform the interacted object. In fact, when we etymologically analyze the term interactivity we see that it also hides a sense of *acting on each other* thereby suggesting a two-way influence between the work and its audience.

2. Interactivity in new media based artworks

Considering interactivity in this latter sense, we can ask whether the classical or modern works mentioned earlier were based on this two-way relationship. Is re-creating a story, an object, in our mind by the help of the directives of a painting, a film or any other work of art, changing the work itself? Shouldn't our impact on the work be more visible and concrete?

It is perhaps here that the difference of interactivity of new media based works resides. Indeed, if we consider the computer based digital works, such as Virtual Reality games, or electronic installations we can see that our interaction with them constitute their purpose and their performance, while with other artworks, such as paintings, sculptures or movies, the intervention of the spectator is not so vital to the constitution of the work. So, the specificity of the new media can be its ability to create a kind of interactivity that is not the outcome but the purpose of the artwork.

Of course, one can think that in every artwork, be it a painting or a movie, some kind of interactivity is always pre-conceived. At least, a book, a painting or a movie is to be read, observed and watched. However, it seems that new media based interactive works make more explicit the happening of the interaction. Randall gives for instance the example of Lynn Hershman's digital artwork that uses interactive media and entitled "Deep Contact". In her work the artist's use of hypermedia allowed the viewer to choose directions inside the artwork's complex branching structure and shape a personal experience from it.

Indeed the idea of personal experience seems to be one of the key points in new-media based artworks. This comes perhaps from the idea that traditional artworks limit the personal experience. However as we have seen with Manovich's argument, this is not really the case. To the contrary, perhaps new media based technologies, although they externalize the act of interaction, can nevertheless be an obstacle to the interaction between the artist and the audience. Especially, if we compare performance art with digital media based interactive artworks; we can argue that despite their claim of interactivity, the latter can interrupt the co-presence of the artist and the spectator by interposing an electronic media between them.

3. Interactivity in "Street Museum"

While questioning interactivity in artworks, I wanted to base myself on my own experience of an artwork and therefore decided to choose a work that I experienced/participated in the Istanbul Biennial of 2001. It was a work called "Street Museum", done by a Spanish group of artists named Cambalage Collective and composed of artists: Caroline Caycedo, Raimond Chaves, Adriana Garcia and Frederico Guzman. This work was an ambulant bus, whose purpose was like other buses, to transport people within the city. However, the passengers, instead of giving money, they either had to give an object belonging to them, (be it a pen, or a napkin etc.) or show/perform their ability (singing for example). A camera was shooting the performance of the passengers (if they had any) who had also the freedom of exchanging objects so that while giving an object from themselves, they can pick an object among the objects left there. Throughout many trajectories, the bus was becoming an ambulant museum whose content was continuously changing according to different traces/objects left by the passengers.

After a period of time, the outcomes of the museum (the video shooting and the objects) were exhibited in the *Darphane'i Amire*. I participated to this artwork at that moment. It was an exhibition composed of a huge table where all the exchanged objects were lying. There were lots of interesting objects, such as small toys, medicines, photographs, even I remember, a piece of hair. The interesting part was that it was not a simple exhibition but the visitors were able to continue to exchange objects and thus had the freedom to change the content of the exhibition. When I was putting a bus ticket from Ankara and picking up a postcard from the table, I though that this work was a different example of an interactive work, especially if we consider all the new media based interactive artworks that emerges in today's artistic realm.

Perhaps the main difference of this work was its possibility of creating a much freer interaction. More than any other new-media based art works, this work provides a very wide range of change and options for the audience since the outcome of the work is fully determined by the audience. The nature and the number of the exchanged objects within the work is unpredictable and not exactly pre-determined to the contrary of some digital interactive works that only provide a pre-determined freedom, such as a limited number of choice or path to take. Of course if we look more philosophically, there can never be a total freedom.

However, the work seems to take into consideration a wider range of audience, since the audience does not have to know how to use a computer or any other new media. Also, the audience does not necessarily have to be an art lover or intellectual who fallows artistic events. In addition to that, the work has also a quality of performance art. If we consider the fact that before being exhibited, the work consists of carrying people around the city; therefore it can also be considered as a moving theatre whose actors are the participants themselves.

However, if we consider the work from another point, we can see that it can also stand as a metaphor for the Internet. If we take the exchanged objects, or the outcome of the work, as *information*, then, the act of putting an object belonging to oneself and taking another from the exhibition, is as if sharing personal information with others, especially if we consider that each exchanged object bare the traces of our personality. For example while I was exchanging my Ankara bus ticket in the exhibition, I left there a clue that someone from Ankara had visited and participated in the work. What is also reminiscent of Internet is the fact that the information (objects) is not eternally present in the pool of information but they can disappear, since another participant can take the objects residing on the table. So a visitor visiting the work a few minutes later than me, would have another set of objects in front of him/her.

What I found also interesting is that this work is providing the audience/participants with a direct interaction, which means that the audience is not here encountering a computer or electronic installation that will make him/her use only a part of his/her sense organs, mostly the sight. This work is more interactive in the sense that it permits the audience to participate in it with his/her whole body (especially if he/she decides to perform something instead of giving an object).

If the performance of an interactive artwork is judged by its ability to attract people to interact with it, then this work is quite successful since it creates enough curiosity in the audience/ participants. Not only the audience would want to interact because of a desire to have a souvenir from the table, but also they would desire to leave their traces in the work, that makes the work a *collective* artwork.

More than that, the thing that attracted me most to this work was its motivation to blur our ego boundaries, by inviting us to share what we have with others and also by reminding us the equality of our human existence. It also reminds us that in order to take we should give. In that sense it was a work that fitted perfectly to the concept of the Biennale that was Egofugue or escape from the ego.

4. Conclusion

After this analysis, we can now think about the contribution of this project to the concept of interactivity. I think that one of the positive contributions is the project's ability to provide not a personal interactivity but a *public* one. If we consider most of the new media based artworks we see a desire to provide a personal experience. In other words, the participant is alone in front of the computer or the installation and his/her experience is driven by personal choices. However, in this work, although personal experience is still there, it is not the only experience. Because we feel a connection with the other participants and even, we feel the unimportance of our own experience, as we can enjoy the coming together of everyone's differences and personal characteristics on a table, and, can even see some similarities between them. This feeling of collectiveness in interactivity is perhaps the main difference of this work, unlike most of the new media based artworks that generally provide a "one to one" interactivity.

I also think that with this work, interactivity is taken into a different level because it is providing us a kind of interactivity similar to the interactivity we have in our everyday life, that is, a kind of interactivity we experience through our encounter with people and objects. But, more than that, this work clarifies the fact that interactivity happens when there is a *real* exchange between the work and its audience, and "Street Museum" does that without loosing its artistic aspect, since it's goal is not only to create an interactive experience but also to question the concepts of the *ego*, *artwork*, *object* and *exchange* as well as their mutual relationship.

Works Cited

Manovich, Lev. *The Language of New Media. Cambridge*, Massachusetts / London MIT Press 2001.

Packer, Randall. *Multimedia: From Wagner to Virtual Reality*. New York: Norton, 2002. Dot.Bomb and Boo Hoo

THE VICIOUS CIRCLE OF CHANGING MEDIA, METHODS, PRODUCTS, AND EXPERIENCES IN ARCHITECTURE DENIZ HASIRCI

1. Introduction

CHANGE IN ARCHITECTURAL WORKING AND PRODUCTION METHODS, CHANGE IN MEDIUM

ARCHITECTURE, SPACE, ENVIRONMENT-BEHAVIOR RELATIONS, HUMAN EXPERIENCES

This paper will discuss the effects of new media on architecture. There is no question that new tools and kinds of media that are developed are influential on products, whatever their formation may be. There is an ongoing discussion on new media, what it is, how it is used and whether it has a role in shaping whatever it is used to produce or not. Although the definition of what exactly constitutes new media is vague, the media used inherently affects the product.¹ Manovich has talked about this matter regarding the computer and various kinds of software; however, once we start questioning this relation, the question becomes a general one that can be extended into many different issues.² The characteristics of new media *-numerical representation, modularity, automation, variability,* and *transcoding-* that Manovich talks about are all inherent in the new architectural media.³ In this paper, these issues will be dwelled upon with a focus on architecture and the question of whether new media has changed architecture will lead to the means by which it has changed it. The adaptation of *language* and *meanings* as a result of this shift will also be discussed.⁴ The topics will be discussed with the works of Peter Eisenman and Frank Gehry due to their different approaches to the use of the computer.

The contribution of the computer as one of the most effective tools of today, to architecture has not only been in the form of a *tool* that has helped *speed things up*. In the first attempts of using the computer for design, perhaps, it was accepted to be so. However, one cannot be certain if a tool ever existed with absolutely no effect on the product being produced. The

Gulen Cagdas, Ahsen Ozsoy, Nur Esin Altas, Hakan Tong, and Manolya Kavakli Thorne, "Bilgisayarli Verimli Calismalar Uzerine", *Mimarist Dergisi*, No. 4, p. 7.

² Lev Manovich, "The Paradoxes of Digital Photography", http://jupiter.ucsd.edu/%7Emanovich/text/digital_photo.html.

^{3.} Lev Manovich, The Language of New Media, p. 118.

Roland Barthes, Essays Selected and Translated by Stephen Heath. Andreas Feininger, Photographic Seeing, p. 14-20. Gary Genosko, Baudrillard and Signs: Signification Ablaze. Michael Moriarty, Roland Barthes. Kaja Silverman, The Subject of Semiotics.

computer was never a neutral and natural tool in architectural design. It affects quality as well as quantity, and perhaps shapes and changes architecture far more than any complimentary tool in history. Thus, presumably, what can be discussed is just how much effect it has on it. In the case of architecture, the impact is massive.⁵

A radical change can be seen in the works of the Architects of New York (ANY), such as Eisenman, Hadid, Libeskind, in addition to Gehry now known especially for the buildings he designs with extended possibilities and new facilities provided by the computer.⁶ These architects have redefined the concepts of time, motion, and architecture through the medium; and the medium in turn has redefined these concepts. In both Eisenman's and Gehry's situations, not only has the medium changed on its own, the medium has changed the product and how they work.⁷ Both Eisenman and Gehry stress that some forms are only possible through the computer, and that what would normally be a sketch model and something to move away from during the design phase, can now be built. This possibility inevitably creates a new kind of architecture.⁸ When the stages of design are reflected upon the new medium, they are bound to change. So, can these new products be called architecture? Yes, why not, if one accepts the definition of spaces to fulfill certain functions. However, it is impossible to ignore the incredible chain reaction that takes place, which alters the whole course of what we are used to call architecture. As a result of this new process, the medium, the methods, and the *product* have changed, but the product is space answering aesthetic but also functional needs of users. Therefore, how does this affect people who start to use and to live in these new spaces? Their habits and ways of life are altered both in aesthetic and functional terms. Aesthetically, people start experiencing transformed and cinematic spaces they have never experienced before.⁹ Functionally, they start living in newly defined spaces that are intelligent -that is the building becomes an organism on its own. This is indeed much more influential than experiencing similar virtual situations on the computer.¹⁰

In addition to aesthetics, the computer has contributed to architecture in another crucial matter, which is the *budget*. For instance, Gehry states that he saved in each stage of the process. Moreover, with the help of "Catia", a computer program developed for French aerospace industry, the execution process in Gehry's architecture has become much more efficient. The

^{5.} Dijital Mimarlik: Topolojiden Tasarima." Arredamento Mimarlik 7-8. 2001: p. 97-116; Luca Galofaro, Digital Eisenman: An Office of the Electronic Era.

Elizabeth Grosz, "The Future of Space: Toward an Architecture of Invention" in Anyhow, Cynthia C. Davidson, p. 242-252.

^{7.} Luca Galofaro, Digital Eisenman: An Office of the Electronic Era. Coosje Van Bruggen, Frank O. Gehry: Guggenheim Museum Bilbao. Kurt W. Forster, Frank O. Gehry: Guggenheim Bilbao Museum.

Gulen Cagdas, Ahsen Ozsoy, Nur Esin Altas, Hakan Tong, and Manolya Kavakli Thorne, "Bilgisayarli Verimli Calismalar Uzerine", *Mimarist Dergisi*, No. 4., p. 7. Elizabeth Grosz, "The Future of Space: Toward an Architecture of Invention" in *Anyhow*, Cynthia C. Davidson, p. 242-252.

^{9.} Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction", http://www.aber.ac.uk/media/ Modules/MC10220/benjamin.html. Edward Branigan, *Narrative Comprehension and Film*. Roberta McGrath, "Natural Magic and Science Fiction: Instruction, Amusement and the Popular Show -1795-1895". In *Cinema: The Beginnings and the Future*, Christopher Williams, p. 13-40. William J. Mitchell, "Intention and Artifice", http://www.cc.rochester.edu/ MitchellIntention.htm. Philip Thody and Ann Course, *Introducing Barthes*. New York: Totem Books, 1997; Miguel F. Valenti. *More Than a Movie: Ethics in Entertainment*. Wim Wenders, *The Act of Seeing: Essays and Conversations*.

^{10.} Greg Lynn, "Geometry in Time". in Anyhow, Cynthia C. Davidson, p. 164-174.

program that can see any surface as an equation, saves time and money by preventing inaccurate application of materials, and by providing flawless calculation of just how much each cm² of the building costs. For example in the cladding of Gehry's famous Guggenheim museum in Bilbao, Spain, titanium, a very durable yet expensive material was used. However, with delicate calculation, just how much material was to be used in those seemingly incalculable, indescribable forms was determined, and the building was clad quite effectively.¹¹

Time is the other significant issue related to architecture where the computer also has a very important role. In architecture, when one aspect related to the design stages changes, everything else changes, thus, even the budget calculations mentioned above can immediately change timing during the process. Just like the digital camera that allows seeing the shot image right away, the computer allows the building of numerous virtual models as the building is being designed without having to stop and build time-consuming 3D models that may not be exact. The sketch becomes a precise image that allows a much quicker building of a model.

According to Eisenman, the order of the design process is inverted, as the physical model can be anticipated by the image on the computer by way of intuition.¹²

As Eisenman states:

The computer gives you the possibility of constructing objects that you would never do directly from mind to hand [...] It is still necessary to think, to see in three dimensions because architecture in the era of the media and images must respond with effective spatiality and corporeality in terms of space. We constantly produce models after having conceptualized them using the computer. It is a process of constant refinement.¹³

A possible danger here is the *standardization* of design due to a very systematic and particular flow of the design process. This is a similar concern to that of Manovich stated in the context of telepresence.¹⁴ He believes that due to the programs we use, we start thinking in a very similar or identical way. Web browsers, image viewers, media players, even "Word" program that is used in writing this paper, for instance, allows one to use certain commands like table, draw, spell check, auto shapes and the like, that allow us to draw in a certain way, construct ready tables and shapes, and even limit our use of word by the limited list of words in the thesaurus. Today, using "Netscape" instead of "Internet Explorer" or vice versa when we are used to the other, feels like a paradigm shift -and perhaps it is. These commands are remediated terms, of course. This is a normal as in a society without mediation of work and users, it would not be possible to read an article or review on a film, a painting, or a building.¹⁵ That is, with a program such as Word, we can *cut and paste*, or *highlight* certain things just like we would do manually before the program existed. Likewise, RealPlayer, for instance imitates the functions of "linear-media machines" like VCR's. Commands such as, "play, rewind, eject", and the like that have been used in previous visual technologies, actually come from even older non-visual media such as tape recorders,

Coosje Van Bruggen, Frank O. Gehry: Guggenheim Museum Bilbao. Kurt W. Forster, Frank O. Gehry: Guggenheim Bilbao Museum. Daniel Libeskind, *Radix-Matrix: Architecture and Writings..*

^{12.} Luca Galofaro, Digital Eisenman: An Office of the Electronic Era. Daniel Libeskind, Radix-Matrix: Architecture and Writings.

^{13.} Luca Galofaro, Digital Eisenman: An Office of the Electronic Era, p. 72.

^{14.} Lev Manovich, The Language of New Media.

^{15.} Luca Galofaro, Digital Eisenman: An Office of the Electronic Era.

making new media simulate old media by remediation.¹⁶ Then the computer, here, is a tool, true, but a tool changing shape, and one that is very much influential on the limits of what we can do.

2. The Role of the Tool in Our (Archi)culture

Karl Marx had made the powerful statement, "As individuals express themselves, so they are," which gives insight into how effective the tool is in our culture in whatever context it is used.¹⁷ The common characteristic in all tool-using cultures is that, they use them to solve specific, urgent, and ordinary problems like in the use of windmills, eyeglasses, umbrellas, or kitchen utensils, or to serve a more abstract and symbolic purpose of religion, art, politics and the like. Moreover, social constructs such as, statistics, what-if scenarios for investors, body sizes, clothing sizes, school grades, multiple-choice tests, polls, TV ratings, and the derivation from these tools the successful, the beautiful, the good, the intelligent, are obviously not things that exist in neutral form. They are decisions, sometimes quite arbitrarily taken. For instance, it can be argued that the IQ test that measures a certain type of intelligence and that claims intelligence can be quantified and measured with a linear scale, has done damage not only to education, but also to society. Commonly, the logical-mathematical intelligence is the one that is prized in school and in life, however, the eight intelligences proposed by Gardner (linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, naturalist, interpersonal, and intrapersonal) are rarely accepted as mainstream intelligence (Gardner, 1993, 2006). All people possess these intelligences, just not in the same amount and ratio, depending on genetic, environmental, and experiential differences in their lives. It is society that rewards one but not the other, and is value-laden depending on the borders of that society in which it is assessed. It is a judgment as well as a tool as it is used as a base for education to say the least. Likewise, the introduction of the number "zero" into Europe in the tenth century that we take for granted today, has made possible and eased calculations in a way never thought possible before, despite the difficulty of the acceptance of a number named "void" by theoreticians. Some of these tools are intruders and some are not, and are integrated into the culture to aid it in different forms. However, the effects are large and it is impossible to say that a product is not affected by the tool, process, or means by which it is produced.

Although the term "tool using culture" is often used for less developed cultures, for the purposes of the present argument, it will be used for any kind of tools or processes used for achieving a goal.¹⁸ This definition necessarily encompasses all cultures of today, but of course, subcategories need to be developed. The use of the computer as a tool to generate *architectural products* is the main focus of this paper. The difference in the use of the contemporary significant tool, the computer, of two prominent figures of architecture, Peter Eisenman and Frank O. Gehry will be used to exemplify the topic.

3. How Do the Principles of New Media Apply to Architecture?

When one attempts to talk about the changes that new media has brought about, it is necessary to also mention what kind of characteristics new media carry. According to Manovich, new media carries five distinct characteristics with the last three related to the previous two.¹⁹

^{16.} Lev Manovich, The Language of New Media.

^{17.} Neil Postman, Technopoly -The Surrender of Culture to Technology, p. 21.

^{18.} Neil Postman, Technopoly -The Surrender of Culture to Technology.

^{19.} Lev Manovich, The Language of New Media.

3a. "Numerical Representation"

According to the principle of numerical representation, all new media objects are made up of a digital code and thus can be represented numerically. A new media object can also be altered algorithmically due to this principle. Having become programmable, an image, therefore, is operationally equivalent to a text or a sound, and an analog operation is also equivalent to a digital one.²⁰ *Sampling*, the taking of a mathematical operation to define something, can be done to define anything as long as the viewport, limit, and operation are defined. This allows experiencing architecture before it actually becomes a reality, as well as flexibility in terms of possibilities. It also allows modularity which gives way to extended counts of options.

3b. "Modularity"

With the *standardization* enabled by sampling, comes *fractal* quality. These processes can be realized with increased flexibility only if *modules* exist. Elements such as pixels, shapes, behaviors, and phonemes, for instance, are examples of modules. These elements can be grouped and combined to form larger modules or objects. Customization of computers, different reflections of the same website can also take place because of modularity.²¹ With new media, it has become much easier to change parts of objects, whatever the size of those parts may be, as long as they relate to one another according to a modular rule. Modularity is a key characteristic of space creation today, with precast structural elements and modular kitchens. One can run into variations of the same space in offices and homes, all enabled by this key feature. Individuality is threatened while production speeds up. The result is the uncontrollable rising of the so-called multi-storey *residences* that promise new *lifestyles* in cities around the world.

3c. "Automation"

Numerical coding, modularity, and standardization also bring *automation* related to media issues. ²² Creating, manipulating and accessing media thus become creative processes from which human intentionality is partly removed. Possibilities are created on their own endlessly given the necessary initial direction. One can intervene at any point and achieve representation of space onto which partly inherent function would be inserted. The space creation process almost becomes an organism on its own. Function becomes secondary as forms transform from one thing to another playing with what would soon become spaces.

3d. "Variability"

Numerical coding and modularity also enable the new media object to be not a finished object, but one that can exist potentially in infinite forms. Old media did not allow this kind of variation in its objects, as its creator designed and stored an object in some unchangeable form. Thus, media becomes a narrative that can be read, like a film or novel with multiple happenings going on at the same time.²³

Meanwhile, the variability character has effects on the value of the object, too. In that, with the

^{20.} Ibid.

^{21.} Ibid.

^{22.} Ibid.

^{23.} Edward Branigan, Narrative Comprehension and Film.

possibility of forever altering an object and its existing in several different forms, it is not possible to define one object designed by one creator. Multiple objects exist designed by multiple creators, which in a sense, lowers the value just by the fact that a single definition is difficult. Users of spaces create a wide variety of spaces, lives, happenings, and thus architectures.

3e. "Transcoding"

Transcoding is one of the most important and powerful characteristics of new media. With media turned into computer data, it is almost only possible to use them with some common *codes, structures* or *languages* that people can recognize and understand. Familiar Cartesian systems, images of recognizable objects, text files are all examples for these common structures. Transcoding, that is, translating something into another format happens on two levels. The first is the use of structures prior to the emergence of new media, such as, languages and cut and paste commands. The second is the use of structures that have developed with computer technology, such as computer programs and software.²⁴ Users become accustomed to these new structures, and are not surprised by them although they might contradict familiar forms of space-function understandings. As architectural representation methods are redefined, so are spaces.

These characteristics apply to new media used for architecture in the sense that by being numerically representable and in modular form, the hassle of drawing, redrawing architectural representations on paper is eliminated, and any part of a representation of a building can be altered. This, of course, saves time and money. Infinite drawings can be made and attached to each other to detail and bring a space closer to real life. This allows spatial walk-throughs that one can experience, which was never possible before. It would be naïve to assume that all this does not have any effect on the understanding, experiencing, use and creation of architecture; or to think that architectural representation methods are solely that.

4. Peter Eisenman: New Media as Ontology

According to Eisenman, new media is a challenge to traditional architecture because with the help of architectural design programs, reality is defined by simulated images and signs. "Appearance" gains more importance than actual "existence". Moreover, it teaches us to see in the new forms that derive from traditional methods such as the perspective, but that are still different. The difference comes from remediated forms and methods in addition to a new social construct that is being formed in architecture. Moreover, the discipline of architecture has "concretized vision" structuring the eye of the mind. The construct of space that uses lines, axes, small and large forms that represent the close and the far objects, replicate real space in ever-changing ways.²⁵ Probing further into the new means of seeing induced by new media, everything becomes digitized and formed of pixels. Although in some cases, the change is not that obvious in the end-product this new means allows one to do things that could not have been done before.

As indicated by Eisenman, although the means change, this may not be reflected onto the product. However, he falls opposite this view with the design process he follows. Perspective stops being the means to create architecture. The perspective is replaced by new technologies. *Opposition, experimentation, and criticism* become the key guides to architecture, and forms and structures are derived from the technology itself with the possibilities that are not yet fully

^{24.} Lev Manovich, The Language of New Media.

^{25.} Luca Galofaro, Digital Eisenman: An Office of the Electronic Era, p. 87.

understood but that have a great potential.²⁶ For example, drawing on the projects of Eisenman, one may never have even thought about extracting design decisions from the operations of DMA, Leibnizian atoms, the behavior of liquid crystals, or human neurological activity. In a project derived from the last inspiration source mentioned, the diagrams of cerebral functions were superimposed on the grid of the actual construction site. The juxtaposition of the diagrams of the design site and the cerebral functions is done by the computer and with the help of the operations (unification, transforming according to an operation, repetition, etc.) of the computer, this superimposition is played with creating the actual form that the building will more or less take.²⁷ This is the answer to just "how" this is done. The answer to the question of "why" is less obvious. Should a product that is mostly functional involve aesthetic concerns that are derived from another function that has absolutely no relation to what is being made? Will the people to live in this building be aware of the "cerebral functions" for instance in this case? Even if they are made aware, how will this remote "concept" get along with or contribute to the function of the building and will it not interfere with it? Related to these, there is also the question of just how much of these remote influences people can take.

When one considers Eisenman's Staten Island Project, for instance, the building is one that has made its users ill from time to time with its slanted walls, and non-geometric forms (or "non-forms" as Eisenman calls them) of sub-spaces.²⁸ Creating this building, he saw a reflection of himself in himself, and produced a product that was a surprise also to himself and was the result of the virtual experiments on the computer. The design phase was -as is routine for him- a process in which the models, diagrams, and computer models intercommunicated. At the same time, the diagrammatic models acted as a theoretical form of expression and played a powerful role in shaping the project. Through a process of totally virtual explorations during which the real is defined by media and simulation, the virtual becomes fully real and values appearance over the existing.²⁹ Manovich had discussed this matter while talking about teleaction under the three computer media operations (selecting, compositing, teleaction) where he stated that the meanings of vision and touch became reversed in time, as distance enabled by vision creates and preserves the aura of the object, while bringing things together virtually or from a distance in real-time, destroys it and objects' relations to each other.³⁰

Space itself, the very stuff of architectural reflection and production, requires and entails a mode of time, timeliness, or duration. Indeed, space must always involve at least two times, or perhaps two kinds of time: the time of the emergence of space as such, a time before time and space, a temporalization/spatialization that precedes and renders the organization or emergence of space as such time and time as such and thus emerges before any scientific understanding of a space-time continuum. This is the space-time of difference, of difference (Jacques Derrida discusses difference as precisely the temporization of space and the spa tialization of time), or differentiation (in Deleuzian terms, differing from itself), which is a pre

26. Ibid.

Peter Eisenman, "Zones of Undecidability: The Processes of the Interstitial" in Anyhow, Cynthia C. Davidson, p. 28-35. Luca Galofaro, Digital Eisenman: An Office of the Electronic Era.

Peter Eisenman, "Zones of Undecidability: The Processes of the Interstitial" in Anyhow, Cynthia C. Davidson, p. 28-35. Luca Galofaro, Digital Eisenman: An Office of the Electronic Era.

^{29.} Ibid.

^{30.} Lev Manovich, The Language of New Media.

condition of and prior to the space and time of life, of understanding, of science. [...] This in terval, neither clearly space nor time but a kind of leakage between the two, the passage of one into the other, propels any being beyond itself, in space and in time.³¹

The term, *aura*, that was introduced by Walter Benjamin in discussions of photography and film to talk about the unique, authentic, and magical value a work of art possesses, has a large role in Eisenman's work. It is an intangible term and is defined as an interesting coming together of space and time, or the appearance or illusion of distance no matter the distance between objects.³² Eisenman strives to achieve this effect in his buildings by trying to make his buildings "look back". He makes every effort to make his buildings possess an order that dislocates vision and does not mean anything.³³

5. Frank O. Gehry: New Media as Tool

Gehry, on the other hand, is less interested in the aura created by the computer alone. He is, no doubt, fascinated by what the computer enables him to do in terms of extending his limits with the help of the new software that makes possible to build buildings that he would leave aside because of all the technical problems that used to arise. He very frequently simply calls the software and related technologies, "the computer" without further specificity, and divides the periods in his professional life, "before" and "after" the computer. Just that, is a very obvious indication that he sees the computer as a mere *tool* to realize his many visions. Gehry states that his main contribution to the field of architecture is 'the direct implementation of an image or form he is in search of, and that architecture arises from a process of mind, hand, and eye coordination from which a sketch is turned into an exact model and then an exact building.³⁴

Gehry was frequently friends with sculptors and painters, and perhaps thus has not felt that what they were doing was very different from his. He derives inspiration from nature, art, and sources outside of the profession unlike Eisenman. He is fascinated by aesthetics and thinks that there is a moment where a decision had to be made on the color, size, composition etc, and that it was not all that important how one got there. He adds that solving functional problems is always an intellectual exercise that relies on a different part of his brain. This part is not less important, just different according to him.³⁵

According to Gehry, the Guggenheim Museum Bilbao would be over budget if it had not been for the Catia program. The program uses polynomial equations instead of polygons and thus can define any surface as an equation. The program therefore is able to define any single point on the surface of the building. Then, an accordion-shaped panel type that could change shape was defined for ease in cladding calculations. With the help of this panel command, while designing, the panels are placed first, and then the building is built from outside in just like in aerospace

^{31.} Elizabeth Grosz, "The Future of Space: Toward an Architecture of Invention" in *Anyhow*, Cynthia C. Davidson, p. 242-252.

^{32.} Graeme Gilloch, Walter Benjamin: Critical Constellations. Richard Maltby, "Sticks, Hicks, and Flaps: Classic Hollywood's Generic Conception of Its Audiences" in *Identifying Hollywood's Audiences: Cultural Identity* and the Movies, Melvyn Stokes and Richard Maltby, p. 23-42.

^{33.} Luca Galofaro, Digital Eisenman: An Office of the Electronic Era, p. 88.

^{34.} Coosje Van Bruggen, Frank O. Gehry: Guggenheim Museum Bilbao, p. 15.

^{35.} Ibid.

design. The calculations are done very accurately with this program, and the backward design was also helpful in gaining momentum in the design process. The program is stated to be very flexible and much effort was put into shaping and managing the software according to Gehry's distinctive design style and the process. The software, according to Gehry, is invented as they go and could easily be replaced by another if a better-in the sense that it better complies to the design in Gehry's mind- program is designed.³⁶

At every opportunity, Gehry states his resistance to new technologies brought by the computer at first. He believed that the computer would limit his designs to forms coming out of symmetries and simple geometries. He hated the images of it and even wanted all of the computers to be out of his sight in the office. However, once the visualizations were improved and he found out a way to use it to build, he began liking the wide range of possibilities opened up by the computer. Meanwhile, unlike Eisenman's case, the physical model has never been given up and is still intensely used.

These words of Gehry are powerful enough to sum up this discussion: "Drawing is a tool. So is the model. Everything is a tool. The building is the only thing that means anything - the finished building."³⁷

6. Gehry and Eisenman

These two creative architects have been very influential on architecture with their use of new media. While Gehry sees the computer as a tool, Eisenman is more in line with Seraji's idea of *tools*. That is, they accept the tools to be "juxtaposition, deformation, displacement, justification, legitimization, delirium, surprise, punctuated past, temporality, instability, superimposition, war, grounds, peeling, insertion, embedding, autonomy, and the magic wand found in the tool bar of Photoshop," and the process to be defined by, "repetition, resistance, fluidity, derogation, competition, elasticity, concentration, colonization, reconfiguration, redefinition."³⁸

One can also see the difference in the views of the two architects in the fact that while Eisenman likes to experiment or support his architecture with philosophy (and we can see this most readily in his collaborations with famous philosopher Jacques Derrida), Gehry has no such wish. Eisenman and other members of the Architects of New York believe in the "pertinent points of overlap" that can prove productive in the disciplines of philosophy and architecture, while Gehry has no concern of the like.³⁹ The ANY group is often accused of extensive experimentation and wandering outside of the discipline. The architects of this group explore other disciplines and try to bring aspects of those into architecture.⁴⁰ Thus, any talk or discussion turns into an act of name-dropping of mostly pertinent philosophers that are remotely related to architecture itself. Gehry only desires to realize the projects in his mind in the most cost-effective and trouble-free manner. Both views are very fruitful, that is for sure, and although they are two very different ap-

Kurt W. Forster, Frank O. Gehry: Guggenheim Bilbao Museum. Coosje Van Bruggen, Frank O. Gehry: Guggenheim Museum Bilbao.

^{37.} Coosje Van Bruggen, Frank O. Gehry: Guggenheim Museum Bilbao, p. 40.

Peter Eisenman, "Zones of Undecidability: The Processes of the Interstitial" in Anyhow, Cynthia C. Davidson, p. 45.

Elizabeth Grosz, "The Future of Space: Toward an Architecture of Invention" in Anyhow, Cynthia C. Davidson, 242.

^{40.} Nasrine Seraji, "Tools, Organization, Process" in Anyhow, Cynthia C. Davidson, p. 44-55.

proaches, the results are very creative.

There is one very important similarity between the two architects, and that is related to their belief in the primacy of *form* over *function*. Gehry refers to one of his sketches as such, "It's just the way I draw when I'm thinking. I think that way. I'm just moving the pen. I'm thinking about what I'm doing, but I'm sort of not thinking about my hands."⁴¹ That is, he has an impatience to get everything in his head out on paper, and using the computer as a tool, tries to get what is in his head into reality as soon as possible. This sort of impulsiveness and creativity deals extensively with forms which functions follow. Likewise, Eisenman loves forms. When he talks about his architecture, he seldom mentions the functions; he delves deep into the origins of his forms. He experiments with forms that are inspired from various sources and that are elaborated on the computer. Once the perfect form is established, functions are fitted in that geometry.⁴²

So, is this approach a fair one especially concerning the users of that building? That depends on several factors such as the function of the building in question, the users, and the like. However, it is surely a dangerous one as it carries the risk of unfit environments for human beings due to the ego of the architect. Surely, trying to fit people into the cerebral functions of Eisenman or the snakes and fish that turn into the quick aesthetic sketches of Gehry, may not always prove effective. Because architecture is not the same thing as a sculpture and that it is commissioned for a particular functional space, the previous approach resembles the feeling of sticking a name or a meaning onto a painting after it is finished. That is, the purpose seems to be pushed aside and assigned a secondary significance.⁴³

There is, no doubt, a necessity for experimentation, remediation, and revising in architecture. Moreover, aesthetics are a crucial part of human nature. The approaches of Eisenman and Gehry are very productive and effective. However, architecture is a discipline that involves several groups of people and different working groups, and thus, it should not be or seem to be a product of one person alone. Aesthetic concerns and functional ones should go hand in hand from the very beginning, otherwise we very often get outrageous buildings that have little or no respect for the user.

7. Lack of Creativity?

One might normally argue that due to three factors, creativity may be lacking in both architects' projects. The first of these factors is that there is the extensive use of programs of the computer with the danger of standardizing design. The second is related to the first one. Experimentation with the computer limits architectural creativity two-fold; the first is the program formation involving the commands for instance (valid for both Gehry and Eisenman) and the second is the direct expectation of designs from the computer (valid for Eisenman). A third limitation is related to the illusionary effects computer architectural models frequently have. Virtual computer models, however realistic they may be, are never an exact simulation due to the additional senses the 3D model or an actual space provides. All three issues are valid counter-arguments to the advantages of current software.

However, the first and second are defeated by the fact that incredible new horizons are

^{41.} Coosje Van Bruggen, Frank O. Gehry: Guggenheim Museum Bilbao, p.37.

^{42.} Luca Galofaro, Digital Eisenman: An Office of the Electronic Era.

^{43.} Gary Genosko, *Baudrillard and Signs: Signification Ablaze*. Michael Moriarty, *Roland Barthes*. Philip Thody and Ann Course, *Introducing Barthes*.

opened. Gehry states that before the computer, he had to rely extensively to the manufacturers and contractors, and that this limited his designs. Being able to manage projects from the office and having to rely less on outsiders, as calculations could be made by himself, was relieving for him and resulted in a strong bond with new technologies. However, the architect becomes more of a master builder-and this, Gehry enjoys- by taking more responsibility, which is something that has both advantages and disadvantages.⁴⁴ The third argument is a constantly evolving matter as more and more realistic representations are being made with the development of software. Furthermore, with virtual walk-throughs, life-like virtual models are being created. All the same, computerized models used in architecture allow a dynamic and immediate interaction, combining and enabling information exchange between different forms of representation.⁴⁵

8. Image, Time, Force and Motion

The widespread belief that *image, time, force, and motion* are concepts that are opposed to architectural form is incorrect. However, it is true experimentation is necessary and thus, this opposition is an argument of the past. Moreover, the concepts of motion and time have been reconsidered in almost every discipline except architecture. This is especially unusual because these are the basic concepts of architecture, and it is interesting that they have been very easily and solidly taken for granted and seldom questioned. This is mostly related to the fact that architectural design has been shaped by virtual description methods. Buildings have been defined by geometry and measurement, and the limits of technology. The description methods have always had a huge impact on the decisions throughout the architectural process, such as design and construction, in addition to the final products of it.⁴⁶

One of the terms that has created much controversy in this discussion, is "flow". The widespread belief that *time*, *force*, and *motion* are concepts that are separate and even in opposition to architectural form creates a disparate relationship between *force* and *form*. However, the view that motion is contradictory to the timeless and static character of architecture is a dated one today. Yet motion, here, does not imply that architecture literally becomes interactive and unstable. The *experience of motion* can be communicated in several different ways, and one of the first ways is to break the notion of architecture as a static form. The difference between actual and virtual movement is thus critical at this point.

The reason for this kind of change in attitude is especially because of the changing character of geometry itself. Geometry is not a melting pot of shapes and measurements, but a discipline that has its own logic. Today with the availability of new geometries, topological geometry differs from the more traditional orthogonal one because it is composed of vectors and not points. This fact inevitably adds the notion of motion and time in the discourse and practice. *Action geometries* define form in terms of directional vectors, whereas Cartesian geometry limited the definitions of materials and spaces due to the use of only X, Y, and Z coordinates. At this point, terms such as "temporality", "morphing" and "deformation", among others, become a significant part of architecture. They introduce not a loss of structure and stability in a system, but a dynamism and motion. With this change in one of the tools or languages of architecture -geometry- what we

^{44.} Coosje Van Bruggen, Frank O. Gehry: Guggenheim Museum Bilbao.

^{45.} Luca Galofaro, Digital Eisenman: An Office of the Electronic Era.

^{46.} Greg Lynn, Geometry in Time. in Anyhow, Cynthia C. Davidson, p. 164-174.

understand of architecture and the discourse we use to talk about it is also changed.47

Although mere technology is not sufficient to design, with it, the possibilities are extended, dynamism and notion are possible, and experimentation and exploration are encouraged. The computer makes possible the direct implementation of creativity in a cost-effective way. This paper concentrates on the works of Eisenman and Gehry to exemplify the effects of the computer on architecture, especially due to the clarity in the progression of their works from traditional to more contemporary media.

However, although Eisenman and Gehry are two renowned architects who have changed their architecture with new media and now design extensively with programs in the computer, one cannot say that their architecture is in any way alike. While Gehry takes a more artistic approach and uses the computer as an efficient way that allows him to be close to being limitlessly creative in his designs, Eisenman is more interested in the designs that derive more or less directly from shapes generated by the computer. In other words, Eisenman is more into exploring what the computer can design, and Gehry dwells more upon the sculptural and aesthetic aspects of his architecture. He very frequently states his closeness to sculptors and painters in terms of working methods. Moreover, his architecture has been likened to the sculptures of Boccioni.⁴⁸ This is of course, not to say that one is not interested in the creative aspects and the other the possibilities of the computer. It is just that the effort and creativity with regards to image, time, force, and motion is a little different in each.

9. Altering of the Language

The discussion of creativity continues in the language of architecture. As in the arguments about ingenuity in the discourse of disciplines, there are two main points of view.⁴⁹ While the first group believes that a new language should be invented so as to be creative, the second group believes that innovative use of the well-established language is a means to carry architecture to new heights. In fact, both are reasonable and valid approaches, and progress can be achieved by both viewpoints. The first approach, by the way, seems to be more like Eisenman's and the second, more like Gehry's stand.

This change and the combination of the virtual and real had incredible effects on the link between architectural theory (which started deriving more and in a different manner from philosophy, psychology, and computer graphics) and profession, in addition to the reformulation of life, the environment, and the human being. In a sense, architecture itself and how it comes about has now started to become new media. This, of course, necessitates certain alterations in the way architectural education is handled, but that is outside the focus of this paper.

The language of architecture relies mostly on visual metaphors, such as, a classical facade looking like a "bastion of democracy" or a house looking like a "ship at sea" or in Le Corbusier's words, "a machine for living." These types of metaphors especially take into consideration the product of architecture, and not the process. It is, of course, not easy to distinctly separate one from the other. In spite of the intense concentration on the visual, there is also a recognition of a metaphor other than the visual. One can sense this when talking about design principles and elements like harmony, balance, and relations of the solid and voids in a building, for example.

^{47.} Greg Lynn, Geometry in Time. in Anyhow, Cynthia C. Davidson, p. 164-174.

^{48.} Coosje Van Bruggen, Frank O. Gehry: Guggenheim Museum Bilbao.

^{49.} Nasrine Seraji, "Tools, Organization, Process" in Anyhow, Cynthia C. Davidson, p. 44-55.

When one says that the process was like "carving away solid" (as was used in defining Gehry's Catia program), this is a different kind of metaphor. A rhetoric one, perhaps. One that deals more with the process and one that involves the metaphor of language more than the visual one.⁵⁰ This shows more explicitly that the process of which architecture is a product is significantly effective on both on the language and the product of it.

The computer brought concepts and terms that were different from the architectural terms used before it. *Flow, elasticity, modulation, temporality, dynamism, fluidity, mobility, twisting, superimposition, shifting, deformation, interpretation, digitally organic, biotechnological interfaces, flexibility, control, blobs, folds, boxes, multi-functionality, combination, distortion, morphing and morphology, topology, experimenting, variation, individuality, optimization, are just some of the terms that entered the discourse of architecture and gained new meaning with the changing medium. These terms are also rhetoric metaphors in that; they have no exact and single meaning as in visual metaphors, or at least less so. This draws our attention to the shift that took place in remediation and use of new media in the language.*

10. Conclusion

This paper has analyzed the ways in which new media has changed our experiences from an architectural point of view. First, a theoretical approach was taken dwelling on tools, methods, and how they shape architecture with examples from old and new works of particular architects. Then, a more exploratory approach was taken to understand how the changing of the medium has changed the methods of working and architecture. However, the aim was not to condemn or glorify the use of the computer in architecture in any way, but to understand and attempt to begin a communization between this inevitable technology and the human being as the participant, observer, client, or user. This important task, according to Galofaro, is the new role of the architect.⁵¹ Subsequently, the effects of these new spaces on people were discussed, with a critical approach to the new functions and the new aesthetics. How to use new media for our own benefit as designers as well as users of spaces, is in our hands and opens a whole new Pandora's box of issues related to function and utilization, as well as ethics, value, and judgment.

Works Cited

Barthes, Roland, *Essays Selected and Translated Stephen Heath. Trans.* Stephen Heath. New York: Hill and Wang, 1977.

Benjamin, Walter. *The Work of Art in the Age of Mechanical Reproduction*. 1 Mar. 2008. Web. 4 Apr. 2010. http://www.aber.ac.uk/media/Modules/MC10220/benjamin.html.

Branigan, Edward. Narrative Comprehension and Film. New York: Routledge, 1992.

Cagdas, Gulen, Ahsen Ozsoy, Nur Esin Altas, Hakan Tong, and Manolya Kavakli Thorne, "Bilgisa yarli Verimli Calismalar Uzerine." *Mimarist Dergisi* 4. 2001: p. 7.

"Dijital Mimarlik: Topolojiden Tasarima." Arredamento Mimarlik 7-8. 2001: p. 97-116.

Eisenman, Peter. "Zones of Undecidability: The Processes of the Interstitial." Anyhow. Ed. Cynthia C. Davidson. Cambridge, Massachusetts: The MIT Press, 1998. p. 28-35.

Peter Eisenman, "Zones of Undecidability: The Processes of the Interstitial" in Anyhow, Cynthia C. Davidson, p. 28-35.

^{51.} Luca Galofaro, Digital Eisenman: An Office of the Electronic Era.

Feininger, Andreas. *Photographic Seeing*. Englewood Cliffs, NJ: Prentice-Hall, 1972. p. 14-20.

- Forster, Kurt W. Frank O. Gehry: Guggenheim Bilbao Museum. Sungham, Korea: Daehan Printing and Publishing Co., 1998.
- Galofaro, Luca. *Digital Eisenman: An Office of the Electronic Era*. Basel: Birkhauser Publishers for Architecture, 1999.

Genosko, Gary. *Baudrillard and Signs: Signification Ablaze*. New York: Routledge, 1994. Gilloch, Graeme. *Walter Benjamin: Critical Constellations*. Cambridge, UK: Polity Press, 2002. Grosz, Elizabeth. "The Future of Space: Toward an Architecture of Invention." *Anyhow*. Ed. Cynthia

- C. Davidson. Cambridge, Massachusetts: The MIT Press, 1998. p. 242-252 Libeskind, Daniel. *Radix-Matrix: Architecture and Writings*. New York: Prestel, 1997.
- Lynn, Greg. "Geometry in Time." *Anyhow*. Ed. Cynthia C. Davidson. Cambridge, Massachusetts: The MIT Press, 1998. p. 164-174.

Maltby, Richard. "Sticks, Hicks, and Flaps: Classic Hollywood's Generic Conception of Its Audiences." *Identifying Hollywood's Audiences: Cultural Identity and the Movies*. Ed. Melvyn Stokes and Richard Maltby. London: British Film Institute Publishing. 1999. p. 23-42.

Manovich, Lev. *The Paradoxes of Digital Photography*. Photography After Photography.Exhibition Catalog, 1995. Web. 4 Apr. 2010. http://www.manovich.net/TEXT/digital_photo.html.

Manovich, Lev. The Language of New Media. Cambridge, Massachusetts: The MIT Press, 2001.

McGrath, Roberta. "Natural Magic and Science Fiction: Instruction, Amusement and the Popular Show -1795-1895." *Cinema: The Beginnings and the Future.* Ed. Christopher Williams. Lon don: University of Westminster Press, 1996. p. 13-40.

- Mitchell, William J. Intention and Artifice. The Reconfigured Eye: Visual Truth in the Post-Pho tographic Era. 1994. Web. 2 Apr. 2010. http://www.stanford.edu/class/history34q/readings/Mitchell/MitchellIntention.html.
- Moriarty, Michael. Roland Barthes. Cambridge, UK: Polity Press, 1991.

Postman, Neil. *Technopoly -The Surrender of Culture to Technology*. New York: Vintage Books, A Division of Random House, Inc., 1992.

- Seraji, Nasrine. "Tools, Organization, Process." *Anyhow*. Ed. Cynthia C. Davidson. Cambridge, Mas sachusetts: The MIT Press, 1998. p. 44-55.
- Silverman, Kaja. The Subject of Semiotics. New York: Oxford University Press, Inc., 1984.
- Thody, Philip, and Ann Course. Introducing Barthes. New York: Totem Books, 1997.
- Valenti, Miguel F. More Than a Movie: Ethics in Entertainment. Boulder, Colorado: Westview Press, 2000.
- Van Bruggen, Coosje. *Frank 0. Gehry: Guggenheim Museum Bilbao*. New York: Guggenheim Museum Publications, 1999.
- Wenders, Wim. *The Act of Seeing: Essays and Conversations*. Trans. Michael Hofmann. Boston: Faber and Faber, 1997.

THE STRUCTURE OF SEEING: READING DAVID HOCKNEY'S 'JOIN-ERS' THROUGH SPACE AND TIME BILGE DEMIRTAS

Introduction

Our era makes us look at all the things we left behind as traditional ones. We think that we have a new view with every new medium or concept, and also we think that this is our reality; to be in a fluctuating progress both in terms of science and society. But with a deep reading, we can be aware of the fact that every new concept or medium did not remove the old one. Moreover we tend to put different things-methods-concepts in the same frame; that is, we like different things to be used at the same time and in the same place.

Modernity told us a different style to look at things. In Modernist theories, we could solve uncertainty and complexity of things with a universal explanation or theory, which could explain everything, and we were offered with an order in universe. There was a strong belief in progress, which means a single, clear and distinct direction. But now, we see things as a set of layers, directions, and perspectives. When we think of culture, art or other social-explanatory fields, we see a plurality of views, concepts, theories, methods, movements etc.¹ They are not separable as 'right' and 'wrong'; that is, they emphasize dis-continuity (especially in narrative structures), non-linearity and fragmentation. The same concepts and principles are used to build and describe variable thoughts, methods in other fields.

What about art and its new forms? Sure, there is a big transformation in art also. Besides, one can easily suggest that many new-ness born either in art directly or in another field which interact with art, like architecture. But it should be noted that which is modern or postmodern is very controversial, and this discussion might get to be another research topic. The important thing here is certain movements resisted or deconstructed old traditional forms, and new interpretations, such as the role of the artist, or the author versus audience, seriousness versus play, or high culture versus kitsch, appeared. In art history we know innumerable such movements, discussions, even works. They have begun to affect cultural production and mass media since late modernism, like Dadaism, Expressionism, Cubism, or Fauvism. They created images; visual images, sound images or others. Every created image provides us with a picture of the trajectory of the people and social positions of the day. These works also include their distinctive new modes of thinking about and experiencing time and space. Some of them dealt with these concepts directly in painting, photography or music. The crucial matter for them is to present their subject in the most complete manner instead of rendering things from just a single fixed and stabilized angle. David Hockney was one of the artists influenced by the thoughts of his time.

^{1.} The root of these differences can be traced back to Kant's synthesis of rationalism and empiricism.

Who is David Hockney?

David Hockney is mostly known as pop-artist, however he always denied being a pop-artist. His biography tells us his important positions in some movements even if he has changed through time. He was born in Bradford in 1937, and studied at the Bradford School of Art and the Royal College of Art between 1953 and 1957. In school he was a gold medal winner and has attained early international recognition. From 1957 to 1959, he worked in hospitals as a conscientious objector to fulfill the requirements of national service. Then, after beginning a three-year post-graduate course at the Royal College of Art in 1959, he turned to the discipline of drawing from life in two elaborate studies of a skeleton before working briefly in an abstract idiom inspired by the paintings of Alan Davie. He soon sought ways of reintegrating a personal subject-matter into his art while remaining faithful to his newly acquired modernism. With R. B. Kitaj and Richard Hamilton, he founded English Pop Art in the early 1960s.

From 1964 to 1967, he lived and taught in the USA, where he produced his well-known shower and swimming pool paintings - such as A Bigger Splash.² Important portraits followed in the early 1970s, including Mr and Mrs Clark and Percy,³ when he worked mainly between London and California. He began a struggle with what he called 'the trap of naturalism', and through his work on stage designs, embarked on radical experiments with the representation of space.

He moved to California and settled there in 1978. It is often said that his paintings became highly colorful there. The example of Picasso, especially after his death in 1973, was also an important factor in Hockney's return to the stylistic manner that distinguished him as a student. His obsessiveness, energy and curiosity resulted in large bodies of work in different media, including the *Paper Pools* and other pulped paper works of 1978, as well as experiments with Polaroid and 35 mm photography: several hundred composite images in which he applied the multiple viewpoints of Cubist painting to a mechanical medium. These exciting and complex 'drawing with a camera' let him to explore new ways of seeing space and time. He has discovered the creative possibilities of the new technologies of printing and imaging, even the ordinary fax machine, stretching the boundaries of every medium he works in, and showing a serious artistic concern with the mass reproduction of his work.⁴

What Does He Do?

It is significant to look at his 'Joiners'⁵⁵ to see how he used the method of 'drawing with a camera'. One important thing about these works is that memory, vertical and horizontal lines, and also time and space have their visual forms in Hockney's works. He is very careful with those elements.

Apparently, Hockney deals with especially space and time. Movement in these two dimensions in his camera works is working as a fundamental to his non-linear style. Also these two concepts -space and time- imply his relation to Cubism, because these are central Cubist themes. The very related concept, non-linearity has been also introduced in art by Cubism, and -with digi-

^{2. &}quot;A Bigger Splash", Wikipedia, The Free Encyclopedia. http://en.wikipedia.org/wiki/A_Bigger_Splash

 [&]quot;Mr and Mrs Clark and Percy", Wikipedia, The Free Encyclopedia. http://en.wikipedia.org/wiki/Mr_and_ Mrs_Clark_and_Percy

^{4.} For a good biography, see "David Hockney", *Mark Barrow Fine Art 20th Century British & International Contemporary Art.* http://www.modernbritishartists.co.uk/hockney_biog.htm.

Between the years of 1982 and 1987, David Hockney experimented with photocollage. Hockney calls them 'Joiners'.

tal world- it is becoming a new reality for a new critical and aesthetic language. We find them in Hockney's work.

He said that he made lines through photography. "Photography is all right if you don't mind looking at the world from the point of view of a paralyzed cyclops - for a split second. But that's not what it's like to live in the world, or to convey the experience of living in the world."⁶He realized that the camera is just a medium, and it is neither an art, a technique, a craft, nor a hobby. He says; "It's a tool." It is a super tool for him. Because the most important thing was that he, like the other artists, always wants to be free through alternatives. There is an obvious sense of liberation in Hockney's case. His collages are principally about line, and as Wechsler says in his book; "An internal sleeve crease, for example, aligns in the next frame with the outer sleeve contour, and contours generally jag from one frame to the next, a series of locally abrupt disjunctions merging into a wider coherence."⁷

Lines always are related to perspective, gaze and space in all art forms. Because it is totally about how we are looking at things. We know that perspective in traditional meaning implies a theory of how to look at outer space or others, an appropriate way of looking at things, a theory or a doctrine, in relation to religion or politics. Looking for Hockney is very interesting; it is the continual projection of any interest, so whatever stands in front of our eyes or body catch our eyes and we perceive it. Perception was the great theme of Cubism. Perception was about thinking and the structure of the object, but not an easy concept to work. Hockney grasped it and used the technique of intersecting planes of Cubism in his works. In Hockney's 'Joiners', we realize that perception is about the structure of seeing the object. He says; "If there are three noses, this is not because the face has three noses, or the nose has three aspects, but rather because it has been seen three times, and that is what seeing is like."⁸

What Is the Relation of Cubism?

What are Cubism and its methods? By the nineteenth century, empirical information and cultural developments redefined painting. Scientific studies on vision and color, new scientific views of physical space, the invention of photography, chemical advances in color preparation and usage, and industrial advances in the manufacture of studio instruments were among the influences that affected visual arts.

Finally, in the twentieth century, we find that new scientific discoveries concerning the physical structure of space, and these new structures caused to renew the investigation of space and time in art. As is known, in the twentieth century, explorations of space were often abstract and, as a result, paintings offer to configure the perceived space of the canvas related to surface, texture, color, and other ways. More important, the nonlinear developments that expand the concepts of representation and abstraction relied on optical impressions and an encounter with conceptual ideas than the real world representation.

The birth of Cubism was the explosion of styles in the twentieth-century. Cubism was the most important and influential avant-garde art movement in the early 20th century. Pablo Picasso and Georges Braque began it. In Cubist works, we see that objects are carefully analyzed. The subject matter is reassembled in an abstracted form.

^{6.} Lawrence Wechsler, David Hockney Cameraworks, p. 12.

^{7.} Ibid; p. 13.

^{8.} Ibid; p. 17.

These painters rejected the traditional techniques of perspective, foreshortening, modeling, and the imitation of nature adopting an approach of spatial deconstruction. The flat is emphasized, and also two-dimensional surface of the picture plane is significant.

The whole picture surface is brought to life by the interaction of the angular, shaded planes. Some of these planes seem to recede away from the eye into shallow depth, but this sensa tion is always counteracted by a succeeding passage which will lead the eye forward again up on to the picture plane. The optical sensation produced is comparable to that of running one's hand over an immensely elaborate, subtly carved sculpture in low relief.⁹

Picasso says: "When we invented Cubism, we had no intention of inventing Cubism. We simply wanted to express what was in us."¹⁰ The cubist image is an image of multiple times, perspectives and spaces and it is called as compositional technique. Cubism wanted to show that objects could only be captured by multiple points of view simultaneously. The compositions were intended to awaken spiritual qualities in the viewer. As a result, we can say that Picasso, and other cubist painters, offered a direct assault on the illusionist Renaissance perspective. Hockney, of course, is one of several contemporary artists who directed his attention to theories on perspective in panoramic paintings and photographs that combine direct observation with memory as a means of suggesting movement through space responded to twentieth century spatial exploration.

In his book, *David Hockney Cameraworks, We*chsler says that, when we look at Hockney's cameraworks, we see what started as experiment becomes a new art form. And this form goes beyond into an entirely new realm - the realm of time. This interpretation makes us to think that what Hockney does in his works is like 'layering of time'. The same thing is valid for space: 'layering of space'. But it is like how we live and experience the world. It takes time to look at his photographs, but one suddenly realizes that they force a different kind of looking. The most important element is, what he agrees, that those kind of photographs are much closer to how we actually see and observe the space and time; that is, not at once, but rather in discrete, separate glimpses. Then we build up our own image, our continuous experiences.

There are a hundred separate looks across time from which I synthesize my living impression of you. And this is wonderful. If, instead, I caught all of you in one frozen look, the experience would be dead - it would be like... it would be like looking at an ordinary photograph.¹¹

Related Philosophy-ies-

Movement is the transition of one pose or model to another. Moreover we can develop this philosophical issue to the extent that movement is *the duration* of that transition. Art works with it. Photography takes pictures of models, poses essentially. In Ancient and Middle Ages, there were ideal poses in nature. Those were very natural. Also, they strongly believed that universe was egocentric. Perspective was also in accordance with this notion. With Galileo, Descartes, Newton and others, this was broken. After their notion of universe, movement is perceived and experienced as a point in space, in flow, which a mobile object took *at any moment*. Time is the fixation of the point. Those points are not poses at all, because they are just any moments, anytime in space.

^{9. &}quot;Braque, Georges. Harbor in Normandy", *The Artchive CD-ROM*, http://www.artchive.com/artchive/B/ braque/harbor.jpg.html

^{10.} John Richardson, A Life of Picasso 1907-1917 The Pointer of Modern Life, p. 105.

^{11.} Lawrence Wechsler, David Hockney Cameraworks, p. 11.

According to French Philosopher Henri Bergson, we do not perceive real life as a succession of separated conscious states, but rather a continuous flow. He made a distinction between the concept and the experience of time. While scientists observe objects and events in succession, time reveals itself to consciousness as duration - an endlessly flowing process. Bergson says that we experience real time as duration and we apprehend it by intuition, not through separate instincts and the intellect.¹²¹²

Muybridge used photographs as the succession of instantaneous pictures and he used those photographs in series to present a description of time. It is a kind of composition of perceiving movement. It was cinema; the constant flow of images. Then and now, in cinema, time is used as the measure of space and movement. In this sense, time is something that can be represented in space: linear, divisible into quantitative units, but connected to each other by a flow, a continuum. The same concept of time describes pose in photography. Pose is the chosen moment like the units of time in a flow.

Let's go back to Hockney. With those arguments, with the small, unique frames, squares that compose each unique photograph, Hockney makes time visible, perceivable. That is, he shows the viewer the change, the flow of things and events. One can say that he uses his unchanging timeless images to represent change. But his perspectives and usage of space took us from one point of view and put in variable points of views, perspectives, and most importantly, in different moments. So our perception of classical perspective -manner of looking at things, outer space-is broken and the movement of the apparatus engages with the movement of other elements, even time and space.

It is not the cinema, not the constant flow of images. Moreover, we know that Hockney's Joiners' carry the essence of photography: immobility. But what they force us to perceive is every single detail. Vision consists of a continuous accumulation of details perceived across time and synthesized into a larger whole. It is like continuously metamorphosizing whole. Each square in that whole assumes a different perspective, a different point around which the surroundings recede to the background. So the general perspective is made up of many micro-perspectives. Therefore, they make us to form a continuous image of the world.

Manovich in his book, *The Language of New Media*, says that in the Western screen-based tradition,

...the body must be fixed in space if the viewer is to see the image at all. From Renaissance monocular perspective to modern cinema, from Kepler's camera obscura to nineteenth cen tury Camera Lucida, the body had to remain still. The imprisonment of the body takes place on both the conceptual and literal levels; both kinds of imprisonment already appear with the first screen apparatus, Alberti's perspectival window. According to many interpreters of linear perspective, it presents the world as seen by a singular eye, static, unblinking and fix ated. As described by Norman Bryson, perspective 'followed the logic of the Gaze rather than the Glance, thus producing a visual take that was eternalized, reduced to one 'point of view' and disembodied.' Bryson argues that 'the gaze of the painter arrests the flux of phenomena, contemplates the visual field from a vantage-point outside the mobility of duration, in an eternal moment of disclosed presence.'¹³

 ¹For further reading about the notion of time in Bergson: "Henry Bergson, An Introduction to Metaphysics", *Questia Academic Library*, http://www.questia.com/PM.qst?a=o&d=24989776

^{13.} Lev Manovich, The Language of New Media, p. 106 in Portable Document Format.
Even if he discusses the screen and the user, those arguments will be helpful to understand how Hockney used multi-perspectival method. Rather than treating the frame of the photograph as a linear perspectival window though which we view a picture, Hockney emphasizes separated views and refuses to let us look at once.

Hockney is fascinated by the notion of 'time' as one of the differences between photography and painting. But the experience of working in both techniques lead him to a radical reconsideration of the role of perspective in art. As we have said before; and Hockney insists, Cubism is about the structure of seeing the object and multiple viewpoints and he applied this method to a mechanical medium. Braque and Picasso's similar compositions were broken into planes with open edges.

To Conclude...

Digital apparatus force us to look at traditional media from a different point of view, both in terms of how works of art are created and how viewers and users see those creations. With the digital apparatus' ability to include the functionality of many other media means that artists have such powerful tool to work. I undertook the cameraworks of David Hockney to explore how space and time are treated through a different understanding of perspective. The purpose was not to defend the possibility of those works' potential power to present time and space in a new and accepted form, but rather to motivate ourselves to try to defend what we do not agree in relation to some significant theories, which would remain separated in our minds.

Works Cited

Bergson, Henry. An Introduction to Metaphysics. Trans. T. E. Hulme. Questia Academic Library. Hackett, Indianapolis, 1999. Web. 30 Oct 2010. http://www.questia.com/ PM.gst?a=o&d=24989776>

Lynton, Norbert. The Story of Modern Art. London: Phaidon Press, 1980.

- Manovich, Lev. *The Language of New Media*. Cambridge, Massachusetts / London: The MIT Press, 2001.
- Richardson, John. A Life of Picasso 1907-1917 The Pointer of Modern Life. New York: Random House, 1996.
- Wechsler, Lawrence. David Hockney Cameraworks. London: Thames and Hudson, 1984.
- Braque, Georges. *Harbor in Normandy*. Le Havre and Paris, 1909. The Art Institute of Chicago. The Artchive CD-ROM. Web. 30 Oct 2010. <<u>http://www.artchive.com/artchive/B/braque/</u> harbor.jpg.html>
- "David Hockney Biography." Mark Barrow Fine Art 20th Century British & International Contem porary Art. Web. 30 Oct 2010. http://www.modernbritishartists.co.uk/hockney_biog.htm.
- "A Bigger Splash". *Wikipedia, The Free Encyclopedia*. Web. 30 Oct 2010. http://www.artchive. com/artchive/h/hockney/hockney_bigger_splash.jpg.
- "Mr and Mrs Clark and Percy". *Wikipedia, The Free Encyclopedia*. Web. 30 Oct 2010. http://upload.wikimedia.org/wikipedia/en/7/77/Hockney.clark-percy.jpg..

TWO QUESTIONS / INTERPRETING SIGNATURES: 'AS IF THE END OF THE WORLD HAS ALREADY COME AND GONE' ÇAĞRI BARIS KAŞAP

That the theater should not lord it over the arts. That the actor should not seduce those who are authentic. That music should not become an art of lying. - Friedrich Nietzsche

Watching the last few weeks of the course with the shock of the elaboration of *Gesamtdatawerk* (within the word-play of *Gesamtkunstwerk*), having got irritated by it and not being able to understand clearly how these words (or their re-workings, whether naively or without a proper political project) that have lent itself to the construction of German fascism can be read in a classroom, I have decided to do the installation project whose sketch I am providing below. The nature of the project that of being an installation is of prominent importance; an installation is usually the perfect form of a work of art that imposes a 'totality' if not carefully scrutinized.

Towards this culmination, I have designed the dramaturgy of the installation by the welcoming of a red carpet, with the specific intention that it will welcome the passerby while crossing the points. In Jena Logic, Hegel describes the point as a determined negation of space by space with its element of ideal transparency, of absolute indifferentiation, of undetermined continuity of the differenceless original impurity of the Nature as absolute space. While the first spatial negation of space is the point, the second one derives to be the line. The point negates and retains itself, lifts itself (by Aufliebung) into a line that constitutes the truth of the point. This is the reason why the lined shape of the carpet, by capturing the truth of the points will be crossed out. Aha! Who will understand it? I am not trying to acknowledge/impose something that my audiences will not know - as naturally well-trained Hegelians, they already know it. The points that will be crossed are the photographs taken from the point of view of the very spot where they stand on. Their purpose is to predict the simulative world of both the photographs and the walking path. Through the non-miming security door -meaning that it equalizes (in *transparency*) the anterior space passed and the posterior space that is to-come, but not necessarily so either since there is the very act of passing - the passerby will pass into the corridor that entails two television sets that are placed diagonally.

As it is, the television set, on the left hand side, holds some excerpts form Nietzsche's *The Case of Wagner* and the one on the right hand side holds excerpts from Adorno's *In Search of Wagner*. On top of the set, a miniscule writing will hold Jacques Derrida's words; "The first question concerns the *name* Nietzsche, the second has to do with the concept of totality", underneath which lies the graphic signature of Derrida .¹ My intention is to question the presence of Nietzsche, whose any presence would always need an otherness that reads it and Derrida, as a person who has written so much about him deserves to use his signature in this place.

In view of the fact that any interpretation is regularly at work throughout, the risks

involved in choosing this strategy are quite limited. In each instance, a single system of reading is powerfully concentrated and gathered together. It is directed at gathering together the unity and the uniqueness of anyone's thinking (Nietzsche, Adorno, Derrida, Wagner etc.), which, as a fulfilled unity, is itself very further away from being the culmination of occidental metaphysics. Therefore in this dramaturgy of an amateur collection, I will not try to 'synthesize' but reflect (or 'interpret the signatures'); by letting the traceable names/presences of the teachers (Nietzsche, Adorno, Derrida) speak -that is what Leonard Cohen track Teachers signifies for the installation.² In the double bind of this diagonal positioning of the two television sets, there are the gestures of the two theorists. Adorno's face in the photograph looks down at Nietzsche while Nietzsche is looking up away in the other direction.

What about this unity? This doubled unity between Marxism and Nietzscheanism? To put the matter another way; to what extent does an interpretation of *Gesamtkunstwerk* in its totality and as a whole contain an interpretative decision about the unity or singularity of thinking? And to what extent does this interpretative decision also presuppose a decision about the 'biography" (say, as Nietzsche does in his own account), or about the 'proper name', about signature or 'politics of signature' (to use a Derridean phrase)?

I cannot indulge with enough justice, here, in a single paper, to the texts of both of my 'teachers'. And it is quiet unnecessary to do this, for their texts will already be flowing down abreast on the screens of the television sets. However, I will just abridge the main points that have directed me towards this possible framework of the installation.

Concerning Nietzsche

In his book, *The Case of Wagner*, Nietzsche defines Wagner as one of his past sicknesses (that is, *decadence*) and requires himself some personal self-discipline "to take sides of everything sick in [him]."³ In his violent writing, he attacks Wagner (and his own friendship with him) in order to defend Bizet as a pupil of Wagner (and his heritage from Schonberg - which is discussed more widely by Adorno) against him. Bizet, says Nietzsche, lets him to be a better "listener" and therefore by the same token, "a better philosopher", ("… one becomes more of a philosopher, the more one becomes a musician!").⁴ Nietzsche's formula in *Beyond Good and Evil* (1949) about music is the Mediterraneanization of it.⁵ And Wagner creates this Mediterraneanization eventually, but with a "magnifying glass" that even lets only his own self [Wagner] look bigger. His art is ever the greater type that fill our whole life with "redemption", "loyalty", "devotion", "purity", all the ideals (of the highest Hegelian type) for "all who are by nature myopic".⁶ Goethe's answer to the threat of all romantics was "the suffocative rumination of all moral and religious absurdities" and Nietzsche's criticism of them is to completely devastate them "every horizon where *their* world only begins *- their* danger, *their* ideal, *their* desirability"; resonating in the words of Nietzsche himself: "Philosophy is not suited for the masses. What they need is holiness".⁷ In an analysis of Wagner's *Ring*, the man

5. quoted in 1956: 3

7. Nietzsche, 1956: 4

 [&]quot;I met a man who lost his mind in some lost place I had to find, follow me the wise man said, but he walked behind", *Lines 9-12.*

^{3. 1956:1}

^{4. 1956:2}

^{6.} Nietzsche, 1956: 2

lies bare the affinities of Schopenhauer and Wagner by the lynch pinch of the true significance of the protagonist's voyage when his ship shipwrecks. This all leads to the aphorism; "everything goes wrong, everything perishes, the new world is as bad as the old one; *the nothingness*" and thus to the fact that the philosopher of decadence (Schopenhauer) has led to *the artist of decadence*. ("I feel the urge to open the windows a little. Air! More air!").⁸ For Nietzsche, the deception that Wagner creates both among Germans and French is the "definition of a vegetarian: one who requires a corroborant diet", when one's instincts are weakened.⁹ However, Nietzsche approves the simulation of 'sickness' to life, and the sickness of Wagner's art, he warns; "one must be strong enough for this stimulant!"¹⁰ If not, it forms a Wagner who can only attract the weak and the exhausted ones. ("Oh the rattlesnake-happiness of the old master when he always saw precisely 'little children' coming unto him!")¹¹

In the intriguing sign of Wagner's style, Nietzsche champions the residual dwell of the "whole" found in both Hegel and Kant and; for the matter of fact, still in Wagner.

The word becomes sovereign and leaps out of the sentence, the sentence reaches out and obscures the meaning of the page, the page gains life at the expense of the whole - the whole is no longer the whole. But this is simile of every *decadence*: every time, the anarchy of atoms, disintegration of the will, 'freedom of the individual', to use moral terms, - expanded into a political theory, '*equal* rights for all'. Life, *equal* vitality, the vibration and exuberance of life pushed back into the smallest forms, the rest *poor* in life. Everywhere paralysis, arduousness, torpidity *or* hostility and chaos: both more and more obvious the higher one ascends in forms of organization. The whole no longer lives at all: it is composite, calculated, artificial, an artifact'.¹²

In the instantaneous organic form that one should see Wagner at work (as Nietzsche personally has done), Nietzsche finds in "the way he [Wagner] separates, he gains smallest units, animates them".¹³ in reversal of the "dramatic style", a lack of the style itself as for example Kant did: "whenever he [Kant] lacked a principle, he posited a special human 'capacity' [*Vermogen*]". But Nietzsche adds, this solely leads to the man's strength ("the rest is no good"), which is converted by Wagner to persuade the masses and with "the wealth of colors, of half shadows, of the secrecies of dying light" leads to an impudent robust of all other musicians".¹⁴ This is why, above all, it is German youth who understand him the most. "The two words "infinite" and "meaning" were really sufficient: they induced a state of incomparable well-being in them. It was not with his music that Wagner conquered young men, it was with the "idea": - it is the enigmatic character of his art, its playing hide-and-seek behind a hundred symbols, its polychrony of the ideal that leads and lures this youth to Wagner; it is Wagner's genius for shaping clouds, his whirling, hurling, and twirling through the air, his everywhere and nowhere, the very same means by which Hegel formerly

- 9. Nietzsche, 1956: 5
- 10. 1965:6
- 11. Nietzsche, 1956: 6
- 12. Nietzsche, 1956: 6
- 13. 1956:7
- 14. 1956:7

^{8.} Nietzsche, 1956: 5

seduced and lured them!"¹⁵ In the midst of Wagner's multiplicity, abundance and arbitrariness, they feel as if justified in their own eyes – 'redeemed'. For Nietzsche adds, "Trembling, they hear how the *great symbols* approach from foggy distance to resound in his art with muted thunder; they are not impatient when at times things are gray, gruesome and cold. After all, they are, without exception, like Wagner himself, *related* to such bad weather, German weather!"¹⁶ Not feeling relieved with the place that Wagner has taken place in the history of music, Nietzsche continues to pinpoint the significance that Wagner has in that history; "*the emergence of the actor in music*': a capital event that invites thought, perhaps also fear. In a formula: 'Wagner and Liszt'".¹⁷ In the seduction of the masses achieved by the *playacting* of Wagner, the stage (which is in concordance with the rise of 'Reich') is dented with one thing: *Teutons*, whom Nietzsche defines with "obedience and long legs."¹⁸

In his essay's epilogue, which is re-published fifteen years later, Nietzsche concerns with the reason why his love of art and music has left his mouth "opened" to the *classical age of war* under the pedagogy of Wagner and his greatest example of self-violation in the history of art, that is equipped with his conception of what *modern* is. In the non-confirmable 'beginning' of the *diagnosis of the modern soul*, in the philosophy of Wagner as a *windfall* and in the words (Master Morality, noble morality, yes and no) that do not belong to Bayreuth, Nietzsche fortunes:

In its measure of strength, every age also possesses a measure from what virtues are permitted and forbidden to it. Either it has the virtues of the ascending life: then it will resist from the profoundest depths the virtues of declining life. Or it itself represents declining life - then it also requires the virtues of decline, then it hates everything that justifies itself solely out of abundance, out of the overflowing riches of strength. Aesthetics is tied indissolubly to these biological presuppositions: there is aesthetics of decadence, there is a *classical* aesthetics - 'the beautiful in itself' is a figment of the imagination, like all of idealism. In the narrower sphere of so-called moral values, one cannot find a greater contrast than that between a master morality and the morality of Christian value concepts: the latter developed on soil that was morbid through and through master morality ('Roman', 'pagan', 'classical', 'Renaissance') is conversely, the sign language of what has turned out well, of ascending life, of the will to power as the principle of life. Master morality affirms as instinctively as Christian morality negates ('God', 'beyond', 'self-denial', all of them negations). The former gives to things out of its own abundance - it transfigures, it beautifies the world and makes it more rational - the latter impoverishes, pales and makes uglier the value of things, it negates the world. 'World' is a Christian term of abuse. These opposite forms in optics of value are both necessary: they are ways of seeing, immune to reasons and refutations. One cannot refute Christianity: one cannot refute a disease of the eye" (my italics, 'Epilogue').

Concerning Adorno

According to Adorno, Schonberg's 'precursor' in music, of course, is Richard Wagner. Adorno argues that the turn toward atonality, that supreme achievement of musical modernism, is already

- 17. 1956:8
- 18. 1956:8

^{15.} Nietzsche, 1956: 7

^{16. 1956: 7-8}

latent in certain composition techniques of Richard Wagner. Wagner's use of dissonance and chromatic movement, his multiple subversions of classical harmony, and the emergence of tonal indeterminacy and his innovations in color and orchestration are seen as setting the stage for Schonberg and the Vienna School. And yet, Schonberg's relation to Wagner, which is central to Adorno's account of the birth of modernism in the arts, is described as one of continuation and resistance, most succinct in his own words: "All of modern music has developed in resistance to his [Wagner's] predominance - and yet, all of its elements are latently present in him."19 The purpose of Adorno's book on Wagner, written in 1937/8, was not to write music history or to glorify the modernist breakthrough. Its purpose was rather to analyze the social and cultural roots of German Fascism in the nineteenth century. Given the pressures of the times - Hitler's affiliation with Bayreuth and the incorporation of Wagner into the fascist cultural machine - Wagner's work turned out to be the logical place for such an investigation. The book on Wagner can therefore be read not only as an account of the birth of fascism out of the spirit of Gesamtkunstwerk, but also as an account of the birth of culture industry in the most ambiguous high art of the nineteenth century. On the face of it, such an account would seem patently absurd since it appears to ignore the existence of a well-developed industrial mass culture in Wagner's own time. But then, Adorno's essay does not claim to give us a comprehensive historical description of the origins of mass culture as such, nor does he suggest that the place to develop a theory of culture industry is high art alone. What he does suggest, however, is something largely lost in dominant accounts of modernism which emphasize the triumphal march of abstraction and surface in painting, textual self-referentiality in literature, atonality in music and irreconcilable hostility to mass culture and Kitsch in all forms of modernist art. Adorno suggests that the social processes that give shape to mass culture cannot be kept out of artworks of highest ambition and that any analysis of modern or, for that matter, premodernist art, will have to trace these processes in the trajectory of the aesthetic materials themselves. The ideology of the artwork's autonomy is thus undermined by the claim that no work of art is ever touched by the social. But Adorno makes the even stronger claim that in capitalist society, high art is always already permeated by the textures of that mass culture from which it seeks autonomy. As a model analysis of how high art entangles with mass cultural commodification, the Wagner book is actually more stimulating than, say, the Philosophy of Modern Music (1973).

Wagner, the Pre-modernist and Gesamkunstwerk

To begin with, Adorno concedes throughout the book that during twentieth century, Wagner represented the most advanced stage in the development of music and opera. However, he consistently emphasizes both progressive and reactionary elements in Wagner's music, making the point that one cannot be had without the other. He credits Wagner for his heroic attempts to elude the market demands for an 'easy' opera and for trying to avoid its banality. But this flight, according to Adorno, leads Wagner even more deeply in the commodity. In his later essay, 'Wagner's Actuality' (1978) Adorno finds a powerful image for this dilemma: "Everything in Wagner has its historical core. Like a spider, his spirit sits in the gigantic web of the exchange relations of the nineteenth century."²⁰ No matter how far Wagner would spin out of music, spider and web will always remain at the back. How, then, do these exchange relations manifest themselves in

^{19.} Adorno 13

^{20. 1978: 16}

Wagner's music? How does music get caught in the web of cultural commodification? After a discussion of Wagner as a social character, (which is a discussion that I will skip here) Adorno turns to an analysis of Wagner's role as a composer-conductor. He argues that Wagner disguises the growing estrangement of the composer from the audience by conceiving his music "in terms of the gesture of a striking blow' and by incorporating that audience into the work of calculated 'affects': 'As the striker of blows...the composer-conductor gives the claims of the public a terrorist emphasis. Democratic considerateness towards the listener is transformed into connivance with powers of discipline: in the name of the listener, anyone whose feelings accord with any measure other than the beat of music is silenced'."21 In this interpretation of Wagner's 'gesture', Adorno shows how the audience becomes "the reified object of calculation by the artist."22 And it is here that the parallels with the culture industry emerge. The composer-conductor's attempt to beat his audience into submission is structurally isomorphic to the way in which the culture industry treats the consumer. But the terms of isomorphism are reversed. In Wagner's theater, the composerconductor is still visible and present as an individual - as a residue of the liberal age, as it were and the spectators are assembled as a public in dark behind the conductor's baton. The industrial organization of culture, however, replaces the individual conductor with an invisible corporate management and it dissolves the public into the shapeless mass of isolated consumers. The culture industry thus reverses the relations which are typical of the liberal age by de-individualizing cultural production and privatizing reception. Given Adorno's description of Wagner's audience as the reified object of aesthetic calculation, it conies as no surprise the claim that Wagner's music is already predicated on the ego-weakness which would later become the operational basis of the culture industry: "The audience of these giant works lasting many hours is thought of as unable to concentrate - something not unconnected with the fatigue of the citizen in his leisure time. And while he allows himself to drift with the current, the music, acting as its own impresario, thunders at him in endless repetitions to hammer its message home."23 Such endless repetitions manifest themselves most obviously in Wagner's leitmotiv technique, which Adorno relates to Berlioz's idée fixe and to Baudelairian spleen. Adorno asserts that the leitmotiv articulates a progressive critique of the tradition of totalizing musical forms and of the 'symbolic' tradition of German idealism. At the same time, however, it functions like advertising in that it is designed to be easily remembered by the forgetful. This advertising aspect of the leitmotiv is not something projected back onto it from hindsight. Adorno already locates it in the reactions of Wagner's contemporaries who tended to make crude links between leitmotivs, latent in Wagner, becomes full-blown in Hollywood film music "where the sole function of the leitmotiv is to announce heroes and situations so as to help the audience to orientate itself more easily."24

Reification emerges as the conceptual core of Adorno's account. 'Allegorical rigidity' has not only infected the motive like a disease, it has infected Wagner's *oeuvre* as a whole -its music and characters, its images and myths, and last but not the least its institutionalization in Bayreuth as one of major spectacles of the times. Adorno goes on to discuss reification, which can be regarded as the effect of commodification in the musical material, on the levels of melody, color and orchestration. The overriding concern here is the question of what happens to musical time

^{21.} Adorno, 1981: 31

^{22.} Adorno, 1981: 31

^{23.} Adorno, 1978: 32

^{24.} Adorno, 1978: 46

in Wagner's oeuvre. Adorno argues that time becomes abstract and as such defies musical and dramatic development on the level of melody as well as on that character. The musical material is pulverized, characters are frozen and static. The construction of *motiv* as temporal sequence is replaced by impressionistic association: "For the composer, the use of the beat is a fallacious method of mastering the empty time with which he begins, since the measure to which he subjects time, does not derive from the musical content, but from the reified order of time itself."²⁵ The predominance of sound in Wagner also dissolves the temporal pressures of harmony. It spatializes musical time, depriving it, as it were, of its historical determinations.

These observations about the leitmotiv, the reified order of time and the atomization of musical material lead Adorno to a central point where he affiliates Wagner's composition technique with the mode of production where it is very difficult to avoid parallel with the quantification of the industrial labor process, its fragmentation into the smallest possible units. Broken down into smallest units, the totality is supposed to become controllable, and it must submit to the will of the subject who has liberated himself from all pre-existing forms. The parallel that Adorno draws with the culture industry becomes fully obvious when we read a little further on: "In Wagner's case, what predominates is already the totality, which excludes all authentic dialectical interaction."²⁶

What *Adorno* describes here, of course, is the reflection of the nineteenth-century industralization of time and space in Wagner's oeuvre. The devaluation of the individual vis-a-vis the totality appears in Wagner's orchestration as the tendency to drown out the voice of the individual instrument in favor of such orchestration techniques is as suspect to Adorno as the progress of the industrial upsurge of the Bismarck era to which it is compared.

If reification of musical and dramatic time is one major element of Adorno's account, then the subjectivistic association and ambiguity of musical meaning is the other side of the same coin. What is at stake here is that which Wagner's contemporaries described as nervousness and hypersensitivity, what Nietzsche called decadence but what is really described as Wagner's modernity. It is interesting to take notice of Adorno's scattered references to the relationship of Wagner's modernity to that of Baudelaire and Monet: "Like Baudelaire's, his reading of bourgeois high capitalism is discerned with the anti-bourgeois heroic message in the destruction of Biedermeier."27 In the essay, "Wagner's Actuality," the discussion of the composer's handling of color unmistakably conjures up the art of Monet: "Wagner's achievement of a differentiation of color by dissolution into minute detail is supplemented by his technique of combining the most minute details and the most minute elements constructively in such a way that something like integral color emerges."28 Yet Wagner only approaches that threshold which Baudelaire and Monet had already crossed: "No comparison of Wagner with the impressionists will be adequate unless it is remembered that the credo of universal symbolism to which all his technical achievements subscribe is that of Puvis de Chavannes and not that of Monet's."29 Therefore Adorno calls Wagner an 'impressionist malgre lui' and relates his backwardness to the backwardness of economic and aesthetic developments in Germany of mid-nineteenth century. The key point that emerges from

- 26. Adorno, 1978: 50
- 27. Adorno, 1978: 101
- 28. Adorno, 1965: 555
- 29. Adorno, 1965: 50

^{25.} Adorno, 1978: 33

this comparison is the paradox that Wagner's anticipation of the culture industry is proportionate to his aesthetic backwardness in his own time. His music conjures up a distant future because it has not yet succeeded in shedding a pat rendered obsolete by modern life. To put it differently, the modernity of allegory and dissonance in Wagner's work is consistently compromised by that 'universal mediation' which simulates a false totality and forges an equally false monumentality, that of *Gesamtkunstwerk*.

Wagner's affinity to the culture industry is worked out most explicitly by Adorno in the chapters on phantasmagoria, *Gesamtkunstwerk* and myth. Adorno's aestheticization of Wagner's opera as a phantasmagoria is an attempt to analyze what happens to aesthetic appearance (*Aesthetischer Scheiri*) in the age of commodity and as such it is the attempt to come to terms with the pressure that the commodity fetishism puts on works of art. As phantasmagorias, Wagner's operas have veiled all traces of the labor that went into their production. Blocking out races of production in the work of art is of course one of the major tenets of an earlier idealist aesthetic and as such nothing new in Wagner. But that is precisely the problem. As the commodity form begins to invade all aspects of modern life, all aesthetic appearance is in danger of being transformed into phantasmagoria, into the 'illusion of the absolute reality of the unreal'.³⁰ According to Adorno, Wagner yields to the pressures of the commodity form. With some minor changes, the following passage taken from the chapter on phantasmagoria could easily be imagined as part of the chapter about mass culture and its production in the *Dialectic of Enlightenment* (1972):

It [the illusion of the absolute reality of the unreal] sums up the unromantic side of the phantasmagoria: phantasmagoria as the point at which aesthetic appearance becomes a function of the character of the commodity. As a commodity it purveys illusions. The absolute reality of the unreal is nothing but the reality of a phenomenon that not only strives unceasingly to spirit away its own origins in human labor, but also, inseparably from this process and in thrall to exchange value, assiduously emphasizes its use value, stressing that this is its authentic reality, that is 'no imitation' -and all this in order to further the cause of the exchange value. In Wagner's day, the consumer goods on display turned their phenomenal side seductively towards the mass of consumer while diverting attention from their merely phenomenal character, from the fact that they were beyond reach. Similarly, in the phantasmagoria, Wagner's operas tend to become commodities. The tableaux assume the character of wares of display (*Ausstellungscharakte*)³¹

It is at this point on his analysis that myth enters the stage as the embodiment of illusion and as regression to prehistory: "Phantasmagoria comes into being when, under the constraints of its own limitations, modernity's latest products come close to the archaic. Every step forward is at the same time a step into the remote past. As bourgeois society advances, it finds that it needs its own camouflage of illusion simply in order to subsist."³² As phantasmagoria, Wagner's operas reproduce the dream world of the commodity in the form of myth: "He [Wagner] belongs to the first generation to realize that in a world that has been socialized through and through, it is not possible for an individual to alter something that is determined over the heads of men. Nevertheless, it was not given to him to call the overarching totality by its real name. In consequence, for him, it is

^{30.} Adorno, 1965: 90

^{31.} Adorno and Horkheimer, 1972: 90

^{32.} Adorno and Horkheimer, 1972: 95

transformed into myth.⁷³³ Myth becomes the problematic solution to Wagner's struggle against the genre music of the Biedermeier period, and his gods and heroes are to guarantee the success of his present and the mythical merge in *Gesamtkunstwerk*, Wagner's divine realm of ideas, gods and heroes are to guarantee the success of his simultaneous flight from the banality of the commodity age. But as the present and mythical merge in *Gesamtkunstwerk*, Wagner's divine world of ideas, gods and heroes is nothing but a deluded transcription of the banal world of the present. In a number of scattered observations, Adorno juxtaposes, by using Walter Benjamin's ideas, moments of Wagner's *oeuvre* to the culture of everyday life in the nineteenth-century Germany. Thus the Mastersingers are said to conjure up - like images on the box containing the famous *Nurnberg Lebkuchen* - the bliss of an unsullied, pre-modern German past, which later fed seamlessly into *volkisch* ideology.

Thus the drama of the future, as Wagner called his Gesamtkunstwerk, prefigures that nightmarish regression into an archaic past, which completes its trajectory in fascism. The Gesamtkunstwerk is a powerful protest against the fragmentation and atomization of art and life in a capitalist society. But since it chooses the wrong means to establish itself as a protest, it can only end in failure: "Like Nietzsche and subsequently Art Nouveau, which he [Wagner] anticipates in many respects, he would like, single-handed, to will an aesthetic totality into being casting a magic spell and with defiant unconcern about the absence of the social conditions necessary for its survival."34 While the mythic dimension of Wagner's opera conjures up fascism, its homogenization of music, word and image is said to anticipate the essential features of Hollywood film: "Thus we see that the evolution of the opera, and in particular the emergence of the autonomous sovereignty of the artist, is intertwined with the origins of the culture industry. Nietzsche, in his youthful enthusiasm, failed to recognize the artwork of the future in which we witness the birth of film out of the spirit of music."35 The totality of Wagner's drama, however, is a false totality subject to disintegration from within: "Even in Wagner's lifetime, and in a flagrant contradiction to his program, star numbers like the Fire Music and Wotan's farewell, the Ride of the Valkyries, the Liebestod and the Good Friday music had been torn out of their context, rearranged and become popular. This fact is not irrelevant to music dramas, which had cleverly calculated the place of these passages within the economy of the whole. The disintegration of the fragments sheds light on the fragmentariness of the whole."36 On the one hand, the logic of this disintegration leads to Schonberg's modernism and on the other hand, to the Best of Wagner album. Where high art itself is sucked into maelstrom of commodification, modernism is born as a reaction and a defense.

Coda

One easily can discern the 'non-identical sameness' of the two teachers' analysis of Wagner. However, this 'non-identical sameness' should not relent to mean that Nietzsche and Adorno, despite their similar reading of Wagner, care about the same philosophical rigors; too forward to say; but they even can be considered to be 'earth enemies' from a salient point of view, but for sure, their 'enemies' were the same - and this is where their 'non-identical sameness' come to have a meaning in the dramaturgy of this work. The difference can also be seized in the stylized writing

^{33.} Adorno and Horkheimer, 1978: 119

^{34.} Adorno and Horkheimer, 1978: 101

^{35.} Adorno and Horkheimer, 1978: 107

^{36.} Adorno and Horkheimer, 1978: 106

(but can Nietzsche ever have a style with so many masks that are the 'diseases of the eye', of the whole) of Nietzsche, which leads to the hardness of its summarization and always in need of an other to scrutinize the text (who was Derrida, in this context) and Adorno's systematic writing - 'determinately negating' the whole.

Not to fall into the diligent calculation of the audience into the counterfeit spleen of the culture industry as in Adorno's lines or the refusal of a classical aesthetics of decadence, all away from the *ugliness* of the eye as in the lines of Nietzsche; I am giving the audience the news about the 'end of the work'.

No miracles, no dreams, no flights here this was an installation that you have just experienced!

[T]he words are everywhere, inside me, outside me, well well, a minute ago I had no thickness, I hear them, no need to hear them, no need of a head, impossible to stop them. I'm in words, made of words, others' words, what others, the place too, the air, the walls, the floor, the ceiling, all words, the whole world is here with me, I'm the air, the walls, the walled-in one, everything yields, opens, ebbs, flows, like flakes, meeting, mingling, falling asunder, wherever I go I find me, leave me, go toward me, come from me, nothing ever but a me, a particle of me, retrieved, lost, gone astray, I'm all these words, all of these strangers, this dust of words, with no ground for their settling, no sky for dispersing, coming together to say, fleeing one another to say, that I am they, all of them, those that merge, those that part, those that never meet, and nothing else, yes something else, that I'm quite different, a quite different thing, a wordless thing in an empty place, a hard shut dry cold black place where nothing stirs, nothing speaks, and that I listen, and that I seek, like a caged beast born of caged beasts born of caged beasts.³⁷

^{37.} Samuel Beckett, The Unnamable, 314.

Works Cited

Derrida, Jacques. *Writing and Difference*. Trans. Alan Bass. Chicago: University of Chicago Press, 1978.

--. Margins of Philosophy. Trans. Alan Bass. Chicago: University of Chicago Press, 1982.

- Hegel, G. W. F. Jena Logic.' *Logic and Metaphysics*. Trans. J. Burbidge et al. Kingston and Montreal: McGill-Queens Press, 1986.
- Adorno, Theodor. In Search of Wagner. Trans. Rodney Livingstone. London: New Left Books, 1981.

--. "The Actuality of Wagner," Selected Writings. Frankfurt: Suhrkamp, 1978.

--. Max Horkheimer. Dialectic of Enlightenment. New York: Herder & Herder, 1944.

--. *Philosophy of Modern Music.* Trans. Anne G. Mitchell and Wesley V. Blomster. New York: Seabury Pres, 1973.

Nietzsche, Friedrich Wilhelm. 'The Case of Wagner,' *The Birth of the Spirit of Music*. Trans. Francis Golffing. New York: Anchor Books, 1956.

--. *Beyond Good and Evil: Prelude to A Philosophy of the Future*. Trans. Helen Zimmern. 4th ed., 2nd impression. London: Allen & Unwin, 1967.

PART II JUMP, RUN AND TAKE YOUR SEATS: FILM, NARRATIVE, INTERACTIVITY AND 3D INTRODUCTION BY I. ALEV DEĞIM & ANDREAS TRESKE

Stemming from the fertile media discourse, the papers in this section explore the interactive narrative possibilities of films and its related aspects with relation to their significance in the theoretical and practical framework.

As the technology continues to evolve to a more interactive experience, films and media change accordingly. The audience can actively participate and control the narrative development and therefore change the outcome of the story by deciding and creating solutions.

The papers explore the realms of existing cinema and the possibilities of such interactive films and analyze their key roles in the media. Following the path of interactivity in films, Tunali's paper explores the multi-narrated Run Lola Run (1999), from the perspective of style and editing. The paper ventures into the film analyzing scenes and graphical components relating to possible connections with the narrative style of computer games. Aytemiz takes the same film in a broader group of samples and analyzes the narrative structure and its relation to interactivity. Memento (2000) and Pillow Book (1995) share similar narrative structures as Run Lola Run and from this connection Aytemiz draws the attention to a new level of interactivity in films that does not require physical inputs. Through this discussion the debate on the possibility for the rise of a new medium inside an existing one is discussed in depth in Özkul's paper on 3D television. The visual medium becoming alive as a part of the two dimensional Television can be recognized to its fullest in this chapter. A similar revelation can be found in Kocoğlu's paper where he discusses how the fleshmachine will soon come to exist over machine-flesh in his own words. He predicts that we as humans will enhance machines and open up a new way for media to be, just as in the example of Avalon (2001). Another aspect of such an enhancement can be found in Önen's paper where he analyzes sound for both traditional and new media by breaking it to its smallest components and directing the attention to the audio part of visual mediums.

Possibilities of interactive films and similar or related visual media are explored in this section where it is possible to find connections to both traditional and new ways of interaction with or within cinemas narratives.

ANALYSING RUN LOLA RUN: MIXED, INTERACTIVE-LIKE BUT LIMITED, COMPLEX, CHAOTIC AND UNSTABLE, THUS TECHNICALLY PERFECT¹ FUNDA ŞENOVA TUNALI

Introduction

Run Lola Run is a film with an adrenaline-rushed pace and a plot as amalgamation of various stories in the same time-span. This film was shot in 1998 and released in 1999 by Tom Tykwer as the writer/director, Stefan Arndt as the producer and Frank Griebe as the director of photography. The film basically combines various media together by exploring the concept of *time* in synch with the theme of *destiny*; textually, visually, and contextually.

The method of this study starts with the breakdown of the components of the film as the outcome of a close-reading of each scene of the film. Thereby, it focuses on how *time* as a notion is illustrated, constructed, perceived, and becomes a metaphor by the use of mix media as 35mm, video and 2D animations, sound effects, camera angles, use of objects and colours as symbols, and editing –with split screens, jump cuts, usage of still frames in synch with the soundtrack. This film can be seen as an example of how new media, developing technologies and techniques effect approaches towards a new cinematic language.

Stories

The plot organization of the film consists of a main story, which is re-constructed three times. These three parallel stories are intermingled with sub-stories. Each re-constructing of the story has different implications on all characters, which are either direct or indirect. Through these stories, hints are gathered by the audience to imagine and decide on the characters – it can be conceived as an extraordinary construction for character development of each character. In other words, the character development of each character is completed by imagination of the audience.

1. The Opening Sequence

The editing of opening sequence is parallel to the editing structure of the film. It links and mixes different kinds of sequences and the use of media.

1.1. First part

The opening sequence starts with epigrams which summarize the logic of the plot structure and render the editing technique of the film in words:

"We shall not cease from exploration and the end of our exploring will be to arrive where we started and know the place for the first time." T. S. Eliot, "Little Gidding" "After the game is before the game" S. Herberger

 A shorter version of this paper has been integrated into a European Master of Arts thesis called Conceiving the Content: The Role of Narration and Interaction in the Cognition of Content in New Media Samples submitted to Image Synthesis and Computer Animation, Hogeschool voor de Kunsten Utrecht, NL in August 2004.

1.2. Second part

The opening sequence re-starts with a swinging pendulum -as the sign of time. The amplified sound of this movement is superimposed upon the ticking sound of a clock. Techno music is also added as a mix of this sound constellation. The camera angle creates an exaggerated perspective. Gothic relieves complete each other and then 2D animation fades in. Through the animation time flows faster than real time. This time a monster is the sign of time.

1.3. Third part

The camera moves along a semi-blurred crowd by focusing on certain people who will appear as the characters of the sub-stories. This whole scene with the voice over, reminds Wim Wenders' *Himmel Über Berlin* in which the angels are wandering around the humans by talking about life, time and destiny. The camera movement stops with a waist-up shot of a man with a uniform. Then the man says, "The ball is round. The game lasts 90 minutes. That's a fact. Everything else is pure theory," and he kicks a football. The camera follows the ball, when it falls back towards the ground, we see the film title formed by the crowd through the bird's-eye view and then the scene fades-in to a 2D animation.

1.4. Fourth part

In the 2D cartoon animation Lola is running through endless corridors and getting lost in the never-ending spiral corridors and the titles are appearing in synch with these movements.

1.5. Beginning

The camera dives into a part of a city where Lola lives with a heavy zooming effect and then this movement ends with a close-up of a red telephone.

2. Main Story

The beginnings of the main stories are the same:

Manni forgot to keep his grip on a bag containing 100,000 DM belonging to his mobster boss, Ronni. Manni has to hand over the money in twenty minutes, but he lost it on the train and a homeless man picked it up. Manni calls Lola and tells the story. He says his only way out is to rob a store. She looks at the clock and starts running to get to the money and then to meet Manni before the noon. Lola starts running and these 3 routes of the story starts as a cartoon animation seen in TV screen in the room where her mother is on the phone gossiping.

2.1. First Route

She runs down the stairs as a cartoon character, a dog growls on the stairs. Outside is shot as 35mm film again. She is running. She hits *a woman with a pram.* Flashforward. She is running through roads, bridges, and corridors. Scenes of her father and his mistress shot with video. She is running. She is talking with *the man on bicycle/bicycle thief.* Flashforward. A car hits to another because of Lola.

Manni is in the phone booth.

Manni talks with the blind lady.

Scenes of her father and his mistress shot with video.

Lola arrives to the bank.

Lola talks to the bank security guard.

Lola is passing through corridors in the bank.

Lola sees a colleague of her father in the bank.

Flashforward.

Lola enters her father's room.

Lola talks to his father and asks for money.

She screams and shatters the frame of a clock on the wall.

Lola's father rejects her and tells her that he is leaving home to have another life by also stating that she is not indeed his daughter.

She asks the time to an old woman.

She crosses the square.

She passes by the homeless man who picked up Manni's bag.

She sees a red ambulance.

Split screen: Lola approaches to the store, Manni enters the store.

Manni starts to rob the bank and Lola helps him.

Lola asks how to use the gun.

Manni and Lola put all the money to a red bag.

Manni and Lola are trapped by the police.

Lola is shot by the police.

Jump-cut to the red sequence of Manni and Lola.

2.2. Second Route

She runs down the stairs as a cartoon character, the owner of the dog trips Lola with his foot on the stairs.

Lola falls down the stairs.

When she stands up, she limps (35mm).

She is running.

She hits a woman with a pram.

Flashforward. (Another story)

She is running through roads, bridges, and corridors.

Scenes of her father and his mistress shot with video.

She is running.

She is talking with the man on bicycle/bicycle thief.

Flashforward. (Another story)

She jumps over the hood of a car and the car hits to another because of Lola.

Scenes of her father and his mistress shot with video.

Lola arrives to the bank.

Lola talks to the bank security guard.

Lola is passing through corridors in the bank.

Lola enters her father's room and she hears a part of the conversation between her father and

his mistress.

Lola talks to his father and quarrels.

She leaves the room.

She takes the gun of the security guard, this time she knows how to use the gun.

Lola sees a colleague of her father in the bank.

Flashforward (Another story)

By force, she gets the money from the cashier of the bank by pointing the gun to her father.

She asks the time to an old woman.

She crosses the square.

She hits the homeless man who picked up Manni's bag.

She sees the red ambulance and turns to the driver and asks for a lift, he says no and crashes to a huge glass plate.

Split screen: Lola approaches to the store, Manni enters the store.

The red ambulance hits Manni.

Jump-cut to the red sequence of Manni and Lola.

2.3. Third Route

She runs down the stairs as a cartoon character, she jumps over the dog.

Outside is shot as 35mm film again.

She is running.

She hits a woman with a pram.

Flashforward. (Another story)

She is running through roads, bridges, and corridors.

She is passing through the man on bicycle/bicycle thief.

Flashforward. (Another story)

The man on bicycle/bicycle thief chats with the homeless man who picked up Manni's bag. She is running.

She hits a car and the owner of the car is a friend of his father.

Scenes of her father and his mistress shot with video.

Her father leaves the room as he expects to meet his friend. Split Screen.

Her father gets into his friend's car.

Manni is in the phone booth.

The blind lady shows Manni the homeless man on the bike.

Manni starts to chase homeless man.

Lola arrives to the bank.

She is late, she misses his father.

Lola talks to the bank security guard.

Lola sees a Casino and enters.

Lola plays roulette, she screams, everything shatters and she wins.

Lola puts money to a green bag and runs.

Manni catches the homeless man and takes the bag back.

Lola crosses the square.

She gets in to the red ambulance

Lola heals the bank security guard in the ambulance.

Manni approaches and they walk together.

3. Her Father's Story

His character development and his story are given through the conversation with his mistress, Lola's unexpected visit and his decisions. The dialogue scenes with Lola's dad and his mistress are given in a rather soap-opera format. Video as a medium is used to emphasis this soap opera reality with the notion of alienation. It creates a sense of televised and media-filtered reality.

4. Short stories given in photo-novella format through the sequences of Lola running through Berlin

Lola seemingly in contact with incidental characters, the film pauses with still images in photonovella format appear. Every time, it shows future projections of that character's life. These future projections change depending on their interactions with Lola. These characters are *a woman with a pram, the man on bicycle/bicycle thief and a colleague of her father in the bank.*

5. Manni and Lola

The details of their relationship through 3 specific shots, which are all shot under a red light referring to a dark room (where images are developed to form stories). These shots form 3 episodes, which operates as a link to reconstruct the plot again.

Symbols Through Objects, Geometrical Figures and the Use of Color

Many objects as the ball, pendulum, roulette, various clocks, photos, telephone, bags, tortoise, domino bricks, and dolls appear through out the film. As it is clearly seen, most of these objects are time-related, some of them are red and domino effect is an obvious symbol; it directly symbolises the domino effect that every move Lola takes, causes a chain reaction that may lead either to winning or loosing situation in the film.

A part in the beginning of the film where Lola thinks of people who she may ask for help visualises a roulette sequence with jump-cuts. Therefore, not only the objects but also sequences symbolises situations and theme related concepts.

The perfect geometrical shapes create the sense of computer game setting with grids. For instance; the checkerboard that Lola runs through in the square, lightened signs and decorations of the stores, Manni's huge tattoo with negative and positive square shapes on his arm, the repetitive shape of the roulette board throughout the film, the perfect rectangles and circles in the casino. Repetitive corridors can also be considered as the lines of this grid. Also the spiral as a geometrical shape constantly appears through out the film; (in the cartoon animation of the opening sequence and also in the cartoon animation where Lola runs down the stairs in the shape of endless spiral, on the sign of a store, on the pillows covers where Lola and Manni are having their conversation, and in various other scenes as the background image) Spiral signifies the complexity of the situation, non-linearity and also destiny.

Also two characters act like a tool which reveals hints both for Lola and Manni there is this blind woman who helps Manni and the bank security guard who interacts with Lola.

The colour red is very significant and rather symbolic in the film. All of the scenes in which Lola is in a frenzied situations do not only display her vibrant red hair, but also contain another red object such as the man on a red bike with a red shirt, a red car, a red ambulance, a red sign or a red phone. All of these red objects symbolise a kind of *out of track* situation -a kind of warning for the situations where you can loose the game.

Manipulation of Time Through Cinematography and Editing

1. Mixed Media

The film exposes an intense work done in post-production, which can be examined through in both editing and mixed media combined together in the final work. Animated cartoon, digital video, black and white film, computer effects on reel film, slow motion and still frames are all assembled with 35mm film to form up a narrative in which audience is carried back and forth in time. Throughout the film, time flows in real time then suddenly it flies fast forward with sequential snapshots with flashing frames, suddenly travels back to an animated sequence. A hand held digital video camera helps constructing a reality different than the current time expressed trough Lola on the run. Slow motion inserts an intensified tension to the ongoing fast paced rhythm. Black and white shots carry the time instantly to a past event, while the animated sequences adds a symbolic yet strong emphasis on being late. These different media helps very much to build up a narration leaping on different points on a time line and also tell the story on three alternative routes.

2. Surreal Interventions (Sound)

Lola has a surprisingly special talent to alter the flow of time –and her destiny as well: she breaks out a very high-pitched scream! When she screams glasses shatter and roulette ball stops on the number she chooses. This surreal intervention appears twice, when Lola finds it as the only way out from her ill-fated destiny. Not only the feverish rhythm of sequences chasing each other but the soundtrack of fast beat electronic music halts to illustrate the sudden pause of time.

3. Camera Angles

Shots with alternate angles of same spaces are used to construct the alternative stories Lola lives through. The camera is usually pulling out all the stops to catch your attention. The camera moves and operates with and according to the action and situation. For instance, in the first two takes Lola is running on the huge square and it is shot with a bird's-eye view, whereas, when she is on time in the last take, the very same scene is shot with a regular and more closer view form the ground.

4. Editing

4.1. Flashbacks/Forwards

As an editing technique, without an exception, all of the past incidents appear as series of black and white short sequences as flashbacks. On the other hand, all of the future projections of the incidental characters -that Lola contacts with- are given in photo-novella format as still frames in color.

4.2. Split Screens

There are few split screen sequences through out the film. Lev Manovich describes this editing technique in a film as *spatial montage* as he links this technique to perception of space by creating a hyper spatial reality in screen:

For me "spatial montage" means meaningful juxtaposition of more than one image stream within a single screen... If traditional cinema privileges the temporal relationship between a particular image and other images which come before and after, computer cinema intro

duces in a set of new relationships which can be described by terms "spatial" and "simultaneous": the relationship between different layers in a composite; the relationship between a frame of a movie and other information which can be hyperlinked to this frame; the relation ships between different images which can be distributed over the screen at the same time; etc. The term "spatial" therefore has a different meaning in two discussions. When I talk about "spatial montage" I am thinking of the relationships between different images that appear on the screen at the same time – in short, this is a literal 2D space. In the case of new material" dimensions of a moving images, I use the term space metaphorically: software "spatializes" the single image by connecting it to other images which share the same slice of time: other images in a composite, other images which can be hyperlinked to it, other im ages which may appear on the screen at the same time.²

Together with the act of creating hyper spatial reality, the way in which these split screens appears also targets to challenge the perception of the audience: In these sequences, wipe-ins and wipe-outs are geometrically in synch with the visuals. For instance, Lola appears with a wipe-in which is in synch with the movement of the sliding door of the store which Manni intends to rob.

4.3. Jump Cuts

Jump cuts distract the linearity sense of the film. Regardless of a chronological temporality, the sequential events are organized as if the audience is let to see fractions from future and past while the ticking time runs towards the end Lola fights to prevent.

4.4 Flash Light Effects

Flash light effects are also used to distract the linearity. Every time, with flash light effect, a scene jumps to another scene either belongs to past or future. Therefore, they are used to create a kind of passageway between the tenses of time.

4.5. Audio Editing (Soundtrack)

Soundtrack communicates entirely well with the hyper action of the film. Not only the lyrics but also constantly playing music with techno-pulsing gives the film a backbone. Like a very fast heart beat, the sound track creates tension by giving the film a fast pace. Some in-between scenes are quiet and contain almost no sound at all, yet due to the editing technique, these scenes are very short and works like a pauses or breaks. A close association is considered between the notion of speed and the operation logic of the late capitalism. Both of them operate and are perceived by breaks³. As Paul Virilio mentions; the notion of speed can only be perceived through breaks. Therefore, these scenes also work as *the effect of duration* –as a speed effect which indicates electronic and technical interruptions– in order to perceive the speed.

Conclusion

After analysing the film scene by scene, I came up with an assumption that both the plot organization and the editing structure are shaped alike a computer game. The story with three routes is subtly changing each time. Hence, each time or in each take this subtle changes have enormous

^{2.} Manovich, Lev. Lev Manovich. < http://www.levmanovich.net>

^{3.} Virilio, Paul. "The Third Window: An Interview with Paul Virilio". Global Television.188.

implications. These are always *redos/retries* of the same game. Moreover, each time she plays as if she learned from the previous take. For instance, she learns how to use a gun from Manni in the first take, subsequently; she knows how to use a gun in the second take. Many other small details such as how in the last take Lola jumps over the stairs to get rid of a possible harm coming from the dog or the owner (that she learned by trying in the previous two takes) exemplifies this assumption.

The editing technique with graphic, aural, spatial, and time-based aspects (which are mentioned in details in this paper) operate through a computer game logic and also the use of objects, hints, split-screens, animated sequences together with their timing to appear makes the film also look like a computer game. As a characteristic of a computer game there are some key characters such as the bank security guard who is also aware that the takes are repeating themselves and the blind lady who give hints to Manni.

As discussed in the "Symbols Through Objects, Geometrical Figures and The Use Of Color" section, the visual implication of the grid system demonstrates the grid-based structure of a computer game.

As a conclusion, *Run Lola Run* uses mostly all of the current techniques –of editing, narration and visual aspects- of new media to transfer a *computer game* like reality to the film screen. It may be considered as an experiment in between different media, but for me it visualizes the future of cinema and a new cinematic language through the perceptive and technical attitude: mixed, *interactive-like* but limited, complex, chaotic and unstable, thus technically perfect.

Works Cited

Landay, Lori. "Digital Transformations: The Media is the Mix". February 2001, <http://www.media-culture.org.au/0104/trans1.html>.

Manovich, Lev. The Language of New Media. Cambridge, MA, London: The MIT Press, 2001.

----. Lev Manovich "*The Archeology of Windows and Spatial Montage*" September 2002, <www.levmanovich.net>

Run Lola Run. Dir. Tom Tykwer. 1999, http://www.sonypictures.com/classics/runlolarun/ Virilio, Paul. "The Third Window: An Interview with Paul Virilio". *Global Television.* Int. Jonathan

Crary, Trans. Yvonne Shafir Eds. Cyntia Shneider and Brian Wallis.

Cambridge; Massachusetts; London: The MIT Press, 1991: 185-197.

PLAY, CREATE AND UNTIE: COGNITIVE PARTICIPATION AS INTERACTION IN FILMS PELIN AYTEMIZ

Introduction

The aim of this article is to unravel further what *Memento*,¹ *Run Lola Run*² and *Pillow Book*³ are saying about interactivity in relation to their narrative structures. Presenting a discussion of these films, this essay examines, to what extent these films can be regarded as interactive and elaborates on a kind of interactivity that entails cognitive participation of the spectators. Although a film cannot suggest physical interaction it could still be considered interactive; via allowing the user to select among choices or by involving the viewer in such a way that s/he needs to make an intensive mental contribution. In an interactive work, the user makes choices from a menu to gain access to particular outcomes according to their choices. But how about the mental contribution of the spectator in creating meaning in films structured in a non---linear narrative form. Can such works be regarded as interactive? This essay will discuss interactivity in films which does not offer any psychical interaction to its audience, but triggers interactivity in other ways.

The examination of the issue may be broken down into the following three main components. In the first part, a brief overview about interactivity and interactive cinema is given. The second part is devoted to the analysis of the above-mentioned films. In the section named "Playing with Lola", the film *Run Lola Run* and it's similarity with a video game will be discussed. "Untying with Leonard" is the part that discusses *Memento* and its non-linear narrative structure and the intense cognitive experience it allows to the spectators. Then, in the following section titled "Creating a Story with *Pillow Book*", Greenaway's film's ability to give a chance to it's spectators to form the story on their own by having multiple scenes in a frame is pointed. At the end, I will sum up the discussion and conclude the argument.

1. Interactivity

When the broad meaning of interactivity is considered, it can be said that, in an interactive text the user expects and gets feedback in response to the actions s/he takes. A work, which includes interactivity, provides their user a kind of freedom that the reader of a conventional text does not have. The user of an interactive text becomes like the author of the work, since the user can manipulate and create an effect on the work. Moreover s/he determines the text's flow. Lev Manovich describes the process of interactivity as follows; "in the process of interaction the user can choose which elements to display or which paths to follow, thus generating a unique work. In this way the user becomes the co-author of the work."⁴ When the technological interaction with the web is considered -which turned out to be a standardized daily practice- it is seen that the practice does not generate a unique work. In this context Gansing writes that; "in the transforma-

3. Dir. Peter Greenaway. 1995.

^{1.} Dir. Christopher Nolan. 2000.

^{2.} Dir. Tom Tykwer. 1998.

^{4.} Lev Manovic, The Language of New Media, p. 55

tion of old media into new media by way of digital technology, the desire to interactivity is strong, especially in the medium of film."⁵ While watching interactive films, there is a possibility of being the author of a particular meaning although that possibility is limited. While defining interactive films Weiberg notes that;

the important decisions in a story are no longer made by its hero but by the viewer itself. That means the movie would be interrupted from time to time for the viewer to choose among two or more possibilities of how the story goes on." ⁶

In the context of interactive films, it would be an oversimplification to consider the notion of interactivity as the usage of the text in the domain of computers or to equate it with a click of a mouse. In this sense Manovich says that, "once an object is represented in a computer, it automatically becomes interactive. Therefore to call computer media interactive is meaningless".⁷ Relying on Manovich's comment, one should also question considering switching channels on the TV, choosing subtitle preferences in a DVD, using the back-forward buttons in a video player or choosing a link in the World Wide Web, as fitting in the description of interactivity. Such actions can only be described as the features of the medium and do not affect the discourse or the meaning in the work. Rather than user interface based interactivity, the mental connection the work creates with its audience includes more interactivity.

Interactivity is perceived as having an ultimate need of tools such as a mouse to click, an interface to use. Maybe without using any supplementary tool, yet without having a physical interaction, one may interact with the work by having a mental engagement. In the following section I will try to give three striking films to discuss this argument.

2. Film Analysis

Playing with Lola Like an Avatar

Tom Tykwer's 1998 film *Run Lola Run* has a distorted non-linear narrative since, the film tells three variations of the same story using flash-forwards. Each story starts to alter with slight differences from the previous one and finishes with a totally different end. The main character Lola is like an avatar in a video game. Her aim is to rescue her boyfriend by finding a bunch of money and create her own fortune. It is as if the film is showing a simulation of a video game where the player actually takes a part in the virtual world and Lola is a figure in the simulation and when she could not reach her imagined happy ending, she restarts her game again and tries one more time. Similar to an adventure video game, in this particular film, Lola like an avatar has a goal. She has to eliminate the obstacles on her way and it is not a surprise that she has a limited time to do all these. When the spectator identifies with the main protagonist of the film, the interaction starts. Now, the goal of Lola, is the spectator's mission too. The obstacles are now her/his obstacles. This film gives the viewer to play a simulation along with Lola by simply identifying with her. Computer games are interactive as the direct actions of the player determine the flow of the game. A viewer cannot fight with the obstacles by making his/her own choices which effects the flow of the film, but watching Tykwer's film needs an intense cognitive process, which gives the film, it's

^{5.} Kristopher Gansing, "The Myth of Interactivity or the Interactive Myth: Interactive Film as an Imaginary Genre" p. 33 http://www.hypertext.rmit.edu.au/dac/papers/Gansing.pdf

^{6.} Birk Weiberg, "Beyond Interactive Cinema" http://www.keyframe.org/txt/interact

^{7.} Lev Manovic, The Language of New Media, p. 55

interactive quality. After the viewer realizes that the second story of Lola, is not the exact repetition of the first, the interaction starts. The viewer after watching the first story now should try to detect the slight variations from the initial narration. Once the viewer knows the end of the initial story, s/he will try to guess what will be happening in the end of the other variations, along with the minor differences Lola faces. Step by step by guessing the next possibility, the viewer actually creates her/his own story along with Lola's run. While watching the third variation, the viewer, who is now in an intense mental process, might try to catch the same events that end differently and may imagine her/his own way on how the story will reach a happy ending. The film is based on choices and chances that allow the viewer to contribute by guessing, imagining, creating solutions for Lola. The film could have a lot of alternations. Even after the film ends, the cognitive process can continue and the viewer can keep on creating his/her own version of Lola's story.

What is striking in this film is that the viewer should be actively involved in following the narrative to comprehend the story as a whole film. This particular film demands from the viewer to remember the details of the previous sub-stories. The viewer should compare and contrast the choices of Lola's and the outcome of them in three different stories in order to make sense of the whole and enjoy the film. Therefore, this film offers interactivity to its viewers while human thought and memory plays an important part in grasping the adventurous story of Lola.

Run Lola Run, as a kind of a database, could have been a good example of an interactive work according to the traditional description, if it had given the viewer the opportunity to choose among the predetermined choices via the help of a tool, instead of Lola. After the user tries all three variations, s/he could have watched Twyker's film. Game designers claim that adventure games "are built on stories, and you must approach the game design from that angle, as if you are writing a script or a book", in this sense Gansing says that; "adventure games are not seldom marketed as actual interactive movies."⁸ I believe *Run Lola Run* cannot simply categorized as a mainstream film. Giving the possibility to create several stories in the audiences mind, being very similar to a computer game and demanding an intense mental process from it's audience, *Run Lola Run* can be considered as an interactive film.

Untying with Leonard Like a Detective

Christopher Nolan's 2000 film *Memento* has also a non-linear narrative while the story runs backwards with flashbacks. The protagonist Leonard has a permanent brain damage that causes him a disability to keep new memories in his mind. So, he copes this defect of his mind, by noting every important detail that he must not forget. His aim is to kill the man who had murdered his wife and left him with this brain damage. The film has a fragmented flow similar to Leonard's mind that is missing recent memories. Thus the film presents a lot of unrelated images, fragments of scenes and hints that Leonard must link. By identifying with Leonard, the spectator also tries to untie the knot. To understand the film, the spectator should solve similar problems Leonard faces. This makes the spectator to be deeply involved in the film from the start to the end.

The film is so much fragmented that the spectators should build the story by themselves via connecting the mental gaps between unrelated images, scenes and sounds that obliges an intense cognitive participation. That is why, likewise *Run Lola Run, Memento* also has an interactive side. Although the viewer does not have a physical effect on the flow of the story via using

Kristopher Gansing, "The Myth of Interactivity or the Interactive Myth: Interactive Film as an Imaginary Genre" p. 41 http://www.hypertext.rmit.edu.au/dac/papers/Gansing.pdf

a tool, she/her watches the film different than any other viewer of a mainstream film. With every new information or hint (such as; the polaroid images, the notes, the tattoos etc.), each spectator fills the gaps differently on their own way. In most of the interactive works, the user cannot make a totally new text, but only a selection could be made between the possible choices which are created by the producer. Every time the experience is new, but only new, within the predetermined limitation. The reader has an impact but s/he is not in total power. However, in this film, the viewer has the power to create the story in his/her own way according to his/her imagination without being limited with the choices defined previously. S/he should only follow the given hints like a detective. What Leonard actually misses is a story. So, the spectator creates one for him in her/ his mind while watching the film. By constructing the hints, linking the images and interpreting the dialogues, the viewer writes the story of Leonard. According to Bodnar, *Memento* is like a database;

the viewers confront the database, creating their own mental databases of images, sequenc es and ideas required in reconstructing the fragmented narrative of the film. In recognizing this relation, Nolan engages his audience by inviting them into the medium as an interpreter and participant in the database of imagination.⁹

As the result of the viewer's participation, every story written while watching *Memento*, is much more different than the intended story of Nolan's therefore, this film includes an interactive quality in it. Manovich says that;

interactive media ask us to identify with someone else's mental structure. If the cinema viewer, male or female, lusted after and tried to emulate the body of the movie star, the computer user is asked to follow the mental trajectory of the new media designer.¹⁰

Following Manovich's comment, one can say that in Memento the viewer, like wise the computer user, is asked to follow the mental structure of Leonard's yet; Christopher Nolan's.

Creating a Story with Pillow Book Like a Writer

Peter Greenaway defines cinema's major problem as being a very passive medium. He, in his film *Pillow Book*, benefits the advantages of new digital technology. By using video and digital postproduction techniques such as "overlays, insets, shifting screens and freeze frames,"¹¹ he creates an intense visual experience in *Pillow Book*, which makes it different from other conventional films. Unlike *Run Lola Run* or *Memento*, *Pillow Book* does not have a distorted narrative structure or includes flash back and forwards. But the film tells it's story not frame by frame but using multiple screens at a time. The supplementary text can appear anywhere, anytime and in various ratios on the screen. For example, sometimes it can be displayed as visuals and sometimes as the voice over of the main character Nagiko. Dilek Kaya Mutlu describes the experience of watching *Pillow Book* in these words: "multiple screens scattered across the screen enable the spectator to view either different events belonging to different time-space simultaneously or the segments

^{9.} Christopher Bodnar, "The Database, Logic and Suffering, Memento and Random-Access Information Aesthetics", *Film Philosophy*, Vol. 7, No 10. http://www.hypertext.rmit.edu.au/dac/papers/Gansing.pdf.

^{10.} Lev Manovic, The Language of New Media p. 61

^{11.} http://users.skynet.be/ chrisrenson-makemovies/GreenawS.htm

which make a single event from different perspectives".¹² Attaining a type of interactivity in *Pillow Book* by using multiple images and allowing the spectator participate actively by selecting which image to focus and which event to follow, Greenaway challenges the passivity of cinema that he criticizes. Greenaway in an interview, considering *Pillow Book*, says that "there are several images to choose from and it's up to you or the audience in which order you choose them or how you utilize them."¹³ He redefines the spectator's relation with the film by allowing them to reconstruct the meaning of the work by themselves which includes a mental participation therefore interactivity. In this sense, Vernon and Marguerite Gras commented on Greenaway's work and wrote that; "the new technology in terms of multimedia and interactivity allow Greenaway to reconceptualize the relation of image to text and as work to audience."¹⁴ Metaphors used in *Pillow Book* also give a rich ground to the viewer in forming their own meanings since a metaphor can signify several meanings once at a time. For example the main metaphor used in the film is the body, as text and this could be understood in many different ways via various viewers. Ascott writes that;

meaning is not something created by the artist, distributed through the network, and received by the observer. Meaning is the product of interaction between the observer and the system the content of which is in a state of flux, of endless change and transformation.¹⁵

In this context, allowing the chance of creating the meaning of the narrative by a mental contribution can be regarded as creating a shift from a passive viewing point to an active position. Such a shift can trigger an interactive experience although it does not include direct manipulation with a toolset.

Conclusion

Nolan's *Memento*, Tykwer's *Run Lola Run* and Greenaway's *Pillow Book* are staying out of the margins of the conventional mainstream cinema. That is because they include several qualities an interactive work demands although they do not allow physical input from the spectator. This paper, tried to discuss the possibility of interactivity in films, which does not offer any physical manipulation. According to Packer and Jordan interactivity

encourages a creative engagement by the user that leaves its marks on the artwork. Just as a conversation is a two-way experience that affects both parties, interactivity is an extension of our instinct to communicate, and to shape our environment through communication.¹⁶

The mental process these films demand like; creating stories, guessing the next step, filling the gaps, linking ideas, remembering the details, selecting frames, connecting the hints, constructing the meaning and understanding the metaphors, are all elements which allows the spectator to participate and get involved to the film. As Packer and Jordan say, they do "encourage a creative engagement". Instead of tools or psychical input, in such films everything happens in the mind of the audience. Such interactivity can be hard to trace but easy to experience individually. In

- 14. Vernon Gras and Marguerite Peter Greenaway: Interviews. p. xii.
- 15. Ascott qtd. in Packer Randall and Jordan Ken Overture p.xxxi.
- 16. Packer Randall and Jordan Ken Overture p.xxxvi

^{12.} Kaya Dilek Mutlu, *F is for Film, G is for Greenaway: The Cinematic Representation in the Films of Peter Greenaway.* p. 158

Manu Luksch, "the Medium is the Message: Interview with Peter Greenaway" http://www.heise.de/tp/ english/special/film/6112/1.html

this context, *Run Lola Run, Memento* and *Pillow Book* are films that, exemplifies a possibility of interaction with the work by having mental engagement.

Without giving a tool to its spectator but giving the possibility to participate and interact with, such films can be considered harder than designing an interactive project. *Run Lola Run, Memento* and *Pillow Book* in several different ways use people's mind, instead of tools, to give the chance to interact; that is why, they are different and special. They make use of the realm of imagination and the possibility to have various alterations of an initial idea via making use of subjective perception. In this sense, it can be argued that maybe even reading a book can also have an interactive part while it allows the reader to construct the world s/he imagines in her/his own way but not in such a way these films provides. It is true that to comprehend a text or image requires such mental processes like recalling, linking but when one think of the medium cinema, not all films provides such an available space to the spectator to manipulate according to its own mind's eye. By making use of the notion interactivity, these films provide that blank area which the spectator can wander around freely only limited with their ability to visualize. What differentiate these films from an interactive work is their ability to guide the spectator but never limit them with choices and tools.

Works Cited

- Ascott qtd. in Packer Randall and, Jordan Ken *Multimedia: From Wagner to Virtual Reality "Over ture*" W. Norton & Co, 2000.
- Bodnar, Christopher. "The Database, Logic and Suffering, Memento and Random-Access Infor mation Aesthetics", Film Philosophy, Vol.7, No 10, 2003. http://www.film-philosophy.com/ vol7-2003/nIObodnar. 6 Jan 2004
- Gansing, Kristopher, "The Myth of Interactivity or the Interactive Myth: Interactive Film as an Imaginary Genre" Melboune Mo University Press, 2003. http://www.hypertext.rmit.edu.au/ dac/papers/Gansing.pdf. Web. 26 December 2003
- Gras, Vernon and Marguerite *Peter Greenaway: Interviews*. Jackson: University Press of Missis sippi, 2000.
- Luksch, Manu "The Medium is the Message: Interview with Peter Greenaway" 1997 http://www. heise.de/tp/english/special/film/6112/1.html. 4 January 2004.
- Manovich, Lev, The Language of New Media Cambridge: MIT Press, 2001.
- Mutlu, Kaya Dilek. *F is for Film, G is for Greenaway: The Cinematic Representation in the Films of Peter Greenaway.* Diss. Department of Graphic Design and Institute of Fine Arts, Bilkent University, 1999.
- Packer Randall and Jordan Ken *Multimedia: From Wagner to Virtual Reality "Overture*" W. Nor ton & Co, 2000.
- Weiberg, Birk. "Beyond Interactive Cinema" 2002. http://www.keyframe.org/txt/interact.

THREE-DIMENSIONAL TELEVISION AS A NEW MEDIUM DIDEM ÖZKUL

Expressing presence requires the reproduction of the physical features of external reality; the possibility of interaction and free action, and the creation and sharing of the cultural web thatmakes meaningful – and therefore visible – both people and objects populating the environment.¹

This chapter is based on a series of discussions on three-dimensional television (3DTV), in which ways it can be considered as a new medium or as a new user interface for an existing medium, in what ways it affects perceived reality, and what constitutes its potential uses in everyday life. Situating the chapter around the concepts of presence, reality and immersion, 3DTV is analyzed as a new media tool according to Lev Manovich's new media concept and under this analysis the illusion of presence and perceived reality are emphasized. Additionally, the history and evolution of three-dimensional image technologies—along with the social urge to reflect reality using these technologies both by the users and the producers— are discussed.

Presence and Immersion

In the three-dimensional world, everything is defined with coordinates. In this setting, presence firstly comes into mind as a physical presence; however ontologically the very essence of our being is the mental presence because it is a mental state. Presence is defined as the users' feeling of *being there* in a mediated environment by Witmer and Singer who have tried to measure presence in the virtual environments². The basic component of *being there* is the location and thus, the distance between the two points of communicative action plays a crucial role in the desire of *being*. Thus new media's immediacy becomes an important factor in terms of overcoming differences in time and place. New media compresses the distance between two places thereby enhancing the feeling of presence because of immediate and communicative feedback.

Lombard and Ditton³ defined presence as the illusion of non-mediation in which the user no longer perceives the display medium. In this sense, presence of this sort can also be regarded as a form of embodiment. Furthermore, as Mark Hansen has noted, human beings can also be considered as interactive media⁴. When we consider human beings as interactive media, it is easier

^{1.} Wijnand Ijsselsteijn and Giuseppe Riva, "Being There: The Experience of Presence in Mediated Environments" in *Being There: Concepts, Effects and Measurement of User Presence in Synthetic Environments*, Giuseppe Riva, Fabrizio Davide and Wijnand Ijsselsteijn, p.14.

Bob G. Witmer and Michael J. Singer, "Measuring Presence in Virtual Environments: A Presence Questionnaire", Presence, Vol. 7, No. 3.

^{3.} Matthew Lombard and Theresa Ditton, "At the Heart of It All: The Concept of Presence", *Journal of Computer Mediated Communication*, Vol. 3, No. 2.

^{4.} Mark B. N. Hansen, Bodies in Code: Interface with Digital Media.

to understand the processes of immersion and embodiment in new media. Especially in new media such as virtual reality, and with the help of immersive interfaces and applications, users feel embodied within a particular virtual context. "What is truly novel and promising about contemporary consumer electronics is not the possibility they open for creating ever more immersive illusory spaces, but rather they expanded scope they accord embodied human agency."⁵ Thus, this helps the user to seamlessly associate virtual experiences with the real life experiences and to identify their selves with the media in their daily lives. Therefore, the success of any new media lies in of its ability to simulate presence. As Biocca discusses:

When we experience our everyday sense of presence in the physical world, we automatically generate a mental model of an external space from patterns of energy on the sensory organs. In virtual environments, patterns of energy that simulate the structure to those experienced in the physical environment are used to stimulate the same automatic perceptual processes that generate our stable perception of the physical world.⁶

The idea of equating daily life experiences with the virtual experiences through technological mediation is also reflected in Reeves and Nass. "The individuals' interactions with media, new media, computers and television are fundamentally social and natural, just like interactions in real life."⁷ So as an automatic response to mediation we equate media with the real life. Presence can also be defined as the illusion of being there or an experience of being in an environment while physically situated in another location.⁸ The feeling of presence created as a result of interaction with new media is closely related to the real experiences. The users struggle in the images' virtual world in order to feel real via the mental presence and they need to show it physically by carrying those experiences to their daily lives. With the advances in design of the new media interfaces and with the extensive usage of computerized media in everyday life, Human Computer Interaction (HCI) and new media interaction have shifted to a new paradigm: *we want to be there*.

In properly assessing the impact of new media on the articulation of presence we must elaborate upon two central terms: immersion and interaction. Immersion is related to one's subjectivity and to the sense of being in a certain predefined medium. Immersion can be defined as follows. As Lister et al. explain,

While normally referring to being under the surface of, or in a body of liquid, in the present context it refers to the experience of being inside the world of a constructed image. The image is not before the viewer on a surface from whose distance they can measure their own position in the physical space.⁹

^{5.} Ibid., p. 3.

^{6.} Frank Biocca, "Cyborg's Dilemma: Progressive Embodiement in Virtual Environments", *Journal of Computer Mediated Communication*, Vol. 3, No. 2.

^{7.} Bryon Reeves and Clifford Nass, *The Media Equation: How People Treat Computers, Television, and New Media Like Real People and Places*, p.5.

^{8.} Matthew Lombard and Theresa Ditton, "At the Heart of It All: The Concept of Presence", *Journal of Computer Mediated Communication*, Vol. 3, No. 2.

^{9.} Martin Lister, Jon Dovey, Seth Giddings, Iain Grant and Kieran Kelly, *New Media: A Critical Introduction.* Glossary.

Thus when the users start feeling present with the help of interactive elements in new media, they are already immersed in the process. Let us explore in greater detail the factors that affect this process in 3D media. According to a study conducted by Ryu, Myung and Lee,¹⁰ there are four interacting factors that contribute to the feeling of presence in mobile 3D: condition, interface, attention and feedback. The condition factors are dependent on the user's mode and degree of control as well as immediacy of control, resolution, visual display quality, anticipation of events, motion, consistency with the objective world, view of the field and continuity. The interface factor is mainly concerned with the control of the event, the interface awareness, intuitive mapping and being there.¹¹ Among the attention factors are response delay, selective attention and speed. As the sub-factors of feedback (the forth factor), sound and tactile can be taken for granted. Adopting the above mentioned study's factors of presence, it is argued that all of the four factors are essentially crucial for new media in general; but the interface design that provides the user with the sense of being there (a sub-factor of the interface defined by Ryu, Myung and Lee) is most important in simulating presence; however, the interface alone cannot add meaning to the interaction process and experience. Users seek to attach meanings to their experiences in order to real-ize their experiences for the sake of being present. Therefore, from the designer's point of view, it becomes an important factor to design experiences in which users can find meaning. Thinking of 3DTV as a new interface for the conventional television - and as a new medium - the condition factors resolution and visual display quality as well as the motion and the view of the field are important in designing experiences and product features. These factors are strongly emphasized by the television manufacturers in order to grasp the attention of the potential consumers.

Three-Dimensional Television

The notion of perceived reality is an important concept when we are talking about televisions and tele-presence. The media industry has searched for better ways to reflect reality/simulate presence and the latest technologies are the final point now that we can reach to. Where is three-dimensional television located among these immersive and interactive new media? Is it only a new interface for the traditional television such as the plasma, LCD and LED technologies offer; or is it totally a new medium in terms of creating the sense of presence?¹² Even if interactivity and three-dimensionality are not the same,¹³ the three-dimensional images create an atmosphere through which the user can easily interact sensorial both with the medium itself and the content.

First, let's look at the historical evolution of reality and interactivity starting with cinema. We will then continue with 3D animations and come up with an analysis of 3DTV and 3D advertising as one of the latest developments in new media.

3D photography, cinema and TV actually have a long history; in fact, stereoscopic 3D versions of these common visual media are almost as old as their 2D counterparts.

^{10.} Hyun Jong Ryu, Rohae Myung and Byongjun Lee, "Measuring Presence in Mobile 3D", in *Human-Computer Interaction*, Julie A. Jacko, p. 681.

^{11.} Ibid., p. 681.

^{12.} Here, it is important to clarify the distinction between three-dimensional displays and three-dimensional television: "We use the term 3D display to refer to imaging devices which create 3D perception as their output. 3DTV refers to the whole chain of 3D image acquisition, encoding, transport/broadcast-ing, reception, as well as display" (Onural and Özakta , 2008: 4).

^{13.} Ibid., p. 7.

65

Stereoscopic 3D photography was invented as early as 1839. The first examples of 3D cinema were available in the early 1900s. Various forms of early 2D television were developed in the 1920s and by 1929; stereoscopic 3DTV was demonstrated.¹⁴

When we look at the history of cinema and television, it can be observed that both the content and the service providers have searched for better ways to reflect the reality in order to create a competitive advantage. Reflecting the reality concept requires surely an immersive and interactive medium that will allow the user to interact with the reflected reality. It should, in other words, surround the audience. For example, that is why Dolby digital and virtual surround sound systems became popular:

When it comes to reproducing natural sound, the most realistic effect would come from having an infinite number of speakers, which would mimic the transmission of audio waves from all points in the environment. As a compromise, the Dolby Digital sound standard, which is now used for DVD players, laser discs and digital and satellite television, calls for six speakers: left and right front, center front (for dialogue) and left and right rear, as well as one for low-frequency effects, which can be placed just about anywhere in the room. Such a setup can make the dogfights in "Top Gun" sound as if they were happening two inches away. But many households lack the space or money for even six speakers. The solution is to use virtual surround sound, a technology that fools the brain into thinking that there are speakers to the sides and the rear when you actually have as few as two in front of you.¹⁵

People want to feel and perceive the virtual reality, live the reality. Reproductions, streaming pictures and different perspectives were not enough to create that feeling of the real. To break the one-way-communication format of the conventional broadcast/consumer media, interactivity and immersion conceptsare introduced. Along with the improvements in technology, apart from virtual reality, 3DTV has become a new media tool for many media institutions not only because of its potential in the television market but also because of its ability in creating an immersive atmosphere. Although 3D movie theatres and I-MAX cinemas were not in high demand in the initial stage of their launch because of their lower quality and resolution by contemporary standards, nowadays they are demanded for their impact as creating a more realistic sense of presence and immersion. It is believed that with good image resolution quality, 3D TVs can take the place of 2D TVs just as the color TVs took the place of black and white TVs. Apart from the film industry, the video gaming industry has been using 3D computer graphics that enable the user to feel *immersed* in the game context. These computer graphics are mainly based on the notion of perspective – which is also another important factor in interactivity.

Secondly, the discussion is whether the 3DTV can be considered as a new medium. If we analyze this technology according to Lev Manovich,¹⁶ one can conclude that it contains the properties of a new medium; it is *numerically represented*, *modular*, *automated*, and *variable* and

^{14.} Ibid., p. 1.

Eric A. Taub, "The Sweet Deception of Virtual Surround Sound", *The New York Times*, 21 April 2010, http://www.nytimes.com/1999/12/02/technology/the-sweet-deception-of-virtual-surround-sound. html?scp=10&sq=dolby%20surround&st=Search

^{16.} Lev Manovich, The Language of New Media.

can be *transcoded*. In new media, there is random access, meaning that the user can decide on the place and time of the interaction. 3DTV carries all these properties of new media. Thus, 3DTV can be thought of as a new medium according to Manovich's conceptualizations. Indeed, Lev Manovich conceptualized 3D virtual reality as a new medium in and of itself. "If we follow Bazin's approach and compare images drawn from the history of 3D computer graphics with the visual perception of natural reality, his evolutionary narrative appears to be confirmed."¹⁷ Manovich looks at the 3D reality from the perspective of cinema and non-linear narrative in cinema. "Comolli reads the history of realistic media as a constant trade-off of codes, a chain of substitutions producing the reality effect for audiences, rather than as an asymptomatic movement toward the axis labeled 'reality'."¹⁸ Not only because of its carrying the properties of new media, but also because of its being a step in the human desire for presence; 3DTV can be regarded as a new interface for the 2D television and as a new product for the consumer electronics market.

The Display and the 3DTV as a Product

3DTV can take several forms such as a TV box with a 3D image, or a hologram image (which is still in its infancy) reflected on a glass table placed vertically or horizontally. For the time being, there are vertical displays launched by the consumer electronics pioneers. The questions about the form will be made clearer when the engineers find a better way to promote it as a product in terms of usability and compatibility. When we think of the media tools such as 2D TVs and cinemas, one can say that it is better to have the image projected on a vertical screen. In terms of everyday life activities, it can also be said that the 3DTV may change the design in homes, shopping centers, cinemas and in almost any place where the TV sets are used. We have to engage in research to come up with a solid understanding of the possible impacts that 3DTV can have on our daily lives as a product. Understanding the significance of 3DTV is not only a matter of technology and marketing, but it is a matter of cultural change and social impact that this new medium will create. The 3DTV as a household consumer product has been launched to the market. However, it should also be noted that it has a wider range of potential use in other industries as well. Scientific and education purposes, industrial design and arts purposes, and also medical purposes should also be regarded among the potential uses of 3DTV. Turning back to the household consumer market, 3DTV was introduced as a great blast. Even if this is not surprising for any new technology, what attracts the attention of all those producers is its potential as a substitute for the 2D conventional television.

> There's no question that 3D TV was the biggest thing going at the Consumer Electronics Show in Las Vegas this year in January. Every major TV maker from Samsung to LG to Sony to Panasonic said they would have 3D capable TVs on the market within the first half of the year. The hope among the consumer electronics industry is that the 3D feature will help spur new sales of TVs.¹⁹

There are three-dimensional televisions in the market produced by big market players such as LG (3D LCD TV), Panasonic (Full HD 3D), Sony (3D LCD television) and Samsung (Full HD 3D)

^{17.} Ibid., p. 189.

^{18.} Ibid., p. 189.

Marguerite Reardon, "3D TV Has Arrived, But Glitches Remain", CNET News. 21 April 2010. http:// news.cnet.com/8301-30686_3-20001672-266.html

LED TV). Some of these producers also started to launch their 3D compatible camcorders and 3D gaming consoles. The conversion from 2D to 3D can be possible with user-assisted product systems.²⁰ This has also created an interest both for the content and the service providers. Even if all of these products are featured in terms of their being LED or LCD, they are using innovation in 3D technologies in order to replace traditional 2D with 3DTV in the home. Although it is an old technology, the product is a new one in terms of consumer electronics. How the consumers will react to this new product still remains a question waiting to be answered.

According to a study conducted by Onural and Özaktaş,²¹

People think of the image/scene jumping out or somehow extending from the front of the screen. It was noted that although not everyone had seen Princess Leya [sic] projected by R2D2 in Star Wars, the idea of a crystal ball was widespread in folklore. However, most people seem to imagine a vertical display like conventional TV, rather than the tabletop scenario. So called three dimensional computer games which are not truly three dimensional, but where the action takes place in a three dimensional domain as opposed to early computer games which take place in flatland.²²

Apart from virtual reality, using holograms is one way to simulate three dimensional realities along with the interactivity. What 3D images do is to break out the traditional narrative style both for the movies and for the future of the TV. They create interactivity in the sense that they turn the plot points into nodes. By turning the basic narrative with the help of the image into three dimensional nodes, holograms also create that sense of reality much better than as compared to a 2D image. This 2D, 3D concept in the narrative apart from image was first introduced by André Bazin. When this narration shift along with the 3D image can be applied to television, a lot of people will have the chance to enjoy the interactivity with what is actually going on in the program.

This interactivity in new media is applied to a broad range of media objects and tools. For instance, one of the easiest ways for interaction is the computer and the Internet. These technologies give the user flexibility in audiovisual elements along with the text, which in turn, creates a perceived notion of reality. But this computer interactivity was not able to create a *more real reality*, that's why 3D animated graphics and computer games boosted out the old version 2D games. So, it can be said that there is an obvious shift to, and demand for, 3D graphics and images. "The same enthusiasm that photography stereographs and Lumiere brothers' Cinematographe received at the end of the 19th century is now seen with 3D TV, virtual reality and other related technologies."²³ When we think in this context, can 3DTV be used as a new medium for advertising? The search for more realistic and affective ways to advertise goods, sell content, and commodify virtual and immersive experiences has been an important driver of technological innovations.

Levent Onural and Haldun M. Özaktaş, "Three-Dimensional Television: From Science-Fiction to Reality" in *Three-Dimensional Television: Capture, Transmission, Display,* Haldun M. Özaktaş and Levent Onural, p.3.

^{21.} Ibid.

^{22.} Haldun M. Özaktaş, "Three-Dimensional Television: Consumer, Social and Gender Issues" in *Three-Dimensional Television: Capture, Transmission, Display,* Haldun M. Özaktaş and Levent Onural, p. 603.

^{23.} Ibid., p. 602.

A Potential Use of 3DTV: 3D Advertising

Why advertising? 3DTV as a new medium as well as a new consumer product suggests many possible commercial uses. After the 'early adopters' market has been saturated, perhaps in a few years, it is estimated that 3DTV will dominate the television market. The content providers such as Time Warner and Newscorps are already on their way of producing 3D television films compatible with 3DTVs. The conventional mass media industry works solely on the basis of commercial budget, thus 3D advertising will become one of the competitive advantages that enable the producers to differentiate their products and their corporate personalities. Today consumers are bombarded with nearly 500 advertising messages per day. As this process gets complicated and as new competition increases, it became harder to reach the target market. Getting the consumers' attention is one of the greatest obstacles faced by the marketers; marketers already struggling with the widespread habit of *zapping* TV commercials.

You zap around as you normally do. You start by checking out the first channel, and then you decide to check the next channel. If that isn't interesting, you zap to the third channel. If that doesn't seem interesting you just try the fourth channel. If you are out of luck and that turns out somewhat boring as well, you can just, zap, zap, zap through all the channels.²⁴

Both media giants and marketers face this challenge of overcoming zapping. So why not surround the audience with something new and something so immersive that one feels that s/he has to interact with it and stop zapping? What can be this new medium? The 3DTV...

As the concept of 3D animation gained much importance, so did the illusionism in it. "Illusionism was limited to the introduction the indication of an object's volume. To compensate for this limited illusionism in the representation of objects, computer animations of the early 1980s ubiquitously showed deep space."²⁵ and adding a third dimension to the graphics enlarged the object's volume, the space and as a result; illusionism. This led to a better representation of the reality. The second step was to create simulations of the perceptual properties of the objects. Here, in the simulation of the real scenes, cinema took the place and 3D and I-MAX cinemas became popular. The obstacles faced by film producers are also faced by 3D TV programmers and advertisers.

Creating a computer time-based representation of an object involves solving three separate problems - the representation of an object's shape, the effects of light on its surface, and the pattern of movement. To have a general solution for each problem requires an exact simulation of underlying physical properties and processes - a task whose extreme mathematical complexity renders it impossible to execute.²⁶

Apart from representation, simulation, and illusionism, problems that may be faced while making such a new media object through the medium 3DTV problematizes the concept of perceived reality. In optically based representation, the audience sees the existing reality because the

Valdis Oscarsdottir as stated in Birk Weiberg, "Beyond Interactive Cinema", *Cinema in the Digital Age*. 21 April 2010. http://keyframe.org/txt/interact/#11

^{25.} Lev Manovich, The Language of New Media, p.190.

^{26.} Ibid., p. 192.

camera records the existing reality as it is perceived by the user. However, in 3D vision, especially in 3D animations formed with computer; "reality itself has to be constructed from scratch before it can be photographed by a virtual camera. Therefore, the photorealistic simulation of 'real scenes' is practically impossible, as techniques available to commercial animators only cover the particular phenomena of visual reality."²⁷

Ziegler talked about the implications of mixing real and animated characters, especially animated characters with real skin; this produces an erosion of trust in video images. Animated images are obviously not to be trusted, and everyone knows that still photographic images can be altered by "photomontage." However, realistic video images are still trusted because people know they must be real shots of real people; people "know" that such images cannot be fabricated. But as everything becomes fully manipulable, we are entering an era where no media content can be taken to constitute "evidence"; you can believe it to the extent that you trust the source, but there is no true first-hand witnessing-at-a-distance any longer since virtually most forms of transmitted data will be manipulable, even the most "realistic" ones of today. And people will know it.²⁸

What marketers try to do is to overcome the problem of this notion of presence and reality. Advertisers try to convince people to try the products and they do so by making people live and experience the products through some affective appeal to the consumer's sense of presence. These often humorous, emotional, and/or sexual appeals engender interactivity because they have a connection with the daily real life. Presence and reality, in other words; illusion of *being there* is an important notion in this context.

Although presence is often explored in the literature of virtual reality, few media theorists would argue that the sense of presence suddenly emerged with the debut of virtual reality. The illusion of presence is a product of all media, and virtual reality is a medium that can generate the most compelling sense of presence.²⁹

As discussed in the case of virtual reality, 3D images are the best way to create this illusion of being there. Also, referring back to the study about three-dimensional television mentioned above;

I. Rakkolainen joined this discussion by suggesting that with the digitalization of all forms of media, it would be possible to create immersive and interactive 3D experiences; eventually synthetic 3D objects would be indistinguishable from real objects captured with a camera.³⁰

^{27.} Ibid.

Haldun M. Özaktaş, "Three-Dimensional Television: Consumer, Social and Gender Issues" in *Three-Dimensional Television: Capture, Transmission, Display,* Haldun M. Özaktaş and Levent Onural, p. 623-624.

Hairong Li, Terry Daugherty and Frank Biocca, "Impact of 3-D Adevrtising on Product Knowledge, Brand Attitude, and Purchase Intention: The Mediating Role of Presence", *Journal of Advertising*, Vol.31, No.3, p.44.

Haldun M. Özaktaş, "Three-Dimensional Television: Consumer, Social and Gender Issues" in *Three-Di*mensional Television: Capture, Transmission, Display, Haldun M. Özaktaş and Levent Onural, p. 624.

Consumer psychology research suggests that consumers feel the sense of presence while interacting with a 3D product even in a non-immersive, mediated environment. This means that usage of 3DTV and in it; 3D advertising can open new insights to consumer studies along with the media studies. There are mainly 2 media characteristics that can form the basis for 3D advertising; antecedents of presence are interactivity and richness. These two are the core characteristics of 3D advertising along with the 3DTV.

Shoppers are likely to gain a unique experience when they feel physically present because a virtual e-commerce environment is able to simulate many of the same experiences as a real store; with presence mediating the persuasive impact the virtual experience created by presence simulated a direct experience, which resulted in increased persuasion.³¹

When 3D TV is considered as a new medium for advertising, one can conclude that it is both marketing as well as a media revolution. As a discussion of medium, "3D characters animated in real time move arbitrarily around the space itself can change during the game. This switch also made virtual words more cinematic, as characters, could be better visually integrated with their environment."³²

What will be changed with 3D advertising? First of all, as a new medium, 3DTV will be able to exchange responses in real time that will lead to a broader concept of interactivity. Interactivity, "as the extent to which users can participate in modifying the form and content of a mediated environment in real time",33 will increase the perceived reality. The perceived reality will be obviously increased by the virtual experience. "[V]irtual experience tends to be richer than indirect experience rendered by print ads, television commercials, or even 2D images on the web."34 3DTV will form a more active cognitive and affective medium than a 2D TV. As schematized below, the virtual experience created by 3D holograms can lead to a more convincing embodiment of presence. The media characteristics such as audio, visual, textual, or digital and interactive, play important roles in the consistency with the content of the media. In advertising, this consistency is crucial because you have to use the right type of medium at the right time in order to grasp the consumer. 3DTV usages will not only help the consumers attach meanings to the experience of the product and in so doing carry those experiences over from the domain of virtuality to the domain of reality. 3DTV will create this experience with its ability to present information to many senses. Even if one cannot touch and feel the texture of a product in reality during a TV commercial, the 3D modeling of a product in virtuality can lead to a sense of touch as the three-dimensional model reflects the reality of a product in such a way that one may want to reach and grab the product. Also, as stated by Li, Daugherty and Biocca;

Shoppers may always believe the texture of a jacket is important; however, when they

Hairong Li, Terry Daugherty and Frank Biocca, "Impact of 3-D Adevrtising on Product Knowledge, Brand Attitude, and Purchase Intention: The Mediating Role of Presence", *Journal of Advertising*, Vol.31, No.3, p.44.

^{32.} Lev Manovich, The Language of New Media, p.83-84.

Hairong Li, Terry Daugherty and Frank Biocca, "Impact of 3-D Adevrtising on Product Knowledge, Brand Attitude, and Purchase Intention: The Mediating Role of Presence", *Journal of Advertising*, Vol.31, No.3, p.45.

^{34.} Ibid.
see bright colors or fashionable designs, combines with user controlled interactivity; they may think these attributes are more important than the feel of the jacket for their product evaluation within the context of e-commerce.³⁵

The consumers that interact with 3D advertising rather than 2D advertising are more likely to experience an increased sense and illusion of presence.

The 3DTV as a new medium used for advertising will be an affective one. Apart from using it in big shopping malls or on billboards, it may also enable users to experience both this new technology and the commercial products offered through 3D advertisements while sitting in the comfort of one's own home.

To conclude; according to the above discussions, Manovich's conceptualization of new media can be related to 3DTV in terms of its being modular, variable, transcoded, automated and numerically represented. However, we can't say that it is a brand new medium; because it uses the same logic as of the conventional television and the tele-presence. It can be considered as a new interface design of an already existing medium: the conventional television. Whether it will replace the existing conventional 2D television in everyday life is still open for discussion, not only because of its new launch as a consumer product, but also because of audience habits of watching TV. In terms of creating sense of presence, reality and high quality images, the conventional TV audience may prefer the 3D TV over the 2D. Time for its diffusion into everyday life and detailed consumer research are needed to answer this question. Not only will it serve the needs of the advertising and marketing industry, but it will also contribute to a more realistic and pervasive experience of tele-presence; it will omit the distances, it will re-create the notion of *reality* and *presence* in the media, and as a result, it will be *perceived as a new* medium in every aspect of everyday life.

Acknowledgements

The author is thankful to Prof. Haldun M. Özakta and Prof. Levent Onural for sharing their work on 3DTV, and to Vincent Manzerolle for reviewing this chapter and for making important contributions.

Works Cited

Biocca, Frank. "Cyborg's Dilemma: Progressive Embodiment in Virtual Environments." *Journal of Computer Mediated Communication* 3.2 (1997): n. pag. Web. 21 April 2010.

Hansen, Mark B. N. Bodies in Code: Interface with Digital Media. USA: Routledge, 2006..

- IJsselsteijn, Wijnand and Giuseppe Riva. "Being There: The Experience of Presence in Mediated Environments." *Being There: Concepts, Effects and Measurement of User Presence in Synthetic Environments.* Eds. Giuseppe Riva, Fabrizio Davide and Wijnand Ijsselsteijn. The Netherlands: IOS Press, 2003. 3-16.
- Li, Hairong, Terry Daugherty and Frank Biocca. "Impact of 3-D Advertising on Product Knowledge, Brand Attitude, and Purchase Intention: The Mediating Role of Presence." *Journal of Advertising* 31.3 (2002): 43-57.
- Lister, Martin, Jon Dovey, Seth Giddings, Iain Grant and Kieran Kelly. *New Media: A Critical Introduction*. 2nd ed. USA: Routledge, 2009.
- Lombard , Matthew and Theresa Ditton. "At the Heart of It All: The Concept of Presence." *Journal* of Computer Mediated Communication 3.2 (1997): n. pag. Web. 21 April 2010.
- Manovich, Lev. The Language of New Media. USA: MIT Press, 2001.
- Onural, Levent and Haldun M. Özaktaş. "Three-Dimensional Television: From Science-Fiction to Reality." *Three-Dimensional Television: Capture, Transmission, Display.* Eds. Haldun M. Özaktaş and Levent Onural. USA: Springer-Verlag, 2008. 1-10.
- Özaktaş, Haldun M. "Three-Dimensional Television: Consumer, Social and Gender Issues." *Three-Dimensional Television: Capture, Transmission, Display.* Eds. Haldun M. Özaktaş and Levent Onural. USA: Springer-Verlag, 2008. 599-629.
- Reardon, Marguerite. "3D TV Has Arrived, But Glitches Remain." *CNET News: Signal Strength.* Cnet Mag., 5 Apr. 2010. Web. 21 April 2010.
- Reeves, Bryon and Clifford Nass. *The Media Equation: How People Treat Computers, Television, and New Media Like Real People and Places.* USA: CSLI Publications, 1996.
- Ryu, Hyun Jong, Rohae Myung and Byongjun Lee. "Measuring Presence in Mobile 3D." *Human-Computer Interaction: Interaction Platforms and Techniques (12th International Conference, HCI 2007, Beijing, China, July 2007, Proceedings, Part II).* Ed. Julie A. Jacko. USA: Springer-Verlag, 2007. 681-688.
- Taub, Eric A. "The Sweet Deception of Virtual Surround Sound." *The New York Times.* The New York Times Mag., 2 Dec. 1999. Web. 21 April 2010.
- Weiberg, Birk. "Beyond Interactive Cinema." Keyframe.org: *Cinema in the Digital Age*, Aug. 2002. Web. 21 April 2010.
- Witmer, Bob G. and Michael J. Singer. "Measuring Presence in Virtual Environments: A Presence Questionnaire." *Presence* 7.3 (2007): 225-240.

AVALON: LEGEND OF FUTURE RIFAT SÜHA KOÇOGLU

Introduction

For the first time in history there is one globally dominant political economy... capitalism. Under this regime, individuals of various social groups and classes are forced to submit their bodies for reconfiguration so they can function more efficiently under the obsessively rational imperatives of pancapitalism (production, consumption, and order)¹

In the last century the highest presence of war and sight machines were acting counterparts for building up the social political and economic structures of the world. Interestingly and expectedly both are being combined to a new order designer, flesh machine. And for the first time there is no opposing party to a control mechanism. The political structure, society and the machine is working together to a combined future. In this essay I will try to explain the formation of the flesh machine from its predecessors and propose a possible counteraction for the balance of political evolution. The control mechanism of the pancapitalism over humanity is the strongest ever. The new social and cultural structure is diminishing the middle class. As George Orwell suggested in his book 1984, middle class is the real threat for the governors, the high class, and their power over the people. I will try to establish a path, using the evolutionary status of the human body, to a new state of being for the mankind. It is the integration of body with its new home, the new media. Using the ideas of the movie Avalon² on a new computer game, I will try to show that there is a way to balance back the ideas of body enhancement and virtual reality. Thus the formation of a virtual world will be the escape path of humanity from the cages of capitalism that are unbreakable from within.

Machines of the World

The war machine is the apparatus of violence engineered to maintain the social, political, and economic relationships that support its continued existence in the world. The war machine consumes the assets of the world in classified rituals of uselessness... and in spectacles of hopeless massacre.³

The conscious usage of the war machine is started after the industrial revolutions. As there were excess amount of production and the possibility of the dream world, in which all humanity will be equal regarding the labor, the balance of powers could only be maintained if the imbalance of the society was to be persisted. Thus war machine is used to consume the technology and wealth of the world. The freedom, justice and protection were cover up ideas for this machine. Thus people were silenced for the sake of so called good.

^{1.} *Critical Art Ensemble.* Flesh Machine–Cyborgs, Designer Babies, and New Eugenic Consciousness. p. 11.

^{2.} Avalon. Dir. Mamoru Oshii. 2001.

^{3.} Critical Art Ensemble. Flesh Machine-Cyborgs, Designer Babies, and New Eugenic Consciousness. p. 54.

[The sight machine] has two purposes: to mark the space of violent spectacle and sacrifice, and to control the symbolic order. The first task is accomplished through surveying and mapping all varieties of space, from geographic to social... the second function ... means that the sight machine must generate representations that normalize the state of war in everyday life, and which socialize new generations of individuals into their machinic roles and identities.⁴ (CAE, 54-5)

In '80s and '90s the sight machine was at its peak, creating a new world of virtually. The representations were globally distributed with no possible escape for an individual. Media was ruling the societies that were not suitable for war machine. The new image of the world was homogenous, not in the sense that there was no differentiation but in a way that consumption and production ideologies of capitalism were now equally reached and imposed.

The separate working principal of both machines were based on sharing suitable areas of the world in a silence pact. However, it is now seen that none of these two are enough for the control of a society. The production and consumption cycle is alone leading to richness of a particular part or whole of a society. The war machine alone can raise opposing voices for antiarmament. Thus pancapitalism started to use them together. While war machine consumes for uselessness, sight machine develops the so called reasons for this consumption. This joint work of machines showed that fears and desires are strong control mechanisms for humanity. When an unreachable desire is set to the society it is easy to designate roles to the individuals. Whereas, when the enemy is too strong, an activist leader is favored with his faults what so ever. The desire-fear structure has set the bases for a new machine that can alone create and destroy the balances of the world and lead humanity to whatever end, the flesh machine.

The flesh machine is a heavily funded liquid network of scientific and mechanical institutions with knowledge specializations in genetics, cell biology, biochemistry, human reproduction, neurology... [The flesh machine] has two primary mandates- to completely invade the flesh with vision and mapping technologies... and to develop the political and economic frontiers of flesh products and services.⁵

The new mechanism now attacks our ultimate fear and desire. Mortality is what has been leading the humanity to ideologies that ruled the world. Immortality is our fearful desire, to which we always try to reach and from which we will always run away. The cyborg fantasy will always be in humans' minds and always there will be a conspiracy about the artificial intelligence insanity. The flesh machine promises us the controlled immortality and uses the dream hypnotized societies for its own persistence.

Natural Selection is Dead

Human mortality and fragility is his greatest weakness. The machine and technology age showed us that we can create to complement our disabilities. However, the technology in this era is not enough for us. It is limited by the human computer interfaces (HCI). HCI is limited by the slowest

Critical Art Ensemble. Flesh Machine–Cyborgs, Designer Babies, and New Eugenic Consciousness. p. 54-5.

Critical Art Ensemble. Flesh Machine–Cyborgs, Designer Babies, and New Eugenic Consciousness. p. 5.

step that is the speed of the human senses. The mind and the computers are racing now for the endless speed. The new computers are getting faster with each new product. The resolution of cameras is now more than we need and we can see with our naked eyes. The limits of the computer technology cannot be figures. If the development of the digital technology do not lower its speed, there will be a point that human will be too slow for the computers. Thus we know that we have to keep up. However, the biology and medicine is not that capable in this century. They may get to the point but it is believed to be easier combining machine technology with medicine to enhance humans.

We want to evolve. Evolution is seemingly slowing down. Humanity is not subject to natural selection after the medicine reached its higher stages in the last century. We can protect our weak and old. The enhancements in genetics enable us to cure some and will enable us to cure many more diseases that will be eliminated by nature if we were to be naturally selected. Thus, we need to build up a new era of evolution to be more adapted to our environment, which is in turn also created by ourselves. The important thing is that our body will not be able to compete with the computer culture, digital environment, we are creating. Human beings should be enhanced artificially to be sufficient for the new coming age of computers.

Steps of Evolution

Human evolution, characterized by our ability to process information, is fundamentally entwined with technological development. Complex tools and technologies are an integral part of our evolutionary "fitness." Genes that are not able to cope with this reality will not survive the next millennium.⁶

Gene is the fundamental physical and functional unit of heredity. A gene is an ordered sequence of nucleotides located in a particular position on a particular chromosome that encodes a specific functional product. This definition had changed after the Human Genome Project (HGP). As Portin suggested "[o]ur knowledge of the structure and function of genetic material has outgrown the terminology traditionally used to describe it. It is arguable that the old term gene, essential at an earlier stage of analysis is no longer useful..."⁷ The functional unit idea is no longer applicable to genetic code. That is DNA-RNA-Protein cycle is seen to be a small part of the genetic hierarchy. Genetic determinations that result from the sequential structure of the DNA function not as a program but as data which is recorded, processed, and used in dynamic process playing the role of a program. This view describes the genetic material of organisms as a text of four letters. This text is not divided into functional and junk parts anymore, but it is a totality of structure as a combination of letters affecting each other in any combination. The new view of genetic material increased its importance as each change in the sequence will affect the entire organism.

This change lowers the speed of the flesh machine while increasing its importance. Genetic treatment is now a much harder process. The mechanic side of the machinery becomes more favorable. Thus as it gets harder to conquer the flesh it gets easier to think about mechanical and digital enhancements. As we stopped the natural evolution and artificial one is slowing down in the way of organic treatment, the robotic side is fastening. So, are we going to be cyborgs at the end?

Critical Art Ensemble. Flesh Machine–Cyborgs, Designer Babies, and New Eugenic Consciousness. p. 36.

^{7.} Portin, Peter The Concept of the Gene: Short History and Present Status. p. 208.

Second Door

Brenda Laurel's words in her essay "When Computers Become Human" describes the dead end we are leading to.

...we are unlikely. We are not a done deal, nor would evolution predict that we are to be progenitors of even more intelligent species than our selves. The story of evolution has neither the unfolding of a divine plan, nor the inevitable march of sentience towards grander and grander manifestations. Rather, the extinction is the rule. We are much likely to die out than transform into a self aware, infinitely smart, infinitely wise collective shrouded in white light...⁸

Flesh machine tries to end the story of human evolution in the way that the society continues to consume and produce infinitely not to die-out. The exit from this dark path, I believe, is in the field that the flesh machine slows down, virtual reality.

The "actual reality" is totally in control of the machines working for the stability of the system. The cages that pancapitalism is building around us, are too strong to break. The end of political evolution is about to be achieved. The slaves and the masters are being recognized for one last time. The weird point is that the master will not be human anymore. Thus, there will not be a man to oppose; there will not be revolutions as everyone will seem equal in the eyes of the system. It becomes common sense to live in the system. Common sense is a form of evidence that is based on conventional wisdom, tradition, or someone's personal philosophy or perspective. It is hard to judge the validity and reliability of common sense because little supporting evidence is involved. Most people judge the validity and reliability of common sense by the person citing common sense as the basis for a decision. However, common sense can be a very biased approach to decision making and means nothing more than "what is common to me makes sense." If we want to change our way we need a new common sense, a new way of life. The new path cannot be established in the world we live in right now. A new home is needed.

Home of the Knights

Avalon, the legendary island, was the hope of the peaceful, the hope of the free minds. In the movie *Avalon* free minds of youth in the future build up a new home for themselves. A game called Avalon is played widely, in which people are playing soldiers. They are fighting against each other for gaining ranks and to pass levels of the game. They even make money from the game according to their success. The game in Avalon is a new home. The players do not have a life outside of it. It masters the mind of the players so harshly that some that die within the game leave their minds within and their body lives as a plant in the real world.

It is actually weird that the levels of the game, as they get higher, imitate the real world more and more. The escape from reality becomes more and more real. The freedom within the virtual space is the real pleasure the game presents. The mind becomes the master then. The incompetence of the body is no longer a factor in that reality. Mortality is defined again. Fear and desire has new meanings. The new immortality is to reach the highest level, feared and desired. A new consciousness which is not continuous but fragmented and momental is formed, interestingly familiar to our understanding of the world.

^{8.} Peter J. Denning (eds), Talking back to the Machine: Computers and Human Aspiration. p. 106.

Boundaries of VR

Virtual reality is the proposed construction of artificial realities in a purely digital realm: not yet technically feasible in the strictest sense. By extension any form of simulated reality - textual or graphical - created using computers. The usage of the computers, for now, is limiting the sense of the reality to the senses of the human beings. The screen limitation of the HCI strictly diminishes the effect wanted from the virtual environment.

Alternative tradition of which VR is a part can be found whenever the scale of representation is the same as the scale of our human world so that the two spaces are continuous. This is the tradition of simulation rather than that of representation bound to a screen. The simulation tradition aims to blend the virtual and physical spaces rather than to separate them.⁹

Until the two worlds integrate into each other it is impossible to create the new cultural structure dependent on VR. Thus it will not be able to compete with the integration of machine to the human flesh. The VR will be a side product of the computer age, a continuum of sight machine, consumed and produced. It will power the individualization of society, becoming one of the greatest tools of pancapitalism. As the technology develops the imprisonment of the body in front of the screen may dissolve and may be completely destroyed.

Eventually, The VR apparatus may be reduced to a chip implanted in the retina and connected by wireless transmission to the Net. From that moment on, we will carry our prisons with us... "to be in touch," always connected, always "plugged-in."¹⁰

However, this will be the victory of the flesh machine. The VR will be reduced to a body enhancement. What I propose here is to integrate flesh in to machine, not the vice versa.

Free Your Mind

Humans know they can live longer by the help of science. Genetics and HGP ventured into the reasons of death. Computer science and molecular biology showed us that we can live longer, even be immortal one day. The fading of the body and the incompetence of it regarding the mind is one of the biggest problems of the human consciousness. Man knows he is mortal. He believes that he can do more if he had time. As the technology evolves it becomes possible to learn and experience more in one lifetime. However, human cannot be satisfied by the achievements, he always looks for possible others. It is known that mind is more capable and fortified than the body. The limits of the body are not sufficient and the mind is creative nearly in a limitless scale. The greatest fear of the humanity is death. Most of our technology and money is spent on warfare and healthcare. People are spending their wealth to live few seconds more in this world. And every death becomes earlier than expected.

Humanity becomes more obsessive with immortality. Nearly all the scientific studies in computer science and genetics are based on this. The cancer research in deep is search for controlling the immortal cell. The machine and medicine technology tries to achieve the ability of enhancing the body, thus bringing the dreams in the science fiction movies to come true.

What we miss actually on the way to immortality that our body or tools added to us

^{9.} Manovich Lev. The Language of New Media. p. 112.

^{10.} Manovich Lev. The Language of New Media. p. 114.

will fade. The physical world has the mortality as an imminent property. What we have in the computer system is the possibility of endless space with no-loss. It is now the time of the mind. The technology is developing faster and we cannot compete with its properties. Thus I propose the disbanding of the body and freeing our minds within the unseen boundaries of the VR.

Conclusions

Avalon uses the war as a desire to lure the people into its dungeons. If a powerful enough desire is presented to the society, people can be lured to whatever end. Additionally, if powerful enough fear is integrated into this desire the society will be under full control. In the movie the desire machine works perfectly, however resembling the real world. The natural evolution of humanity stopped by the technological development in medicine. The unsatisfactory nature of human should be fed. Thus the system presents us the flesh machine, the chance of body enhancements. The loss in the functioning of the flesh machine is freedom. The society should place itself in the cycle of production, consumption and order in order to keep the machine working.

The imprisonment habit of the body is limiting the capacity of mind. The creativity and thought are diminishing in front of the screens of the sight machine. We cannot escape from it as all other corners are held by the war machine. The freedom becomes the choice of individuality, getting lonely near the masses bound to the mazes of the Net.

The new media offers us a new era of mass storage and manipulation of the data. Synchronized happening of all events is now a possibility. The media works as an imposer of the capital image as long as we stay out of it and in the same time bound to it. The dead end of the pancapitalism is too strong to break out. However, here I propose an escape root, an opposing act against the flesh machine, a machine flesh. To a new island for the free, an island of binary code, the minds of the brave will be integrated. The life will cease and the virtual reality will start to live. We will enhance machines, computers, the great Net with our minds, instead of enhancing our bodies with machines. A new society will be formed. New ethics and morality will be established. Capital will be the ultimate desire no more. A new history of mankind will begin. We will not surrender to distinction but will change dimension for the beginning of a new species. The legend of the future will begin. The time line will stop and everything and anything will happen at the same time. Everyone will be equal regarding the knowledge and capacity. The future of the system will be up to the ability of minds leaving old desires aside but anyhow it will be a great restart. A new home, the island of magic, the Avalon will be established.

Work Cited

Avalon. Mamoru Oshii. 2001. Film.

- *Critical Art Ensemble*. Flesh Machine–Cyborgs, Designer Babies, and New Eugenic Consciousness. NY: Autonomedia, 1998. Print.
- Laurel, Brenda. "When Computers Become Human". Talking back to the Machine: Computers and Human Aspiration. Ed. Peter J. Denning. New York, NY: Copernicus/Springer-Verlag, 1999. 106-107. Print.

Manovich Lev. The Language of New Media. Mass.: MIT Press, 2001. Print.

Portin, Peter "The Concept of the Gene: Short History and Present Status," *The Quarterly Review* of *Biology* vol. 68, 1993: 173-223. Print.

A PERSPECTIVE ON SOUND FOR 'TRADITIONAL' AND 'NEW' MEDIA, AU-DIO PROFESSIONALS AND COMPOSERS, AND INTERDISCIPLINARY EDUCATION UFUK ÖNEN

1. Sound for 'Traditional' Media

In film, and in visual media in general, sound is a very important element which supports what is on the screen, which helps the story to get through to the audience by compensating the shortcomings of the visual narrative. Most of us, while watching a film or any kind of program on TV, take sound for granted. We live in a visually dominated world, so most people do not pay attention to sounds in film. Most people do not realize, or care to realize, that there are layers and layers of sounds, even in a simple scene in a film. The only way to show these people that sound is an important element in film is to turn the volume all the way down and make them watch the film without any sound. Then, they will realize that without sound, they lose half of the film. But we do not need a demonstration like this. We do not need to prove to the audience or make them realize that sound is an integral element because in film, sound secretly works on the audience. As Francis Ford Coppola says: "Sound is 50 percent of the whole cinema experience ... It is your best friend, because it works on the audience secretly."

Francis Ford Coppola is not the only director who gives great importance to sound; many successful directors are aware that sound is an integral and crucial element in cinema and they do their best to use sound accordingly. Another example of these directors would be the seminal David Lynch. On the relationship between sound and image in cinema Lynch comments:

Sound is 50 per cent of a film, at least. In some scenes it's almost 100 per cent. It's the thing that can add so much emotion to a film. It's a thing that can add all the mood and create a larger world. It sets the tone and it moves things. Sound is a great 'pull' into a different world. And it has to work with the picture—but without it you've lost half the film.²

1.1. What is Soundtrack?

The term soundtrack usually refers to the songs contained in a film, but literally it means the whole audio portion of film, video program, or any kind of visual media. All components of sounds in film are collectively referred to as 'soundtrack'.³ The soundtrack is comprised of three essential ingredients: Human voice, sound effects, and music.

Human voices in film are dialogs, monologues and voice-overs. It is possible to include

^{1.} Francis Ford Coppola; foreword in *Sound for Picture: An Inside Look at Audio Production for Film and Television*, edited by Jeff Forlenza and Terri Stone; p. vii.

Soundscape: The School of Sound Lectures 1998-2001, edited by Larry Sider, Diane Freeman and Jerry Sider; p. 52.

^{3.} Technically, the term 'soundtrack' refers to the audio track (the physical space) on the edge of a film on which the film's whole sound components are recorded.

'direct address' as well, which means that the performer speaks directly to the spectators.⁴

The term 'sound effects' refers to an entire hierarchy of sound elements that are recorded or electronically produced. There are four main categories of sound effects. Principal effects are what-you-see-is-what-you-hear type of sound effects that are synchronized to the picture. Background sound effects are ambient sounds, such as traffic noises, forest sounds and the like, that indicate the setting to the audience. Foley sound effects, e.g., footsteps, rustling of clothes, are 'live' sounds created by Foley artists by watching the picture and mimicking the action on the screen with appropriate props. Designed sound effects, such as monster sounds, light sabers and the like, are sounds that do not exist in nature, that are impossible to record, therefore designed or created electronically or digitally.

Music in films can be treated as three separate categories: Score, source music, and soundtrack. Score "is the original-music composition", that is music composed exclusively, for a motion picture to heighten emotions provoked by the imagery and to provide "emotional or atmospheric background to the primary dialog or narration onscreen".⁵ Classical film scores "are almost always melodic, simple, and have a structure and flow that closely matches the pictures going by on the screen".⁶ Source music, contrary to score, is "realistically part of the scene", within the world of the story of the film, "whether visually performed (a marching band, street musicians, etc.) or from a real source (radio, TV set, etc.) on- or off-screen".⁷ Although all components of sounds in film are collectively referred to as 'soundtrack', the term 'soundtrack' is also used both for the songs used in a movie and for the collection (i.e. album) of these songs. Songs used in movies are generally popular songs, almost always not composed or performed specifically for the movie.

Composer Dave Raksin told the following anecdote about the filming of Lifeboat (1944) and its director Alfred Hitchcock in "Composers and the Creative Process" symposium presented at the Virginia Festival of American Film, Charlottesville, Virginia, on October 25, 1990:

One of [Hitchcock's] people said to me, "There's not going to be any music in our picture" and I said, "Why?" "Well,... Hitchcock says they're out on the open ocean. Where would the music come from? So I said, "Go back and ask him where the camera comes from and I'll tell him where the music comes from!"⁸

This anecdote puts the general lack of understanding about the role of music in films under spotlight. This role is "not fully understood even within the film industry itself, possibly because music is the most abstract of the film arts".⁹

1.2. Diegetic Sound and Nondiegetic Sound

Diegetic sound is a part of the narrative space within a film, emitted from a sound event in the story and heard by the characters, whereas non-diegetic sound is outside the world of story, therefore not heard by the characters in the film. Diegetic sound can be onscreen or offscreen,

9. Tony Thomas, Music for the Movies, p. 2.

^{4.} Herbert Zettl, Sight Sound Motion: Applied Media Aesthetics, p. 341.

^{5.} Sound for Picture: An Inside Look at Audio Production for Film and Television, p. 130.

^{6.} Jeff Rona, The Reel World: Scoring for Pictures, p. 2.

^{7.} Stephen Handzo, "A Narrative Glossary of Film Sound Technology" in the anthology *Film Sound: Theory and Practice*, edited by Elisabeth Weis and John Belton, p. 408.lbid.

^{8.} Quoted in Kathryn Kalinak's Settling the Score: Music and the Classical Hollywood Film, p. xiii.

e.g., a song sung by a street musician (onscreen diegetic sound) or a speech from an unseen character (offscreen diegetic sound). Onscreen sounds are sometimes referred to as 'internal' and 'subjective', where, on the other hand, offscreen sounds are referred to as 'external' and 'objective'.¹⁰

1.3. Acousmatic and Offscreen Sounds

For the sounds coming from unseen sources, Michel Chion has coined the term 'acousmatic' (a word "unearthed ... in 1950s" by Pierre Schaeffer) which refers to the sounds that one hears without seeing their originating cause.¹¹ The original meaning dates back to Pythagoras, a Greek philosopher, who is believed to have tutored his students from behind a curtain, "so that the sight of the speaker wouldn't distract them from the message".¹²

Offscreen sound is "sound that is acousmatic"; sound, "whose source is invisible".¹³ The question of offscreen sound has been discussed in many articles and books¹⁴ and "it dominates an entire field of thinking and theorizing about film sound".¹⁵ Michel Chion distinguishes two categories of offscreen sound:

I shall give the name *active offscreen* sound to acousmatic sound that raises questions— What is this? What is happening?—whose answer lies offscreen and which incite the look to go there and find out ... Films like Psycho are based entirely on the curiosity aroused by active offscreen sounds: this mother we keep hearing, what does she look like? ... *Passive offscreen* sound, on the other hand, is sound which creates an atmosphere that develops and stabilizes the image, without in any way inspiring us to look elsewhere or to anticipate seeing its source.¹⁶

'De-acousmatization', which Chion compares to deflowering,¹⁷ is the effect where the bearer of the unseen sound is disclosed. The classic example of de-acousmatization is the scene in *The Wizard of Oz*,¹⁸ where "The Great Oz", the wizard, who speaks with a thundering voice behind a curtain, is revealed to be an ordinary little man speaking into microphone and amplifying his voice, when Dorothy, the main character in the film, tears down the curtain. The moment the curtain is torn down, de-acousmatization occurs, the voice is 'embodied'.

Opposite of acousmatic is 'visualized sound', often called onscreen sound.¹⁹ Visualized sound, as the name suggests, is a sound that is coming from a seen source, onscreen.

19. Michel Chion, The Voice in Cinema, p. 18.

^{10.} David Bordwell and Kristin Thompson, Film Art: An Introduction, p. 244.

^{11.} Michel Chion, The Voice in Cinema, p. 18.

^{12.} Ibid., p. 19.

^{13.} Michel Chion, Audio-Vision: Sound on Screen, p. 73.

^{14.} For an extensive discussion on offscreen sound see Michel Chion, *The Voice in Cinema*, and *Audio-Vision: Sound on Screen*, especially the chapter "The Audiovisual Scene". See also, Christian Metz, "Aural Objects"; Fred Camper, "Sound and Silence in Narrative and Nonnarrative Cinema"; Mary Ann Doanne, "The Voice in the Cinema: The Articulation of Body and Space".

^{15.} Michel Chion, Audio-Vision: Sound on Screen, p. 73.

^{16.} Ibid., p. 85.

^{17.} Michel Chion, The Voice in Cinema, p. 23.

^{18.} The Wizard of Oz. Dir. Victor Fleming. 1939.

2. Sound for 'New' Media

The elements of sound for film, or 'traditional' media are the same as the elements of sound for 'new' media. In both, there are human voices, sound effects and music. The concepts of diegetic and nondiegetic, onscreen and offscreen sounds apply to 'new' media as well, though in a more complicated way because the interaction of the user affects the relationship of image and sound.

Lev Manovich argues that art in general is interactive in a number of ways: Ellipses in literary narration, missing details of objects in visual art, and other representational "shortcuts" require the user to fill in missing information. Theater and painting also rely on techniques of staging and composition to orchestrate the viewer's attention over time, requiring her to focus on different parts of the display. With sculpture and architecture, the viewer has to move her whole body to experience the spatial structure.²⁰

Manovich suggests that "[m]odern media and art pushed each of these techniques further" by "placing new cognitive and physical demands on the viewer".²¹ He also suggests that there are dangers using the "concept of "interactive media" exclusively in relation to computer-based media"²² but in this paper the term 'interactive' is used as utilized by the industry: The "multiple opportunities" that "digital media offer us",²³ "the ability for the user to intervene in computing processes and see the effects of the intervention in real time".²⁴

The major difference between audio for film or video, and audio for new media is that, the latter has to cope with the non-linear structures and it should possess interactive and adaptive, or shortly, dynamic aspects.

2.1. Interactivity and Adaptability

The word "dynamic" is "characterized by constant change, activity and progress".²⁵ Dynamic audio, which encompasses both interactive and adaptive audio, is designed to be changeable.²⁶

Interactive audio refers to sound events that occur in response to a user or participant. Interactive audio exists "when a participant interacts and evokes a sound event to occur".²⁷ When the player fires a gun in the game, a gunshot is heard; when a button is pushed on a website, a click noise is heard.

Adaptive audio "has elements of interactive audio", as "the sound events are triggered in some way", but contrary to interactive audio, it is not a direct response to the user or the participant; it reacts to participant changes in an environment".²⁸ In adaptive audio, the parameters—which "can

- 24. Ibid., p. 388.
- 25. Oxford American Dictionary.
- Karen Collins, "Video Games Music Glossary", Games Sound. Accessed 20 February 2007. http://www.gamessound.com/glossary>

^{20.} Lev Manovich, The Language of New Media, p. 56.

^{21.} Ibid.

^{22.} Ibid., p. 57.

Martin Lister, Jon Dovey, Seth Giddings, Iain Grant, Kieran Kelly, New Media: A Critical Introduction, p. 19.

^{27.} Joseph Cancellaro, Sound Design for Interactive Media, p. 225.

^{28.} Ibid., p. 224-5.

be anything from pitch to volume ... tempo, and so on"²⁹—are changed according to the changes occurring within the interactive environment. A simple example would be increasing of the volume of the rhythm played on kettledrum when the player is about to face a powerful enemy in a computer game.

2.2. Dynamic Audio and Diegesis

As stated before, the concepts of diegetic and nondiegetic sounds apply to dynamic audio but in a more complicated way as the interaction of the user with the media affects the relationship of image and sound.

For dynamic audio, in the context of diegesis, it is possible to list four categories: Interactive nondiegetic sound, adaptive nondiegetic sound, interactive diegetic sound, and adaptive diegetic sound.

Interactive nondiegetic sound is not emitted from a sound event in the story yet occurs in response to an action or movement of a user or a participant. For example, in a game setting, when the user is forcing a locked door to open it, an alarming sound, which indicates that the door is locked, is heard. This sound event occurs in response to the user's attempt to open a locked door; it is not a part of the diegesis.

Like interactive nondiegetic sound, adaptive nondiegetic sound is outside of the story space as well, but contrary to interactive audio, it is not a direct response to the user or the participant. The example previously given in this paper, the increasing of the volume of the rhythm played on kettledrum when the player is about to face a powerful enemy in a computer game, epitomizes nondiegetic adaptive sound. For the purpose of unity all examples in this paper, related to dynamic diegetic and nondiegetic sounds, are given in the context of computer games.

Interactive diegetic sound is a part of story space, it is heard by the characters and it is triggered in real time as a response to the user or the participant's movement or action. Sword whooshes and gunshot sounds, which are triggered in response to character's actions in game that are controlled directly by the user, are the simple examples for interactive diegetic sounds.

Adaptive diegetic sound is within the diegesis and, though it is not a direct reaction to the user or participant's actions or movements, it reacts to environmental changes upon user or participant's movements, or other alterations such as changes in time, epoch and so forth. The change of soundscapes as the user moves from one location to another, as she travels in time or as the day turns in the night are the examples for adaptive diegetic sound.

2.3. Soundscape

A soundscape is an acoustic or sonic environment. The term 'soundscape', which was coined by Canadian composer R. Murray Schafer, "may refer to actual environments, or to abstract constructions" like "musical compositions and tape montages", especially when they are "considered as an environment".³⁰

Soundscapes consist of sounds that are characteristic of a period or location, therefore they are important to help identify a place or a time period.

For example, the late nineteenth-century American soundscape was largely limited to unamplified, live sounds, while the soundscape of the mid-twenties included radio,

^{29.} Ibid., p. 225.

^{30.} R. Murray Schafer, The Soundscape: Our Sonic Environment and the Tuning of the World, p. 274-5.

electrically recorded disks, and public address, as well as live music, theater, and an increasingly number of unmuffled motors. In much of the world, today's soundscape is characterized by competition among multiple amplified sounds ... Rural, maritime, and the Third World soundscapes of course offer their own particularities, as do early morning and late evening soundscapes.³¹

In some cases, such as the video game *F.E.A.R.*³² instead of using the sounds of the actual environments, the soundscapes are constructed by editing, manipulating, and layering various sounds. Also in cases like this, sometimes the borders between music and sound effects blur, where music serves both as score and as soundscape.

2.3.1. Immersion

Besides helping to identify a location or a time period, another important aspect of the soundscapes is that, both in 'traditional' and 'new' media, they play a crucial role in creating the illusion of being immersed in a three-dimensional environment, "being inside the world of a constructed image".³³ In the context of immersion, the "image is not before the viewer on a surface", instead it "appears to surround" her,³⁴ and sound plays an important role in reinforcing this experience because, unlike image on the screen, sound does not have a frame, or an auditory container.

2.4. Cage and 273 Seconds of Silence

American composer, writer and thinker John Cage was among the first to draw attention to the sounds in our environment, sounds that surround us. His composition 4'33" (1952), four minutes and thirty-three seconds of silence (commonly referred to as 'silent piece'), muted the performer to shift attention to the sounds in the surrounding; it "silenced music to hear the unintended ... and ultimately the total environment".³⁵

The real content of 4'33' was not silence, but the sounds that the audience makes: The movement sounds, breathing, coughing and such. In that sense, 4'33" turns everyone into performers. This is a relationship in a manner commonly found in digital and interactive media, where the space it created (the concert hall) allows the audience (the user or the player) to fill it with their own noise.

Not only 4'33", but most of Cage's compositions, though they do not define a specific human and instrument, or performer and audience interaction, open up a huge field of possibilities in terms of interaction that produce differing results through elements of chance and variation.³⁶

Considering 4'33" was composed in the 1950s, it was both provocative and also predictive "about the future shape of digital media".³⁷ Another important aspect of the work of

- Dieter Daniels. "Strategies of Interactivity". Media Art Net. < http://www.medienkunstnetz.de/sourcetext/65> Retrieved 5 May 2007.
- 37. Charlie Gere, Digital Culture, p. 111.

Rick Altman, "Afterword: A Baker's Dozen Terms for Sound Analysis" in Sound Theory Sound Practice, p. 249.

^{32.} F.E.A.R. First Encounter Assault Recon, Vivendi Universal, 2005.

Martin Lister, Jon Dovey, Seth Giddings, Iain Grant, Kieran Kelly, New Media: A Critical Introduction, p. 387.

^{34.} bid.

^{35.} Douglas Kahn, Noise Water Meat: A History of Sound in the Arts, p. 183.

Cage was that, it helped to develop a "framework for thinking about the use of interactive and multimedia technology beyond its military applications".³⁸

2.5. Offscreen Sound in 'New' Media

Like in film and other 'traditional media', offscreen sounds are used in new media as well, especially in computer games. Active offscreen sounds are used to alert the user, or to raise curiosity, whereas passive offscreen sounds are used to "create atmosphere and environment" such as traffic outside a room.³⁹

2.6. Challenges

There are certain challenges in interactive and adaptive audio. The foremost one is to overcome the problem of the repetitive nature of dynamic audio. In 'traditional' media, such as film, a sound event may be used for a single incident or it may be used several times for different incidents. In the latter case, due to the linear structure of the film, it is possible to control and to arrange the places of the occurrences in the timeline so that they do not take place one just after another. This prevents the sense of repetition. In dynamic sound, however, a sound event attached to an incident may occur over and over again. This would be very irritating for the user or the participant.

To overcome the repetition, sound events that are attached to incidents, and also certain parameters of them such as volume, pitch, filter settings and so forth, should be randomized.

It is, in a way, like teaching a console to mix by itself. The game experience changes every time, so you have to balance things in such a way that the player gets a good mix with great sounds every time they play through.⁴⁰

Another challenge in dynamic audio is the necessity to design sounds in a way so that they will cope with the unpredictable nature of the interactive media when they are layered on top of each other. In a complex interactive environment there are infinite number of possibilities and in each of these possibilities the layered sounds, such as soundscapes or the sound events attached to incidents, for example gunshots, footsteps and the like, should work well together.

Finally, hardware specifications and limitations of the target platform, such as CPU,⁴¹ disk space, memory, supported codecs,⁴² and so forth, control and determine the way sound design is created. This is a challenge that should be taken into consideration even before the beginning of the sound design process.

^{38.} Ibid., p. 199.

David Sonnenschein, Sound Design: The Expressive Power for Music, Voice, and Sound Effects in Cinema, p. 153.

^{40.} Mark Kilborn, e-mail to Yahoo Group Sound Article List, dated 6 April 2007. http://groups.yahoo.com/group/sound-article-list

^{41.} Central Processing Unit. "The part of the computer in which operations are controlled and executed." (*Oxford American Dictionary*)

^{42. &}quot;A codec is a device or program capable of performing encoding and decoding on a digital data stream or signal. The word *codec* may be a combination of any of the following: 'Compressor-Decompressor', 'Coder-Decoder', or 'Compression/Decompression algorithm." *Wikipedia, The Free Encyclopedia.* 11 May 2007. Retrieved 13 May 2007. http://en.wikipedia.org/wiki/codec>

2.7. Current and Potential Dynamic Audio Platforms

Current and potential dynamic audio platforms include, but not limited to, computer games, internet, customer service robots, electronic music instruments, telephones, education, recreational environments, automobiles, homes and clothing.

3. Sound Professionals and Composers Working in the Fields of 'Traditional' and 'New' Media

Sound design, contrary to what most people, including film and video professionals, think, is not only a technical process. It is true that sound design involves high level of audio expertise and skills, but along with that, a sound designer or an audio professional working for film and TV also needs knowledge and solid understanding of the relationship between sound and image and the points discussed here before, i.e., categories of sound in cinema, diegetic and nondiegetic sound, onscreen and offscreen sound and so forth.

While in major film and television productions the work descriptions of the sound professionals are clear, in low budget projects this is rarely the case. For example, in a high budget film the post-production sound crew often consists of 15-20 people, including positions such as sound designer, supervising sound editor, sound editor, sound mixer, foley editor and the like. Sometimes, in larger productions, especially which demand complex sound design such as *Armageddon, Avatar* and *Terminator 2: Judgment Day*,⁴³ the sound department grows larger, and with the addition of the production sound crew, this number might go up to 50 or 60 or even more. In low budget productions, on the other hand, the number of people in the audio department is smaller, and as this number gets smaller, the boundaries between work descriptions begin to blurred. For a film with a tight budget that is set to be released on video only, it is not unusual that the all sound duties are handled by 5 people or so, sometimes even less. In cases like this, one person wears many hats, such as sound designer, foley recordist, sound editor, mixer and the like, and this causes blurring of the boundaries between work descriptions.

Digital technology, i.e., digital video cameras, video editing software and the like, made filmmaking accessible to nearly everyone. As a result, very low budget, even near to no-budget movies started to emerge. Today, it is not so uncommon to see advertisements on websites placed by filmmakers who are looking for a "composer/sound designer" or a "composer that can also work with sound effects". While music composition and sound design seem like two different areas, still, advertisements like these make sense, as trusting a composer with the sound portion of the movie is probably a better idea than trusting a video person who knows very little or nothing about sound.⁴⁴ The reason for that is composers who work for film and television have a basic understanding of how music, and, to a certain degree, sound, work with the picture, and, also, they are competent users of audio software and equipment.

Sound design for new media, such as games, interactive applications and so forth, is similar to sound design for film, video and television that, in major productions, e.g., in big budget games, the sound crew, which includes positions like director of sound, sound designer, implementer,

Armageddon. Dir. Michael Bay. 1998. / Avatar. Dir. James Cameron. 2009. / Terminator 2: Judgment Day. Dir. James Cameron. 1991.

Ufuk Önen, "The 'Real' Work Description of Composer and Sound Designer in Low-Budget Visual Productions," Volume, Nov. 2006, p. 79.

voice-over director,⁴⁵ is larger and the work descriptions are generally clear. In low budget projects, however, just like in film and video, the sound crew is smaller and the boundaries between the work descriptions tend to blur. In smaller productions, such as mobile phone applications, it is usually the composer, again, who composes and produces the music and who does the sound design. In fact, according to the IASIG⁴⁶ Game Audio Education Working Group, a large section of the industry, those who develop games, provide applications and content for mobile phones, customer service systems, online media and so forth, has a 'one person' audio department.⁴⁷ That 'one person', who has to be a 'jack-of-all-trades', works across all audio disciplines, from music composition to audio editing, from sound design to audio implementation and the like.⁴⁸

3.1. Challenges for Sound Designers and Composers

Interactive applications are highly challenging for audio professionals and composers. As an example, a sound designer or a composer working in a game project has to deal with both linear and interactive media. Most of the games incorporate 'game cinematics' or 'cinematic sequences' which are "mini movies" that flow "from start to finish in a pre-scripted fashion," "used as a part of opening sequences, transition between game levels" and "other functions that require moving pictures."⁴⁹ A sound designer or a composer working in such a project has to have the understanding of the relationship between sound/music and image in linear media, how sound/ music works with and for the picture etc., and, in addition to those, the dynamic aspects of sound/ music in interactive media, dealing with unpredictable nature of interactive environments and such.

Another challenge for sound designers and composers, especially those who newly started working for the interactive applications, is that, the competency in 'classic' tools of the trade, such as audio editors, multitrack recording programs, MIDI sequencers and so forth, are not enough for dynamic audio. In addition to those, sound designers and composers should also be proficient in audio implementation, data compression and the like.

3.2. Interdisciplinary Nature of Sound and Music for 'Traditional' and 'New' Media, and a Perspective on Education

Sound design and music composition for both 'traditional' and 'new' media are, in nature, highly interdisciplinary. This calls for educational programs that combine various disciplines which are often separated by school and faculty.

Sound design for film programs, for example, require not only audio recording, editing and mixing classes (which should also cover acoustics, an area that falls under Physics department),

^{45.} For skills and specializations for game audio professionals, see report from Project Bar-B-Q 2008, an interactive audio think tank conference: Lieberman, D., Lewis, J., Kwasneski, J., Brandon, A., Collins, K., Prum, J. and Kastbauer, D. 2008. "Group Report: So You Want to Work in Game Audio?" http://www. projectbarbq.com/bbq08/bbq08r6.htm Also see curriculum guideline by IASIG (Interactive Audio Special Interest Group) Education Working Group: *Game Audio Curriculum Guideline*. Draft .994. March 2010. http://www.iasig.org/wg/eduwg/index.shtml

^{46.} Interactive Audio Special Interest Group. An autonomous group founded in 1994, supervised by MIDI Manufacturers Association. http://www.iasig.org

^{47.} IASIG Education Working Group, *Game Audio Curriculum Guideline*, Draft .994, March 2010, p. 3. http://www.iasig.org/wg/eduwg/index.shtml

^{48.} Ibid.

^{49.} Aaron Marks, The Complete Guide to Game Audio, p. 189.

but also film, media and communication courses from various departments such as Film Studies, Media Studies, Communication and such. Music composition for film programs, as an another example, require music composition, music technology, and audio recording, editing and mixing classes and, also, just like sound design for film, courses from Film Studies, Communication and such to provide the students with theoretical and critical contexts.

Educational programs for sound design and music composition for "new" media, such as games, interactive applications and so forth, undoubtedly require the courses mentioned above, and, in addition to those, also classes from Computer Science departments for a solid understanding of implementation, audio engine programming, real-time sound generation and such.⁵⁰

4. Conclusion

The categories of sound for 'traditional' media, such as film, are the same for 'new' media as well. In both 'traditional' and 'new' media the three broad categories of sounds are human voices, sound effects and music. This is also true for the subcategories of sounds. In both mediums human voices are separated into three subcategories (monologues, dialogs, voice-over), sound effects into four (hard effects or principal effects, background sounds or ambience, foley, designed sounds), and music into three (score, source music, soundtrack).

The concepts of relationship of sound to the story and the relationship of sound to the image (diegetic and nondiegetic sounds, and onscreen and offscreen sounds, respectively) in 'traditional' media apply to 'new' media as well, however, in a more complicated fashion, as the interaction of the user affects the relationship of sound and image, and sound and story, to a great extent.

The major difference between sound for 'traditional' media and sound for 'new' media is that, while the former flows in a linear fashion, the latter has to deal with the non-linear structures, and, in doing so, it should possess dynamic aspects. Sound that have dynamic aspects, in other words dynamic audio, encompasses both interactive audio, which refers to sound events that occur in response to the user or the participant, and adaptive audio, which refers to sound events that are not direct responses to the user but reacts to participant changes in an environment.

Soundscapes are important both in 'traditional' media and 'new' media as they not only help identify a location or a time period, but also play a crucial role in creating the illusion of being immersed in a three-dimensional environment and reinforcing this experience.

While sound design for both 'traditional' and 'new' media involves high level of audio expertise and skills, it is not just a technical process. Sound design, especially in our day in which boundaries between work descriptions of sound designers, audio professionals, composers etc. tend to blur, is truly interdisciplinary, drawing not only from audio engineering and music, but also from film theory, communication and so forth, and, in case of interactive media, from computer science and engineering as well. This calls for educational programs that combine various disciplines which are often separated by school and faculty.

In the very near future it will not be surprising to see the number of interdisciplinary

^{50.} For a discussion of interdisciplinary nature of game audio and education, see IASIG Education Working Group, Game Audio Curriculum Guideline, Draft .994, March 2010. http://www.iasig.org/wg/eduwg/ index.shtml

educational programs on sound design and music composition for 'traditional' and 'new' media rapidly grows.

Works Cited

- Altman, Rick. "Afterword: A Baker's Dozen Terms for Sound Analysis". Sound Theory Sound Practice. Rick Altman, ed. New York: Routledge, 1992. 249-53.
- Bordwell, David and Kristin Thompson. *Film Art: An Introduction*. 2nd ed. New York: Alfred A. Knopf, 1986.
- Camper, Fred. "Sound and Silence in Narrative and Nonnarrative Cinema". *Film Sound: Theory and Practice.* Elisabeth Weis and John Belton, eds. New York: Columbia University Press, 1985. 369-81.
- Cancellaro, Joseph. Sound Design for Interactive Media. Clifton Park, NY: Thomson Delmar Learning, 2006.
- Chion, Michel. *Audio-Vision: Sound on Screen*. Edited and translated by Claudia Gorbman, with a foreword by Walter Murch. New York: Columbia University Press, 1994.
- Chion, Michel. *The Voice in Cinema*. Edited and translated by Claudia Gorbman. New York: Columbia University Press, 1999.
- "Codec". *Wikipedia, The Free Encyclopedia.* 11 May 2007. Retrieved 13 May 2007. http://en.wikipedia.org/wiki/codec>.
- Collins, Karen. "Video Games Music Glossary". *Games Sound*. Retrieved 20 February 2007. http://www.gamessound.com/glossary>.
- Coppola, Francis Ford. Foreword. Sound for Picture: An Inside Look at Audio Production for Film and Television. Jeff Forlenza and Terri Stone, eds. Milwaukee, WI: Hal Leonard Publishing Corporation, 1993. vii.
- Daniels, Dieter. "Strategies of Interactivity". *Media Art Net.* Retrieved 5 May 2007. http://www.medienkunstnetz.de/source-text/65
- Doanne, Mary Ann. "The Voice in the Cinema: The Articulation of Body and Space". *Film Sound: Theory and Practice.* Elisabeth Weis and John Belton, eds. New York: Columbia University Press, 1985. 162-76.
- Forlenza, Jeff and Terri Stone. Sound for Picture: An Inside Look at Audio Production for Film and Television. Milwaukee, WI: Hal Leonard Publishing Corporation, 1993.

Gere, Charlie. Digital Culture. London: Reaktion Books, 2002.

- Handzo, Stephen. "A Narrative Glossary of Film Sound". *Film Sound: Theory and Practice*. Elisabeth Weis and John Belton, eds. New York: Columbia University Press, 1985. 383-426.
- IASIG Education Working Group. *Game Audio Curriculum Guideline*. Draft .994. March 2010. Retrieved 3 May 2010. http://www.iasig.org/wg/eduwg/index.shtml
- Kahn, Douglas. *Noise, Water, Meat: A History of Sound in the Arts*. Cambridge, Massachusetts: MIT Press, 1999.
- Kalinak, Kathryn. *Settling the Score: Music and the Classical Hollywood Film*. Madison, Wisconsin: The University of Wisconsin Press, 1992.
- Kilborn, Mark. "Game Sound". E-mail to Yahoo Group Sound Article List. 6 April 2007. http://groups.yahoo.com/group/sound-article-list.
- Lieberman, D., Lewis, J., Kwasneski, J., Brandon, A., Collins, K., Prum, J. and Kastbauer, D. "Group Report: So You Want to Work in Game Audio?" 2008. Retrieved 3 May 2010. http:// www.projectbarbq.com/bbq08/bbq08r6.htm
- Lister, Martin, et al. New Media: A Critical Introduction. London: Routledge, 2003.
- Manovich, Lev. The Language of New Media. Cambridge, Massachusetts: MIT Press, 2001.
- Marks, Aaron. The Complete Guide to Game Audio. Lawrence, Kansas: CMP Books, 2001.
- Metz, Christian. "Aural Objects". *Film Sound: Theory and Practice.* Elisabeth Weis and John Belton, eds. New York: Columbia University Press, 1985. 154-61.
- *Oxford American Dictionary*. Electronic edition, version 1.0.1, bundled in Apple Mac OS X (10.4), 2005.
- Önen, Ufuk. "The 'Real' Work Description of Composer and Sound Designer in Low-Budget Visual Productions." *Volume*. Nov. 2006: 78-79.
- Prendergast, Roy M. *Film Music, A Neglected Art: A Critical Study of Music in Films.* 2nd ed. New York: W. W. Norton & Company, 1992.
- Rona, Jeff. The Reel World: Scoring for Pictures. San Francisco: Miller Freeman Books, 2000.
- Rose, Jay. Audio Postproduction for Digital Video. San Francisco: CMP Books, 2002.
- Schafer, R. Murray. *The Soundscape: Our Sonic Environment and the Tuning of the World.* Rochester, Vermont: Destiny Books, 1994.

- Sider, Larry, Diane Freeman and Jerry Sider, eds. *Soundscape: The School of Sound Lectures* 1998-2001. London: Wallflower Press, 2003.
- Sonnenschein, David. Sound Design: *The Expressive Power of Music, Voice, and Sound Effects in Cinema*. Studio City, CA: Michael Wiese Productions, 2001.
- Thomas, Tony. Music for the Movies. 2nd ed. Los Angeles: Silman-James Press, 1997.
- Zettl, Herbert. Sight Sound Motion: Applied Media Aesthetics. 5th ed. Belmont, CA: Thomson Wadsworth, 2008.

PART III PARTICIPATORY CULTURE IN THE AGE OF INTERNET INTRODUCTION BY BESTEM BÜYÜM & UFUK ÖNEN

We have been going through what can be referred as the age of Internet for some time now. As the dynamics of participation and access to resources changed, and developed new dimensions, experience of cross-media and transmedia literacies also gained new perspectives. Within this context, participatory culture gains an importance in the studies of new media. As the access to internet increased, and the sharing and reproduction of media joined hands with this virtual platform, becoming a 'participant' started to create new identities. Even though nicknames are still considered as a part of the virtual identity, the individual behind that online persona becomes more transparent. Anonymity has been abandoned while being one's self and stating an opinion became the new virtual participation trend. In this part, we will be 'surfing through' the papers that takes participatory culture from this perspective and combines the global interaction of consumers with the products of new media.

In the light of the theories of Halbwchs, Zelizer and Boyer, Sak's "Collective Memory and Video Sharing on the Internet" investigates and discusses the relationship between collective memory and the phenomenon of online video sharing through web sites such as YouTube, which facilitates establishment of new relations and globally sharing of new experiences and information.

In "The Significance of Participatory Culture at the Age of Media Convergence" Zeynep Koçer explores media convergence in relation to the changes in media industries and audience. She discusses the media convergence as a cultural process and a representation of a cultural shift for consumers. Koçer goes through the changes in technologies and markets while defining a new media consumer in relation to those and pointing the changing marketing strategies of the producers regarding the consumer/participant.

Through a Lacanian analysis, Alev Değim discusses the problematic of identity construction in social networking sites. In "Identity Construction in Facebook: A Lacanian Analysis of Profiles and Facebook Generated Games", Değim focuses on Facebook and Facebook generated games to explore the identity constructions of its users while trying to explain the tendencies and problematic through a Lacanian perspective. As Değim concludes, she points the tendency for self-narration and the liquefaction of the Identity; as the constructed identities of Facebook users form a bond between their Ideal-I and Social-I, they create fragmented bodies and through their avatars they take a step towards viewing and forming their Gestalt and others Gestalts.

Sarıkaya, in his "What Is Blogging: Towards a Definition," questions what blogging is, and makes an attempt to define blogging with respect to the characteristics of this new medium including motivations of bloggers and blogging. There is substantial amount of work and studies done on blogs but Sarıkaya suggests that blogging has usually been compared to citizen journalism. He approaches blogging as a new genre of writing, publishing and participating, and proposes that there is more to blogs than mere journalism as blogging is something that emerged out of the web and it is something that is only possible on a networked infrastructure such as the internet. instant and unlimited access to products marks the importance of participation as it becomes the undeniable fact for both the producer and the consumer of that media. So in this part, it is possible to find how media industries and individuals are affected with what participation and, as a result, global interaction triggers.

COLLECTIVE MEMORY AND VIDEO-SHARING ON THE INTERNET SEGAH SAK

1. Introduction

In the broadest sense, the use and development of the internet provided easier and faster communication for the mankind. The new tools of communication provided by the Internet brought out the question of establishing, developing, weakening or destroying social ties and thus communities. As text-based or aural communication is not the blessing of the internet, although their transition has widely drawn attention, what was more significant for the users and the researchers was communication through video. Video-sharing offered internet users who are scattered upon the globe the opportunity to communicate through moving images. Through video-sharing, establishment of new relations and sharing of experiences and information were facilitated.

If the World Wide Web provides the storage of those experiences and information to be communicated through the globe, then there appears a phenomenon to be related to the study of new media and that is collective memory. The following sections will try to investigate this relation establishing the discussion upon the studies on collective memory and on video-sharing. YouTube and Collective memory are the two video-sharing web sites that are to be studied as cases of video-sharing sites.

After this very first section, which is the introduction, in the second part, the most fundamental theories on *collective memory* will be given. The third section will comprise the information and discussions on the video-sharing web sites. The main discussion on the possibility of constructing collective memory through video-sharing will be given in the fourth part. The last section will conclude the study.

2. Collective Memory

One of the most referred names in the studies of memory is clearly Bergson who, just as Beplate states, "positions memory as a mode of relation rather than a fixed term."¹ This is in a way related to Bergson's understanding of subjective experience of time which he believes to be not linear. Bergson brings past and present to the ground of discussion of memory claiming that "memory pushes the past into the present."² For wo/man, in duree, perception takes place in every act but the degree of the tension of the mind varies, resulting in the selection of various images "suitable to the exigencies of the moment"³ for the formation of the memory. According to Bergson, memory's fundamental function is "to evoke all those past perceptions which are analogous to the present perception, to recall to us what preceded and followed them, and so to suggest to us

^{1.} Justin Beplate, "Joyce, Bergson, and the Memory of Words", *The Modern Language Review*, Vol. 100, No. 2, p. 299.

^{2.} Grace Neal Dolson, "The Philosophy of Henri Bergson, I", The Philosophical Review Vol. 19, No. 6, p. 588.

^{3.} Dolson 590

that decision which is the most useful."⁴ In parallel, a name from the discipline of video-art, Bill Viola suggests that "memory can be regarded as a filter (as are the five senses) - it is a device implanted for our survival".⁵

Bergson's problem was individual memory. Later than Bergson, his student Halbwachs attempted to construct a theory of *collective memory*. Halbwachs does not handle memory as something intrinsic, rather, believes that memories are reconstructed under the influence of the society.⁶ According to him, the only memory that is freed from the pressure of the society is dreamlike memory. He explains that "what makes recent memories hang together is (...) that they are part of a totality of thoughts common to a group, the group of people with whom we have a relation at this moment, or with whom we have had a relation on the preceding day or days."⁷ Thus, it is possible to say that not only common individual recollections constitute the collective memory, but also collective memory forms individual recollections.

Zelizer explains that "at its most fundamental level, collective memory suggests a deepening of the historical consciousness" which establishes the differentiation and relation "of the markings of the past and ourselves in the present."⁶ He then states six premises for the description of collective memory depending on the contemporary studies. Those premises set forth collective memory as being processual (for that it is a transforming, unfolding and changing process), unpredictable (for that it is not linear, logical or rational), partial (for that it involves various fragments from various histories), usable (for that it helps to make connection for construction of meanings), both particular and universal (for that it can represent a particular past for a group and a universal significance for another), and material (for that it exists not in the head but in the world).⁹

If the collective memory is, under these circumstances, the relation of wo/man to history, then it is possible to say that, it is closely connected to time and space. The communication technologies of the contemporary era present World Wide Web as a *space*, if not *the place*, which is referred to as cyberspace. Thus, a study of the collective memory in the contemporary era is highly attached to a study of cyberspace, and vice versa, a study of cyberspace must at some point touch the studies on the collective memory. Actually, the question of the collective memory in the modern era and modern space can constitute a ground for the discussion of the relation between collective memory and cyberspace. Perhaps, the mostly shared idea on the issue is that, as recaptured by Boyer, "a panoramic flow of unstable visions offered a new accounting of memory disturbances."¹⁰ To examine such proposition in the context of this paper, firstly, an overview of the studies on the video-sharing sites is essential.

^{4.} Henri Bergson, Matter and Memory, p. 303.

Bill Viola, "Will There Be Condominiums in Data Space?" in From Wagner to Virtual Reality, Randall Packer and Ken Jordan, p. 317.

^{6.} Maurice Halbwachs, On Collective Memory, p. 42.

^{7.} Halbwachs 52.

Barbie Zelizer, "Reading the Past Against the Grain: the Shape of Memory Studies" in Critical Studies in Mass Communication, p. 218.

^{9.} Zelizer 218-234.

^{10.} M. Christine Boyer, The City of Collective Memory: Its historical imagery and architectural entertainments, p. 24.

3. Video-sharing through Internet

Bush states that "science has provided the swiftest communication between individuals; it has provided a record of ideas and has enabled man to manipulate and to make extracts from that record," and mentions the sustainability of knowledge "throughout the life of a race rather than that of an individual."¹¹ Video-sharing can be considered as the most popular activity of communication and consequently, in parallel to Bush's argument, enabling the sharing and transmission of representations of cultural texts, information and experiences through the internet.

In the video-sharing web sites, associations required for sharing and transmission are based on shared interests. There appears one of the main points of the arguments on cyberspace: does establishment of associations create communities? The answer to this question seems to be complicated, however asking the question is important to put forward an idea on the formation of collective memory in the cyberspace.

Driskell and Lyon juxtapose three components of community depending on Hillery's studies; a specific place, common ties and social interaction.¹² They agree, and I would agree, that cyberspace constitutes that specific place in the virtual world. However, for the remaining two, although relations between people are constructed in the cyberspace, they find the establishment of common ties and social interaction questionable as the internet users do not have "a bond, a measure of commitment, a set of shared values, a culture, a history, and a shared identity."¹³ Consequently, they argue that "most virtual communities do not contain the necessary qualities of true community" although they are believed to have the potential to substitute the classical communities.¹⁴ Questionability of the formation of communities in the cyberspace is perhaps agreed upon which triggered the proposition of the concept of *social networks*.

Cheng, Dale and Liu see the great achievement of video-sharing sites in the establishment of such social networks more than in the combination of videos with rich content.¹⁵ Lange explain that social networks are formed by the negotiation of "affective exchanges, identities, and social relationships" through both videos and texts.¹⁶ Here, I propose the next question which I will discuss after I elaborate on the two cases: are social networks, if not communities, required for us to speak about collective memory?

3.1. YouTube

YouTube (http://www.youtube.com) was founded in 2005 with the slogan of "broadcast yourself". Hilderbrand explains that YouTube facilitates communication by the "ways that emphasize video

- 13. Driskell and Lyon 377.
- 14. Driskell and Lyon 384.
- Cheng, Xu, Cameron Dale, and Jiangchuan Liu, "Understanding the Characteristics of Internet Short Video Sharing: YouTube as a Case Study" in *ArXiv.org*, p. 1.
- Patricia G Lange, "Fostering Friendship Through Video Production: How Youth Use YouTube to Enrich Local Interaction," paper presented at the Annual Meeting of the International Communication Association, p. 22.

^{11.} Vannevar Bush, "As We May Think" in *From Wagner to Virtual Reality*, Randall Packer and Ken Jordan, p. 143.

Robin Bateman Driskell and Larry Lyon, "Are Virtual Communities True Communities? Examining the Environments and Elements of Community" in *City& Community*, Vol. 1, No. 4, p. 375. Driskell and Lyon quote from: Hillery, G. A., Jr. (1955). "Definitions of Community: Areas of Agreement," <u>Rural Sociology</u>. V. 20, pp. 779–791.

over epistolary exchange."¹⁷ In this video-sharing web site, users do not merely produce and view videos shared by a few people; rather, they "participate in a huge decentralized community by creating and consuming terabytes of video content."¹⁸ As discussed above, the communal character of YouTube is questionable; however Lange's proposition that "YouTube is an imagined community of people who share an interest in video making or communicating through interactive video"¹⁹ is acceptable. After all, the issue here is not a concrete formation of a community, rather, just as elaborated by Rotman, Golbeck and Preece, it is a sense of community.²⁰

Although its starting point is individually created videos, there are many categories now of videos that are shared within this imagined. The current interface offers the links to videos under the categories of autos & vehicles, comedy education, entertainment, film & animation, gaming, howto & style, music, news & politics, nonprofits & activism, people & blogs, pets & animals, science & technology, sports, travel & events, shows, movies, contests and events, somehow orienting and sorting the individuals within the network. As argued by Naím, the videos are mostly frivolous; however there are also serious videos of "incidents that have political consequences or document important trends, such as global warming, illegal immigration, and corruption" as well as educative videos again produced by the internet users.²¹ "Once publicized on YouTube, these events and issues at times get taken up in the mainstream press".²² This leads us to treating, or at least considering YouTube as an alternative source of information. Furthermore, the power of YouTube as a tool of propaganda, which was, as frequently stressed on the discussions on YouTube, just proved to be existing during the election campaign of Obama, should not be underestimated.

Therefore, it seems to be possible to claim that YouTube itself constitutes a network of videos and of people. Santos et al. investigate this network depending on the most essential relationships that are present in YouTube; those relationships are stated to be present between user and user as friendship, between user and user as subscription, between user and video as favoring, and between video and video as relatedness.²³ Stimulating users on the shared interests and experiences by encouraging *friendship* and *subscription* enables establishment of relations between people. YouTube uses hyperlinks to connect and sort videos leading to adding of a "non-narrative seriality to the viewing experience."²⁴ There is also the possibility of tagging which

Lucas Hilderbrand, "YouTube: Where Cultural Memory and Copyright Converge," in *Film Quarterly*, Vol. 16, No. 1 p. 49.

Rodrygo L. T. Santos, Bruno P. S. Rocha, Cristiano G. Rezende, and Antonio A. F. Loureiro, "Characterizing the YouTube Video-Sharing Community," working paper submitted to the *Department of Computer Science, Federal University of Minas Gerais*, p. 1.

Patricia G. Lange, "(Mis)Conceptions about YouTube" in Video Vortex Reader, Geert Lovink and Sabine Niederer, p. 88. "Imagined community" is a concept that the author borrowed from Benedict Anderson, *Imagined Communities*, London and New York: Verso, 1983.

Dana Rotman, Jennifer Golbeck, and Jennifer Preece, "The Community is Where the Rapport Is – On Sense and Structure in the YouTube Community" in *Proceedings of the 4th International Conference on Communities & Technologies*, p. 41.

Moisés Naím, "The YouTube Effect: How a Technology for Teenagers Became a Force for Political and Economic Change" *Foreign Policy*, Jan./Feb. 2007, p. 104.

^{22.} Hilderbrand 50.

^{23.} Santos, Rocha, Rezende, and Loureiro 1.

^{24.} Hilderbrand 49.

contributes to this kind of experience by providing "additional descriptors for submitted video."²⁵ Tagging is a kind of naming that reveals the meaning given by the users to that video. Halbwachs considers naming and attributing meanings as a way of arrangement of objects and event in the mind.²⁶ Analogically, the activity of tagging arranges the videos in the web site which is itself a memory, and this way determines the significance of a video to be selected for the recollection of collective memory.

3.2. Collective Memory

Collective Memory (http://www.collectivememory.com) is another web site that is constituted by videos. In the web site, the videos are organized according to the title, the place, the time, the topic, and the language. Most of the videos involve interviews and chats with elder people. Although there are not enough videos in English, presumably related to its establishment in Berlin, it is possible to handle the web site conceptually. In the text that presents the description of the site, it is stated that,

the real history is hidden in the people's memory, experience, testimonies, and human stories. (...) Collective (historical) memory has been created to store these memoirs, (...) and to make them available for all the people around the world. Collective (historical) memory is our collective memory, the true history, the library of historic testimonies. It is not important, whether the story concerns the whole society or just an individual, whether it is about love, misfortune, real events or special experiences. It should be an interesting story, beneficial for future generations.²⁷

Under the light of these statements, it is possible to say that this web site targets at the individual memories that have contributed to formation of collective memories, or that have the potential to awaken or strengthen collective memories to be transmitted to the future.

One point that has drawn my attention in this statement was the emphasis that was made to benefit of future generations. As mentioned in the second chapter, Bergson underlined the use of perceptions to form the memory. What this site tries to do seems to be in parallel with Bergson's theory that, in a way, favors the selection of the useful image; if the story that is intended to be uploaded to the site is beneficial, then it is welcomed. But if it is not beneficial, then it is considered to be irrelevant and is eliminated from the collection of images and thus the collective memory. Thus, to establish a connection between collective memory and video-sharing web sites, it feels like it is reasonable to think on the analogy between collective memory and the web site of Collective Memory.

4. Discussion: Possibility of Constructing Collective Memory through Video-Sharing

I believe that it is possible to develop a discussion on the relationship between collective memory and video-sharing upon two dimensions that can be deduced from the previous chapters. The first dimension is related to the relationship between people in means of the construction of communities or social networks in the cyberspace. The other dimension that I offer is related to

26. Halbwachs 175.

Gary Geisler and Sam Burns, "Tagging Video: Conventions and Strategies of the YouTube Community" Proceedings of the 7th ACM/IEEE-CS Joint Conference on Digital Libraries, p. 1.

^{27. &}quot;What is Collective Memory?" Collective Memory Web Site.

videos which constitute the images, the raw material of the memory. In the following paragraphs, I will handle these two dimensions respectively to develop arguments on the possibility of construction or existence of collective memory.

The studies mentioned in the third chapter reveal that, the communities in the cyberspace do not carry the characteristics of a classical community. In the most basic sense, the relationships among the users of YouTube are found to be not between large number of people but rather between small groups of two to three (Rotman et al, 2009).²⁸ Eventually, use of the notion of social network seems to be more appropriate. However, this premise does not break off the ties between social network in the cyberspace and the classical communities; after all, there exists a connection between the people of a network. This might be related to the inefficient use of the cyberspace by the users or to the inadequacy of the cyberspace in providing communal relations. Halvey and Keane believe that "a large number of users do not use the facilities for social interaction available to them in media sharing services" and that if they do, it becomes possible to create sound social interactions.²⁹ This idea is close to the ideas that are involved in the critiques of modern societies claiming the disappearance of communities "due to weak connections with local places and changing modes of social interactions,"³⁰ Driskell and Lyon argue that on the one hand intense use of internet indeed harms social relations, and on the other hand the relationships within the virtual communities lack the intimacy and psychological closeness of classical communities.³¹

Contributing to the formation of social networks in a video-sharing site requires not only uploading or viewing videos, but also commenting or discussing on the videos. After all, people can not partake in the construction of a collective memory unless they partake in the construction of the social network. The images of the collective memory might be perceived by the outsider, but those images would not be selected to be kept in the memory of her/him. But if we are talking about a social network that is not a classical community, perhaps constitution of a social network is not really vital; articulation of the video by the activities of uploading, viewing, commenting and discussing might provide a place for the shared video in the collective memory. Accordingly, there are arguments on the potential of video-sharing sites for the collaborative production of "social capital."32 Ascott similarly writes about global cultures which are expected to be hypermediated by digital media; and no culture exists without collective memory.³³ For example, I believe that video-sharing web sites increased the accessibility to those artworks and the familiarity of the people with video-art; this situation opens the way for, if not yet ensures, the formation of a collective memory constituted by those artworks. As Burgess and Green explain, "on YouTube, aesthetic values, cultural forms, and creative techniques are normalized via the collective activities and judgements of the entire social network-forming an informal and emergent (and by far from homogeneous) 'art world' that is specific to YouTube" and it is impossible to underestimate the

^{28.} Rotman et al. 46

^{29.} Martin Halvey and Mark T. Keane, "Exploring Social Dynamics in Online Media Sharing" poster paper presented in *Proceedings of the 16th International conference on World Wide Web*, p. 1274.

^{30.} Driskell and Lyon 373

^{31.} Driskell and Lyon 382

^{32.} Fay Durrant, "The Digital Difference of Online Social Networking in the Caribbean" presented at the International Federation of Library Associations, Social Science Libraries Section, Satellite Conference, p. 1.

Roy Ascott, "Is There Love in the Telematic Embrace?" in *From Wagner to Virtual Reality*, Randall Packer and Ken Jordan, p. 343.

existence of a collective memory for that art world.34

However, still, there appears to be a distinction between the construction of and the preservation, reinforcement or reconstruction of an already existing collective memory. For now (not to be narrow-minded on the limits of technology), construction of collective memory does not sound to be an essential consequence of video-sharing depending on the questionability of constructing true communities or social groups. However, it is the question of preservation, reinforcement or reconstruction of an already existing collective memory, then there appears a counter argument on the contribution of video-sharing to the collective memory.

Driskell and Lyon, based on their study, state that "users report that the Internet has had a modestly positive impact on both increasing contact with others and communicating more with family."³⁵ The study of Lange also reveals that YouTube "can function as a catalyst that helps facilitate social interaction at the local level" by strengthening weak ties or awakening latent ties.³⁶ Lange also mentions the ability of YouTube of mediating off-site communication between the users.³⁷ Consequently, even if video-sharing does not construct new communities on the internet, it reinforces the communities existing in the material world.

Depending on the argument that YouTube makes some existing but invisible social ties appear, it is also possible to refer to the concept of public sphere. According to Warmbrodth, Sheng and Hall "the use of videos provides more freedom for bloggers to express their opinions/ views and interact with their viewers more directly and interactively."³⁸ This will lead to sharing of opinions more freely in the cyberspace than in the material world. Circulation and discussion of the opinions in the cyberspace as a public sphere not only establish ties between separated individuals, but also create a collective memory of political discourses.

If we continue with the videos that serve as the images that constructs collective memory, the first thing to say will be that bringing together videos, the YouTube itself acts as a memory. However, YouTube does not really make a selection from those images; there I find an analogy between perception and YouTube on the one hand, and memory and Collective Memory on the other. What differentiates Collective Memory from YouTube is that it selects the useful images for the construction and sustainability of a collective memory. In this sense, the situation of YouTube is closer to the situation of the whole contemporary civilization: wo/man "has built a civilization so complex that he needs to mechanize his records more fully if he is to push his experiment to its logical conclusion and not merely become bogged down part way there by overtaxing his limited memory."

Another argument that can be developed in respect to shared video is that the contribution of video to the collective memory is related to the quality of the video. The frivolous videos produced and shared by YouTube users are condemned to be only momentary perceptions that will not help to construction of collective memory. However, just as Collective Memory does,

Jean E. Burgess and Joshua B. Green, "Agency and Controversy in the YouTube Community" in Proceedings IR 9.0: Rethinking Communities, Rethinking Place - Association of Internet Researchers (AoIR) Conference, p. 2.

^{35.} Driskell and Lyon 385.

^{36.} Lange, "Fostering Friendship Through Video Production" 1.

^{37.} Lange, "(Mis)Conceptions about YouTube" 88.

John Warmbrodth, Hong Sheng, and Richard Hall, "Social Network Analysis of Video Bloggers' Community" in Proceedings of the 41st Annual Hawaii International Conference on System Sciences, p.1.

^{39.} Bush, "As We May Think" 159.

YouTube also contains videos that cover significant historical events. Actually, YouTube has more potential to offer significant videos. Because, on the one hand, there exists videos recorded by citizen journalists exhibiting what professional journalists might have missed or ignored for some acceptable or vulgar reasons; Naím claims that the professional journalists employed by international news operations including BBC and CNN "will never be as omnipresent as millions of people carrying a cell phone that can record video."⁴⁰ On the other hand, YouTube makes it possible to relocate into the collective memory the images of "classic' moments from television"⁴¹ and media texts which have contributed to the popular culture. Eventually, as Hilderbrand suggests, YouTube operates "as a portal of cultural memory."⁴²

5. Conclusion

After bringing together the mentioned studies and elaborating and discussing in the light of those studies, I believe that it is hard to take a definite position in a discussion of the relation of collective memory and video-sharing. Still, there are some points that I consider to be important for the development of such discussion. Firstly, I think that it is substantial to differentiate between the construction of collective memory and the preservation, reinforcement or reconstruction of an already existing collective memory through video-sharing. Secondly, it is also substantial to not make generalizations on the videos that are shared in YouTube as it contains various important videos as well as the redundant ones. Comparing YouTube and other cases of video-sharing sites offers sound insights for the evaluation of video-sharing sites and activities and their influence on the people. Furthermore, I resist prejudicing against new media which I have frequently encountered in cultural and specifically urban studies, even if not in media studies. In this regard, I agree with Lipsitz: "people act in the arenas open to them; there is nothing intrinsically better or worse about the generation and circulation of ideas through electronic mass media than through the printed word."43 Lastly, I believe that cyberspace is indeed a space, however in distinctive character- positive in some senses and negative in others. Thus, although relying upon the existing theories and studies on physical space and communities, and depending on possible analogies is unconditional and inspiring, it is important to be aware of the difference of the natures of the physical world and of the virtual world. I would never accept an argument that replaces or substitutes the physical world with the virtual one, and I would never like to give up on the communication and information opportunities that are offered by the virtual world.

^{40.} Naím 105.

^{41.} Hilderbrand 50.

^{42.} Hilderbrand 54.

^{43.} George Lipsitz, Time Passages: Collective memory and American popular culture, p. vii.

Works Cited

- Ascott, Roy. "Is There Love in the Telematic Embrace?" *From Wagner to Virtual Reality.* Eds. Randall Packer and Ken Jordan. New York & London: W. W. Norton, 2002. 305-316. Print.
- Beplate, Justin. "Joyce, Bergson, and the Memory of Words." *The Modern Language Review* 100.2 (2005): 298-312. Web. 27 Dec. 2010.
- Bergson, Henri. *Matter and Memory.* Trans. Nancy Margaret Paul and W. Scott Palmer. Mineola; New York: Dover Publications, 2004. Print.
- Boyer, M. Christine. *The City of Collective Memory: Its historical imagery and architectural entertainments.* Cambridge; London: The MIT Press, 1994. Print.
- Burgess, Jean E. and Joshua B. Green. "Agency and Controversy in the YouTube Community." Proceedings IR 9.0: Rethinking Communities, Rethinking Place - Association of Internet Researchers (AoIR) conference. 15-18 Oct. 2008, IT University of Copenhagen, Denmark. Web. 27 Dec. 2009 << http://eprints.qut.edu. au/15383/1/15383.pdf>.
- Bush, Vannevar. "As We May Think." *From Wagner to Virtual Reality.* Eds. Randall Packer and Ken Jordan. New York & London: W. W. Norton, 2002. 135-153. Print.
- Cheng, Xu, Cameron Dale, and Jiangchuan Liu. "Understanding the Characteristics of Internet Short Video Sharing: YouTube as a Case Study." *ArXiv.org* 25 July 2007. arXiv:0707.3670v1 [cs.NI]. Web. 27 Dec. 2009 <http://arxiv.org/PS_cache/arxiv/ pdf/0707/0707.3670v1.pdf>.
- Dolson, Grace Neal. "The Philosophy of Henri Bergson, I." *The Philosophical Review* 19.6 (1910): 579-596. Web. 27 Dec. 2009.
- Driskell, Robin Bateman & Larry Lyon. "Are Virtual Communities True Communities? Examining the Environments and Elements of Community." *City & Community* 1.4 (2002): 373– 390. Web. 28 Dec. 2009.
- Durrant, Fay. "The Digital Difference of Online Social Networking in the Caribbean." International Federation of Library Associations, Social Science Libraries Section, Satellite Conference. 6–7 August 2008, University of Toronto. Web. 27 Dec. 2009 http://www.ideals.illinois.edu/bitstream/handle/2142/8836/Durrant.pdf?sequence=2
- Geisler, Gary and Sam Burns. "Tagging Video: Conventions and Strategies of the YouTube Community." *Proceedings of the 7th ACM/IEEE-CS Joint Conference on Digital Libraries.* 18–23 June 2007, Vancouver, BC. Web. 27 Dec. 2009 http://portal.acm. org/citation.cfm?id=1255279>.
- Halbwachs, Maurice. On Collective Memory. Trans. Lewis A. Coser. Chicago: University of Chicago Press, 1992. Print.
- Halvey, Martin and Mark T. Keane. "Exploring Social Dynamics in Online Media Sharing." Poster Paper. Proceedings of the 16th International conference on World Wide Web.
 8-12 May 2007, Banff, Alberta. Web. 27 Dec. 2009 http://portal.acm.org/citation.cfm?id=1242804>.
- Hilderbrand, Lucas. "YouTube: Where Cultural Memory and Copyright Converge." *Film Quarterly* 16.1 (2007): 48-57. Web. 28 Dec. 2009.
- Lange, Patricia G. "Fostering Friendship Through Video Production: How Youth Use YouTube to Enrich Local Interaction." *Annual Meeting of the International Communication Association.* 27 May 2007, San Francisco, California. Web. 27 Dec. 2009 <a href="http://

www.patriciaglange.org/page4/assets/Lange%20ICA%202007%20Paper.pdf>.

- ---. "(Mis)Conceptions about YouTube". *Video Vortex Reader*. Eds. Geert Lovink and Sabine Niederer. Amsterdam: Institute of Network Cultures, 2008. 87-100. Web. 02 Mar. 2010 http://networkcultures.org/wpmu/portal/files/2008/10/vv_reader_small.pdf>.
- Lipsitz, George. *Time Passages: Collective memory and American popular culture*. Minneapolis & Oxford: University of Minnesota Press, 1990. Print.
- Naím, Moisés. "The YouTube Effect: How a Technology for Teenagers Became a Force for Political and Economic Change." *Foreign Policy.* Jan./Feb. 2007: 104-103. Web. 28 Dec. 2009.
- Rotman, Dana, Jennifer Golbeck, and Jennifer Preece. "The Community is Where the Rapport Is – On Sense and Structure in the YouTube Community." *C&T'09, Proceedings of the 4th International Conference on Communities & Technologies.* 25–27 June 2009, University Park, Pennsylvania, USA. Web. 04 Apr. 2010 http://portal.acm.org/citation. cfm?id=1556467>.
- Santos, Rodrygo L. T., Bruno P. S. Rocha, Cristiano G. Rezende, and Antonio A. F. Loureiro. "Characterizing the YouTube Video-Sharing Community." Working Paper. *Department* of Computer Science, Federal University of Minas Gerais. Brazil, 2008. Web. 27 Dec. 2009 http://security1.win.tue.nl/~bpontes/pdf/yt.pdf.
- Viola, Bill. "Will There Be Condominiums in Data Space?" From Wagner to Virtual Reality. Eds. Randall Packer and Ken Jordan. New York & London: W. W. Norton, 2002. 287-298. Print.
- Warmbrodth, John, Hong Sheng, and Richard Hall. "Social Network Analysis of Video Bloggers' Community." Proceedings of the 41st Annual Hawaii International Conference on System Sciences. Jan. 2008, Waikoloa, HI. Web. 27 Dec. 2009 http://www.computer.org/portal/web/csdl/doi/10.1109/HICSS.2008.402>.
- Zelizer, Barbie. "Reading the Past Against the Grain: the Shape of Memory Studies." *Critical Studies in Mass Communication* 12 (1995): 213–239. Web. 27 Dec. 2009.

Collective Memory. <http://www.collectivememory.com>/<http://www.collectivememory.tv> YouTube. <http://www.youtube.com/>

THE SIGNIFICANCE OF PARTICIPATORY CUL-TURE IN THE AGE OF MEDIA CONVERGENCE ZEYNEP KOÇER

Henry Jenkins defines media convergence as "flow of content across multiple media platforms, the cooperation between multiple media industries and the migratory behavior of media audiences."⁴⁴ Through this definition this paper explores media convergence in relation to the changes in media industries and audience. The former involves the investigation of the ways different types of media merge and the alterations in the marketing strategies of media products such as films and television series. The latter explores the shifting viewing experiences and the significance of the new active consumer in circulating the media content through the production of a participatory culture. In this sense, this paper approaches media convergence not only as a "technological process"⁴⁵ but also as a cultural one since convergence represents a "cultural shift as consumers are encouraged to seek out new information and make connections among dispersed media content."⁴⁶

The Changes in Existing Technologies, Industries and Markets

Since the late 1990's video rentals and DVD sales have surpassed the U.S. box-office revenues of almost every film. Theatrical releases of the films nowadays can not even compete with the video game sales. D. N. Rodowick suggests an optimistic point of view regarding this constant decline. He argues that "Hollywood will learn to coexist with the internet; home theater and video gaming just like it did with video and television."⁴⁷ How do film and television industries can reinvent themselves and create new marketing strategies? In other words, how can producers achieve collective intelligence and hence collective consumption for their media content?

If we look at participatory culture as a middle ground which receives the media content, circulates it and then helps the production of collective intelligence around that specific media content, it can be argued that the active participant becomes the key player. The active viewer/ participant/consumer is the mediating link between collective intelligence and the producers since it is the consumer who constructs participatory culture. According to Jenkins collective intelligence becomes more and more important for the media industry since it leads to consumption. From watching and sharing trailers to spreading production details and gossip on stars online, the consumers are increasingly using the internet as a platform for producing hype around media products. There are numerous websites, blogs, forums and fan pages in social networking websites such as Facebook, Myspace and Twitter and they are dedicated to certain films and television series where fans speculate on the ongoing mysteries of the stories and the production details of films. These sites are also becoming platforms where media can literally be consumed since clothing, accessories, DVDs, posters and props are being sold over them as well.

^{44.} Henry Jenkins, Convergence Culture: Where Old and New Media Collide, p. 2.

^{45.} See John V. Pavlik, New Media Technology: Cultural and Commercial Perspectives. Allyn & Bacon.

^{46.} Henry Jenkins, Convergence Culture, p. 3.

^{47.} D. N. Rodowick, The Virtual Life of Film, p. 183.

In other words, the participants and fans in these forums and websites have become free agents who promote films or television series. The "imdb All-Time Worldwide Box Office"¹ list is an example to understand the power of fandom and the technological advancements in cinema hence all of the films which will be mentioned below are at the moment among the top 50 most grossing films worldwide.

According to imdb, out of the 50 most commercially successful films world-wide, 34 of them already have an established fan base from comic books such as Batman, Spider-Man, Iron-Man, novels such as The Lord of the Rings Trilogy and Harry Potter Series or/and of them are sequels to a very successful first movie or animation such as Pirates of the Caribbean: The Curse of the Black Pearl (Verbinsky, 2003), Toy Story (Lasseter, 1995), and Shrek (adamson, Jansen, 2001). One example of how fans play a significant role in the construction of hype over the internet is the latest Batman film, The Dark Knight (Nolan, 2008). The anticipation to the release of The Dark Knight was so high among the fans that, the film became the top film on imdb's top 250 list even before its theatrical release. Also the adaptations of successful novels such as The Da Vinci Code, Forrest Gump, Eclipse, New Moon, Harry Potter and The Lord of the Rings into film have become an almost guaranteed box office success since all of the films together with their sequels are among the most commercially successful films worldwide. However, it would not be enough to suggest that only the already established fan base of the comic books or novels is enough to create hype and bring solid box office revenue to the producers. They still need to provide more than just the novel or the comic book. Hence, producers most commonly spread production details, estimated budget of the film, sign a star to the leading role (Tom Hanks in Forrest Gump (Zemeckis, 1994), Will Smith in Hancock (Berg, 2008) or Harrison Ford in Indiana Jones and the Kingdom of the Crystal Skull (Spielberg, 2008) or in some cases expand cinema technology and provide the fans/audience with new ways of experiencing the films as in the case of Jurassic Park (Spielberg, 1993), Independence Day (Emmeich, 1996) and more recently Avatar (Cameron, 2010), Alice in Wonderland (Burton, 2010) and Toy Story 3 (Unkrich, 2010).

By looking at the imdb list it can also be argued that with the exception of *Harry Potter* and the *Philosopher's Stone* (Columbus, 2001), the sequels of a very successful first movie brings more box-office revenue than the first one such as *Transformers: Revenge of the Fallen* (Bay, 2009) which grossed over 100 million dollars more than *Transformers* (Bay, 2007) or *Spider-Man* 3 (Raimi, 2007) which brought over almost 100 million dollars more than *Spider-Man* (Raimi, 2002). In other words, their popularity simultaneously raises both with the success of the first movie and the hype generated around them. Yet still the film industry cannot solely depend on the theatrical revenue of the films. Therefore films nowadays have become the major marketing tools for other media products such as DVD sales, rentals, video games of the films as well as the other merchandise such as clothing lines and toys.

The other new marketing strategy involves what Henry Jenkins calls *transmedia storytelling*. In addition to the promotion of the above products, producers can prefer not to reveal every detail about the narrative of the film in the film. In other words, the story does not have to be contained in one media and can be "expanded through television, novels, comics"², videogames or like in the case of *The Matrix* (Wachowski brothers, 1999) through a Japanese anime, *The Animatrix* (Chung, Jones, 2003). George Lukas also used the same method with

^{1.} http://www.imdb.com/boxoffice/alltimegross?region=world-wide

^{2.} Henry Jenkins, Convergence Culture, p. 96.

Star Wars (Lucs, 1977) when he produced a television series of *Star Wars*: Clone Wars (Lucas, 2008-2010) and a digitally animated film of *Star Wars*: *Clone Wars* (Filoni, 2008). Barbara Klinger argues that "created with a surplus of information or narrative tricks," the industry promotes such films as particularly re-viewable.'³ In other words, in those extensions, the producers provide more detailed plots to the existing stories as well as revealing important aspects of the plot in order to understand the film. This leads to another aspect of convergence culture which offers the possibility to produce complex narratives both inside film industry and for commercial television. What is the complex narrative and more importantly how does it become a part of the discussion on participatory culture and changing media marketing strategies?

The New Media Consumer

Hollywood has been producing complex narrative films for a long time. Barbara Klinger uses Bordwell's term "puzzle films" and argue that these films

typically have a mature subject matter; a complex, atypical, multilayered narrative; a confusion of objective and subjective realms; a usually dense style; an ending that depends on a reversal or surprise that makes viewers reevaluate their experience with the text; and the presence of an initially occult meaning that requires re-viewing to uncover the text's mysteries.⁴

However, even though complex narratives are not a new form in Hollywood, given the example of the transmedia storytelling narrative in *The Matrix* (Wachowski brothers, 1999), it can be argued that this type of narration has been evolving in television. One major reason for this evolution is the advancement of new media technologies and possibilities they offer such as multiple viewing and downloading.

In commercial television, the complex narrative is relatively a new form. One of the first examples of this kind of a narrative was *Twin Peaks* (Frost and Lynch, 1990-1992) which was a surrealistic nightmare of events after the death of Laura Palmer. These narratives can be considered as examples of "hypertextuality which is among the key concepts of new media."⁵ Hypertexts allow the producers the possibility of non-sequential readings since the text does not necessarily include one line of interpretation but rather the reader is offered "a multilinear experience since the variable number of links on offer in any given text produces high number of possible pathways."⁶ Therefore, these television series are filled with enigmas, clues, mysteries and codes. Especially since "the Oceanic flight 815 crash-landed in the Pacific Ocean"⁷, complex narratives have become very popular on television. With *Lost* (Abrahms, 2004-2010), the writers fragment time and produce flashbacks as well as flash forwards. The linear time line is constantly broken infinite number of times with these flashbacks and flash forwards and time with its possible definitions and interpretations itself becomes an enigma. The clues are hidden inside the plot very

^{3.} Barbara Klinger, Beyond the Multiplex: Cinema, New Technologies and the Home, p. 160.

^{4.} Ibid., p. 157.

^{5.} M. Lister, J. Dovey, S. Giddings, I. Grant and K. Kelly, New Media: A Critical Introduction, p. 23.

^{6.} Ibid, p. 27.

ABC's Lost, as Jason Mittell describes, is "the most complex American television has ever seen." (Jason Mittell, "Narrative Complexity in Contemporary American Television," *The Velvet Light Trap*, Vol. 5, No. 8, p. 38.)
meticulously that in order to solve the enigmas, the participation and the production of collective intelligence produced by the viewers becomes necessary. The only way to accomplish that is by multiple viewings. This also requires a consumer who is no longer a passive recipient but a "savvy decoder of a text's mysteries, an authority."⁸

According to Horace Newcomb,

the goal of every producer is to create the difference that makes a difference, to maintain an audience with sufficient reference to the known and recognized, but to move ahead into something that distinguishes his show for the program buyer, the scheduler, and most importantly, for the mass audience.⁹

In the line of Newcomb's argument, Steve Johnson proposes that Lost (Abrahms, 2004-2010) "raises almost thirty legitimate major questions only on the first season."¹⁰ As a result, there is an immense number of websites such as lostpedia.wikia.com, lost.com, lost-tv.com, lost-media.com, fuselage.com, dedicated to Lost (Abrahms, 2004-2010), and the participants are using each and every clue to solve mysteries. One fan from www.lost-tv.com says he used Photoshop to figure out the name on the obituary which Jack holds in his hand at the final episode of the 3rd season. Another fan says he needed to pause every scene in order to realize the Dharma Initiative sign on the shark which attacked Sawyer on the 2nd season. Another website, www.lost.com became a platform where participants try to explain each other the importance of quantum physics in understanding how Ben woke up in the desert after he activated the Orchid Station. Participants quote passages from Steven Hawkins' books and write summaries of their physics professors' lectures to explain the time difference and the possibility of bending space-time continuum. In other words, through consumer's active participation it is now possible to create even bigger enigmas than the ones in Twin Peaks (Frost and Lynch, 1990-1992). Consequently, television viewing has evolved so much from just being a text which is delivered to a mass audience to "decoding to put together the pieces of the puzzle."¹¹ As a result, television series have become what Lev Manovich calls QuickTime movies which "are supposed to be played forward, backward, or looped."12

In the past American fans were the most important source to decipher *Twin Peaks* (Frost and Lynch, 1990-1992) since they were able to watch the entire season before anybody else. It took a lot of effort to figure out who killed Laura Palmer for them since they were only capable of taping the episodes but not able to reach to millions of other fans around the world to discuss plot details. Now, with the option of downloading, anyone can provide narrative details of every single episode as well as decipher the enigmas each week right after the broadcast on internet websites. ABC executives have already figured out a way to make more money out of Lost (Abrahms, 2004-2010), by uploading each episode to iTunes¹³ so that fans can download

^{8.} Barbara Klinger, Beyond the Multiplex, p. 161.

Horace Newcomb and Paul M. Hirsch, "Television as a Cultural Forum", in Television: The Critical View, Newcomb and Hirsch, p. 510.

 [&]quot;Finding Lost", Stevenberlinjohnson.com, http://www.stevenberlinjohnson.com/2005/09/finding_lost. html, September 16th, 2005

^{11.} Barbara Klinger, Beyond the Multiplex, p. 158.

^{12.} Lev Manovich, The Language of New Media, p. 316.

It should be noted here that while iTunes is not supported in every country, the content of iTunes also differs from country to country.

every episode after its initial broadcast on television. Fans also use rapidshare, hotfile, torrents to download episodes, watch them online from various websites or watch them from the website of each network channel if available to their geographical regions including AMCstore, Amazon, CBS, CWTW, and Showtime. So now fans from all over the world can be a part of discussions without having to wait for the DVD release of each season. This is an example of the power of convergence culture and the opportunities the producers offer to customers. Hence, it can be argued that the advancements in technology, the spread of the internet, the downloading and online watching possibilities are among the catalysts of the reemergence and development of complex narration on commercial television.

Conclusion

Henry Jenkins suggests that convergence "alters the relationship between existing technologies, industries, markets, genres and audiences."¹⁴ This paper explored how existing technologies interact with each other through the use of transmedia storytelling and collaborations between the film and other media products. In order to explain the changing marketing strategies of the producers, the paper focused on the importance of hype which is created by the consumer/ participant. It is also pointed out that there has been a shift from using film as the marketing tool, to using film as a marketing strategy for promoting and selling other media products. Finally it is argued the reemergence of complex narration and hypertextuality are very much linked to the changing viewing experiences and the increasing significance of internet in becoming spaces of collective intelligence. According to John Fiske, "text are insufficient and inadequate to their cultural function of circulating meanings and pleasure until they are worked upon and activated by their fans."¹⁵ It is clear that at the age of media convergence, the active consumer has become a free agent who receives, constructs, distributes, promotes and consumes the media content because circulation mostly depends on participatory culture, hence the active consumer. For complex narrative such as Lost requires the sharing of knowledge in order to understand the clues, codes and messages. High budget films like The Dark Night (Nolan, 2008) uses the hype and anticipation created around the film in order to achieve maximum box-office revenues. Even though the ranking of these films at the worldwide box office lists will eventually change in time, they will still be examples of the ways hype is created by the fans through the changing market strategies of the producers.

Collective intelligence leads to grasping the clues or creating buzz and it eventually leads to consumption which according to Jenkins "can be seen as the alternative source of media power."¹⁶ This source of media power is the active participant, the new consumer; who is becoming more powerful as it evolves to be the link that combines media content to collective intelligence.

^{14.} Henry Jenkins, Convergence Culture, p. 15.

John Fiske, "The Cultural Economy of Fandom," in *The Adoring Audience: Fan Culture and Popular Media*, Lisa A. Lewis, p. 42.

^{16.} Henry Jenkins, Convergence Culture, p. 4.

Works Cited

- "44 video games being made into movies." http://www.videogamesblogger. com/2009/01/09/26-video-games-being-made-into-movies.htm. Videogameblogger, n.d. Web. 9 Jan. 2009.
- "All-Time Box Office: Worldwide." http://www.imdb.com/boxoffice/alltimegross?region=worldwide. Imdb, n.d. Web. 19. Oct. 2010.
- Fiske, John. "The Cultural Economy of Fandom." *The Adoring Audience: Fan Culture and Popular Media.* Ed. Lisa A. Lewis. London: New York; Routledge, 1992. 30-49.
- Jenkins, Henry. Convergence Culture: *Where Old and New Media Collide*. New York: New York University Press, 2006.
- Johnson, Steve. "Finding Lost." http://www.stevenberlinjohnson.com/2005/09/finding_lost. html. Stevenberlinjohnson.com, n.d. Web. 16 Sep. 2005.
- Klinger, Barbara. *Beyond the Multiplex: Cinema, New Technologies and the Home.* Berkeley: Los Angeles: London; University of California Press, 1992.
- Lister, Martin. et al. New Media: A Critical Introduction. London: New York; Routledge, 2007.
- Manovich, Lev. The Language of New Media, Cambridge: Massachusetts; MIT Press, 2001.
- Mittell, Jason. "Narrative Complexity in Contemporary American Television." *The Velvet Light Trap*, 5. 8 (Fall 2006) : 29-40.
- Newcomb, Horace and Hirsch, Paul M. "Television as a Cultural Forum." Ed. Newcomb and Hirsch, New York: Oxford: Oxford University Press, 1994. 561-573. Print.
- Rodowick, D., N. *The Virtual Life of Film*. Cambridge: Massachusetts; Harvard University Press, 2001.

Films

Alice in Wonderland, Dir. Tim Burton, 2010. Avatar. Dir. James Cameron. 2010 Dark Night. Dir. Christopher Nolan. 2008 Eclipse. Dir. David Slade. 2010 Forrest Gump. Dir. Robert Zemeckis. 1994. Hancock. Dir. Peter Berg. 2008. Harry Potter and the Philosopher's Stone. Dir. Chris Colombus. 2001. Indiana Jones and the Kingdom of the Crystal Skull. Dir. Steven Spielberg. 2008. Independence Day. Dir. Roland Emmerich. 1996. Iron-Man. Dir. Jon Favreau. 2006. Jurassic Park. Dir. Steven Spielberg. 1993. Lost. Creaters. J. J. Abrahms. 2004-2010. New Moon. Dir. Chris Weitz. 2009. Shrek3. Dir. Chris Miller & Raman Hui. 2007. Spider-Man. Dir. Sam Raimi. 2002. Star Wars. Dir. George Lucas. 1977.

Star Wars: Clone Wars. Dir. Dave Filoni. 2008

Transformers. Dir. Michael Bay. 2007.

Transformers: Revenge of the Fallen. Dir. Michael Bay. 2009.

The Matrix. Dir. Wachowski Brothers. 1999.

The Animatrix (2003). Dir. Peter Chung, & Andy Jones. 2003.

The Da Vince Code. Dir. Ron Howard. 2006.

The Pirates of the Caribbean: The Curse of the Black Pearl. Dir. Gore Verbinsky. 2003.

Toy Story3. Dir. Lee Unkrich. 2010

Twin Peaks. Creators. Mark Frost & David Lynch. 1990-1991.

IDENTITY CONSTRUCTION IN FACEBOOK: A LACANIAN ANALYSIS OF PROFILES AND FACEBOOK GENERATED GAMES I. ALEV DEGIM

The dictionary definition explains the word "Identity" as follows: "who a person is, or the qualities of a person or group, which make them different from others".¹ The usage of the term "Identity" as the part of personality that defines the person as a unique individual emphasizes their place among others in the society. The individual is given different tools to construct their identities in various altering ways. The list includes but not only limited to: fashion, shopping, education, personal websites and blogging. All of these are the instruments used to construct uniqueness among other people. There is a constant struggle to find the identity and define it as a personal trait. Interestingly, contrary to the definition of the word in everyday life, Identity as a word originates from the Latin word *Idem*, meaning "the same"². The definition and etymology of the word clashes on itself; the definition highlights the "difference" while the origin of the word means "sameness". This struggle within the word, points to a general problematic in the construction of Identity among people. Although individuals are attempting to build a sphere that separates their identities from others they define and construct Identities using similar methods and mediums, which generate a difference inside similarity.

This opposition in the word is carried on to the process of constructing the Identity. Social networking sites on the web such as Facebook, demand that the users create a Profile that includes information about both personal, business and educational life. This information later constructs the basis for the Profile page of the user. Every time other users click the name of the person, they are presented with this information accompanied by a profile picture. This page view is universal for all users although the degree of information shared with non-friends can vary. The Profile page also includes; Wall, Info, Photos and Boxes. With the help of the Profile page the users formulate their identities on the virtual space, using the same gadgets given to them.

Facebook also includes online gaming feature. These games, such as; Farmville, Café World, Fishville, Petville, Yoville, Mafia Wars, Island Paradise and many others, similar to MMOs (massively multiplayer online games), are played with the online community connected to Facebook network. Similarly, the game demands from the users to create an identity, yet this time not with the information about their birth date or education but with selecting and building up an Avatar of themselves. They choose from a variety of different haircuts, face shapes, nose shapes and clothes. During the game they construct another Avatar-Identity, for they are measured with the amount of time they spend playing online. Since the information about the advances of the users in the game is posted to the Wall of the user, the Avatar-Identity and the Profile page identity comes together.

Cambridge Online Dictionary. 29 Dec. 2009. http://dictionary.cambridge.org/define. asp?key=38918&dict=CALD

^{2.} Etymology Dictionary. 29 Dec. 2009. http://www.etymonline.com/index.php?term=identity

Identity seemingly problematic from the perspective of definition and etymology is an important part of the formation of human psyche. Jacques Lacan explains this process of constructing Identity, with the help of what he calls the Mirror Stage (or Mirror Phase). The Mirror Stage takes place when the child sees his image for the first time in the mirror. By the mother's directives, the child understands that the image is connected with his or her body. As the child watches the image he realizes that this is his body, it seems as a whole, a Gestalt, yet there is something more to him than just this image. In Lacan's own words:

The fact is that the total form of the body by which the subject anticipates in a mirage the maturation of his power is given to him only as *Gestalt*, that is to say, in an exteriority in which this form is certainly more constituent than constituted, but in which it appears to him above all in a contrasting size (*un relief de stature*) that fixes it and in a symmetry that inverts it, in contrast with the turbulent movements that the subject feels are animating him.³

With this knowledge the child is faced with a Gestalt, a whole, and the image on the mirror is the assurance of this wholeness. Yet the knowledge of him/her as something beyond, not only limited to the image, creates a fragmented body. The identity therefore is built upon this knowledge of the self. Whenever the child needs assurance of the Gestalt, the primary identification with the Other, the mirror image provides a unitary notion. While people construct identities in all parts of their lives, this performance is particularly evident on Facebook since the norms of use and interpretation are still being developed for this community.⁴ The Profile pages and the Avatar's created on Facebook similarly suggests a Gestalt effect. The person is presented as a Gestalt, everyone has attributes of their own and different likes and dislikes. Just like the person looking in the mirror to see the Gestalt, the users now are using their online profiles to see their Gestalt's. The knowledge of the person that there is something more to him than this image creates a fragmented ldentity.

The Profile pages created are "Ideal-I" for the person. Lacan tells that the image on the mirror, the Gestalt is "Ideal-I", which will later form the basis for the ego and the social self Identity: "This form would have to be called the Ideal-I, if we wished to incorporate it into our usual register, in the sense that it will also be the source of secondary identifications, under which term I would place the functions of libidinal normalization." ⁵ The Profile pages and the Avatars in the game represent this Ideal-I. The main focus of this essay will be on the process of identification on Facebook Profile pages and games. These notions will be explored with the guideline of Lacanian Mirror Stage. The primary and secondary identification processes will be analyzed with accordance to Gestalt. The question of how the identity is constructed will be the primary concern keeping in mind Lacan's fragmented body and its relation to the clash in the term "identity".

The Construction of Facebook Profiles

"Facebook.com was created by Mark Zuckerberg and two other Harvard students (Reuters).

Lacan, Jacques. Ecrits. The mirror stage as formative of the function of the I as revealed in psychoanalytic experience. Routledge, 1977. p. 2.

^{4.} Kelley, Faith L. Face-Time: The Construction of Identity on Facebook. Oxford, Ohio. 2007. p. iii

^{5.} Lacan, Jacques. *Ecrits.* The mirror stage as formative of the function of the I as revealed in psychoanalytic experience. Routledge, 1977. p. 2

Originally a site geared towards college students, it is now open to anyone with a valid e-mail address. Facebook profiles consist of information about the user including their name, picture and personal interests. The site has become one of the most common forms of computer-mediated communication that college students use to contact friends...^{*6} The social networking site wants the user to provide information about them: their birth date, gender, religious view, educational information, business information as well as their personal relationship statuses. The users can post photographs, share videos, add applications, such as Horoscopes or Reading Lists, choose their feelings. After this process the user connects with other people using the social networking site. The profile created on Facebook is coherent than any other profile created on other sites, since it is shared with other users synchronously with the News Feed feature. The user faces a whole image of their self that is immediately transferred to others as it is created. Lacan suggests that the "I" is formed in contact with the Other. As the person builds up the image of him or her self on the virtual space, it is directly embedded inside the symbolic matrix in the case of Facebook.

Before going in depth to analyzing this stage, Lacan's theory of constructing the Identity is necessary to be highlighted. As the infant comes across a mirror image of itself, and 'apperceptes' (becomes aware of the act of perception) it as its own, it creates identification with it. This identification is the primary identification that takes place. The identification is with the Other, the Ideal-I, the mirage outside the body. The infant understands that the image, the Gestalt, is not all there is to him. And a fragmented body takes place with this knowledge. This stage constitutes the basis for the secondary identification, which is the father in the case of males. Before entering the social sphere and adapting to social rules the infant identifies with the image. After the Specular I comes the Social I.

Facebook Profile Pages are mirrors in this sense. The users create an identity, an image of themselves. This image is an Ideal-I since they only put features they think are appropriate. As they place information they form up the body image on the mirror. When the process is finished, the first viewing of the profile page is the moment Lacan calls Aha-Erlebnis⁷, the A-ha experience of the recognition of ones-self on the mirror. The person recognizes the profile as its own. As the user adds friends and makes social connections the profile page becomes a social representation of the person, so the Social I is immediately constructed. The Profile page information becomes less important after social interaction is achieved, rather other actions of the user comes forth.

The content that comes to the fore of profiles includes interaction summaries that are automatically generated by the profile owner's own and other "friends" social interactions. The summaries reflect what the profile owner has done, and also other activities within the networks to which they belong. The home page of a person is all about activities and events happening within that person's network.⁸

As this quote shows, the concern shifts from the Profile Page to the activities. But this is not simply a case of going from the Ideal-I to the Social-I. The Ideal-I still remains to exist; the Identity

^{6.} Kelley, Faith L. Face-Time: The Construction of Identity on Facebook. Oxford, Ohio. 2007. p. 1

^{7.} Lacan, Jacques. *Ecrits*. The mirror stage as formative of the function of the I as revealed in psychoanalytic experience. Routledge, 1977. p. 1

McClard, Anne. Anderson, Ken. Focus on Facebook: Who Are We Anyway?. Anthropology News Journal. March 2008. p. 10

is not only constructed by the Profile Page but also with the activities, the likes and dislikes of the person. The users profile as a whole is the Identity that resembles Gestalt. As the user goes online and scroll through the News Feed, where all other users activities are visible, the identity they have build is present in that virtual space. Even though the user is not online or present behind the computer, the Virtual Identity, is there: it is tagged in photos, its earlier activities are commented on or liked and it is invited to groups or pages. To simply put it the Virtual Identity is living on its own in Facebook. The Ideal-I remains, the person looks at the developments from time to time and the portrait s/he had made is the image, the Gestalt. The person is fascinated and admires the image presented to her as herself, knowing she can never be that in the first place. As the person identifies with this image, there happens a transformation, as Lacan explains:

We have only to understand the mirror stage *as an identification*, in the full sense that analysis gives to the term: namely, the transformation that takes place in the subject when he assumes an image - whose predestination to this phase-effect is sufficiently indicated by the use, in analytic theory, of the ancient term imago.⁹

As the image is assumed on oneself, the identity is constructed. This identity remains until the libidinal normalization is placed by it. The case where the child identifies with the father and accepts the social rules and conventions is interwoven inside the Facebook profile. As the person connects with other people and accepts the norms of the cyber space, the Social-I emerges, yet this identity does not eliminate the role of the Ideal-I totally. The Ideal-I remains and co-exists with the Social-I, since the Social-I also constructs the Ideal-I. The Other created on Facebook, the Profile of the user, changes and is shaped in accordance with the Social-I.

It is argued that in the modern day there is a shift to the self-narration that helps construct the identity.

Giddens (1990) argues that one important aspect of identity in modernity is the ability to self-narrate. Job applications, online dating, blogging, and SNS all contain some form of "tell us a little about you" imperatives. Blogs (and blogs contained on various SNS) have become virtual 'confessionals' for many users, who treat their blogs as a place to theorize about their lives, and express innermost thoughts and desires (Bean, 2006). Those who actively engage in the "reflexive project of the self" (Giddens, 1990, p. 244) that is, rewriting the personal narrative as identity construction, can presumably function well in the modern world, and as a corollary through online spheres that cater for these narrative constructions of self.¹⁰

The identity here referred, as the self-narration is both the Ideal-I (as the person itself creates the story around them and perceives it as Gestalt) and Social-I (since this is broadcasted to the Social Network simultaneously). The self-narration creates the identity as a double-layered process that includes the two phases of identification at the same time; the identity created includes both aspects.

^{9.} Lacan, Jacques. *Ecrits.* The mirror stage as formative of the function of the I as revealed in psychoanalytic experience. Routledge, 1977. p. 2

^{10.} Norgrove, Aaron. Bean, Meredith. Face(book)ing The Future: Identity, Control and The Formation of the 'Digital Dividual'. p. 2

The Hundred Headed Greek God Typhon of the Modern Day

As the person constructs the Profile page they are guided through several steps, yet Facebook demands real information from its users: "Facebook requires all users to provide their real date of birth to encourage authenticity and provide only age-appropriate access to content."11. Although in every step the user signing up to the site faces such warnings, it is easy to give false information. As one of the users explain in a research on Facebook: "I have had an Internet 'identity', under various monikers as well as my own name, for the past 10 years." ¹² Just like the Greek God Typhon, who has hundred dragonheads, the user can create different accounts and pretend to be different people in each of these accounts. They create various Ideal-I's all serving different purposes. The self-presentation in the online environment was the topic of study in recent years about dating sites, chat rooms, etc. The research results highlighted the fact that people acted differently on the dating sites, than they act on other sites.¹³ There might be multiple personality displays on different sites, which shows that there might be more than one identity constructed by the same individual at the same time. Similarly on Facebook, users might choose to show the information they want about themselves and hide others and construct an identity on the virtual space that might not be consistent with other identities s/he has on other sites. This shows that the profiles people construct on the virtual space is multiple yet the Identity of the person consists of the sum of all these profiles put together. The person might act as if s/he graduated from a college in one profile and have another account that might tell the true information. The two of them combined together constitutes the Identity of the person, the Ideal-I and the Social-I. The virtual space identities have come to be similar to Role Playing Games. The same person acts to be someone in one site and other in another with different names and different professions. That is why Facebook is demanding real information from its users, yet how successful it is at doing so, is of course debatable. The identity has become liquefied; people can shift from identity to identity yet the whole forming a greater identity of one.

We should also acknowledge the recent studies show that identities created on the web are like performances. In Kelley's argument drawing from Erving Goffman's theory, the identity is created with social roles that each individual play at different social spheres. According to Goffman, performance is "all the activity of a given participant on a given occasion which serves to influence in any way any of the other participants."¹⁴ Performance in this respect tries to sustain a specific definition of the situation and lay claim to what reality is; rather than being a result of the reality of identity, performance creates it.¹⁵ Identity cannot just be claimed or expected to be preexisting; instead one must establish it by satisfactorily performing in a given situation.¹⁶ This notion of identity acknowledges the existence of different social situations a person faces in everyday life. A man working in a management firm plays the role of the Boss at work, when he goes home, he might play the role of Father or Husband or son depending on the social situation. According to Goffman,

Facebook Front Page "Why do I need to Provide My Birthday?" pop-up window. http://www.facebook. com

^{12.} Norgrove, Aaron. Bean, Meredith. Face(book)ing The Future: Identity, Control and The Formation of the 'Digital Dividual'. p. 2

Ellison, N., Heino, R., & Gibbs, J. (Managing impressions online: Self-presentation processes in the online dating environment. Journal of Computer-Mediated Communication, 11(2) (article 2).

^{14.} Goffman, Erving. Sociology: Introductory Readings. Polity Press, 2010. p. 203

^{15.} Kelley, Faith L. Face-Time: The Construction of Identity on Facebook. Oxford, Ohio. 2007. p. 3

^{16.} Jenkins, Richard. Social Identity. New York: Routledge, 1996. p.95

"a status, a position, a social place is not a material thing to be possessed and then displayed; it is a pattern of appropriate conduct, coherent, embellished and well articulated."¹⁷ The person adapts the social role to its own identity, therefore creating a context upon which the social conventions are displayed. Facebook identities are similar in this respect. People act differently in each social group or page they belong to. For example one can act as a fan in one site with using short versions of the word like "OMG," "Iol," etc. and discuss mathematical formulas in another group related to the subject. The psychoanalytical view however provides an insight to the subject's construction of identity in the psyche, while Goffman's argument highlights the social aspect of the formation.

Facebook Generated Games; Send a Reindeer!

The avatars created in games played on Facebook are another aspect of the construction of Identity in the Virtual Space. The user defines a visual self in the game as they enter upon it. From the given list of visual features, the user defines an avatar for themselves. This avatar will stand as themselves on the Farm, Island or whatever themed game they are playing. The most important aspect of the games is to have neighbors and send free gifts to these people in order to help them raise more money or coins and level up. The avatar as an Ideal-I is in a desired place, on a farm, island, managing a restaurant, etc. Yet with the neighbors joining in and helping out each other, the avatar becomes a Social-I as well. The already liquefied identity becomes even more flexible with the introduction of the games into the play.

The applications-based aspect of Facebook is appealing because it allows a representation of identity that is fluid. One's identity is not fixed, nor is it wholly self-defined. One's "image" is created by what one does, who one does it with and how it is done; it is constantly in flux. Compared with other social networking applications we have used, Facebook requires little or no maintenance, other than interacting occasionally with friends.¹⁸

This aspect of the identity that is created via the Facebook games makes it even more attractive. The gifts that are sent to friends using the application not only ensure their constant usage, but also imply another aspect of identity. The avatar is promoted by the help of these gifts, which means the person searches for approval of the Gestalt by sending gifts. As other people send and receive gifts they simply tell each other that the identity they have constructed is whole and consistent. The assurance of the identity as Gestalt, or the Ideal-I is transferred to the games. Sending a reindeer on Farmville as a gift to your friend not only helps him level up but helps him define himself as a whole, Gestalt, Identity. This is a very important part of the Facebook identity. "On Facebook life is a game. Although participants can open chat windows or belong to special interest groups of a more serious nature, the daily drivers of Facebook exchanges are games and quizzes."¹⁹ The liquefied identity, assures its Gestalt with gifts and the stable cycle of the game. The avatar is there when you open the game.

Goffman, Erving Contemporary Sociological Theory. 2nd. Edition. The Presentation of Self in Everyday Life. Blackwell Publishing, 2007. p.65

McClard, Anne. Anderson, Ken. Focus on Facebook: Who Are We Anyway?. Anthropology News Journal. March 2008. p.12

McClard, Anne. Anderson, Ken. Focus on Facebook: Who Are We Anyway? Anthropology News Journal. March 2008. p.12

Although the Avatar seems to be unique with its features to the user, it is defined from a list of objects that other users also use. The avatars might be the same. The Gestalt, the Other might also look like some one else's avatar. The identity, becomes idem, it is a difference in similarity.

Conclusion

Facebook is like a mirror. The user upon entering the social networking site, creates a profile that helps construct the identity on virtual space. As the profile is constructed, the first viewing of the page is the Lacanian Aha-Erlebnis, the first recognition of the image on the mirror as its own. The image is the Other, which is a whole, Gestalt. The first identification is through this image. As the person identifies with the Profile Page created, the Profile Page is simultaneously viewed in the Network. The user connects to other people using Facebook and with this, the Ideal-I is enter a new phase, into the Social-I, yet containing the Ideal-I at the same time. This two leveled relation of the Identity created with the profile on Facebook takes its place among other profiles created by the same person on different sites, sometimes under different names. There is a tendency for selfnarration. This phenomenon of different accounts is applicable to nearly all the users and recent studies show that people tend to act differently in different sites. They form different Identities and all of these profiles constitute the Identity itself. This creates a liquefaction of the Identity. The person can slip into one identity and to another on another site. This liquefied identity is also evident in the Facebook generated games such as Farmville, Fishville, Island Paradise, etc. The Avatar created for the games stands as a Gestalt. The assurance of its wholeness is maintained with the help of sending and receiving free gifts among friends playing the same game. Each and every gift assures that the Avatar is a Gestalt and that it represents the users unique features. But the Avatar is created with given visual objects, which can be used by any user; the Avatars may look identical. So there is a difference in similarity while the Identities are constructed on the virtual space.

The liquefied Identity that takes its place in the world of *Idem*, helps explain the difference between the dictionary definition of the word "Identity" and its etymology. The Identity constructed by the user on Facebook, is one of other accounts the same person has, yet forming a unique bond between the persons Ideal-I and Social-I. This creates the fragmented body. Its among similar Profiles, similar people with a difference of self-narration. The person constructs its own narrative on Facebook, forming an Identity that can take the form of an Avatar; it can be a farmer, a chief, a fisher or an islander. Every user builds up their profile with the same tools (Idem) forming their own story around it with their social relations (the difference) and in each step viewing and forming their Gestalt and others Gestalts.

Works Cited

- Cambridge Online Dictionary. 29 Dec. 2009.
 - http://dictionary.cambridge.org/define.asp?key=38918&dict=CALD
- Ellison, N., Heino, R., & Gibbs, J. (*Managing impressions online: Self-presentation processes in the online dating environment.* Journal of Computer-Mediated Communication, 11(2) (article 2).
- Etymology Dictionary. 29 Dec. 2009.

http://www.etymonline.com/index.php?term=identity

- Facebook Front Page "Why do I need to Provide My Birthday?" pop-up window. http://www.facebook.com
- Goffman, Erving. Sociology: Introductory Readings. Polity Press, 2010.
- - -. *Contemporary Sociological Theory*. 2nd. Edition. The Presentation of Self in Everyday Life. Blackwell Publishing, 2007.
- Jenkins, Richard. Social Identity. New York: Routledge, 1996.
- Lacan, Jacques. *Ecrits*. The mirror stage as formative of the function of the I as revealed in psychoanalytic experience. Routledge, 1977.
- McClard, Anne. Anderson, Ken. *Focus on Facebook: Who Are We Anyway?*. Anthropology News Journal. March 2008.
- Norgrove, Aaron. Bean, Meredith. Face(book)ing The Future: Identity, Control and The Formation of the 'Digital Dividual'.
- Kelley, Faith L. Face-Time: The Construction of Identity on Facebook. Oxford, Ohio. 2007.

WHAT IS BLOGGING: TOWARDS A DEFINITION ALPER U. SARIKAYA

Technorati, a web service that tracks the content and activity of blogs, report that as of May 2008, they are tracking more than 112.8 million blogs and there are 175.000 new ones appearing everyday (Technorati). Similarly, Time magazine declares that the year of the person is You, and they state that these are the people that say "I'm going to turn on my computer and make a movie starring my pet iguana? I'm going to mash up 50 Cent's vocals with Queen's instrumentals? I'm going to blog about my state of mind or the state of the nation or the steak-frites at the new bistro down the street?"1 Looking at these excerpts from Technorati and Time, the question to follow is: what is the big deal about blogs? The amount of blogs on the web as well as the new attitude towards the user-created content on the web reflect that this new medium has something in itself that makes it unique. A quick literature review shows that a considerable amount of academic work that has been done on blogs has to do with blogging compared to citizen journalism. However, there is more to blogs than mere journalism, and the answer lies beneath the question what is blogging? In the light of these, this paper will aim to define blogging with respect to the characteristics of this new medium including motivations of bloggers and blogging. While discussing these, I will approach blogging as a new genre of writing, publishing and participating, as something that emerged out of the web and as something that is only possible on a networked infrastructure such as the internet. In this respect, I will discuss the technical aspects behind blogs in relation to the new generation of web called Web 2.0. Then I will go on with a definition of blogs and blogging mentioning blogging subgenres - with what bloggers themselves say about the medium they use and their motivations.

1. The Medium, the Content, Web 2.0 and Blogs: Technical Aspects and New Attitudes

In this section, I will be discussing how the new understanding of web and the new web technologies affect and shape the way blogs function, and how they aid to the characteristics of blogging. In ways of expression – be it arts or anything else – the form or the medium and content are not separate but they should be seen as two different aspects that affect and shape each other. In other words, blogging should not be thought separately from the technical basis that allowed it to happen. This is also valid for blogging, and at this point the new generation of web called Web 2.0 or the social web comes into the discussion. According to Tim O'Reilly, who coined the term Web 2.0, there are a couple of characteristics of this new understanding of web: the web as platform, where data becomes important, emergence of the social/live web, radical decentralization of the web, emergence of new web technologies². These aspects imply that the web is no longer merely a marketplace (as it was considered during the early dotcom boom) but it is now a platform for forming user experiences. Additionally, with what is called social or live web, the understanding of web has changed: it is no longer a bulk of information and knowledge but a means of making connections and forming relationships. The web is no longer one-to-many but a many-to-many platform, where

^{1.} Lev Grossman. "Time's Person of the Year: You." Time.

Tim O'Reilly. "What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software." O'Reilly.

everyone publishes and participates. However, this should not be understood as a matter of who can publish on the web but also what can be published. There is no longer a hierarchy of what is important since everything has the same value – be it a major disaster or a kitten – they both have the same publishing value when it comes to publishing on the web. Therefore the web is radically decentralized, as O'Reilly states. Furthermore, the new web technologies are another major factor, which allowed these to happen.

Then, the question is how these relate to blogs and blogging - or an indirect question would be are blogs merely personal pages? As stated earlier, medium and the content should be seen inseparable. Therefore, we cannot define a blog simply by referring to its being personal, which is why I referred to the technologies that blogs make use a moment ago. Blogs are powered by dynamic programming languages such as PHP or ASP and databases (SQL). This way, the blog is updated easily and instantly: anything written in a post is immediately stored in the database and appears on the blog. As an advantage of using dynamic programming languages, blogs can export or offer the data they have in various ways for various uses. XML is one of these ways, and it can be used for syndication feeds like RSS or Atom. With the help of syndication, anything that is posted is immediately available to users without the need for checking the website to see what is new. Several web services that check the activity on blogs, such as Technorati or Google's Blog Search, make the blogs even more accessible. Readers can also leave comments to the posts Trackbacks or pings, which is a way to inform another blog when there is a hyperlink to that blog is a way that establishes the social links between blogs. XFN, which is short for XHTML Friends Network, can be used as another example to how blogs function as forms of social web. As the developers define it, XFN "is a simple way to represent human relationships using hyperlinks" (XFN)³, and this HTML tool developed mainly for blog users works by defining links with social relationships. As stated earlier concerning social web that it is about making connections and forming relationships; trackbacks and XFN hyperlinks form organic links between different blogs. Consequently, blogs should not be thought separated from the technologies that allowed it to happen. The characteristics, as has been and will be discussed, reflect that blogs make use of various technologies together with the new attitude of Web 2.0, show that blogging is a social way of writing.

2. So What Are Blogs?

The discussion so far hints certain characteristics of blogs and blogging. However, I will skip building the argument on that discussion and move onto what others say about blogs and blogging. In a survey conducted by me, I asked bloggers certain questions to understand what blogging is according to them and why they blog. Below are some excerpts from the answers⁴ given to questions on blogging by these bloggers, where each paragraph shows a separate reply:

Basically, it's a way to record my own history. A compilation of the things I liked, delicious stuff I tasted and an album to remember afterwards.

Blogging is simply telling. Telling a story of your life, of someone's life or something you like.

^{3.} XFN. "XFN - XHTML Friends Network."

^{4.} The survey was conducted in May 2008 by the author, Alper Utku Sarıkaya, for the graduate course *Image Time and Motion II* at Media and Visual Studies MA program at Bilkent University. It consisted of questions regarding blogging and how bloggers perceive blogging, and the purpose of the survey was to find out answers to these questions. The survey was conducted online with 20 anonymous participants, who were between 18 and 30 years of age.

Also blogging is writing you, your life, your interests. So I can say blogging is introducing yourself to others or just yourself.

It's the way to express myself in a way I can't do in non-virtual world. blogging is mind freeing, I can write whatever I like because no-one (except friends) knows me, they don't even know my name, and my nickname is the real person, this is what I call myself [...]. Real world doesn't always allow me to be 'myself', we all wear social masks and we all have titles, but in virtual world I'm the queen of my mini-universe :). The control is in my hands, I can shape it, change it, erase it. blogging must be personal as it can be, I must get an idea of the person who blogs, I must be able to get a picture of her/him; where s/he lives, what does s/he do, what s/he likes etc. If the blogger writes about just one topic (e.g. a music-blog), s/he is not a real blogger for me, It's just a web-site written in a form of blog.

I am not exactly a blogger actually. At least in the current sense of the word. I write a lot less frequently than I should and I write a lot longer than I should. If you ask me what is writing for everyone to see, I'd say writing is a pastime, an activity that helps me "know myself" and finally an antisocial means to a social end.

I write to forget, not to memorize, I want all the stuff piling inside me to go out, it's not like keeping a diary, of course I'll look through them years later but now, I don't.. I just unburden myself. Sometimes I write to get opinions, I'm a curious person and I really want to know what others think of the subject matters. I can't get an instant feedback but eventually it happens. Actually I started writing to meet new people :) *kidding* but it helps. I continue writing because I meet very interesting people I can't meet normally in real life, I really like it, it's a benefit of blogging.⁵

Though I am not offering reductionism and limitation, and the replies would change from country to country (i.e. a white American would write differently and about different aspects and experiences in life than an Iraqi, who is experiencing war), some patterns can still be found. A summary of the replies state that blogging is writing yourself, getting to know yourself, a memoir, finding your true self, a pastime, getting rid of your mental burdens and forming relationships, and these all stress the personal aspect of blogging. As seen in one answer, it is writing in a way so that the readers can learn about you. Therefore, style of writing is an important aspect in blogging. Another aspect is instantaneity. As discussed earlier, the technologies behind blogging allow it to be instant -a blogger publishes something and it is immediately on the web for others to reach and participate. While these examples mostly focus on blogging as writing, there are also subgenres of writing, which will be discussed in the next section in a pursuit of a definition of blogging.

3. So What Are Blogs: Types of Blogging

The term blogging does not limit itself to writing or to a particular type of expression – it can include text, images/photographs, audio and videos. However, there are specific kinds of bloggings that makes use of a single way of expression: photoblogging, podcasting and videoblogging and microblogging.

^{5.} Alper U. Sarikaya, unpublished survey results.

A photoblog is a type of blog that uses photographs. In the beginning of the discussion, it was stated that anyone could be a blogger publishing anything. In other words, it does not matter if you are a famous photographer or whether you are taking *serious* photographs. Therefore, it is basically a way to reverse and bypass the hierarchies of representation and mainstream media. Podcasting, on the other hand, is a form of blogging, where words are replaced by audio. However, as it is same with audiobooks, which supposedly substitute the written text; podcasts should not be seen as mere substitutes for textual expression. What makes podcasting different is the instantaneity it encloses in itself: Podcasts can be used or are used to take advantage of this vocal expression – one might record his or her happiness, disappointment or sadness on an issue, and the voice would be a better way of expression when the written words are not efficient. Additionally, similar to what has been discussed concerning publishing on the web, Richard Berry states that:

Anyone can create a Podcast: you don't need a licence (although music royalties are due) and you definitely don't need a radio studio. "To many Podcasters, it is about reclaiming the radio and using the powerful and easy technology many now have, to do what they want" (Twist 2005). It is a convergence of technologies that already existed and, in many cases, that users already owned. Portable media devices, such as the Apple iPod, are now commonly seen in use on commuter trains, buses and in the high street and each user is hungry for content. What Podcasting does is to combine these devices with online audio content (such as the material already offered by Audible) and RSS feeds as a distribution system.⁶

As stated and quoted by Berry, podcasts are a reclamation of the radio (from mainstream media to anyone), a convergence of technologies (the internet and mobile devices), where the syndication feeds become ways of distribution. In all these steps, the mainstream media culture is bypassed. It is no longer a one-to-many but a many-to-many broadcasting, where the listeners are free to choose whatever they want to listen.

Videoblogs, on the other hand, make use of videos for expression. However, while it makes use of videos, any video will not work since videoblogging (and online video in general) consists of video production that is made for online broadcasting. Richard BF, who is a videoblogger himself, tries to define this new medium and states that television channels also put videos on the web, and asks if this would also count as videoblogging. He adds that "a videoblog should include videos that are made for publication on the web"." Therefore, the intention is also an aspect in the definition. After discussing these, he comes up with a definition:

Individuals creating personal media of a new genre and form, not being controlled by big media, and not simply reproducing that which is traditional in big media, such as television and movies. [...] Short, personal, not for profit, mostly non-fictional, video on the web. Snapshots of life.⁸

As argued, videoblogging is a way to bypass mainstream media and a way to produce videos that has a new style of expression. Richard BF also adds that it has to be spontaneous and instant – a snapshot of life.

^{6.} Richard Berry,, "Will the iPod Kill the Radio Star?: Profiling Podcasting as Radio." Convergence. p.145

^{7.} Richard BF, "The Definition of Videoblogging as a genre." Richard BF.

^{8.} Ibid.

Micro-blogging, also known as tumbloging (coined from the web service Tumblr) is a another form of blogging that basically emerged and became popular with the web services Twitter, Tumblr, Jaiku and Pownce, which allow for typing a short message, a status update (as in, what you are currently doing) or links. This is not something peculiar to these web services for sure – you can also do this on your blog. What makes Twitter, Jaiku and Pownce interesting is that it is the flow of messages from everyone using the service: micro-blogging tools make immense use of the immediacy of the internet.

At this point, it is also essential to talk about the ways of posting on blogs. Most blogging services allow their users to post from their mobile phones or via email: Google's Blogger allows posting via MMS and email, Flickr has a mobile web interface for mobile devices, Twitter allows posting updates using SMS or the mobile interface, Qik allows publishing streaming video from mobile phones, and the blogging software Wordpress can be updated through emails. From the beginning of this paper, I have been stressing the immediacy of this new medium called blogging, and throughout the discussion I tried to show how it is made possible.

To sum up the discussion so far that showed the characteristics of blogs and blogging; a blog is a personal medium created by anyone, who has several personal intentions and motivations in blogging, and is a medium that is of the web and that bypasses the mainstream media, it is instant and allows platform-free interaction and posting. As argued, blogs can be used by anyone, which is a way to challenge the hierarchies of representation (i.e. what can be represented) and also a way to bypass mainstream media. The excerpts from the survey show that blogging is a very personal activity and according to bloggers and Richard BF, it should be done in a way to reflect one's self. Together with new web technologies and syndication feeds, which become a way of distribution, blogs are made available to be found on the internet with services like Technorati or Google's Blog Search. As much as anyone can blog, also anyone can post comments on blogs, and they can be updated and reached through desktop or mobile platforms.

4. Conclusion

The last few years witnessed the change in the attitude of the web - the web is no longer an information and knowledge bulk, where dissemination is from one-to-many, but it has become what is called the social web. For sure, blogs are the babies of this new attitude. With over 112.8 million blogs with a lot of new ones appearing everyday, as Technorati report; the question should be what is the big deal about blogs? In this respect, this paper has discussed and aimed at a definition of blogging. It has been argued that this new medium cannot be thought separately from the technologies it is based - the dynamic web languages and databases, XML and syndication as well as trackbacks and XFN. These shape and affect the way blogs function for they allow immediacy and the social aspect of blogs. Additionally, as seen in the responses to the survey, bloggers find their medium a very personal way to express themselves, who used the phrases getting to know themselves, finding your true self, blogs as memoirs and forming relationships. The subgenres of blogging are also essential in the discussion as they show the various characteristics of the medium, which are a bypass of the mainstream media through a medium that can be immediately updated and made available to others to reach through syndication. It has been argued that the new medium can be used by anyone and the interaction is made available to everyone, where access is not limited to desktop computers but to any device that has directly or indirectly access to the internet.

Works Cited

- Berry, Richard. "Will the iPod Kill the Radio Star?: Profiling Podcasting as Radio." *Convergence*. 12 (2006): 143-62.
- BF, Richard. "The Definition of Videoblogging as a genre." *Richard BF*. Web. 16 May 2008. http://www.kashum.com/blog/1156867771
- Grossman, Lev. "*Time's* Person of the Year: You." Time. 13 Web. December 2006. 16 May 2008. http://www.time.com/time/magazine/article/0,9171,1569514,00.html
- O'Reilly, Tim. "What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software." *O'Reilly*. Web. 30 October 2005. 14 May 2008. http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.htm

Sarikaya, Alper U. Unpublished survey results.

Technorati. "About." Web. 16 May 2008. http://technorati.com/about/

XFN. "XFN - XHTML Friends Network." XFN. <http://gmpg.org/xfn/>

PART IV TOUCH, LOOK AND FEEL: DELVING INTO THE REALMS OF VIRTUAL REALITY INTRODUCTION BY I. ALEV DEĞIM & BESTEM BÜYÜM

With the late developments in the technology of Virtual Reality, its social impact as a cross-media experience increased influentially. In today's world virtual reality corresponds to the needs of a social individual beyond time and space in the global arena. The boundaries of Virtual Reality and its implications to our world today are explored throughout this section. The newly emerging techniques and technological possibilities help transform the existing media as well as our perception of the world in general and this change in the medium also affects the social function of the new media in general. In this part, we will be searching through the realms of virtual reality with its social and cultural impacts as well as its philosophical dimension.

"There isn't There" discusses the concept of immersion in relation to art and Virtual Reality as an extension of integration of the arts in modern days. Stating the new possibilities created by computer related multimedia it goes through the work of different artists while exemplifying new technologies accordingly. Önal concludes that VR and immerse environments are not separable from the personal experiences of the individual with the art word, as well as many other concepts. It is not only about technological developments but also about a shift in the philosophical and artistic level.

Sumnu discusses in his "What is Absent in Telepresence?" That Virtual Reality cannot be reduced to the question of technology but it's related with the real being always open to the future. Sumnu points to the different perspectives of telepresence in relation with the possible social impacts of Virtual Reality.

Sevin draws attention to the problematic of the "Screen". Originating from Lev Manovich's definition of the frame Sevin applies Derrida's critique to Kant on the impossibility of differentiating the inside and outside of a frame and where its boundaries lie. With the discussion of the Parergon concept she continues to underline the impossibility of making the same differentiation in Virtual Reality.

The section analyzes the concept of Virtual Reality looking for future possibilities in the medium. The discussions not only have important philosophical, artistic and social questions but also highlight the technological aspect of Virtual Reality and explore its limitations and future prospects.

COMPUTER SCREEN, VIRTUAL REALITY AND THE FRAME AYDA SEVIN

Lev Manovich identifies three types of screens in the second chapter of *The Language of New Media*: Classical screen, dynamic screen and computer screen. The first one refers to the traditional understanding of a screen: "It is a flat rectangular surface ... for frontal viewing [which] acts as a window into another space."¹ As Manovich states, a Renaissance painting or a modern computer display exemplifies well a classical screen.² On the other hand, the dynamic screen that includes all aspects of the classical screen has an extra feature, which is the possibility of displaying "an image changing over time."³ Obviously, what Manovich refers are the screens of television and cinema. As he underlines, the dynamic screen "fully surfaces" the relationship between the image and the spectator by means of focusing all attention for "complete illusion and visual plenitude"⁴ and isolating the viewer from its physical space.

Although television and cinema viewing differs in several aspects, they consequently fall into the same "viewing regime" according to Manovich, since they depend on the same identification process even if the extent to which this works may differ. Yet, according to him, the arrival of the computer screen has brought a completely different viewing regime. The computer screen consists of several windows and neither of them "completely dominates the viewer's attention." In other words, [t] he viewer no longer concentrates on a single image."⁵

On the other hand, "with VR, the screen disappears altogether." The viewer's visual field is completely filled, and s/he no longer looks through a window. In this case, the physical space and the virtual space coincide.⁶

Therefore, Manovich introduces a new era, in which the identification based viewing regime of the dynamic screen gives its place to the disappearing of the screen. In this respect, not only VR, which completely invades the visual field, but also the practice of *splitting the screen into many windows* is considered as a kind of disappearance of the screen.⁷

In this context, considering multiple windows and VR as a new era in terms of the screen, this paper will analyze the ways in which these innovations can possibly change the conventional understandings about the image and the inside/outside oppositions that they generate. To that end, some of Jacques Derrida's views will be applied to these new notions of screen (or screen-lessness in the case of VR) and then whether this new era might deconstruct traditional understandings of the *image* and the *frame*, as well as the associated inside/outside distinctions will be discussed. In this respect, a similar pattern with Peter Brunette and David Wills, who in *Screen/Play: Derrida and*

- 2. Ibid
- 3. Ibid, 96
- 4. Ibid
- 5. Ibid, 97
- 6. Ibid
- 7. Ibid

^{1.} Manovich, Lev, The Language of New Media, p.95

Film Theory apply Derrida's thoughts to cinema, will be followed.

Jacques Derrida's essay "Parergon," in *The Truth in Painting* refers to Kant's *Critique* of *Judgment* in order to subvert the coherence of the image, which is a form of *self-presence*. The main point that arises from Derrida's reading of Kant -which is actually one of the central points of deconstruction- is the problematic of how to separate *inside* from outside.

Parergon is what is supplementary or secondary to the work of art (Greek: para (beside); ergon (work)). However, as Derrida argues, making such distinctions as to what is inside and what is outside of a work of art is not really possible. For instance, is the frame of a painting outside or inside it? Is it a part of the painting or not? As Derrida concludes, the frame has a completely relational status in terms of an inside and outside. In other words, the inside of the frame can only be determined in terms of an outside, and vice versa.⁸

What happens when the computer screen and VR are considered in this respect? First of all, in the case of computer screen, the frame is not only something material –i.e. the physical frame of the computer screen-, since the outside of its borders is considered as the real world against the virtual one on the screen. Therefore, there happens to exist another -non-material- frame. This applies to VR as well. Although it does not have a material frame at all, it clearly creates a real and virtual distinction. In other words, the image, its very existence somehow creates a frame by itself. Moreover, the outside world becomes internalized within the image, since it includes what is called *the real/the outside*. In fact, this process can be explained with what Derrida calls *invagination*:

[Invagination] is one of the terms...for deconstructing the fundamental division between inside and outside...since the vagina...can be seen in a sense as exterior tissue that has been folded inside, and thus as exterior and interior at the same time...This internalized pocket of externality can in fact be larger than the exterior that is said to enclose it. The concept can be applied to film by considering that genre distinctions are usually seen as existing outside or drawing their definition from outside the individual film, but actually always inside it at the same time through citation and reference and through each text's individual semiotic functioning, which must always apply to a code that exists without.⁹

Since the term invagination signifies the fluidity of the distinctions between inside and outside, it is necessary to identify and analyze the ways in which these distinctions are constructed and reinforced as strict separations. However, this attempt is in advance obscured by some factors:

The oppositions and their stability are created by cultures and histories (including the history of a genre, a medium, a theory and so on). Yet, is it really possible to talk about such entities in the case of computer screen and/or virtual reality? Evidently, there are many speculations, arguments, theories and interpretations about the new digital world -especially about computer and its multiple window regime, which are readily *under experience*. However, the multiple window viewing regime does not actually have a history when compared to cinema for instance. As for VR, it does not have yet a history at all.

Nevertheless, one may argue that the computer screen already embraces the histories of other mediums, since it is a multi-media environment. Yet, the question of what kind of texts will be

^{8.} Brunette, Peter and David Wills, Screen/Play: Derrida and Film Theory, p.101-103

^{9.} Derrida, Jacques, "Parergon" in The Truth in Painting, p.55

presented through the mediation of VR can only be assumed at the moment. The most apparent and probable one is the assumption of a *beyond-image/simulation*. In other words, what the users (are going to) encounter in VR is of course still an image and simulation; yet, one feels like giving another term for this experience as the older ones are not sufficient. In fact, even the term *user* will probably fall short of the VR experience and will eventually be replaced by another term. However, this leads one back to the notions of the real and the image, which means that the realization of VR is somewhat an extended and more immersive version of the already known experience of identification. Thus, it can be argued that it also bears in itself a history of the image in general.

In fact, since the history of image indicates the *metaphysics of presence* in a Derridian perspective, which is something to be deconstructed in his own terms again; assuming a history for the computer screen and VR is a bit tricky. If the histories for these technologies -at least in terms of grounded theoretical or philosophical backgrounds- were to be denied, this would make everything easier, since it would be like starting a fresh new page without well-established authentic inside/ outside divisions. The ease would be doubled by the fact that these technologies have obvious potentials for deconstruction by means of their structures. Yet, it is not unproblematic to make such a denial, especially if the evolutionary progress and the close relationships between digital and analog understandings of the image are considered.

Now, leaving the question of history aside, the computer screen and virtual reality are going to be analyzed (sometimes separately, sometimes comparatively) in terms of *frame* and *image* -and therefore in terms of the relationship between inside and outside.

First of all, regarding the computer screen, the assumed wholeness and coherence of the image easily disappears. In other words, the discrepancies of time and place are so apparent in multiple windows that one cannot talk about a coherent understanding of image. Yet, in the case of VR, the image seems to be coherent and whole more than ever. At this point, it can be argued that the excessively realistic image conveys self-presence, and therefore assumes a privileged position. The *signified* somehow vanishes, leaving its entire place to the *signifier*. Nonetheless, this is still a metaphysical presence in Derridian terms, since *referentiality* is still there, referring to an ultimate real however close it might be.

Even so, *too much realism* also deconstructs its own hierarchies; since resting on the side of the signifier (It is still referential, but it is so quickly mediated that it is almost immediate) underlines the fact that the distinction between inside and outside gives way to a mere signified -either in or out.

On the other hand, multiple windows do not let categorization. For instance, different web pages can be categorized, and particular genres might be created for the sake of establishing a theoretical *framework* of the Internet. However, the fact that their very structure is multiple -i.e. what are viewed are multiple windows simultaneously makes the processes of inclusion and exclusion a totally different one. In other words, the multiplicity of frames displaces the notion of frame.

In addition to these, the question of *look* in computer screen and VR challenge the coherence and integrity of the image as well. In these cases, the focus and perspective of the viewer is no more controlled, regulated. In VR, the perspective is totally created by the viewer. Although it seems that the organization of particular windows still control the line of look to be traced, the multiple window environment with its interactivity and plentitude gives more choice to the user.

Moreover, by means of the usage of *sound* in the computer screen and VR, the consistency of the image is once more taken into question. If artificial sound is used in VR, this means that the user, who feels like existing in another physical space, will be disturbed by the fact

that his/her voice is still not there. Even if s/he can talk, what will happen to various sounds that s/ he would be producing if s/he were in a real physical space? Similarly, the artificiality of sound as something *attached* to the image will always make itself recognized in the computer screen. A very obvious example might be the coming of sound from a window, while it does not even cover the screen (minimized). Such kind of an experience prevents the user from constructing strict binary oppositions regarding an inside and an outside.

Similarly, the sense of *smell* will always challenge the notion of image as a whole, and the oppositions such a notion reinforces. While playing a VR game, the player will naturally feel the smells coming from its surrounding environment. In this case, the extreme realness of the game will be disturbed. Therefore, the logocentric privilege of the image, and of realism, will get into trouble.

On the other hand, the user is always in tactile relations (with the computer itself, and with his/her environment) while interacting with the computer screen. The extreme dependence upon the outside physical world in order to use the computer destroys in advance the privilege given to the image by the logocentric metaphysics of presence.

Later in the second chapter of The Language of New Media, <u>M</u>anovich analyzes the relationships between the screen and the body. He concludes that in all types of screen (including computer screen and VR), the body is still immobile to a great extent¹⁰. In this respect, the question of immobility will be examined from a different viewpoint.

The impression of reality mentioned above so far and its deconstruction is once more proved by means of this point of movement. The discourse on the integrity of the image is structured on the movement of the image. Yet, it is usually forgotten that the image equally depends on stability. Movement and stability coexist at the same time.

Both in the computer screen and the VR, not only the construction, but also the viewing of the image always traces the absence of the image as well as its presence. In the case of VR, this fact may seem irrelevant at first sight. However, it should be considered that the experience of the real is not always in motion. The presence of discontinuities can never be separated from the presence of movements; they are interrelated with each other. Therefore, once more the divisions of inside/outside get blurred.

As a last point, the question of signature will be emphasized in light of Derrida's discussions in "Signature, Event, Context." According to Derrida, rather than claiming a present intention, a signature is always something repeatable and citable. In this case, the external intention cannot signify the inner meaning of a text, even though it is generally supposed that way. In such an understanding, the intention determines the frame. However, there cannot actually be a proper name, which is again a kind of logocentric claim of essence and self-identity.¹¹

If computer screen and VR were to be considered in this respect, the problematic of signature, author and intention reveals itself at once. First of all, these texts (any text within the computer environment and VR texts) are not produced by a single person. The authors of these new media products are usually either anonymous or they consist of a large group of people.

On the other hand, even legal citing possibilities are extreme in the case of computer. Of course, various kinds of authenticities can be identified in terms of design, structure and content. Yet the extent to which invagination takes place cannot be denied. Reasonably, the fact that these

^{10.} Manovich, Lev, The Language of New Media, p.103-111

^{11.} Derrida, Jacques, "Signature, Event, Context" in Limited Inc., p.1-25

technologies do not have a history (if a single, proper history is ever possible) as mentioned above strengthens the impossibility of invagination in this new phase. In this case, locating the meaning into inside or outside and therefore claiming a stable, coherent and self-present identity for it is shown to be contradictory and invalid.

In conclusion, if new media -and particularly computer screen and virtual reality- has a recent history, or as Manovich states that it should be written while we are experiencing it; making use of a Derridian perspective, which is tried to be formulated in this paper, can be meaningful. Both VR and computer screen are deconstructive innovations by means of their very natures. At least, they challenge the classical and dynamic screen as Manovich identifies and illustrates. Following this trace and considering the metaphysics of presence and its limitations, theoretical non-frameworks can perhaps be generated.

Works Cited

Brunette, Peter and David Wills. *Screen/Play: Derrida and Film Theory.* Princeton, NJ: Princeton University Press, 1989.

Derrida, Jacques. *The Truth in Painting.* Chicago: University of Chicago Press, 1987. Derrida, Jacques. *Limited Inc.* Evanstone, Illinois: Northwestern University Press, 1988. Manovich, Lev. *The Language of New Media*, Cambridge, Massachusetts: MIT Press, 2001.

THERE ISN'T THERE LEYLA ÖNAL

This article is about the concept of immersion, described as the "experience of entering into the simulation or suggestion of a three-dimensional environment."¹ The main focus is on the works of the several artists, starting from the ideas of Richard Wagner to the present, which are going to present a brief history of the development of the concept and related philosophical ideas.

The concept of immersion is related with the primal desire of being transported into another world, a fantasy realm, a world of fiction, as different from the immediate environment, together with the fantasy of being able to leave the material body behind and achieve a transcendental status of being here, being elsewhere, being everywhere/nowhere or all at the same time. Even though computer based multimedia are now seen as the main means through which creating immersive virtual worlds seems possible, the idea of creating such environments dates long before the invention of computers. According to Packer and Jordan, the earliest virtual environments known to humanity are the caves of Lascaux in the south of France, dating back to 15.000 B.C.²

If we accept that virtual reality (VR) is the extension of the integration of the arts, we can say that as a modern concept VR dates back to Richard Wagner's ideas about 'Gesamkunstwerk' (total work of art), which was related to a form of theater "in which the audience loses in the veracity of the drama, creating an immersive experience."³ To achieve his aim of directing the audience's total attention to the dramatic action, Wagner reinvented the conventions of the opera house. By doing so, he wanted to make the audience believe that they were occupants of an illusionary world. The late 19th century vision of Wagner did not stay as a solitary step and had been carried on by various artists to our present and even our foreseen future, which is presented both in the form of (science) fiction and in the current developments of computer related multimedia.

Computer related multimedia helped the artists—or engineer-artists as a more up-todate concept—by creating new possibilities of experimenting with the creation of VR and thus immersive environments. Virtual reality is about the digitalization of physical objects and spaces -and even the human self as the furthest extreme point. It is built on the idea that "if anything can be digitalized, then it would be possible to represent the world—or part of the world, or an imagined space as a wholly digitalized environment, with which humans, through a computer, could interact as freely as they do with real objects in the real world."⁴ In VR, the digital signals that construct the virtual space are translated into sensory experience.

In the modern world, the idea of VR is closely tied to developments in military technology, where the main goal is to simulate the experience of flying for pilots. Even though the development of the concept is related to military technology, there are wider implications, especially in relation to everyday life. Artists who had been working in the various fields of art dealing with visual representation such as painting, photography and cinema, dwelled on the idea of the representation of

^{1.} The Art Museum http://www.artmuseum.net/w2vr/concepts/immersion.html, 2003.

^{2.} Randall Packer and Ken Jordan, Multimedia: From Wagner to Virtual Reality, p. xxii.

^{3.} Ibid., p.xxiii.

^{4.} Giuliano Zampi and Conway L. Morgan, Virtual Architecture, p. 107.

human vision and human sensation through their own means like the canvas or the camera. Consequently, the changes in the visual arts went hand in hand with the developments in technology. In cinema, the visual came to be combined with the audial, while in VR the work of art, or the virtual environment, became an interactive field which could respond to the user/immersant." This new art is collaborative and interactive and abolishes the state of unidirectionality traditionally characteristics of literature and art. Its elements are text, sound, image and, eventually, virtual touch based on force-feedback devices."⁵

Thus, Wagner's vision about the total work of art that could immerse its audience came to be carried on to a different stage, which is everywhere and nowhere at the same time. Paralleling Wagner's vision, the American cinematographer Morton Heilig developed his 'cinema of the future' in the 1950s, where cinema could become so realistic that the audiences themselves would believe that they are transported to another domain. Heilig can be seen as the first artist to attempt to create VR, since he thought that the sensory elements of life can be simulated by 'reality machines' and the artist's power of expression can be enhanced by the scientific understanding of the senses and perception, or human consciousness in his own terms. He proposed that "if an artist controlled the multisensory stimulation of the audience, he could provide them with the illusion and sensation of first-person experience, of actually 'being there.'6 His inspiration by the ideas about Cinerama and 3-D movies led him to develop the basis for the invention of the Telesphere Mask and the Sensorama. He saw the machine's entrance into to field of the production of art as a notable possibility for the artist to reproduce the "visual world of man as perceived by the human eye."7 The machine allowed this perception to be simulated in the most realistic way and ascertain the control of the artist over his work together with the permanence of the artwork Thus, Heilig envisioned the 'cinema of the future' where the cinema would be one that encompassed all the senses and would not be based only on vision, the sense which constitutes only 70% of human consciousness.8

Even though Heilig's Telesphere Mask and Sensorama did not become popular devices, his ideas influenced a forthcoming generation of engineers. In 1965, Ivan Sutherland wrote "The Ultimate Display" which came to be known as the "seminal statement to define the field of computer-based virtual reality."⁹ His idea was that the developments in computer science would lead to a phase where virtual experiences could be created in a way to be convincing for the human senses. He imagined a system that would go beyond the devices like the joystick, lightpen and keyboard, and that interactivity between computers and humans is possible through interfaces which include three-dimensional computer generated environments. Thus, he invented the Sketchpad system and the head-mounted display which allowed the user to be immersed in a visually simutaled 3-D environment.

Sutherland's model had to be further developed and refined since the immersant faced the threat of decapitation due to the mass of the device. Thus, Sutherland's invention became the first step of research the aim of which was to project the viewer into a virtual environment by means of a head-mounted display. In 1989, Scott Fischer developed the Virtual Environment Workstation

^{5.} Eduardo Kac, "Aspects of the Aesthetics of Telecommunocations." in Zero, p. 29

^{6.} Randall Packer and Ken Jordan, Multimedia: From Wagner to Virtual Reality, p. 240.

^{7.} Ibid., p. 244.

^{8.} Ibid., p. 245.

^{9.} Ibid., p. 253.

(VIEW) to develop an interface that can engage all the senses, which utilized an updated version of Sutherland's project. Together with the head-mounted display, stereoscopic images and the 'dataglove' which is a wired glove worn by the user to grasp virtual objects had been utilized. Fischer "made a significant advance toward what he term 'telepresence'--the projection of the self into a remote location or virtual world."¹⁰ Again in 1991, a virtual house was created by Division for Matsushita electronic industries in Japan, which resembled a modern Japanese house with full detail. The employment of a head-mounted display and a three-directional mouse was necessary to move the virtual hand that allowed you to operate objects within the house including taps, doors, drawers and curtains to see the view outside of the windows.¹¹

These developments in turn, made possible not only the interactivity between the human and the computer, but also the interaction of human subjects in virtual spaces. In 1995, Char Davies developed her interactive multimedia work Osmose, which incorporated the head-mounted display and dataglove, together with a sensor that allowed the user to navigate through a virtual space similar to deep-sea diving through breath and balance. Her achievement "was to incorporate the intimate, emotional territory of the body into the encounter with virtual worlds."¹² Davies was concerned about the relationship between the changes in environment and the changes in psychological responses. She found out that immersants faced unusual sensibilities during their experience in Osmose, ranging from euphoria to a sense of loss, from a feeling of being 'somewhere else' to increased awareness of their sense of being. During the experience of immersion, goal oriented behavior disappeared and full attention was directed towards this unusual experience. This view was shared by the Japanese artist Arakawa, whose first proposition was the statement that "if architectural forms change, our brains will be prompted to think differently, to be structured using more flexible, less oppressive forms, to explore new dimensions of thought."¹³

During the 1990s, another conception of VR was developed in which the human body had to be placed directly inside a computer-generated environment, without the need of a head mounted-display, datagloves, or datasuits as the next step of inventions. The first of these experiments was the Cave Automatic Virtual Environment (CAVE), developed by Daniel Sandin, Thomas DeFanti and Carolina Cruz-Neira in 1991. It was a small room about three cubic meters which was built as an allusion to Plato's cave. It presented interplay between the real and the virtual, without the feeling of dislocation or disembodiment on the side of the immersant.

Since VR is a concept associated with an artistic tradition which focused on the simulation of the real physical world through various means and in various forms such as in photography or cinema, almost all VR work of the day focuses on simulating our known (or unknown, like in Osmose) reality. However,

> what's most interesting about the potential of virtual worlds isn't how well they can imitate physical reality. Rather, it's the entirely new worlds that could not have been imagined without the computer... What's new in the virtual is exactly what isn't shared with the real... To uncover the true potential of virtual worlds, we must master new paradigms.¹⁴

^{10.} Ibid., p. 258.

^{11.} Giuliano Zampi and Conway L. Morgan, Virtual Architecture, p. 116.

^{12.} Randall Packer and Ken Jordan, Multimedia: From Wagner to Virtual Reality, p. 294.

^{13.} Luigi P. Puglisi, Hyper Architecture: Spaces in the Electronic Age, p. 74-5.

^{14.} Steven Holtzman. Digital Mosaics: The Aesthetics of Cyberspace, p. 46.

Following this latter statement, it can be inferred that the striking thing about all these developments is the ways in which they change the human experience, together with the philosophical paradigms that are paralleling these experiences. While the first visions about immersive experiences fantasized about the full control of the artist in manipulating the viewers of the artworks, the focus today is on the ability of the immersant to interact with and control his/her environment. In VR the key factor is the immersant's autonomy of movement within the virtual space where the actions of the immersant are not limited by the constraints of reality and the applied interfaces of the system.

In summary, VR and immersive environments are not only related to the personal and micro level experiences about interacting with an artwork. They are also in an indivisible relation with a wider level of concepts. Moreover, they are not only about technological developments and the changes in the forms of art, but also about a shift in the philosophical and aesthetic level, which has to deal with the (re)definition of what art is together with the real and the human self. As Eduardo Kac stated precisely, "the complexity of the contemporary social scene permeated by electronic media, where the flux of information becomes the very fabric of reality, calls for a reevaluation of traditional aesthetics and opens the field for new developments."¹⁵

Works Cited

Holtzman, Steven. *Digital Mosaics: The Aesthetics of Cyberspace*. New York: Simon & Schuster, 1997.

Kac, Eduardo. "Aspects of the Aesthetics of Telecommunocations." Zero. Ed. Styrian Culture Initiative. Graz: Steirische Kulturinitiative, 1993.

Packer, Randall and Jordan, Ken. Multimedia: *From Wagner to Virtual Reality*. New York: Norton, 2001.

Puglisi, Luigi P. Hyper Architecture: Spaces in the Electronic Age. Berlin: Birkhauser, 1999.

Zampi, Giuliano and Morgan, Conway L. Virtual Architecture. New York: McGraw-Hill, 1995.

WHAT IS ABSENT IN TELEPRESENCE? UMUT SUMNU

Gilles Deleuze has commented that the treatment of time was bodily-kinesthetic, embodying what he calls the *movement-image*. While, what characterizes cinema today is the *time-image*. Generally *movement-image* uses time as it is readily perceived in expected sensory-motor action: It is a linear time, a proper sequence, and straightforward causality¹. The *time-image*, on the other hand, relies on mechanisms of association, memory, imagination, illusion, and hallucination: An object out of place, out of time, with its probable histories or possible futures². Building on Bergson, Deleuze sees in each object, in each frame of a film, a rhizome in time, allowing a *motion without action*. An object is thus enveloped by an aura through time that is immensely different from the sequence of images that would describe its motion is space. Thus, the *movement-image* records position in space while *time-image* records states in time.

Following the Deleuzian line of thought, the general frame of this paper is the manner in which the new communication technologies such as the cinema, telephone, radio, television, and computer networks have altered contemporary experiences and understandings of time and space. I want to approach this statement by considering the impact of these communication technologies on the milieu of body. In that respect, body needs to be understood here as more than a concrete term which reflects a kind of exteriority, but also as something that designates a sense of interiority. In other words, this paper attempts to hold the physical and the psychical body together, without simply collapsing them into one another.

The crisis of grand narratives, which Lyotard posed as the fundamental condition of post-modernity, is very much a crisis of boundary, reference and dimension³. This has a profound impact on the way, in which we can define our bodies in the present, whether at the level of the individual perception and experience through film spectatorship, or communities at large through telecommunication. I wanted to begin by bringing together two quotations, which serve to highlight Lyotard's phrase and portrays some of the tensions on body produced by technological transformation. These are the theories of Walter Benjamin and Paul Virilio that are structured around the idea of *telepresence* by Lev Manovich. In his book, *Language of the New Media*, he states that Benjamin and Virilio's essays focus on the same theme- the disruption caused by new communication technology [film in the case of Benjamin, telecommunication in the case of Virilio] in the familiar patterns of human perception ; in short, the intervention of technology into human nature⁴. Manovich argues that Benjamin and Virilio equate nature with spatial distance between the observer and observed, and they both see technologies as destroying this distance. With his famous concept of aura that is 'the unique phenomenon of distance', Benjamin is well aware of the fact that modern technology has a tactile form of vision⁵. Virilio, on the other hand, also uses the

^{1.} Gilles Deleuze, Cinema 1: The Movement-Image, p. 56.

^{2.} Gilles Deleuze, Cinema 2: The Time-Image, p. 44.

^{3.} Jean-Francois Lyotard, The Post-Modern Condition: A Report on Knowledge, p. 66

^{4.} Lev Manovich, The Language of New Media, p. 77

^{5.} Walter Benjamin, Selected Writings 1913-1926, p.126

concept of distance in a similar way: Information from any point can be transmitted with the same speed, and the concepts of near, far, distance and space itself no longer have any meaning⁶. Then, if for Benjamin the industrial age displaced every object from its original settings, for Virilio the post-industrial age eliminates the dimension of space altogether. Benjamin's and Virilio's analyses make it possible for us to understand the historical effect of these technologies in terms of progressive diminishing and, finally, the complete elimination of something that both writers see as a fundamental condition of human perception- spatial distance, the distance between the subject who is seeing and the object being seen. In other words, as Virilio puts it "closer to what is far away than to what is just beside us, we are becoming progressively detached from ourselves"⁷⁷. Through this phrase, one can easily underlines a *disembodiment* of person from his or her own body and a reduction of this passive body to an eye. Benjamin's and Virilio's words lead us to question the necessity of distance between here, at which the self is centered and there, where the Other exists. Then, how can we think of a situation that will not go from here to there where there will be no more there and there will only be here? Or, if there is no more there, does this imply - at least in fantasy - *the disappearance of the place of the Other*?

In that context, Grosz's invaluable essay, which is named as *Cyberspace, Virtuality, and the Real*, can be helpful in order to surface the term telepresence and criticize new communication technologies not in terms the elimination of distance, but in terms of the distance itself. Grosz prefers to deal with the produced mediums such as simulated environments offered by the net and Virtual Reality (VR) technologies. But, while doing that, Grosz mainly focuses on the term *virtuality* in order to theorize the intimate relation, the distance between I and Other, here and there, inside and outside, etc. and also to reveal Other in to the appearance.

First of all, her argument structured around the notion that the simulated environments offered by the Net and VR technologies have generated between two equally rigid, equally naive, groups.

- 1- On the one hand there are the technophiles and cybernauts who see in this technology the key to new spaces, new identities, and new relations, in short, new worlds, open and available, customized to one's individual preference and taste-that is who see in VR *the potential for a world of free-for-all choice* In short these people believe that there will be a choice not only of spaces, sites and environment but also bodies, subjectivities, and modes of interaction with the other.
- 2- On the other hand, we have a group of people who revile and fear VR's transformation of relations of sociality and community, physicality and corporeality, location, sexuality, personal intimacy- in short, the loss of immediacy of physical presence. These individual may lament the replacement of the face-to-face contact with connection established only through electronic mediation.

After portraying these two groups, Grosz continues with the concept of virtuality in order to surface a new definition of a group in-between. While explaining the concept of virtuality, her first remark is that "we do not have to wait for the computer screen or the movie projector in order enter the space of virtuality, we have been living in its shadows more or less continually"⁸. What does that

^{6.} Paul Virilio, The Aesthetics of Disappearance, p. 97

^{7.} Paul Virilio, The Aesthetics of Disappearance, p.74

^{8.} Elizabeth Grosz, Architecture From the Outside: Essays on Virtual and Real Space, p.38

mean? Does it portrays telepresence, as an existential thing, rather than a new phenomenon? In order to answer, we can easily recall Gilles Deleuze who identifies a reciprocal interaction between the virtual and the real by stating that "virtual is always the foundation of the real"⁹. Hence, one can say that both Grosz and Deleuze underlining the necessity and impossibility of a separation between virtual and real. The relation, and also distance, between the virtual and the real, for Grosz, prefigures and is entwined with a whole series of other oppositional terms- among them; we may list mind and body, culture and nature, origin and copy.

Grosz answers that "the pervasive fantasy of disembodiment is linked to the fantasy of mastery of a distance, of tele-presence, the illusion of being able to leave the body at will and reappear elsewhere, in other words, to be present while not really present"¹⁰. As we can easily underline, her concerns are not centralized on the separation of mind from the body and of virtual from the physical. These terms, she argues, continue to refuse their external status as oppositional terms and instead are seen to inhabit to very heart of the real. This virtual is not a geometric, spatial or technological concept, nor is it structured by phantasmic or imaginary projections alone: Rather, it is the domain of latency or potentiality, giving that the boundaries, distances, between the virtual and the real are unsustainable. Thus the distance between virtual and real becomes not a metric quality but acts in two manners: in means of both overcoming and creating distance. And aura around things is never decayed, as Samuel Weber argues, but it is permanently re-produced by this very (dis) appearance¹¹.

As a result, if Virtually resides in the real that is because the real is always in fact open to the future, open to potentialities other than those now actualized. The challenge that VR (and also other communication devices) poses to us cannot be reduced to the question of technology. If this occurs, then the question is: how can this computer system, mode simulation, structure of desire function otherwise, can open to difference?. And this is the crucial question that the virtual continually poses to the real: How can the real expand itself? The virtual poses no threat to the real because it is a mode of production and enhancement of the real: *A transformation of the real by and through its negotiation with Virtuality.* Thus the answer of the question "what is absent in telepresence" is not only the distance itself, but also a new perception of body that cannot be reduced to an eye, to a onto-photo-logical structure, that objectifies the Other and (de) form itself.

Works Cited

Benjamin Walter. *Selected Writings* 1913-1926. Cambridge, Mass: The Belknap Press of Harvard University Press, 1996.

Deleuze, Gilles. *Cinema 1: The Movement-Image*. Minneapolis: University of Minnesota Press, 1991.

Deleuze, Gilles. Cinema 2: The Time-Image. Minneapolis: University of Minnesota Press, 1991.

Deleuze, Gilles. The Logic of Sense. New York: Columbia University Press, 1990.

^{9.} Gilles Deleuze, The Logic of Sense, p. 253

^{10.} Elizabeth Grosz, Architecture From the Outside: Essays on Virtual and Real Space, p. 42.

^{11.} Samuel Weber, Mass Mediauras : Form, Technics, Media, p. 33.

- Grosz, Elizabeth. Architecture From the Outside: Essays on Virtual and Real Space. Cambridge, Mass: the MIT Pres, 2002.
- Lyotard, Jean-Francois. The Postmodern Condition : A Report on Knowledge. Minneapolis: University of Minnesota, 1993
- Manovich, Lev. The Language of New Media. Cambridge, Mass: the MIT Press, 2001.
- Virilio, Paul. The Aesthetics of Disappearance. New York: Semiotext(e), 1991.
- Weber, Samuel. Mass Mediauras : Form, Technics, Media. Stanford, CA Stanford University Press , 1996

BIOGRAPHIES

Pelin Aytemiz

Play, Create and Unite: Cognitive Participation as Interaction in Films

Pelin Aytemiz has graduated from Bilkent University Graphic Design Department with an MFA degree by her thesis titled "Spectral Images: Dispossesed Family Photographs Circulating in Antique Markets in Turkey". She received her MA degree by her short film project named "Ephemera: A Short Film Project about Dying Photographs".

Her short film Forget Me Not, which started as a thesis project, realized with a professional crew, was screened in many international film festivals. Since 2004, she works with Ankara Cinema Association, mainly as a part of Festival on Wheels team. Lately she worked as the second assistant director in a feature film called Siyah Beyaz. Pelin, who is now both a teaching assistant and a PhD student at Bilkent University, continues working on critical literature concerning photography and researching on post-mortem photographs, death and the ultrasound image of the fetus for her doctoral thesis.

Bestem Büyüm

Bestem Büyüm has graduated from Middle East Technical University, Department of Sociology, as Valedictorian with a minor in Industrial Design. She received her M.A degree, at Bilkent University, Department of Communication and Design, with her thesis A Study of Popular Culture and Fandom: The Case of Japanese Manga. She is interested in and have been doing research on topics like popular culture, media effects, fan studies and cultural patterns and communication. She is a comic book enthusiast and a traveler who started a World Tour, in which she is planning to discover Egypt and Spain next, as this year's route. Büyüm is a member of International Communication Association (ICA).

I. Alev Değim

Identity Construction in Facebook: A Lacanian Analysis of Profiles and Facebook Generated Games

Iclal Alev Degim has graduated from Bilkent University, Department of Communication and Design in 2009, as Valedictorian. She is interested in fantasy fiction genre and has been researching on the genre films and it's implications in New Media and contemporary society. She has given oral presentations on topics such as; analyzing Fantasy fiction films with Heidegger and Lacan, Orientalism in the film Avatar, among which includes Harvard University and ECREA 2010 Hamburg. She has also worked on documentary films in Eastern Part of Turkey (Kars and Artvin). "Federal" was selected and distributed in Cannes Film Festival (2009) by Ankara Cinema Association. She is currently a grad student undertaking her thesis to earn an M.A. Degree in Media and Visual Studies at Bilkent University.

Bilge Demirtaş

The Structure of Seeing: Reading David Hockney's 'Joiners' Through Space and Time

As part of an extended METU experience, following a degree in philosophy major, Bilge Demirta began working at G SAM (Audio-Visual Systems Research and Production Center). Besides the routine professional work at the facilities, attended and assisted courses of Ulus Baker, worked on various collaborative film projects and organized workshops. In the meantime, she completed the Media and Cultural Studies graduate program, co-made the short-film A Waxed Movie and video-documentary Here is Ankara, has been an active member of Korotonomedya and Videa collectives and collaborated in Kozavisual project. Very recently, she has completed another graduate program at Integrated Digital Media Institute at Polytechnic Institute of NYU and worked on the various multi-media projects of the faculty members. She is living in Izmir, Turkey.

Fulya Ertem

"Street Museum": Thinking about interactivity and artworks in a work that does not use New Media

Fulya Ertem is a lecturer at the Visual Communication Design department at the Faculty of Fine Arts and Design in Izmir University of Economics, Turkey. Her PhD thesis (Undoing Recognition: A Critical Approach to Pose in Photography, 2006) is a psychoanalytical study of the act of posing and its relationship to self-identification in photography. Her scholarly work include: "Re-Thinking the act of posing in Ralph Eugene Meatyard's The Family Album of Lucybelle Crater," Ankara Üniversitesi Dil ve Tarih-Cogtrafya Fakültesi Dergisi, 46-1, 2007, "The Pose in Early Portrait Photography: Questioning The Attempts of Appropriating The Past" Image and Narrative: Online Magazine of the Visual Narrative http://www.imageandnarrative.be/painting/fulya.htm and "BIZ [US] Looking productively to the representation of the "self" in photographic portraiture", Photographies Vol. 3, No. 1, March 2010, pp. 69–83. [e-mail: fulya.ertem@ieu.edu.tr]

Deniz Hasırcı

The Vicious Circle of Changing Media, Methods, Products and Experiences in Architecture

Born in London, and an interior architect, she graduated from Bilkent University. She worked in various architectural firms and received her PhD in 2005. As a Fulbright scholar, she studied "learning environments and creativity" at North Carolina State University. Her articles have been published in The Journal of Creative Behavior, Creativity Research Journal, and Children, Youth and Environments as well as magazines such as Arkitekt, Geceyarisi Sinemasi, Duse-Yazma, Populer Bilim and Patika. She is on the editorial board of Koridor where she continues to write. She has taught Human Factors, Design Studio, Environmental Psychology, and Design Semiotics courses. She began working at Izmir University of Economics in June 2006 and is currently the chairperson of the Dept. of Interior Architecture and Environmental Design. She is a member of The Chamber of Interior Architects of Turkey, Environmental Design Research Association (EDRA), TED Ankara College Alumni Society, and Fulbright Alumni.

Çağrı Barıs Kaşap

Two Questions / Interpreting Signatures:'As If The End of the World has already Come and Gone'

Cagri Baris Kasap is currently a Ph.D. student at the Department of Comparative Literature at State University of New York at Binghamton. He has completed his B.A. and M.F.A. at the departments of Communication and Design and Graphic Design of Bilkent University consecutively. His current interests lie in the fields of Critical Theory, Continental Philosophy, 20th Century French/English Literature and Film, and Communication Studies.

Zeynep Koçer

The Significance of Participatory Culture at the Age of Media Convergence

Zeynep Kocer is a PhD student at the Faculty of Art, Design and Architecture at Bilkent University. She received her MA Degree from College of Staten Island /CUNY in 2005 in Cinema and Media Studies where she wrote her thesis on the representations of femininity in Turkish internal migration films. Her currently research areas are film studies, masculinity, star studies and Turkish cinema.

Rıfat Süha Koçoğlu

AVALON: Legend of Future

Rifat Süha Koço lu was born in Ankara in 1980. He graduated from Bilkent University, Molecular Biology and Genetics Department in 2001 and started his MSc studies in the same department. In 2005 he entered Graphics Department for a change of career, however could not completed his studies due to health problems. He worked as an actor and director in several theater companies. In 2009 founded his own company.

Leyla Önal

There Isn't There

Graduated from the Department of Sociology, Middle East Technical University, Ankara. Studied Radio, Television and Cinema in Eastern Mediterranean University, Famagusta, T.R.N.C. Currently a Ph.D. student at Bilkent University, interested in post-structural theory, cultural studies, feminist theory, cybertheory and sociology of the body and urban subcultures. She is a fan of cyberpunk, body modification and B-Movies. She is a craftsmaker and a costume/accessory designer.

Ufuk Önen

A Perspective on Sound for 'Traditional' and 'New' Media, Audio Professionals and Composers, and Interdisciplinary Education

Ufuk Önen is a composer, music producer, sound designer, audio recording engineer and educator. He produced and recorded more than 50 albums, EPs and singles in Turkey, his native country, and

worked as a composer, engineer and sound designer in more than 200 Turkish, European and North American audio-visual projects, including films screened in international films festivals. His recent work What Is and What Should Be was programmed in Zeppelin Festival (2009, Barcelona, Spain) and in NewMediaFest (2010, Cologne, Germany) and his sound/noise art piece Feeding Back Through the Door was commissioned as part of the Talking Doors, an interactive art project which has been selected for the Award of Distinction in the Interactive Arts Category of Prix Ars Electronica (2010). Önen wrote Audio Recording and Music Technologies (English title), the first reference book in Turkish language in the fields of audio recording and music technology, and published more than 30 articles. Önen holds a B.A. in Linguistics and M.A. in Communication and Design, and is a graduate of Los Angeles Recording School. He is a member of AES (Audio Engineering Society) and IASIG (Interactive Audio Special Interest Group). Önen teaches sound and visual communication classes at Bilkent University.

Didem Özkul

Three Dimensional Television as a New Medium

Didem Özkul is a PhD candidate at the Communication and Media Research Institute (CAMRI), at the School of Media, Arts and Design, at the University of Westminster in the UK. Her research in new media ranges from studies in user interaction to location-awareness and perception of space. Currently, she is working on her dissertation which explores the social and spatial dimensions of mobile communication technologies and their use in everyday life. She works as a research assistant at the Faculty of Communication, at the University of Ankara in Turkey.

Segah Sak

Collective Memory and Video-Sharing on the Internet

Segah Sak graduated from the Department of Architecture, Gazi University, in 2006. She received her M.A. degree from the Faculty of Art, Design and Architecture, Bilkent University. Currently, she is a Ph.D. candidate at the Institute of Fine Arts, Bilkent University, and works as a part-time instructor at the Department of Interior Architecture and Environmental Design. During her master's studies, she dealt with issues related to urban history, concentrating on the city that she lives in, Ankara. After beginning her Ph.D. studies, she somehow got engaged in media studies. Recently, she has been wandering around the intersection of media and urban studies. The work that appears in this book can be considered as the basis of her Ph.D. research that is related to cyberspace and urban memory.

Alper U. Sarıkaya

What is Blogging: Towards a Definition

Alper Utku Sarıkaya received his B.A. in American Culture and Literature from Baskent University in Ankara, Turkey. He took graduate courses in new media as well as media theory from M.A. in Media and Visual Studies at Bilkent University, Ankara. He took part in the organization of the international
conference Video Vortex Ankara held at Bilkent University in 2008. Though he neglected blogging a lot; he is a blogger, a videoblogger and a web enthusiast. He is currently working as an instructor of the English Language at Gazi University in Ankara, Turkey.

Ayda Küyel Sevin

Computer Screen, Virtual Reality and the Frame

Ayda Küyel has graduated from Bilkent University, Department of Communication and Design in 2005. She got her M.A. degree on Media and Visual Studies in 2007. She worked in several advertising agencies for a while then completely changed her direction to the field of publishing. She worked for a publishing house as a translator and editor assistant. Currently she is working as a freelance translator and her main area of interest is permaculture design. Her translations are being published in major online permaculture sources of Turkey. Not only with the purpose of contributing to the development of literature regarding this matter, but also of putting it into practice in her actual life, she is attending seminars and workshops as well.

Umut Sumnu

What is Absent in Telepresence?

After having graduated from Bilkent University, Faculty of Art, Design and Architecture in 2000, Umut umnu had a master degree at the same faculty with his thesis called 1912 Galata Bridge: as a Site of Collective Memory. In 2002, he started his PhD study titled as The Idea/Image of the Turkish House : The Univocity of Being and the (De)Formation of National Identity within the Historiographical Studies. Umut Sumnu mostly deals with the post-structuralism and tries to translate the concepts of this theory to the field of architecture. In that respect, he had many articles published in international journals like Theory and Event, International Studies in Philsophy, and national journals like Doxa and Siyahi. He is currently working as a full-time instructor at Baskent University Faculty of Art, Design and Architecture; and giving courses such as Design Studio, Contemporary Architecture, History of Furniture, Architectural Theory and Criticism .

Andreas Treske

Andreas Treske is an Editor, Filmmaker, and Media Artist living in Turkey. He graduated from Munich Film Academy (Hochschule f. Fernsehen u. Film); professional experience and continuing activities as director and editor. From 1992 till 1998 creative art staff at HFF Munich with extensive research on applied aesthetics for cinema and TV. From 1998 – 2010 teaching at the Department of Communication and Design at Bilkent University, Ankara, film and video production, new media theory; chair of the department from 2005 till 2010.

Since Summer 2010 he is Assistant Professor at Yasar University in Izmir/Turkey.

International exhibitions of interactive media works, various short films screened on international film festivals, his co-directed feature length documentary "Takim boyle tutulur" played in Autumn 2005 in more than 50 Turkish cinemas. In 2008 picture editor of the feature length cinema documentary

"Mustafa", directed by Can Dündar. He was the organizer of the 3rd Video Vortex conference in Ankara.

Funda Senova Tunalı

Analysing Run Lola Run: Mixed, Interactive-Like but Limited, Complex, Chaotic and Unstable, thus Technically Perfect

Funda Senova Tunali is a graphic designer based in Ankara, Turkey. She received her BFA degree in Graphic Design at Faculty of Art, Design and Architecture, Bilkent University, her MFA degree in Graphic Design at Institute of Fine Arts, Bilkent University, Ankara and a European Media MA degree in Image Synthesis and Computer Animation at Faculty of Art, Media and Technology, Hogeschool voor de Kunsten Utrecht, The Netherlands. She is a PhD candidate at Bilkent University and currently working on contemporary sound design and digital typography. Since 2007, she is lecturing at the Department of Graphic Design, Bilkent University, Ankara.



This reader is a collection of essays written by Turkish graduate students between 2003 and 2010 for Andreas Treske's seminar 'Image, Time and Motion' at Bilkent University in Ankara, revised and actualized in 2010.

Coming from a wide range of disciplines they had studied before, very rarely media or cultural studies, these students brought in their various viewpoints and methods, and tried to integrate their observations and understandings in a seminar related to cinema and new media to discuss and sometimes just to describe the influences of digital media technologies for themselves and their colleagues. Starting from the premise that digital technology redefines our moving image culture, the authors reflect in their essays various kind of approaches and methods, experiences and practices, descriptive, critical and interdisciplinary.

Contributors: Pelin Aytemiz, Bestem Büyüm, I. Alev Değim, Bilge Demirtaş, Fulya Ertem, Deniz Hasirci, Cağri Bariş Kasap, Zeynep Kocer, Rifat Süha Koçoğlu, Leyla Önal, Ufuk Önen, Didem Özkul, Segah Sak, Ayda Sevin, Umut Sumnu, Andreas Treske and Funda Senova Tunali.

Printed on Demand

ISBN: 978-90-816021-5-0

