

INTERPRETING *GLITCH*;  
THE MANIFESTATION OF DIGITAL CULTURE:  
A STUDY ON THE ASSOCIATION BETWEEN CONTEMPORARY  
SOUND DESIGN AND DIGITAL TYPOGRAPHY

A Ph.D. Dissertation

by  
FUNDA ŞENOVA TUNALI

Department of  
Graphic Design  
İhsan Doğramacı Bilkent University  
Ankara

May 2012



to my grandparents

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SOUND DESIGN AND DIGITAL TYPOGRAPHY

Graduate School of Economics and Social Sciences  
of  
İhsan Dođramacı Bilkent University

by

FUNDA ŞENOVA TUNALI

In partial Fulfillment of the Requirements for the Degree of  
DOCTOR OF PHILOSOPHY

in

THE DEPARTMENT OF  
GRAPHIC DESIGN  
İHSAN DOĐRAMACI BİLKENT UNIVERSITY  
ANKARA

May 2012

I certify that I have read this thesis and have found that it is fully adequate, in scope and in quality, as a thesis for the degree of Doctor of Philosophy in Graphic Design.

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## ABSTRACT

INTERPRETING *GLITCH*;  
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May, 2012

This research probes into the concepts of designing and consumption of digital typography that manifest the logic of digital media by following an analogy of the patterns in contemporary sound design which act on the developments within computer technologies as part of digital culture. When a technological system malfunctions and no longer executes its function it loses its essence and we fully became conscious of it. In many of these such cases *noise* and *glitch* occur. Therefore, this study tries also to conceive the concepts of *noise* and *glitch* within a visual framework following an analogy of the aural designs as used in Sound Art. Departing from the conclusions reached at the end of the investigation and analysis of a parallelism within the design patterns in both spheres through systems approach, it proposes that the emerged patterns demonstrate the manifestation of digital culture and the culture functions depending on its operational logic and productions.

Keywords: Digital typography, contemporary sound design, glitch, graphic design, digital culture.

## ÖZET

*GLITCH*İ YORUMLAMAK;  
DİJİTAL KÜLTÜRÜN GÖRÜNÜMÜ:  
ÇAĞDAŞ SES TASARIMI VE DİJİTAL TİPOGRAFI ARASINDAKİ İLİŞKİ  
ÜZERİNE BİR ÇALIŞMA

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Danışman: Prof. Dr. Bülent Özgüç

Mayıs, 2012

Bu araştırma dijital medyayı ortaya koyan dijital tipografi tasarımı ve onun tüketimi ile ilgili kavramları, çağdaş ses tasarımı ile bilgisayar teknolojileri üzerinden hareket eden örüntüler arasındaki benzerlikleri araştırmaktadır. Teknolojik bir dizge arızalandığında ve artık işlevini yerine getiremediğinde özünü yitirir ve o an teknolojinin farkına varırız. Bu durumların çoğunda *gürültü* ve *glitch* meydana gelir. Bu nedenle, bu çalışma aynı zamanda Ses Sanatı'nda kullanılan biçimleriyle ses tasarımlarının dijital tipografi ile benzerliklerini takip ederek görsel bir çerçeveden *gürültü* ve *glitch* kavramlarını araştırmaktadır. Her iki alandaki tasarım örüntüleri arasındaki paralellik araştırmasının ve çözümlemesinin sonunda dizge yaklaşımı ile ulaşılan sonuçlardan yola çıkarak ortaya çıkan örüntülerin dijital kültürün bir görünümünü sunduğunu ve bu kültürün kendi işleme mantığına ve üretimlerine dayanarak çalıştığını ileri sürmektedir.

Anahtar kelimeler: Dijital tipografi, çağdaş ses tasarımı, *glitch*, grafik tasarım, dijital kültür.

## ACKNOWLEDGEMENTS

I have numerous motives behind writing this dissertation, none of which is prior to the others. My fascination with digital technologies, my increasing curiosity on human-computer interaction, my interest in the operational logics of systems and my familiarity with the relation formed between digital culture, technology and graphic design are amongst many others.

Throughout my doctorate study exceptional people whom I should mention here helped and supported me along all the stages of this study. I would like to thank my supervisor Prof. Dr. Bülent Özgüç for his guidance, vision and patience in the writing of this dissertation. I would like to thank Assist. Prof. Andreas Treske for helping me during the kick-off of this study. I thank my examining committee Assist. Prof. Dr. Fulya Ertem Başkaya, Assist. Prof. Dr. Çağrı İmamoğlu, Assist. Prof. Dr. Dilek Kaya, and Assist. Prof. Dr. Ersan Ocak for investing time in the evaluation of this study and for their critical comments.



I would also like to thank Dr. Orhan Anafarta and Damla Özer Ülvan. Our discussions and conversations turned into priceless inputs through my academic life. I also thank my dearest friends Halime Fişenk, Nazife Karamullaoğlu, Jülide Akşiyote, Çağla Saraç, Gizem Alagöz Mocan, Levent İnce, Pelin Aytemiz and Oğuz Akın. They always supported me and gave me courage to carry out this study.

I want to thank Ufuk Önen for his friendship and his books on sound recording and music technologies. Furthermore, I thank the genial people Murad Gürzumar, Ümit Vurkır, Nükhet Büyükoğtay, Erol Çalışkan, Aydın Ramazanoğlu, and Cemil Gülyüz.

I should mention Assist. Prof. Dr. Ersan Ocak once again in order to especially thank him for his inspiration, insightful comments and feedbacks, for his support as a friend and as a mentor. With his knowledge and perspective he directed me in the right direction and gave me courage for further studies.

I thank every artist, designer, curator, theorist, scholar and writer who inspired me. I thank Pati HD, Nevron HD, Ashitaka HD, PhD Comics, and our old but mighty car.

My deepest gratitude goes to my parents Işık and İlhan Şenova for always believing in me, and for their endless love. I cannot express enough my gratitude for my husband Erhan Tunalı who supported me no matter what happens and without whom this study would be impossible or meaningless.

I especially thank the best sister and curator Başak Şenova, her husband Erhan Muratoğlu, and my precious niece Maya for their support and love and for being the sources of invaluable information and insight on the subjects I work on.

I thank Seçil, and Esin Tunalı and Elif Tunalı Nikoglou for their support. I cannot finish without mentioning the two very special beings; Pati and Zip for spreading color and joy to my life. I am thankful to everyday that all these irreplaceable people, my cat, and my dog are parts of my life and supported me through this amazing, yet thoughtful experience.

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# CHAPTER 1

## INTRODUCTION

### 1.1 The Aim of the Study and Statement of the Problem

The technological developments throughout the history brought us a great deal of possibilities and channels that associates the systems with and in correlation of media to communicate, to inform and to distribute data. Hence, the agenda of globe has always been created and shaped through these associations. By locating myself as a designer that processes in this sphere, it is crucial for me to grasp how digital media operates and forms new visual languages that shapes and directs societies of information with different profiles. The definition of visual culture is in continuous flux and this endless change becomes more visible with the introduction of digital apparatuses such as computers, surveillance systems, mobile phones...etc.



Communication technologies are not neutral spaces that only convey messages, they are governed by a set of articulated rules that are effected by and have effects on societies. Technology reterritorializes the public and private space and causes the self to re-identify herself in relation to her environment. Especially communication technologies and digital media encompass the power of creating a society that manifests the operational logic of globalization by promising democratized, diversity-based, and non-hierarchical societies.

Technology is best noticed when it is not functioning. In our everyday lives we are so much accustomed to use technology that we became unaware of its existence in many cases. However, when a technological system malfunctions and no longer executes its function it loses its essence and we fully became conscious of it. In many of these such cases noise and glitch occur.

Thus, this research probes into the concepts of designing and consumption of digital typography that manifest the logic of digital media by following an analogy of the patterns in contemporary sound design which act on the developments within computer technologies. Many theorists and artists like Randal Packer, Ken Jordan, William Gibson, Henri Jenkins, Charlie Gere, John T. Caldwell, Lev Manovich, Geert Lovink, Paul Hegarty, who are producing within and about digital

technologies discuss and question the main features, possibilities and influences of the problems and opportunities inherent in technology. Therefore, this study tries also to conceive the concepts of noise and glitch within a visual framework following an analogy of the aural designs as used in Sound Art.

Hence, the research tries to unveil the possible association and link between sound design especially glitch music and typography that are produced within and about digital media. Departing from the conclusions reached at the end of the investigation of a parallelism within the design patterns in both spheres, it proposes that the emerged patterns demonstrate the manifestation of digital culture and the culture functions depending on its operational logic and productions.

The core question to be researched is “Is there an association between the patterns of design of contemporary sounds and typography in digital media?” The second question to be investigated based on the outcomes of the first question is “How do these patterns manifest the operational logic of digital culture?”

The two domains; digital typography and sound design are the realms with which the artist and designers explore new possibilities of creative acts. The digital technologies used in these two domains are shaped by

cultural inputs and needs. The way these technologies develop and operate allow the users to engage with new forms of thought, production, utilization and consumption. This study is significant in its selection of these two sub-domains, that may seem unrelated, but when analyzed reveal common patterns in the processes of production, distribution, and consumption, through the investigation of the concept of *glitch*, which is an intrinsic element of digital culture.

The concepts, which are commonly inherent in these technologies are failure, malfunction, and error. Hence, *glitch* as a minor malfunction within the system manifests itself as the marking of the digital technologies used. The perception and utilization of the concept of glitch as a subversion —by the creators of design and art works within these two spheres of digital typography and contemporary sound design— are the reasons behind choosing the concept of *glitch* as the pivotal point of the study.

## **1.2 Research Methodology**

The study employs qualitative approaches which aim to explore and manifest the status quo of the tendencies regarding the design sphere and the lived experiences of the designers involved in the development

and creation of those mentioned sound and typographic designs addressed by the study. The aim is to observe if the research disciplines within these approaches allow themes to emerge which illuminate the semblance resulting from a cultural reflection of digital media. Therefore, it is at utmost importance to conduct historical surveys of both domains. The surveys include works of Avant-Garde artists and designers such as Futurists, Dadaists, Constructivists, the Bauhaus School, Fluxus, and other relevant names from the computer age. These surveys play crucial role in highlighting the key theoretical and artistic works that, when analysed, manifest particular methods, techniques and processes used by the theoreticians and artists and their relationship to cultural, historical, artistic, sociological and technological milieu.

The selected works are deconstructed and analysed benefiting also from General Systems Theory in order to highlight the emerging patterns within these systems.

This research refers to the works of theoreticians such as Douglas Kellner, Andrew Darley, Bob Cotton, Jay David Bolter on visual digital culture, Lev Manovich, Lori Landay, Mark J. Brosnan, William Gibson, Henry Jenkins on new media, Ken Goldberg on Internet and Richard Coyne on information technologies, Katherine McCoy, Ellen Lupton, J. Abbott, Miller, Rick Poynor, Jessica Helfand, Lorraine Wild, Donald

Knuth on graphic design and digital media and Marshall McLuhan, Jaques Derrida, Gilles Deleuze, Felix Guattari, and Henri Jenkins on the sociological and cultural theoretical discourses. Within this framework, how noise and glitch are produced and their effects in the creative process will be investigated by taking into account philosophers such as Attali, again Deleuze and Guattari, contemporary sound artists such as Merzbow, Kim Cascone, Pan Sonic and key figures in graphic design and typography such as David Carson, Neville Brody, Zuzana Licko, Rudy Van DerLans, Jeffrey Keedy among others.

### **1.3 Objectives and Description of the Research Design**

The objective of this research is focused on the linkage between sound design and typography which are effected by and effect the emergence of digital culture. Thereby, the history of the communication technologies will not only guide the research, it also will maintain links to various disciplines. The sphere of digital culture appears as the amalgamation of various media such as printed media, television, computer games, and software and hardware related fields. Therefore, the structure of this research will be based on the objectives of processing and distribution of information, digital audio-visual language, interface structures and

designs, and, compatibility through the use of technology in cultural levels.

Furthermore, other related resources are taken into consideration within the scope of this study. Examples each from Flippo Tomasso Marinetti, Jamie Reid, Allen Hori, Edgard Varèse, Merzbow, and Kim Cascone and an audio-visual self-project called *Glint: Audiovisual Glitches*, are analyzed as the case studies of this thesis. As the case studies: structure of a complete design/product/artwork, production, storage, distribution , consumption, thus, the operational logic of typographic representations, digitally created sound designs and other related sources are analyzed through the works of artists and the design and functioning of number of software, which are used to design typography and sound are mentioned. Moreover, considerable analysis is made referring to General Systems Theory while keeping in mind the semiotic readings which had apparent impacts on both the creations of typographic and audial works.

The next chapter probes into the historical survey of digital typography starting from 1900s, reaching present, grounding the rationale transposed earlier. It tries to unveil the artistic and theoretical key events and people in order to establish the cultural, sociological, technological and historical relations.

Following that chapter, the next one examines the history of events happened in the sound design sphere in 20th Century, focusing especially on the last few decades, again starting with Futurists and ending up with the present *status quo* of digital media to bring out the above mentioned relationships.

Chapter four is an attempt to manifest the possible association between digital typography and contemporary sound design by making analyses of examples from typographic and aural designs from several prominent designers and an audio visual self project. The term “glitch”, its signification, visual and aural aspects and its application are explained and articulated in this chapter, as it marks itself as a signifier of digital culture. This chapter is the core of the dissertation in the sense that it tries to unveil the possible patterns used in the production in both domains. The found associations inferred from the interpretations of the aural, visual, and textual data presented will show that even the mentioned domains seem apart, since they share the same media for production, storage, distribution and consumption, they inherit basic principles which reveal a manifestation of digital culture.

In the last chapter, the conclusions are derived and presented from the analyses and discussions made in the fourth chapter, and possible future suggestions are made that lead to further researches. In conclusion, this

study argues that digital culture and its operational logic can be manifested through the association between two domains, digital typography and contemporary sound design.

#### **1.4 On Systems and General Systems Theory**

Apart from the means of production, distribution and consumption of digital typography and contemporary sound pieces on a sociological level, in order to analyze these two fields in a quest to seek for associations that would yield conclusions about a shared cultural patterns, these two cultural entities should also be evaluated as systems. These complexities and their relations with and reflections on their environment; people, culture, and technology, can be understood through the utilization of systems approach.

A system is by definition a set of interrelated parts that forms a whole with a structure and common behaviors. The whole becomes significant in the sense that its parts are interdependent and works towards a process that forms the whole by the semantic relations constructed between the whole and its parts. Aristotle's famous statement "the whole is greater than the sum of its parts" manifests itself through a Gestalt view of systems. In order to analyze both domains (digital typography and



contemporary sound design) they can be viewed as systems and through an intensive investigation, their properties, the structural entities, behaviors and rules should be outlined so that a possible pattern matching can be performed. “A system can be defined as a set of elements standing in interrelations.” (Von Bertalanffy, 1988: 55) In such manner, a system cannot be regarded apart from its components. The components of a system are important in the sense that they interact both with each other and the environment surrounding them, thus, forms a new dynamic system as a whole.

Ludwig von Bertalanffy (1988: 32) is the biologist who was one the pioneers of the *General Systems Theory (GST)*, a theory that is based on “the formulation and the derivation of those principles which are valid for ‘systems’ in general.” GST is regarded as an interdisciplinary study that can be applied to many fields such as biology, mathematics, psychology, sociology, cybernetics and so forth. The important issue in GST is the idea that these researched patterns should not be confused with superficial analogies. Pointing out one or two similarities between systems is not the concern here. The development, formation and the processes within a system should be regarded as patterns of values that would form isomorphisms with the emerging patterns of another system in the inquiry of meaningful relations, hence, meaningful principles which are common in the questioned systems.

Von Bertalanffy (1988:35) explains his concerns on the subject matter as such :

But general system theory is not a search for vague and superficial analogies. Analogies as such are of little value since besides similarities between phenomena, dissimilarities can always be found as well. The isomorphism under discussion is more than mere analogy. It is a consequence of the fact that, in certain respects, corresponding abstractions and conceptual models can be applied to different phenomena. Only in view of these aspects will system laws apply.

Regarding systems as isolated structures is what Von Bertalanffy tried to avoid, hence, he also proposed open systems. Closed systems are isolated from their environment, thus the interaction of their entities does not vary, so the system gets no feedback and has always the same outcome since the conditions are stable. However, open systems are interdependent on each other and on their environment, and are affected by different interactions, thus an open system always welcomes new possibilities. Systems theory is of great value at that point because of the fact that typography and sound design are language systems that are in constant change though they have specific rules and properties, thus, both of them appear as open systems and can be analyzed through GST.

Glitch, is one of the many features that these two systems, digital typography and contemporary sound design manifest in common. In this sense it is both a technological and sociological phenomenon and cannot

be regarded as a superficial analogy but as an isomorphism which Von Bertalanffy mentions about.

Typography and sound design are means for human expression, significantly for communication. In both domains there are certain messages that are carried out and generated by the sender, the production methods used, the channels of distribution, and the receiver. In order to communicate in the intended way the perception fields of the sender and the receiver should correspond to each other and the messages should be encoded and decoded in the appointed ways. This can only be achieved through a common language, a common cultural background. Much of these isomorphisms can be analyzed by keeping in mind the semiotical approaches. Such isomorphisms are likely to appear in the analysis of the case studies within this thesis. However, in order to fully grasp the mechanism, the systemic construction of these domains, one has to investigate interrelations other than mere cultural designations. Because of that reason it is important to understand these two domains as systems that we are dealing with and explore the hardware, the software and the production devices that they are dependent on. Searching for certain patterns between them will potentially lead us towards an understanding of these systems as a whole.

Before diving into the possible associations between them, one should analyze each system starting with the parts constituted in them. “If, however, we know the total parts contained in a system and the relations between them, the behavior of the system may be derived from the behavior of its parts.” (Von Bertalanffy, 1988: 55) So, each system can be reduced to other systems forming them, there is a clear hierarchical structure in the formation of a system. Nevertheless, the open system suggests a de-hierarchized structure as a result of the interactions and interrelations that it proposes by nature. Digital typography and sound design practices are products of a common system, the contemporary culture and they share a common history. Furthermore, they are both interactive and participatory because of their digital nature. Digital media offers interaction and participation in the sense that the viewers of the media become the users, participants, and even the co-authors who help in shaping and in the completion of the works that would acquire meaning only through such interactions. This dynamic interdependence of their components generates new systems, new relations and new languages. “The basis of the open-system model is the dynamic interaction of its components.” (1988: 55) So, the interaction and the nonlinear fashion embedded within these components is what the open systems are characterized by. This whole new system which is emerged from digital technologies is based on participatory relations and the idea of freedom of expression and creation where the decision of the parts of

the system and of the outer effects have significant roles in altering the outcome, construction and the reflection of the system others in question. As Alfred Kuhn (1974) argues in *The Logic Of Social Systems that* “knowing one part of a system enables us to know something about another part.”

Systems Theory is important in this research because of the reason that it can help draw relations and indicate the patterns that are forming within a system and between systems. So it would be possible to draw out conclusions based on these overlapping patterns and speculate upon their implications on technological and sociological levels. “A consequence of the existence of general system properties is the appearances of structural similarities or isomorphisms in different fields.” (Von Bertalanffy, 1988: 33) GST will instruct and guide towards a prospective answer to the questions investigated within the boundaries of this work. With the implementation of the systems approach to the mentioned domains, the relations underlying the cultural formations inherent will be revealed.

Typography has been at the core of graphic design since the beginning. It is considered as the art of designing letters and arranging them on a space. The aim of any graphic design work is to convey a message/an information. Graphic design, as an activity, is very much dependent on

the environmental and cultural inputs such as knowledge, technology and value systems. Designers use mass media to convey these messages. Mass media is a tool for reaching large audiences. Its promise is to deliver objective information to society. However, because of the reason that it is structured within and with ideology it can never carry messages outside ideology. The main mass media channels are radio, television and newspaper that shaped and are shaped by culture. With the advent of technology, the Internet and the World Wide Web emerged as new channels of mass media that also marked society and manifested a new era.

Communication as a concept is significant in this study, since, its operational logic has effects on who communicates with whom, what is communicated, and through which media it is communicated. The answers to these questions play crucial role in determining the interrelations of such elements, which are also inherent in digital culture.

In *Deconstructing Communication*, Briankle Chang (1996) puts emphasis on the *postal system* alike operational logic of communication. Communication, as a concept, has to hold a determined identity for the sender and for the receiver in which the delivery of message and return stayed identical and unaffected. However, in application as an experience, communication is exposed to other effects that are the results of a socially constructed order. Cultural theorist and sociologist Stuart Hall (1973)

demonstrates in “Encoding and Decoding in the Television Discourse” that the receiver, in this case the audience, plays a crucial part within this communication model. The message sent may be interpreted by the audience on different levels, based on the socio-cultural structure. The audience is never a neutral receiver because of the reason that he is born into a culture that is built up with and governed by ideologies. He is born into a society where the language is prior.

Typography acts as a significant element in mass media especially in printed media and digital media, where the messages can be transmitted through written texts. However, typography is a practice which is usually neglected or its effectiveness is taken for granted, its significance can easily be observed through the industrial revolution and through out the information age as it became one of the most important practices in printed and digital media. In every message transmission, although the sender sends a specific message in a specific way, there is a chance that the receiver may interpret it in a different way. The graphic designer or the typographer adds another layer to the message sent by the use of visual language. Mass media transmits a message to the audience encoded with certain codes that are inscribed in society through repressive and ideological state apparatuses. Media, in this sense, acts like an institution, as also Althusser stated, which is the communications ideological state apparatus. (1971/1995: 111) A message can attain a

signification in relation to other elements in the system, the system acts like a chain of signifiers. Hall (1973: 131) mentions ‘misunderstanding’s that may occur during the transmission of a message. These misunderstandings or different interpretations may occur if the messages are decoded with different codes other than the presumed ones. These codes are learned by experiences that emerge from cultural conventions.

Connotative signs offer open texts that may be interpreted more freely than the closed texts. For instance, there are immense usages of connotative signs in domains of graphic design and motion graphics. Since these signs call for different but ordered meanings, they are used to grasp the attention of the audience by offering sub-meanings as a strategy for economic and effective usage of them. Moreover, one of the most powerful tools of graphic design used to convey messages is typography and contrary to what Beatrice Warde suggested in 1955 and the philosophy of “New Typography”, contemporary graphic design rarely tries to be a “crystal goblet”, which is transparent and does not interfere with the message sent and the receiver.

The system of encoding and decoding is built on social construction, it is dependent on the ideology that governs the culture. Because of that reason, particular media such as the Internet may lead to such different readings of any messages because of the reason that it is heavily



dependent on the visual language and iconic signs. Althusser (1971/1995: 131) argues that, “the existence of ideology and the hailing or interpellation of individuals as subjects are one and the same thing.” Although, the Internet is a medium that hails to the masses, the existence of the personal web sites, forums and blogs acts like a system, which calls for differentiated readings of the same content, that is made possible by the audial and visual language, involving image, text and sound.

Underlining Marshall McLuhan’s (1964) well-known statement “the medium is the message”, he states that not only what the medium communicates, but the medium itself also has a message. So the message always carries traces of the medium that it is transmitted through. Likewise, Lev Manovich (2001: 64) in *Language of New Media* states that, “In cultural communication, a code is rarely simply a neutral transport mechanism; usually it affects the messages transmitted with its help.” As a consequence, the medium that the message is transmitted always carries cultural, historical and social marks and they add to the meaning of the message. Moreover, communication technologies reversed the precedence given to space over time. New media constructs its own structure and how it communicates in accordance with the new approaches towards the formulation of time and space. Digital

typography is a domain where these new formations can easily be built and tested.

The history of western typography is often told by mentioning printed letters invented by Johannes Gutenberg as a point of departure. However, for the sake of argument stated here, this study focuses on the digital evolution that happened especially within the past 30 years. Nevertheless, in order to point out some of the similarities with respect to typographic approaches, in addition to digital typographic processes, and the points of view of different designers and artists produced under different circumstances, this section stresses also Dadaists, Futurists, Constructivists, and other Modernists as the precursors of digital typography.

## CHAPTER 2

# THE EVOLUTION OF DIGITAL TYPOGRAPHY AND IMPRINTS OF POST STRUCTURALISM

*“Typography, in this environment,  
desperately needs direction”*  
(Helfand, 2001: 237).

### 2.1 The Precursors; Avant-Gardes

At the beginning of 20th Century, the artists, writers, designers were after revolution in arts and the values attached to it. Avant-garde movements of the early 20th Century are of great importance that each of them was very passionate in their pursuits and in order to pursue their goals they produced a great variety of work. They produced paintings, sculptures, made films, wrote poems, published manifestos, magazines, books, photographs, designed clothing, drew new buildings and worked with typography.

*Futurism*, which was an Italian movement that had its roots in politics, was concerned with machinery in the 20th Century. It aimed to emphasize the dynamism, motion and power of the machinery, and tried to insert a dynamic notion to the art scene. Futurist artists, like Filippo Tomasso Marinetti, Giacomo Balla, Paola Buzzi, Umberto Boccioni glorified new technologies, and industry, more significantly power. They saw war as the ultimate form of art. “Italian Futurism was perfect vehicle for a movement that advanced cultural renewal through technology and social purification through war” (Heller, 2003: 34). Filippo T. Marinetti, founder of the movement, published in 1909 the “First Futurist Manifesto” and declared that they refuse academies, institutions, rules and values attached to them. In “Destruction of Syntax - Imagination without Strings - Words-in-Freedom”, he manifested a typographic revolution that rejected the conventional rules of design.

Marinetti (1913/1999: 10) stated the following:

I initiate a typographical revolution aimed at the bestial, nauseating idea of the book of passéist and D’Annunzian verse, on seventeenth-century handmade paper bordered with helmets, Minervas, Apollos, elaborate red initials, vegetables, mythological missal ribbons, epigraphs, and roman numerals. The book must be the Futurist expression of our Futurist thought. Not only that. My revolution is aimed at the so-called typographical harmony of the page, which is contrary to the flux and reflux, the leaps and bursts of style that run through the page. On the same page, therefore, we will use three or four colors of ink, or even twenty different typefaces if necessary. For example: italics for a series of similar or swift sensations, boldface for the violent onomatopoeias, and so on. With this typographical revolution and this multicolored

variety in the letters I mean to redouble the expressive force of words.

Marinetti published other typographical manifestos that refused the traditional typographic rules in order to emphasize their passions about their pursuits. (Heller, 2003: 36) Later on in 1914, he published his far-famed book *Zang Tumb Tumb* in which a war in Adrianopolis (Turkey) is depicted through typographic expressions such as the use of different typefaces, styles and type sizes, hence, the work that he visualizes his theory of “words-in-freedom.” (Fig. 2.1.1) Instead of creating “crystal goblet”s, Marinetti and other futurists produced many expressive and loud compositions that glorified machinery, new technologies, speed and power.



Fig. 2.1.1. The Cover of *Zang Tumb Tumb*, 1914, and *Parole in Liberta*, 1915, designed by F. T. Marinetti (moma.org)

This violent reaction, manifested itself as a form of propaganda. Consequently, for this art movement, mass media such as printed media (with which the typographical revolution, that the Futurists defined could be practiced) and radio were perfect tools to reach mass audience.

Later on this dynamic outcome was imitated by *Dadaists, Constructivists and De Stijl*. (Spencer, 1990: 15) Dadaists were also against the traditional rules set by the institutions. However, their motive was very different than Futurists. Dadaism emerged from the “disillusionment with war” and lasted from 1916 to 1924 (1990: 17). Hugo Ball, John Heartfield, Marcel Duchamp, Hans Arp, Tristan Tzara were among the prominent Dadaists. Dada includes manifestos, typographic compositions, paintings, poetry, ready-mades, montages and collages. Typographic Dada works produced were also inspired by the advertising industry that uses different typefaces, styles, colors, etc., in order to attract consumers. As Heller (2003:53) also states, typography represented the city, crowd and noise.

Kurt Schwitters was one of the striking figures in the art scene who produced *Dadaist, Constructivist and Surrealist* works. He published a Dada periodical from 1923 to 1932 called *Merz* in which the influences of Constructivism, De Stijl and later on New Typography are apparent. (Fig.

2.1.2) He worked with Tristan Tzara, El Lissitzky, Van Doesburg, Jan Tschichold and many diverse artists.



Fig. 2.1.2. The Cover of *MERZ*, 1923. (Chipp, 1968: 384)

Schwitters and Lissitzky also worked together for the design of the advertisements for *Pelikan* ink company. El Lissitzky, Aleksander Rodchenko, Vladimir Tatlin are some artists associated with Constructivism. They incorporated abstracted, extreme geometrical forms that symbolized machinery and mass-production. One of the most

memorized visual examples of this movement is the journal *LEF* (1923-5), later published as *Novi Lef* (1927-9). (Fig. 2.1.3)

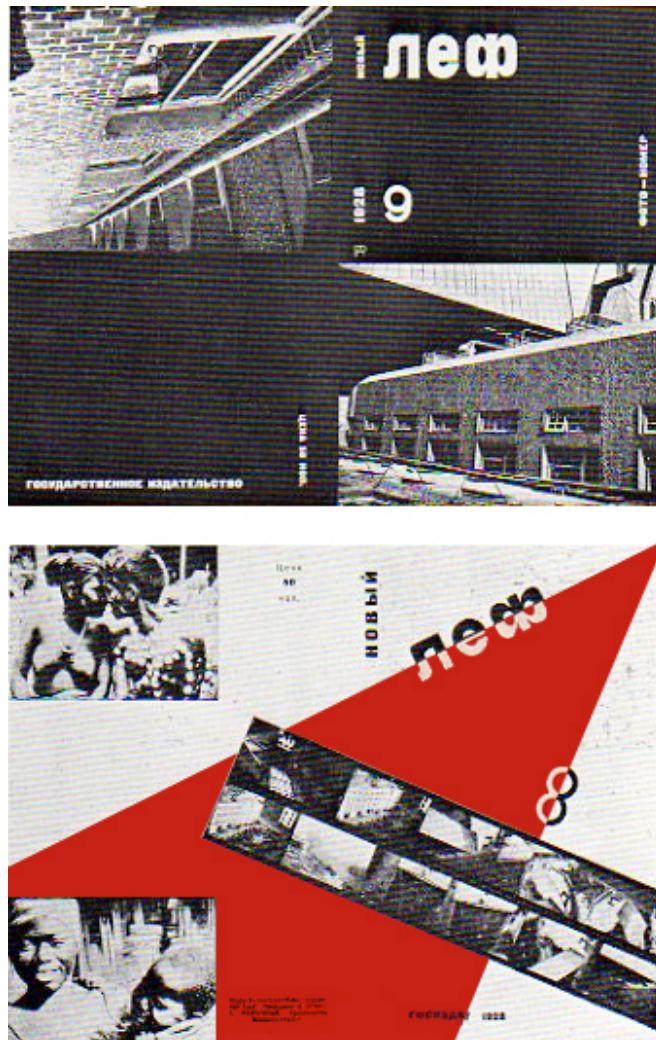


Fig. 2.1.3. Cover examples of *Novyi Lef*. (moma.org)

Among the works of Schwitters, Van Doesburg and Lissitzky, contrast appears as one of the most significant design strategies. Theo van Doesburg published the journal *Mécano*, and in 1919 designed *Van Doesburg* type face which is formed by using equally weighted, perpendicular strokes. In 1997, this typeface is revived digitally and



named *Architype Van Doesburg* (Fig. 2.1.4) by Freda Sack and David Quay of The Foundry. (The Foundry, n.d.)



Fig. 2.1.4. *Architype Van Doesburg* Typeface (foundrytypes.co.uk)

Within this scene, a leap first to expressive typography then towards a rigid, grid based, geometrical design manifests itself through avant-garde movements. One of the prominent movements that had its focus on designs concentrating on functionality and rationality by taking mass production into consideration was **the Bauhaus School**. Bauhaus School operated from 1919 to 1933 is founded by Walter Gropius in Weimar. Hannes Meyer, Laszlo Moholy-Nagy, and Wassily Kandinsky, Herbert Bayer are among the important figures. Herbert Bayer designed geometric sans-serif typeface called *Universal* in 1925, which revived digitally as *Bayer Universal*, That typeface also influenced the designs of

*ITC Bauhaus* and *Architype Bayer* (The Foundry, n.d.). Herbert Bayer and Jan Tschichold both embraced geometrical, san-serif typefaces and asymmetrical, grid based compositions that manifested the utility and functionality, which were in the core of Bauhaus. (Fig. 2.1.5)



**Fig. 2.1.5. Herbert Bayer, poster design, 1926. (heathershawdesign.com)**

As J. Abbott Miller and Ellen Lupton (1992) stated in “A Natural History of Typography”, avant-garde movements tried to “defamiliarize” writing. Defamiliarization, which is a theory of Victor Shklovsky (1992: par. 21) “held that everyday world is invisible until we are forced to see it differently, and that art is primarily means for ‘making strange’ the already-seen and already-known.” Avant-garde movement, though each

one having different motives blurred the boundaries between art and everyday life. They aimed at reaching masses and creating a sense of awareness. By asserting different approaches, avant-garde artists created a shocking effect that defamiliarizes the viewers' reception by contrasting the artistic and cultural conventions.

## **2.2 The Computer Age, from METAFONT to Emigre**

### **2.2.1 The Computer Age and Digital Culture**

By attacking the typographic norms, avant-garde artist and designers began creating new visual languages, which call for reactions from the audience. They attacked on the structural constructions of typographic formations that allowed the emergence of diverse meanings.

Ellen Lupton (2000: par.2), a pioneer in graphic design education and practice in “Fluid Typography” defines typography as, “the art of designing letterforms and arranging them in space and time.” Until recently, typography was a specialized profession, which was performed by highly skilled craftsman as the punch-cutters and compositors. However, with the advancement of digital technologies, especially, with the introduction of the Macintosh computers into the market, not only

designers but also the lay persons received the chance of performing typography. The availability of personal computers and developing technologies, helped the transformation of typography into an experimental, wide ranged profession. Digital culture calls for new approaches, a new state of mind and inclination. Computers acquired new approaches towards typographic applications. However, it is very easy to fall into a technologic deterministic point of view, in order to avoid such mistake one should analyse the factors that digital culture is building itself upon very carefully.

Charlie Gere (2002: 13) in *Digital Culture* explains that:

Gilles Deleuze points out, ‘the machine is always social before it is technical. There is always a social machine which selects or assigns the technical elements used.’ Digital refers not just to the effects and possibilities of a particular technology. It defines and encompasses the ways of thinking and doing that are embodied within that technology, and which makes its development possible.

Different from static type, television, video games, the Internet, human computer interfaces, movies, communication technologies, so, all the digital culture media and apparatuses necessitated kinetic type for motion graphics. Digital culture by its electronic nature, which elevates the variable of “time” that introduced motion and speed into the scene, challenged time and space relations. The conventions related to traditional typography is critically challenged. As a consequence, “[w]e

need to look at screen-based typography as a new language, with its own grammar, its own syntax, and its own rules” (Helfand, 2001: 236).

### **2.2.2 Passage from Analogue to Digital**

Computers first perceived as media with which the designers can work in order to create solutions for the printed media. However, as the medium developed and the softwares emerged and upgraded, digital media became a platform for the designers not only to work with but also to work for this interactive medium.

The first explicit visual development concerning typography was the bitmapped fonts that referred to WYSIWYG (“what you see is what you get”) approach that the computers developed. “WYSIWYG employed the use of actual-size images of document pages on the computer screen and the corresponding ability to print them as they appeared” (Staples, 2000, p. 20). In the late 70s and early 80s researchers and programmers were working intensely in exploring new ways of imaging digital type. Donald Knuth’s 1979 METAFONT was an attempt to design type through the use of algorithms of geometrical equations. Although, it is considered as being a groundbreaking event the designers had to stand outside of it as

the programming language required mathematic expressions which most of the designers were unfamiliar to. (Staples, 2000: 22)

### 2.2.3 Typefaces of Digital Culture

Charles Bigelow's and Kris Holmes' typeface, *Lucida*, which was introduced in 1986 is of great success since it answers the needs for a type that is applicable in both printed media and in online media and it is still in use. Most of the designers preferred to work with Macintosh computers and as a result, the developments and alterations in the visual language of the interface of the Macs defined the look and feel of the computers. For instance, bitmap fonts *Chicago* and *Geneva* were addressed to meet the need for display of letters in CRT (cathode ray tube) which uses pixels as defining elements. After dot matrix printers, PostScript Laser printers were introduced and they were using the outlines of the letterforms in order to identify the type for print. As a consequence the screening of a type and its printed version required two different technologies, one of which is for screen playing and the other is for printing.

However, there was the need for variety in the design of the letterforms. *Emigre* enters the scene at this particular point. *Emigre* is the name of a

type foundry and a graphic design publication located and published in Berkeley, California, founded by Rudy VanderLans and Zuzana Licko. The magazine used to be published till issue number 69 in 2005. Later on it *Emigre no. 70* is published as a compilation of selections from the issues of magazine. Zuzana Licko is one of the prominent designers who acknowledges the significance of screen-based typefaces and image and the new language that digital media offer. Licko designed many typefaces related to the content and context of the *Emigre* which also celebrated the use of Macs and the freedom of the designer to be able to design new type settings and typefaces that would enhance the message of the design and which would form new associations between image and text by bringing those together on a unified layer.

Licko, (par.46) in the *Emigre* web-site, where she answers frequently asked questions states that:

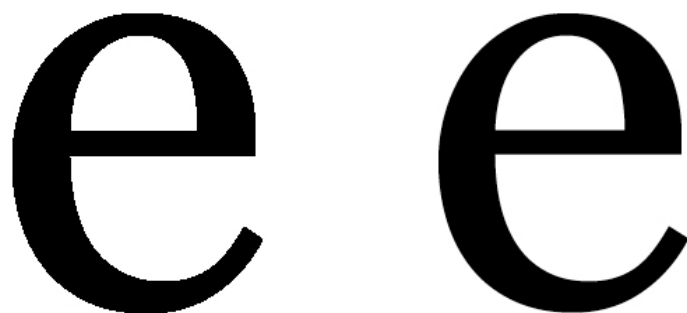
Information is increasingly being stored, accessed and displayed in digital form. Thus, on-screen design has regained importance for multimedia CDs, electronic bulletin boards and the World Wide Web. Screen display is no longer a temporary analogy for the final printed piece; it has become the final method of viewing much of our information. This presents the challenge of addressing the coarse resolution of the common computer screen.

She stressed the importance of the primary function of type as communication and emphasizes the visual language as being part of the message with which this communication is made possible. The three most

major typefaces that manifest the look of the pixel that Licko designed are *Emperor*, *Oakland* and *Emigre*.

*April Greiman* is another important figure in the formation of the visual language of digital typography. She made extensive use of pixellated letterforms and images in both her printed and video works. Her approach of intensifying the pixels manifested as a challenge that questions the conventions of traditional typography.

*Adobe Photoshop*, which is a raster based digital image editing program, introduced commercially the concepts of anti-aliasing and blurring into the digital typography scene. Although, as a program it was built as a tool to edit photography, with its raster based nature it enabled intermixing of image and text by attributing image qualities to the text. The text apart from the typographic aspects, became an element that could be manipulated visually within the limits of the raster based program, since it transferred the letters into rasterized objects that is formed of pixels. Any visual manipulation, which might not be thought of became possible.



**Fig. 2.2.3.1. Aliased vs. anti-aliased**



Anti-aliasing is used to get rid of the jagged edges of the letterforms by placing middle color valued pixels next to the edges of the letters that would create a smooth transition between the letterforms and the background (Fig. 2.2.3.1) Neville Brody made extensive use of this power of Photoshop to bring together and manipulate text and image.

David Carson throughout the 90s, especially in the *Ray Gun* magazine continued this new style that digital typography offered. He played mostly on the concept of *legibility*, as a consequence his works contributed a lot to the new language of typography and digital imagery. (Fig. 2.2.3.2)



Fig. 2.2.3.2. *Ray Gun* covers by David Carson (magspreads.net)

The concerns of digital culture, which are reflected through the dialogical operations between the computers and typography are not limited to printed media. The emergence of CD-ROMs, the broadening usage of

World Wide Web and the TV graphics introduced a new challenge for the designers, namely *the interactive media* where the viewer becomes participant and own the power to alter what she is interacting, hence, becoming a co-author. (Fig. 2.2.3.3) The designers were responsible of every visual decision in their designs, however, with the emergence of interactive media the users gained power over some decision making. They now can choose with which typeface to view the page, how big will the type appear on the screen etc.



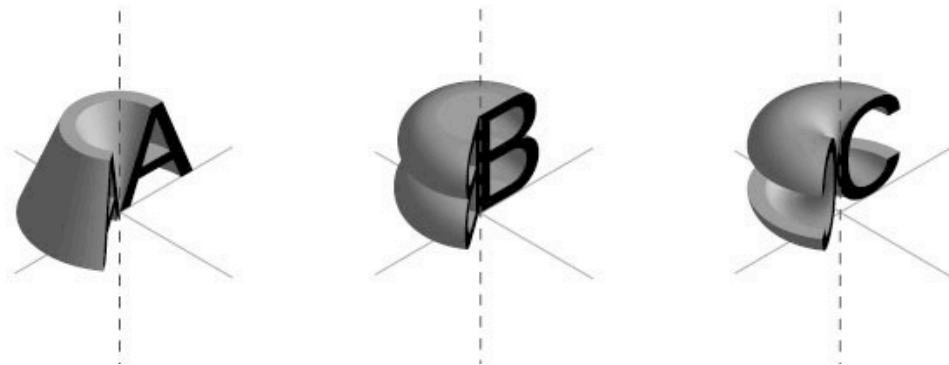
**Fig. 2.2.3.3. Screenshot from *Foxlife* Web Site (foxlife.com.tr, 2008)**

A second challenge is the *kinetic typography*. Motion graphics offered a new dimension for the designers to work for, a dynamic one. As Jessica Helfand (2001: 235) stated in “Electronic Typography”, “As we ‘set’ type, we encounter a decision-making process unprecedented in two-dimensional design: unlike the kinetic experience of turning a printed

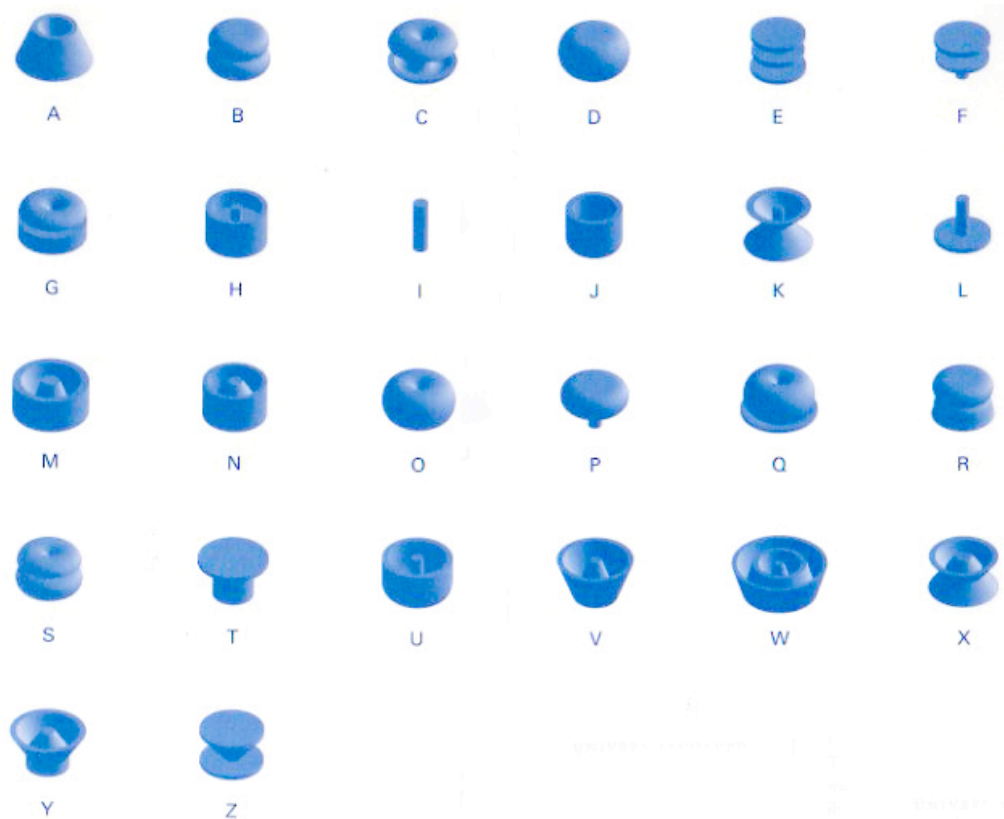
page to sequence information, here, time becomes a powerful and persuasive design element.”

In 1996 J. Abbot Miller published *Dimensional Typography*, which was constituted of case studies the shape of the letters within a virtual environment. With those case studies by different designers, he analysed the spatiality and temporal dimension added to typography, enabling our senses to engage with the text on a higher level of reception.

Ji Byol Lee’s *Univers Revolved* is such an exercise, where the letters with Univers typeface are revolved around themselves at a vertical axis drawn from the “left-most point” of each letter by the help of a 3D computer program. (universrevolved.com) The resulting forms require more effort from the readers and offers a reading practice different from the conventions. (Fig. 2.2.3.4) The letters by being revolved become symmetrical forms, thus, the reading direction is freed from the conventions of linear reading. (Fig. 2.2.3.5)



**Fig. 2.2.3.4.** The making of *Univers Revolved*, letters revolved 220°, designed by Ji Byol Lee as a homage to Frutiger’s *Univers* typeface (universrevolved.com)



**Fig. 2.2.3.5. *Univers Revolved*, 1996, designed by Ji Byol Lee as a homage to Frutiger's *Univers* typeface (from *Dimensional Typography*, 1996, J. Abbott Miller)**

It is obvious from the developments mentioned, that the computers have distinctive effects on the typography as they cause the creation of a new visual language that expresses the technological, social and cultural changes. Digital media appear not only as a platform, which the designers use only as a tool but also as a cultural sphere in which the social, historical and political agenda is defined and reflected upon.

Digital culture transformed typography into a whole new asset by introducing spatiality and temporality not only through the used technologies but also by the new ways of thinking and cognition.

## **CHAPTER 3**

### **SOUND MACHINES**

The previous chapter focused on the significance of changing of the cultural realm, and its manifestation by use of typography. The Western Culture is a visually dominant culture. Within this visually dominant sphere the significance of sound has usually been overlooked by the theorists/analysts. Until recently, the theories regarding perception, cognition and construction were grounded on visual manifestations of ideas, and representations. However, there is a new audio culture that has emerged over the past century.

The difficulty of examining such a culture may lie in its ephemeral nature. Sound is heard by the ears and felt by the body as a physical sensation as the result of vibrations. Because of its temporal essence it vanishes promptly. "Sound inhabits its own time and dissipates

quickly” (Kahn, 2001: 5) Recording techniques as Kahn suggested enabled sound to be fully analysed as they grasp sound and prevent it from vanishing. One other aspect of sound is its dynamic relation with its environment. Sound’s relation with time and space continuum is different from a visual element’s relation with it, since, sound is formed of waves, it does not occupy a visible pictorial space. Peter Krapp (2011: 61) in *Noise Channels: Glitch and Error in Digital Culture* explains that:

The cultural history of sonification is marked by two aspects: on one hand, it makes audible something one would not get to hear without its data being transcoded, that is, without the use of media technology that can store, reproduce and transmit data in a number of ways. On the other hand, this variable access to data can lead to insights that otherwise are hard to come by: examining light or color or humidity or temperature as sound waves, as practiced both in sound art and in experimental contemporary music.

As Brandon LaBelle (2006) argued in *Background Noise* the modes spatiality of sound is “at the core of the very practice of sound art” (p. ix). The technical and technological developments, as well as socio-political changes, and cultural adjustments revealed the acoustic space that was present before the establishment of visual space in the minds of Western people.

This section tries to examine the key developments that were triggered with the technological innovations under the influence of changing and evolving culture and the already effected ideas and notions that took

forms as responses towards a definition of an acoustic culture in order to comprehend and render the discourse within a theoretical framework.

### **3.1 Noise as Power; the Avant-Gardes**

With the emergence of Industrial Age, starting with the Futurists such as Luigi Russolo, Hugo Ball, and Francesco Balilla Pratella and later on accelerating with the experiments of artists like John Cage, Brian Eno and the others sound has gained importance in the art scene. The Western Classical Music is based on harmony and melody. Then the focus has shifted from the system of music that is formed with the wanted, filtered and desired resonances, which is purified from the unwanted resonances towards the background sounds that were neglected and eliminated. “The basic composition of ‘background’ is comprised of data we filter out to focus on our immediate surroundings” (Cascone, 2000: 13) Consequently, this shift of focus from foreground to background impelled the artists to explore new territories. The reversal of this relation appears as the consequence of the influence of digital culture, hence, technology in our lives. According to Attali (1985: 10) “the only thing that primitive polyphony, classical counterpoint, tonal harmony, twelve-tone serial music, and electronic have in common is the principle of giving form to noise in accordance with changing syntactic structures.” As the

approaches towards music changes through shifting technologies and evolving culture, noise, which was regarded as a dissonance became part of the audial pieces and new meanings could be assigned to it.

Contemporary Sound Design/Art, which is considered as new media art is based on experimentation through the application of different techniques and diverse apparatuses and various approaches and the search for new art forms and creative acts. The preceding pioneers are Luigi Russolo, Edgard Varèse, Pierre Schaeffer, Pierre Henry, Karlheinz Stockhausen, John Cage, Iannis Xenakis, Steve Reich, Hildegard Westerkamp among others.

As was also stated in the previous section, Futurists embraced power, dynamism, motion and technology. The Italian Futurist painter Luigi Russolo after being influenced by the performance of Balilla Pratella wrote a manifesto called the “Art of Noises” as a letter to Pratella in 1913. With the help of noise machines, Russolo tried to control noise since he saw new potentials and multiplicities in “the noises” that egressed by the machines, which were triumphed with the industrial age. He was concerned mainly with the noises that the industrial machines are producing. He claimed that our ears are educated and are used to hear the sounds. However, the variety of the ‘noise-sound’ is more promising and can answer the call of our ears. Russolo (1913) stated in “The Art of



Noises” that “this musical evolution is paralleled by the multiplication of machines.” Thus, Russolo is considered as the pioneer theorist of electronic music because of his involvement with machinery and the possible noise-sounds that can be acquired from them. He designed noise machines that are called *intonarumori* (noise intoners) in order to experiment with the created sounds that imitate that of the machines’. In *The Art of Noises: Futurist Manifesto* (1913), Russolo declares that there are 6 families of noises: 1. roars, thunderings, explosions, hissing roars, bangs, booms, 2. whistling, hissing, puffing, 3. whispers, murmurs, mumbling, muttering, gurgling, 4. screeching creaking, rustling, humming, crackling, rubbing, 5. noises obtained by beating on metals, woods, skins, stones, pottery, etc., 6. voices of animals and people, shouts, screams, shrieks, wails, hoots, howls, death rattles, sobs.

Therefore, the sounds which were previously considered as unwanted elements that were seen redundant and even as disturbances became significant components of the production process and important parts of the acoustic realm.

As Torben Sangild (2002: 3) stated “noises are the sounds which used to be denounced as non-musical.” The aesthetic power of noise used in sound art comes from the multiplicity of the machines that are introduced to the society and are part of daily lives. Digital culture is built upon the

interrelations, interactions and the dialogues formed between every single element within its system.

Attali (1985: 26) defines noise in *Noise: The Political Economy of Music* as:

A noise is a resonance that interferes with the audition of a message in the process of emission. A resonance is a set of simultaneous, pure sounds of determined frequency and differing intensity. Noise, then, does not exist in itself, but only in relation to the system within which it is inscribed: emitter, transmitter, receiver.

When we examine noise music, we see that what is reversed in noise music within the system, which it is inscribed in, is the exclusion of harmony, flow, melody and composition that forms the Western music and the introduction of the sounds, which are considered to be noises since they interrupt, disturb and distract. Music is structured like society and changes in accordance with it (Attali, 1985: 10). If music is the “organization of noise” then it signifies that noise cannot be fully controlled. Sounds are also structured within culture, through language we assign meanings to them, so when we cannot articulate any sound or load meaning to it we tend to consider it as noise. Sound is thus embedded in culture. Our auditory senses are developing as the culture is also in a continuous flux. New meanings are generated through generating, recording, sampling, repetition, juxtapositioning of sound.

Hugo Ball, one of the prominent Dada artists that founded *Cabaret Voltaire* with politic, as well as artistic reasons performed sound poeries which were consisted of nonsensical words. The performances were reactions towards the *status quo* of society, culture and art sphere, and a revolt against institutions. A well-known example of these poeries is *Karawane*, which Ball performed in 1916, in Zurich.

Ball in *Dada Manifesto* (1916: par. 4 and 5) states with a great enthusiasm his position:

I shall be reading poems that are meant to dispense with conventional language, no less, and to have done with it. Dada Johann Fuchsgang Goethe. Dada Stendhal. Dada Dalai Lama, Buddha, Bible, and Nietzsche. Dada m'dada. Dada mhm dada da. It's a question of connections, and of loosening them up a bit to start with. I don't want words that other people have invented. All the words are other people's inventions. I want my own stuff, my own rhythm, and vowels and consonants too, matching the rhythm and all my own. If this pulsation is seven yards long, I want words for it that are seven yards long. Mr Schulz's words are only two and a half centimeters long.

It will serve to show how articulated language comes into being. I let the vowels fool around. I let the vowels quite simply occur, as a cat miaows ... Words emerge, shoulders of words, legs, arms, hands of words. Au, oi, uh. One shouldn't let too many words out. A line of poetry is a chance to get rid of all the filth that clings to this accursed language, as if put there by stockbrokers' hands, hands worn smooth by coins. I want the word where it ends and begins. Dada is the heart of words.

Along with Ball, Marcel Duchamp also engaged with sound and music. His 1913 piece *Erratum Musical* held the concept of chance that in future will inspire many sound artists. 88 cards with numbers on them, representing each key of the piano are prepared, drawn randomly and played. As Kenneth Goldsmith (2000) argued, Duchamp's work resembles Erik Satie's "Furniture Music" which was meant to be perceived as background music.

Edgar Varèse who was one of the key figures in electronic music tried to liberate the sound from the distinction of music vs. noise. He highly glorified new instruments and technologies that helped him experiment on especially the concepts of timbre, pitch, and musical space. Varèse defined the music as "organized sound" as he conceived it. He saw new machinery, and computers as new media of expression where he can create sounds from scratch and organize, manipulate, and alter sound. His prominent works include *Ionisation* (1929-31), *Déserts* (1950-54), and *Poème Électronique* (1957-54). He foresaw the innovations as a means of liberation of sound from its limited boundaries.

He (1939/2001: 19) declares in "Music as an Art-Science" the advantages of such machinery as:

... liberation from the arbitrary, paralyzing tempered system; the possibility of obtaining any number of cycles or, if still desired, subdivisions of the octave, and consequently the formation of any desired scale; unsuspected range in low and high registers; new

harmonic splendours obtainable from the use of sub-harmonic combinations now impossible ...

His aim was not to eliminate the instruments that were used in his time but to add new ones, because he thought that new technologies and instruments are productive and additive factors. Edgard Varèse has shifted the focus from the score and notes to the sound and achieved this shift by experimenting with electronic instruments. (Sangild, 2002: 9)

Pierre Shaeffer, the pioneer of *musique concrète*, along with Pierre Henry, founded a form of experimental music which emphasized the significance of technology that led the establishment of electroacoustic music. *Musique concrète* was concerned with the recording process of sound, and the listening experience which was based on acousmatic sound. Shaeffer quotes dictionary for the definition of acousmatic as "... noise that one hears without seeing what causes it." (Cox and Warner eds., 2001: 77)

Classical music is represented by notation, which are signifiers for certain sonorous objects that were inscribed within culture, when these notes are transferred by instruments they become audial representations. In contrast to that notion, *musique concrète* starts from concrete sounds, noises and through processes and manipulations they are isolated from their contexts.

Pierre Schaeffer's most famous pieces are called *Études de Bruits*, in which he made recordings from different sources such as engines and machines. The techniques that Schaeffer was engaged with by using phonograph recordings, magnetic tapes, recording studios and devices included mastering with "recording and reproduction speeds, sampling and editing by manipulation of the pickup, locking of recorded grooves, backwards playing of disks, loudness modulations, fade-in and fade-out" (Palombini, 1999: par. 3). His lock-groove technique let him to "create a 'loop' of sound" (LaBelle, 2006: 27). That technique resembles to that of sampling, instead of repeating some recording from beginning to end it allowed him to take samples, bits from these recordings and transferring them into sound objects that would freed the listener from the prior contextual meaning engraved.

These recordings, alterations, isolations, and reproductions underscored the technological potentials of the techniques used. Schaeffer was using these techniques in order to detach the sounds from the cultural contexts attached to them. According to that idea, since we are all born into culture, and hearing, as well as listening are learned actions, every sound has a cultural and a contextual meaning. By taking sound out of its context and setting it apart from the meanings attached to it, *musique concrète* aimed at arriving at a new, open-ended listening experience. Schaeffer, as also stated by LaBelle (2006: 27), called this experience

“‘reduced listening,’ defined by Michel Chion as ‘listening for the purpose of focusing on the qualities of the sound itself’ (e.g., pitch, timbre, etc.) independent of its source or meaning.”

Karlheinz Stockhausen was a German composer who was a very influential figure in electronic music after World War II. First he shortly worked with Pierre Schaeffer in *musique concrète*, however later on, he chose to experiment with new technologies in studio in order to generate sound from scratch by departing from the idea that if a sound can be analysed, it can also be generated by using the same technicalities. His important works include *Klavierstücke*, *Kontra-Punkte*, *Gesang der Jünglinge*, *Gruppen*, *Zyklus*, *Kontakte*, *Momente*, *Mikrophonie I*, *Hymnen*, *Stimmung*, *Aus den sieben Tagen*, *Mantra*, *Tierkreis*, *Inori*, *Licht*. (LaBelle, 2006: 370)

According to Stockhausen (1958) electronic music “...should not imitate the timbres of the traditional instrumentarium or familiar sounds and noises.” (Cox and Warner eds., 2001: 374) He saw new technologies and instruments as means to signify a new language. A new language, instead of its ability to reproduce, should be prioritized with its new signifiers, which acquire new relations, new understanding and a new mode of listening. The listener of the electronic music should also be aware of the fact that it is composed by using such technologies and it can

only be heard via speakers, so it is a different experience than. He was very insistent on the idea that electronic music composers should learn new ways of thinking, hence composing by concentrating on the machines, computers and their modes of production. What digital culture offers is this very experience lived by the whole society on everyday basis.

### **3.2 John Cage and Brian Eno, The Fluxus; Experimental Music**

John Cage is probably the most famous figure in contemporary experimental music scene, most significantly of the '60s. Along with the act of chance in composing and the use of found objects, Cage introduced the term *indeterminacy* into the domain. Although, also mentioned before Duchamp had a piece called *Erratum Musical* that also depends on chance in some ways, Cage is the main composer/performer that is known for his inclination towards the use of chance as a composing element within experimental sound. He was using *IChing*, star maps etc. as tools to introduce the idea of indeterminacy. Indeterminacy not only served for the composer as a creative process but also for the performer in realizing his performances. Indeterminacy in experimental music finds its counterpart in digital culture as it is echoed through the act of interaction where the process acquires active participation.



Cage agreed with Russolo on the idea that noises that we hear all the time is an important resource. He (1937) wrote about noises that “when we ignore it, it disturbs us, when we listen to it, we find it fascinating.” In contrast to Russolo who uses *intonarumori* to manifest that noises signify the industrial age and machinery John Cage had a different approach, which was evident in his work *4'33"* (1952) where he sat in front of an instrument and played nothing but recorded the sound coming from the environment for 4 minutes and 33 seconds. His piece was also a declaration of the signification of the surrounding (environment) and time (duration).

Indeterminacy leads the composer, performer and the listener to experience music not as an object but as a process in which experimental music becomes an autonomous entity which unfolds during its realization. As Cox and Warner (2001: 207) articulated the state of experimental music as such: “It is fundamentally interested in the issue of *process*: in the procedures for generating sound and in the life of sounds once they have come into the world.” Since the main focus is shifted on the process itself instead of having a closed, finished musical piece, now we are confronted with an open-ended music, open to new interpretations, different performances, altering realizations and changing experiences by the composers, performers and the audience. This process, the constant flux dissolves the boundaries between art and

everyday life by offering immediacy. Thus, digital culture, in this sense, has the potential of actualizing this desire for an open-ended work with its interactive, immediate and participatory nature.

John Cage's approach and his performances were the most inspiring elements in the works and ambitions of Happenings and Fluxus. Creation of spontaneity and indeterminacy were at the core Happenings. Happenings and Fluxus redefined the art object as a system. Instead of seeing a work/performance/happening as an object, the organization and the interconnectivity of the organisation became the core of the contemporary art scene.

Duchamp and Cage also shared the concept of the blurring boundaries of art and everyday life. In both works of Duchamp and Cage time and space have great importance. Fluxus, emerged in '60s, owes much to the arguments that are results of the problematization of the creator, performer, audience and Art especially by Dadaists and also by Cage. Maciunas who was the founder of Fluxus influenced much from Cagean indeterminacy and Happenings. Fluxus community was an interdisciplinary formation that saw every art domain as of equal importance. Well-known Fluxus artists include Joseph Beuys, Dick Higgins, Nam June Paik, La Monte Young and Yoko Ono who produced in different media ranging from performance art to experimental music.

Interconnectivity with life, experiences and interactions are foundational concepts for Fluxus artists. Hannah Higgins states that: “Fluxus is better understood on its own terms: as producing diverse primary experiences and interaction with reality, plain and simple.” (LaBelle, 2006: 59) The thought of having different experiences and interactions by proposing open-ended works can lead to multiple actualizations and perceptions, each of which is dependent on the creator, performer, audience, time and space by offering immediacy.

Another prominent artist that was connected with John Cage and also Fluxus is Brian Eno. Brian Eno challenged the distinction between high art and popular music. He contributed to the works of the artists like Talking Heads, U2, David Bowie, Dido, Devo, Coldplay etc., and to various films. His works reveal his awareness of the fact that new recording technologies call for new language and new approaches. The new sound textures that could be generated by electronic and digital means and the space that new media is offering are the promises of new experiences that can be integrated in everyday lives. Brian Eno is the founder of the term “Ambient Music”, that would create the sense of an atmosphere by designing pieces that focuses on timbres and that can be listened attentively and ignored easily. As he (1978) declared: “Ambient Music must be able to accommodate many levels of listening attention without enforcing one in particular; it must be ignorable as it is

interesting” (Cox and Warner eds., 2001: 97). His most famous ambient work is *Music for Airports/Ambient 1*. The concept of designing background music belonged to Muzak Inc.

Also as mentioned earlier, Erik Satie produced what he called “Furniture Music.” Erik Satie stated that “... there’s a need to create furniture music, that is to say, music that would be part of the surrounding noises and that take them into account.” (as quoted by Lanza, 2003: 17)

Like the works of Fluxus, Eno also aimed at immersive experience, which is also the promise of digital media. Eno (2001: 96) states: “I realized this was what i wanted music to be-a place, a feeling, an all-around tint to my sonic environment.” This experience can be created by using new technologies that would convey feelings, moods that are particular to varying places.

Along with new technologies through the cultural changes, the altering and diverging approaches in the acoustic sphere manifest the need for new semantics and new forms and creative acts that would replace the old and conventional courses of perception, cognition and reception.

New tools and forms are needed for experiencing, generating and remixing sound. New forms of structural formations and new

understandings are needed with which new semantics are built upon. New tools and spaces are required where sound works can be accessed at and distributed from. Therefore, new tools and forms are needed as an integral part of daily life.

## CHAPTER 4

### DECONSTRUCTING THE PROCESS: GLITCH AESTHETICS

*“Glitch is a subversion of expectation”*  
(interview with Cascone,  
*Glitch: Designing Imperfection*. 2009: 18)

Heretofore, the historical surveys of both digital typography and sound design domains shed light to the cultural, historical and technological aspects of the society. The need for new approaches and a new understanding towards a new cultural organization demonstrated through the examination of the works in their historical context. This section analyzes case studies in order to illuminate the foreseen associations between digital typography and contemporary sound design and it uses the “glitch” concept, which is inherent in electronic media to acquire a manifestation of digital culture.

## 4.1 Defining Glitch

The word *glitch* is derived from Yiddish *glitsh* slippery place, from *glitshn* (*zikh*) to slide<sup>1</sup>. It means **1:** a usually minor malfunction; *also* : bug, **2:** a false or spurious electronic signal. Glitch is a product that is the result of an error occurred in the system. It is a form of noise that normally would like to be prevented. Glitch by definition does not effect the system but it has effects on how we experience the product that the system delivers. So, although it is a disturbance, it does not effect the system's operational logic. It is a momentarily manifestation of the system running in the background. As the name suggests, it happens as a result of the *failure* of the technology used in the form of a malfunction.

Although the dictionary included bug in the definition of glitch there are significant differences between a bug and a glitch. A bug is detectable within the system and can be repeated or corrected in the system. This correction is called debugging within computer literature. However, a glitch is unpredictable, occurs once and cannot be repeated. A bug can be a program code written badly. Hence, unlike glitch, bug effects the operational logic of the system. Bug is a system failure that can be corrected, however the occurrence of glitch is unpredictable and it is usually overlooked. Glitch manifests the very technology used and it does

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<sup>1</sup> Merriam-Webster Online Dictionary.

this without the intention of the user/viewer or the technology itself. It is a reminder of the medium used, which is culturally significant. As Michael Maddox (2008, par.5) explains in “The Infamous Glitch” that “many computer glitches can generally be described as Latent errors; i.e., errors that have no immediate consequence but cause problems when the right set of circumstances prevails.”

In the age of computers, glitch manifests itself as the marker of the digital media used as sources of storage, production and distribution. The actualization of malfunctioning/failure gave rise to different audial and visual experiments that would bring new understanding of aesthetics that digital age signifies. Glitch is significant in the sense that it represents technology by subverting the idea of perfection. Although glitch is an undesired element, it is imprinted within technology. As technology enhances and improves in pursuit for perfection, it puts forward the possibility of glitching.

Because of the reason that glitches are unintended, unplanned and unpredicted, the sound artists/designers and graphic designers/artists have to imitate, recreate and generate glitches in order to explore new semantic possibilities. Iman Moradi in his BA thesis *Glitch Aesthetics* (2004: 8) groups glitches into two in order to be able to study the glitch artworks created, one is pure glitches and the other one is glitch-alikes.



Pure glitches are the manifestations of unpremeditated and unmotivated products, which are the results of an unexpected malfunction within the system. Glitch-alikes, on the other hand, are motivated, planned and designed artifacts that are actualized by human interference. Even though glitch-alikes are applied to all systems, they are widely used in electronics, computing and video game industries. They are the representations of pure glitches created by artists and designers with new aesthetic and design values and taste concerns.

## **4.2 Visual Glitches**

As mentioned earlier, be it visual or aural, any kind of glitch is undesired and unexpected. However, as a signifier of technology its representation has the potential of creating new art forms and even a new narrative that would communicate to the users of the such media. In specular artworks, glitch-alikes are presented as pure glitches and the idea of glitch is used as new aesthetic form. In most of the cases the aim is to create visually appealing or shocking results by integrating glitch into the design. Visual glitches do not manifest themselves only on digital media, also print media demonstrates examples of visual glitches, which disturb the system while not destroying it. For instance, misprinted texts, pages in a book, or a glitched stamp as the collector's item can be considered as

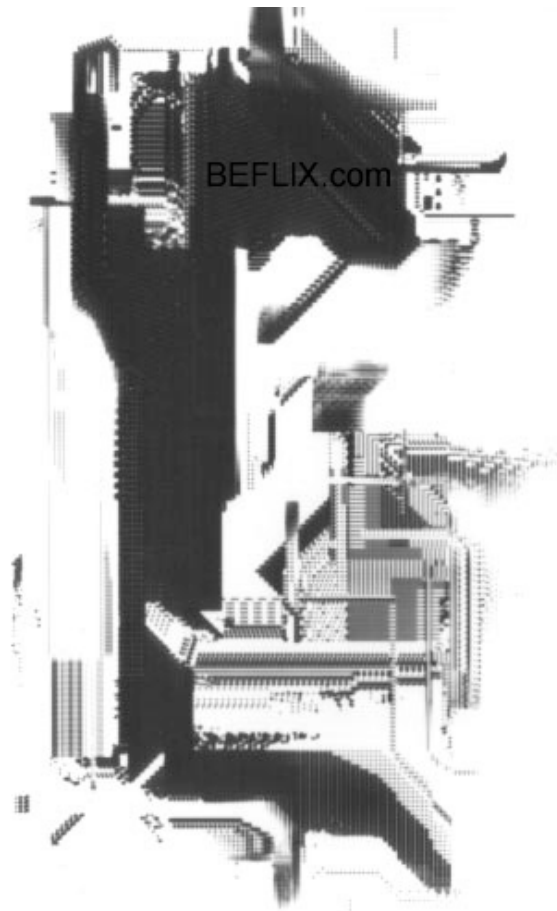
analogue glitches. In *Glitch: Designing Imperfection*, Moradi (2009: 8) defines visual glitch as “simply the product of an error and more specifically its visual manifestation.”

Current society is exposed to immense amount of digital and analog manifestations of glitches, through the use of interfaces, films, video games, and printed material. The visual glitch acts as the indicator of technology, it reminds the user/viewer of the technology that turns an immediate experience into a hypermediated one. For instance *Ubisoft's* action-adventure video games *Assassin's Creed I* (2007) and *Assassin's Creed II* (2009) use glitches within the interface and cinematics of the games, in order to indicate that the user has to interact at those instances. The protagonist of the game enters a machine called the *Animus* in the first game and an identical machine to that of the *Animus* in the second, in order to re-experience the genetic memories of his ancestors. So, the game also uses the idea that glitch reminds the player of the presence of the technology that she uses.

There are various ways to obtain glitch-alikes, through different types of manipulations, some of which were also used in the self audio-visual project *Glint: Audiovisual Glitches* for this study. Visual glitch-alikes can be obtained via interfering hardware or software. Using hex editors to play with the raw data of the images are one of the most common ways to manipulate it. Some other techniques include flat panel photogram,

which Tony Scott uses, or specifically produced plug-ins for motion graphics such as *Twitch*, using displacement maps to achieve a similar visual effect, or applications like *Quartz Composer* to manipulate the images, 3D renderings or video frames and recently closed *glitchbrowser* that was designed by Dimitre Lima, Iman Moradi and Ant Scott.

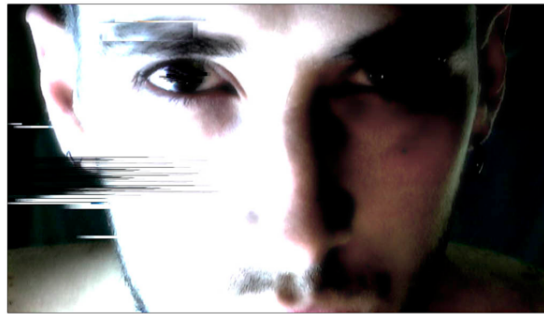
For instance, in flat panel photogram technique Ant Scott places a hinged filter on the screen where the image is monitored. Then, he attaches a photographic paper on the monitor. (Fig. 4.2.1) After the exposure is done he develops the photograms with classical chemical process (Scott).



**Fig. 4.2.1. *Generatives #01*, 2005, by Ant Scott. (beflix.com)**

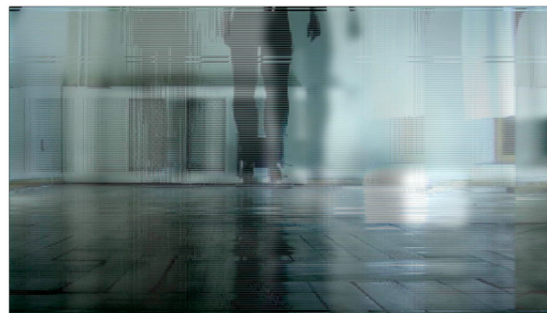
Visual glitches, as stated by Iman Moradi in *Glitch Aesthetics* and later echoed in *Glitch: Designing Imperfection* (2009: 9), display certain characteristics other than being unexpected and unplanned, such as, fragmentation, replication/repetition, linearity, complexity and physical manipulation of medium. These are the foundational aspects of visual glitches.

- Fragmentation: The glitch occurs mostly on a horizontal axis because of the computer rendering as if stripes are torn off and re-pasted again. (Fig. 4.2.2)



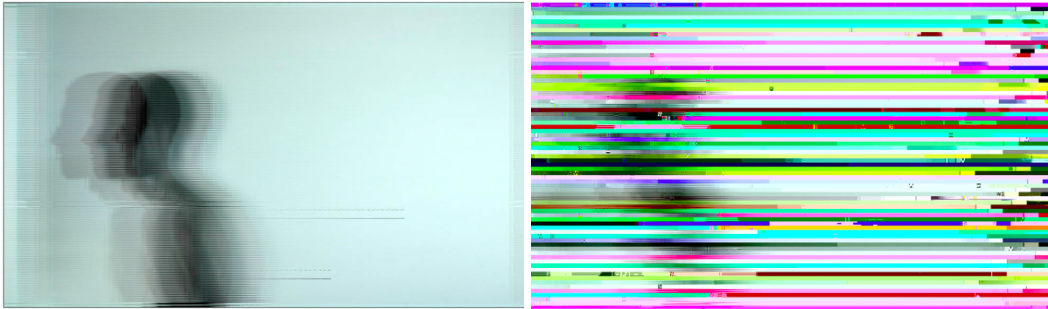
**Fig. 4.2.2. *Alchemy*, 2006. Video Still 01, by Erhan Tunali. (Fragmentation) (erhantunali.com)**

- Replication/Repetition: The computer rendering produces a pattern formed out of repetitions that are results of “infinite loops, division by zero’s and null pointers.” (Moradi, 29) (Fig. 4.2.3)



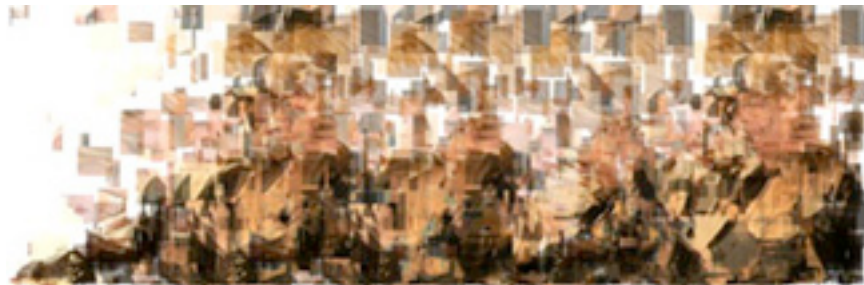
**Fig. 4.2.3. *Alchemy*, 2006. Video Still 02, by Erhan Tunali. (Replication/Repetition) (erhantunali.com)**

- Linearity: Commonly, it occurs during the transfer of a file from one medium to another or during record. The components may form a visuality similar to the interlacing effect as a result of merging pixels in rows. (Fig. 4.2.4 and Fig. 4.2.5)



**Fig. 4.2.4. and 4.2.5. *Alchemy*, 2006. Video Stills 03 and 04, by Erhan Tunali. (Linearity) (erhantunali.com)**

- Complexity: These glitches can either be complex visually or can be the results of complex operations. (Fig. 4.2.6)



**Fig. 4.2.6. *The Fly's Eye*, 2002. Video Still, by Andrea Polli. (Complexity) (andreapolli.com)**

- Physical Manipulation of Medium: Results if a glitch occurs on a physical medium or has effects on one.

Technical and technological aspects reveal much about the nature of glitches and the formation of possible glitch aesthetics. If approached from a more theoretical side to fully grasp the “glitch” phenomenon, the “rhizome” concept might be an appropriate term to be dealt with. The audio-visual material is recorded onto or transferred into digital media by transforming into digital data within a rhizomatic structure. The data can be collected, stored, manipulated, reorganized, fragmented, etc. The material mimics the operational logic of electronic media and it becomes a net of connections, where every segment and each connection are equally significant, or to put in other words, it inherits a non-hierarchical structural formation. A designer/artist producing within digital culture considers the surface as a map, where she organizes the format and the elements on that format. The production process of a designer is very similar to that of the aspects of the “map” that Deleuze and Guattari mentions.

As Deleuze and Guattari (1987: 12) stated in “Introduction: Rhizome”,

[a map] is itself a part of rhizome. The map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by an individual group, or social formation.

The language of glitch is that of digital eras. It carries traces and characteristics that are embedded in electronic media. Although glitch is a malfunction of these technologies and normally not even a part belonging to the organization; production, creation, generation, storage or distribution phases, it territorializes the very characteristics of digital technologies, hence digital culture, when manifested. So it is possible to talk about the aesthetics of glitch.

Ant Scott (2009: 21) elaborates this idea as:

The glitch aesthetic is very much allied with a particular era of technology, and looks the way it does because of the way current processors are engineered, how data is organized to be processed efficiently and because visual output devices are mostly raster-line based.

### **4.3 Audio Glitches**

#### **4.3.1 Glitch Music**

In sonic sphere glitch acquires meaning mutually with the term noise. Glitch as a noise, which is actually a disturbance, has started to be used as the main element in the audial pieces, with the arrival of digital era. As a consequence, *failure* became a core aesthetic in many of the art forms. (Cascone, 2000: 13) Although, the technology used evolves glitch as a part of technology always marks itself imperfect. However, this

imperfection leads to new possibilities of creative acts. Noise as an audio glitch, which belongs to the realm of the milieu became the core component in many of the sound artworks. As the avant-garde artists declared, noise, that is normally considered as the discordant sound requires new structural means instead of traditional music system. Although, in most cases glitch art is considered to be a subcategory of noise art, a distinction between noise and glitch can be traced. The noise can be produced under the control of the artist whereas, glitch is by nature unexpected and randomly generated by the digital media used as a system error. However, similar to the visual design realm, the sound artists also produce glitch-alike sounds and provide control over them. The main differences between pure glitch and glitch-alike forms are as follows, pure glitches are accidental, coincidental, found and real , and appropriated in the system, whereas, glitch-alikes are deliberate, planned, created, designed and artificial (Moradi, 2004: 11).

As a consequence, glitch manifests itself as the signifier of the technology and of the production process of technology within digital culture. As mentioned earlier technology is best recognized when it is not functioning. Because of that reason the experiments and explorations concentrated on digital music focus on “failure” in order to stress the medium. Kim Cascone (2000) names this emergent genre as “post-digital”, referring to Nicholas Negroponte as he states “the digital



revolution is over”. According to Cascone the medium is no longer the message but the tools are. As “failure” became the new aesthetics and focus that signifies technology, especially digital technologies, it also marks new approaches and new techniques. “New techniques are often discovered by accident or by the failure of an intended technique or experiment.” (Cascone: 13)

Torben Sangild (2004: 200) in “Glitch-The Beauty of Malfunction” suggests three types of glitch music, conceptual glitch, oceanic glitch and minimal click.

- a. **Conceptual glitch:** Glitches that are created by sound artists who are working on glitch as a conceptual notion. These audial pieces are usually used as a part of an art installation or a performance. For instance famous sound artist Yasunao Tone, who also has connections to Fluxus movement experimented with both visual and audio materials that would translate into audio glitches. In *Musica Iconograda* (1992), Tone took some ancient Chinese poetry and transferred the chinese characters on a surface with calligraphy. Then he transformed each character to visually signified photographs, and then concerted them into sound waves by digitizing them. (A performance of *Musica Iconograda* by Yasunao Tone in 2002 can be accessed at <http://www.youtube.com/watch?v=HIDihdjWH7A>)

b. **Oceanic glitch:** Works with a wide range of variety of sounds to create complex, layered textures and harmonies or works that are created with fewer elements that creates an ambient. For instance, Austrian musician Fennesz are rich in diversity of sounds. As a guitarist he is also engaged with electronic music. Sangild also mentions Oval, Andreas Tilliander, Microstoria, Nobukazu Takemura as important sound artist that fall under this category, but are not limited to. (A videoclip of Fennesz's track *Aus* can be accessed at <http://www.vimeo.com/756938>)

c. **Minimal click:** Minimalistic approach that creates audial pieces by the repetition of sounds belonging to the computer or the technology and are normally ignored. By using repetition the sounds are composed without the intervention of any melody. For instance, Pan Sonic's track *Lataus* (1999) from the *B* album uses such repetitions. Sangild also reminds us Ryoji Ikeda and Alva Noto as prominent artists producing under this category. (The *Lataus* track can be accessed at <http://www.youtube.com/watch?v=W20tVcW1zXY>)

Although these three subcategories seem as main types, the glitch music that artists are performing may overlap on multiple categories and it is not easy to categorize all of the works.

### 4.3.2 A Conceptual Reading of Audio Glitch

Echoing Janne Vanhanen, it can be said that glitch appears as a sign of the event in Deleuzean sense. In that sense as a concept glitch manifests itself as a becoming. Something is meant to be happening in the production phase, but because of a failure in the system, a glitch, a totally unexpected outcome is seen. Glitch is virtual and does not occur within a mimetic structure. It is produced within an act of representation, however its essence is unrelated and unattached with the thing in production. It marks the sound of the production. Because of the reason that it is virtual it holds the potential of multiple actualizations. Vanhanen (2003: 50) in “Virtual Sound: Examining Glitch and Production” states that glitch music is made of absences (gaps, skips, cuts) and excesses (overloads, feedback and screeches). These expressions are all signifiers of digital culture. Glitch’s whole production is based on difference.

The event is a virtual unity, and infinitive capable of multiple actualisations. At this point, Deleuze makes a distinction between the event and its actualisation. One is the historical time of the event and the other is the time of the event. When we try to locate the event in historical time we encounter a paradox, because of the reason that the event is what is just happened and what is yet to come. The event can

never be fully actualised since it is always coming to be, yet to become. The event is at most importance in Deleuzian sense because it is a force of the outside. Glitch is not part of the system, yet it belongs to the system, to the very technology that it is emerged from. The understanding of everyday event does not always meet with the concept of event in philosophical notion. In the “First Series of Paradoxes of Pure Becoming”, Deleuze (2000) articulates the notion of pure becoming by taking the *Alice* and *Through the Looking Glass* as examples. Becoming avoids the present by escaping it. “This is the simultaneity of a becoming whose characteristic is to elude the present.” (Deleuze, 2000: 1) As Deleuze (2000: 8) stresses, “The event is coextensive with becoming, and becoming is itself coextensive with language; the paradox is thus essentially a “sorites” that is a series of interrogative propositions which, following becoming, proceed through successive additions and retrenchments.” Glitch is thus an event of a paradox (absence/excess). It is also paradoxical in the sense that the computer gives rigid but unexpected errors without affecting the system, thus brings uncertainty. That is also another reason why glitches are called computers’ own art. What glitches indicate is the pure process of production. Therefore, it shows that digital culture has its own art forms and operational logic.

Another term, which can be borrowed from Deleuze and Guattari, while trying to conceptualize glitch as a phenomenon is “refrain.” Glitch and

moreover the technologies that it emerges can also be seen as refrains in Deleuzean sense because of the reason that they deterritorializes and reterritorializes digital sounds. Deleuze and Guattari wrote about refrain in their book *A Thousand Plateaus* (1987) in “11. 1837: Of the Refrain.” What they theorise in this section is not only the refrain which means a regularly recurring phrase or verse especially at the end of each stanza or division of a poem or song, repetition or a motif but also refrain as holding back and to restrain. Refrain is situated on the border of the territory.

#### **4.4 The Precedents, Towards a Definition of Glitch Aesthetics**

Analysis of key examples from both domains of sound design and digital typography and then an analysis of a short audiovisual project *Glint: Audiovisual Glitches* are presented in this section. Before moving onto glitch aesthetics and arriving at conclusions, various observations and experiments are in order for conceiving the underlying logic of production, development and consumption processes of the works in both domains. In order for the patterns in these systems to emerge examples each from Flippo Tomasso Marinetti, Jamie Reid, Allen Hori, Edgard Varèse, Merzbow, and Kim Cascone’s and an audio-visual self-project called *Glint: Audiovisual Glitches*, are analyzed. These analyses are aimed at

showing how cultural reception of ways of production, communication and representation has gradually shifted from the traditional approaches towards a new creative audio-visual narrative that is sustained within the digital culture.

Exemplary works by these names are selected because of the reason that they manifest common highlights and characteristics of their domain and of the times that they belong to. As Rick Poynor (2008: par. 2 and 3) argued in “Absolutely the ‘worst’”, in order for a work to be considered as a crucial and a recognized one along with reproduction ‘repetition’ of the work in right places and to be seen on frequent basis are central. The selected works for this study are such examples, which appeared on a regular basis in books, mass media, and are exhibited number of times, and are subjects to various studies.

**4.4.1 *At Night, Lying in Bed She Rereads the Letter from  
Her Gunner at the Front. SCRABrrRrraaNNG, 1919,  
by F. T. Marinetti***

In the previous chapters Futurism explained as an avant-garde movement, which praises technology, speed and war. Because of the aspects that it admires and supports it emerged as a movement that was

a propaganda by nature. As Walter Benjamin (1936: epilogue) stated in “The Work of Art in the Age of Mechanical Reproduction”, Futurism act as the aesthetization of politics, “This is the situation of politics which Fascism is rendering aesthetic.”

F. T. Marinetti as the founder of Futurism wrote numerous manifestos designating some ground rules and approaches to be applied to the works produced in order to achieve the desired effects. Futurism aimed at changing the culture and bringing art and daily life together, so it was very much dependent on the aspect of acting and performance through Futurists’ works. In order to help the performer to reflect the visual material consistently Marinetti sought the need for a new typography, abolishing the existing syntax and established set of rules.

Most of his works were inspired by his experiences as a war reporter. “At Night, Lying in Bed She Rereads the Letter from Her Gunner at the Front. SCRABrrRrraaNNG” (henceforth will be referred as *SCRABrrRrraaNNG*) is a war poem written by Marinetti and published in *Les Mots en Liberte Futuristes (Words-in-Freedom / Parole in Libertà)* in 1919.

Marinetti and his contemporaries tried to give communication a new look. His usage of letters, page layout and orthography reflected the dynamic,

loud and crowded nature of war. His works employing words-in-freedom are in themselves act as a war between the letters.

Marinetti's renown works *Words-in-Freedom* (1919), and *Zang Tumb Tumb* (1914) are designed with expressive typography and visual experiments. As Wanda Strauven (2009: 276) stated, a Futurist art work is very much engaged with performances, "... since its expression comes alive as it should only in and through the process of experience." So the idea becomes to arise a dynamic effect and immerse the audience in the presented work.

Marinetti broke the general rules of literature and writing. According to him in order to achieve a new experience old ways should be abandoned. *SCRABrrRrraaNNG* is an example of such application. Marinetti's use of typography acts as a recipe for the performer on the stage on how to read the words and perform. Words-in-freedom, as a methodology, can be read as a reaction to the symbolist poetry. Futurist typography opens up a new visual space, where the expression becomes a dynamic, from place to place a chaotic experience, which is a common practice in Futurism.

In "Geometric and Mechanical Splendour and the Numerical Sensibility" (1914) Marinetti argues words-in-freedom as such:

The words-in-freedom, in this continuous effort to express with the greatest force and profundity , naturally transform themselves into



*self-illustrations*, by means of free, expressive orthography and typography, the synoptic tables of lyric values and designed analogies. (Eg. the military balloon I designed typographically in my *Zang tumb tumb*.) As soon as this greater expression is reached, the words-in-freedom return to their normal flow. (Apollonio, 1973: 155)

*SCRABrrRrraaNNG*, instead of serving as a report of war is a private letter between two people. (Fig. 4.4.1.1) Unlike the rest of *Parole in Libert *, *SCRABrrRrraaNNG* has a different format and bound at the end of the book as a folded poster.



Fig. 4.4.1.1. *SCRABrrRrraaNNG*, 1919, by F. T. Marinetti. (Marinetti, 1919)

In the letter, there are two different hand writings suggesting a message and a reply. At the right top corner is the phrase “Ho ricevuto il vostro libro mentre bombarde il Monte Cucco” (I received your letter while bombarding the Mount Kuk). At the end of the sentence there are the initials *F.T.M.* which suggests that it is a letter from Marinetti. The phrase “Grazie e auguri a lei e ai suoi arditi compagni” (Thanks and best wishes to you and your bold comrades) suggests the answer of the lady, who is reading the letter. The only pictorial element that is seen, is at the bottom right corner, the silhouette of a reclining woman. The composition by abandoning the conventional syntax becomes a dynamic one that conveys the message with a shocking effect. The bold letters and words varying in size are what Marinetti called “onomatopoeias.” They are the sounds of the machineries and guns. He uses them as metaphors and analogies for the words, letting the audience to be immersed in the work more, so that a more vital and expressive experience can be achieved.

As mentioned before, most of Marinetti’s works also require a performer. The onomatopoeias let the performer to acoustically load the words and eventually have greater impact on the audience. Clara Orban (1997: 51) states that “onomatopoeia serves a bridge between sign-systems, between symbol and icon, and the insistence on this trope serves to create a new poetic language.”

In *SCRABrrRrraaNNG*, the word “ESPLOSIONE” refers to an explosion, probably caused by the bombardment, initiated by soldiers. So it is not only the signifier of the act of bombardment but also of the machine, the soldiers and the war. As Strauven (2009: 280) argues, Marinetti takes on an anti-Saussurean attitude by stressing “the reciprocal dependence” between signifier and signified, thus denying the arbitrary nature sign as was proposed by Saussure.

Marinetti in “Technical Manifesto of Futurist Literature” (1912) mentions initiating a typographic revolution which attacks “the so-called typographic harmony of the page, which is contrary to the flux and reflux, the leaps and bursts of style that run through page.” (Apollonio, 1973: 104) The arrangement of the letters in the *SCRABrrRrraaNNG* recalls collage technique with cut letters, overlapping, usage of different typefaces, and the varieties in size and visual weight.

In *SCRABrrRrraaNNG*, Marinetti moves away from the visual conventions, thus adds new meanings to the typographically expressed elements. The text in the work produces signification not in the traditional sense of syntax but in the expression created by the relations forming through the positions, sizes and visual weight varieties between them. The elements in the letter turns into both indexical and iconic signs. Johanna Drucker (1994: 107) explains Marinetti’s employment of

pictorial strategy as, “structuring specific poetic texts according to visual conventions for the representation of space—a technique which gives the semblance of an analogous relation to vision but is in fact utterly conventional and semiotically coded.” In the letter the signifiers are charged with meanings not only based on their signifieds but also on their visual identities present on the page. So this act enforces the signification of the meaning attached to them both linguistically and visually.

Marinetti’s typographical expressions are results of modular construction in some ways. By abolishing the syntax in the conventional sense, he dismantles the words or the layout and works with fragments and rearranges them in order to give the desired effect in *SCRABrrRrraaNNG*. This process is an appropriate approach when considered as a Futurist act in the sense that it resembles a mechanical system in which the system destructs itself for generating a more powerful one. Drucker (1994: 115) states that “his understanding of language as a system which is fundamentally mechanical, and capable of being atomized into elements available for recombination, attributes a functional efficacy to syntax as if its semantic properties were not linked to reference but entirely contained within the structure of the linguistic sign.” Marinetti’s poetics became manifestations of what he calls a “wireless imagination—absolute freedom of images and analogies” (Apollonio,

1973: 99) freed from syntax and punctuation where there is both the visual and auditory aspects of continuous flux of information that reflects the notions of speed, communication novelties and the war. As Strauven quoted Campbell, Marinetti's poetics is "a system wherein 'both become mere data flows' and wherein 'a wireless imagination' [...] dictate[s] the sense perceptions of objects that sound in the real." (as quoted in 2009: 282 from Campbell 2006: 81)

Considering Marinetti's manifestos and his typographic applications driven by his enthusiasm on machinery, technology and speed and his usage of these features in his works, Marinetti acts as a key figure that transformed the visual literacy drastically by freeing the typography and using it in light of these developments respectively. The effects of his expressive typography can be seen in the works onward.

#### **4.4.2 Defining the Image of Punk:**

##### ***Sex Pistols* and Jamie Reid**

Throughout the 1970s, Britain witnessed a new wave manifested by the expressions of frustration, anger and disbelief of youth culture in England. *Sex Pistols* who became the symbol of the British Punk Rock, their album sleeves, posters and flyers marked the visual language of the

Punk movement in England. The appropriated visual language shared many parallelisms with the music produced and echoed the anarchic nature through the use of expressive imagery and typography.

Jamie Reid is a British artist. He is the art director of the group's image and is responsible for the visual style of their printed materials. Jamie Reid's visuals have roots in Dada, Surrealism, and Situationist International. Reid was introduced to the *Sex Pistols* by Malcolm McLaren, the manager of Sex Pistols, whom he knew from the Croydon Art School and shared a common background through their interest in the ideas permeated by Situationists.

Situationist International (SI) was an avant-garde group who were active between 1957 and 1972. SI was an artistic and political movement, and they based their works on constructing situations. Among the prominent members of the group are Guy Debord and Asger Jorn. According to the situationists, society could no longer experience the real life as should have been, but through spectacles that weren't real, but governed and produced by the totalitarian forces. Their consumption of these rendered realities as passive subjects in an alienated society must be stopped and serious actions should be taken. The culture has turned into a commodity culture with pseudo needs and desires that work in favor of the ruling class. As Sadie Plant (1992: 1) stated, SI believed that "the alienation

fundamental to class society and capitalist production has permeated all areas of social life, knowledge, and culture, with the consequence that people are removed and alienated not only from the goods they produce and consume, but also from their own experiences, emotions, creativity, and desires.” Thus, the society needed revolutionary actions. In order to surpass this passivity situationists reacted against the separation of arts from politics and created situations to achieve real experiences of everyday life.

Being effected by ideas embedded in SI, Jamie Reid designed the *Suburban Press*'s magazines, stickers and leaflets, which he co-founded in 1970. The budget problems and the close deadlines of the prints designated the visual language of the punk movement yet to manifest itself. The works regarding *Suburban Press*, SI texts translated by Christopher Gray *Leaving the 20th Century* (1974), *Sex Pistols*' imagery, the cut-outs, ransom-note looking typography, photocopy, collage, and fragmented visuals depicted his style by expressing his artistic and political stand, and moreover, illustrated the ideas of a resistant, frustrated subculture. In 1976, by the invitation from McLaren he started producing designs for *Sex Pistols*. Jamie Reid declared that he “saw punk as part of an art movement that's gone over the last hundred years, with roots in Russian agitprop, surrealism, dada and Situationism.” (as quoted in De Ville, 2003: 161) Punk movement was not merely a style shared



among the youth culture but also the signifier of the despair and anger of children of struggling working class suppressed by capitalism.

Underground magazines and fanzines, stickers, posters many of which are anonymous in '60s and '70s displayed and defined distinctive visual aspects of Punk movement. For instance, the promotional poster for the band's single "Anarchy in the U.K." (1976) displays the *do-it-yourself* (D.I.Y) fashion that became a signature style of the punk scene. (Fig. 4.4.2.1) Although the sleeve of the single was a plain black one, for promotional purposes *Sex Pistols* used this controversial poster. At that time almost every step that band took was considered controversial in the sense that they were playing with the norms, the representative imagery of England and royalty, and the lyrics were aggressive and daring, furthermore the band continuously displayed misbehaviors that were interpreted as offensive by the society. Jamie Reid distressed a Union Jack flag and reassembled it with safety pins and the black and white text is attached to the flag with stationary clips. The text brought together different letters of different sizes and weights with varying kerning to form the group's name and the name of the single. The usage of ransom-note letters is assumed to be first introduced to the designs of *Sex Pistols* by Hellen-Wellington Lloyd (La Placa, 2004: par. 6). Although the cut and paste approach and the integration of the elements seems arbitrary, the contrasts, placement of the elements demonstrates a

designed work. Through his designs Reid deliberately distorts the centered designs by introducing an extra element asymmetrically and off-centered placed that escapes the understructure of the format.



Fig. 4.4.2.1. *Anarchy in the U.K.*, 1976, promotional poster, by J. Reid. (sexpistolsofficial.com)

*God Save the Queen* was Sex Pistols' second single released in 1977 (Fig. 4.4.2.2) The release of the single coincided with the Silver Jubilee of the Queen. Promotional posters, stickers, and the sleeve had the photograph of Queen Elizabeth II. Reid used altering designs for these items. The portrait of the Queen is the common element within those items that is détourned with variations. On the promotional poster there is again the Union Jack flag and in the middle there is black and white Queen but her eyes and mouth are torn and instead of her eyes the text "God Save the

Queen” is written in ransom-note style and “Sex Pistols” text is placed on her mouth. In other visuals Reid did similar alterations as well. Throughout his works, by the usage of collage and cut-out technics, he employs the *détournement* tactic that was used by SI. Some of the works that Reid produced and even some of the songs were banned but they kept their popularity.

In “Détournement as Negation and Prelude” (1959: par.1), *détournement* is explained by SI as follows:

Détournement, the reuse of preexisting artistic elements in a new ensemble, has been a constantly present tendency of the contemporary avant-garde, both before and since the formation of the SI. The two fundamental laws of *détournement* are the loss of importance of each detoured autonomous element — which may go so far as to completely lose its original sense — and at the same time the organization of another meaningful ensemble that confers on each element its new scope and effect.



Fig. 4.4.2.2. *God Save the Queen*, 1977, promotional poster, by J. Reid. (sexpistolsofficial.com)

Reid's usage of Queen's official Jubilee photograph taken by the royal photographer and the Union Jack flag together with the ransom-note style text turned them into controversial visuals and created new meanings. This shocking imagery attracted people and acted as the visual counterpart of Punk Rock. Moreover, the name of the song, "God Save the Queen", is same as the national anthem, however, the lyrics depicting the idea of a fascist regime and England with no future signified a different reality that culture was experiencing. Furthermore, Reid's use of détournement has similarities to some of the works of Marcel Duchamp who is associated with the Dadaist and Surrealist movements. "It shared the same vehemence, same anarchic spirit, same subversive aspect and same chaotic approach-to which it added the raw expression of aggression and destructiveness." (Jubert, 2006: 386) However, one problem resides in the fact that although these avant-garde movements are revolutionary in their nature and arise as reactions towards governing ideologies, they themselves become commodities and loses their initial effects, motives and meanings. There are clear analogies and parallelisms among the means of production of the works between these avant-garde movements and their reflection in Jamie Reid's designs. His works exemplify the subversive nature of the Punk movement and because of the visuals' outcome are fresh and shocking they become new signifiers of the culture and society which is experienced by the youth. These works are considered as offensive and outrageous by the ruling class whereas the

youth subculture embraced these messages in a different manner. This subversive approach of the designs obtained by using low-cost production methods became the symbols of Punk movement. Détournement in this sense contributed intensely to the messages Reid and the group were trying to convey. The visuals become striking if the elements to be used as part of détournement are selected from already powerful signs regardless of their original contexts and brought together with simplest deviations. The resulting product can supersede the meanings attached to them and generates new ones. SI distinguishes two types of détournement, one is minor détournement and the other one is deceptive détournement. In minor détournement the outcome of the détourned elements are significant, not the original elements themselves. In deceptive détournement the elements used already bare significance on their own. (Debord and Wolman, 1956: par. 11 and 12) Jamie Reid's "God Save the Queen" visuals fit into the second category, thus creates a shocking effect.

The visual weight of typography in Reid's designs are achieved through the concept of eclecticism. The type used in his work are not *crystal goblets* but highly expressive and provoking. The collaged letters cut and pasted from different places resemble the dislocations and fragmentation happening in the society. Sex Pistols' album *Never Mind the Bollocks, Here is the Sex Pistols'* (1977) sleeve was designed again by using ransom-

note looking typography but no imagery. (Fig. 4.4.2.3) The collage of different letters that brought together and the use of high contrasted fluorescent color combinations in the design broke the rules of modern typography and grid system. (Fig. 4.4.2.4) The sleeve clearly denotes an anarchic expression and defies the institutionalized norms and order. Omitting the faces of the band members though the posters and sleeves can also be considered as a reaction against the idea commodification.



**Fig. 4.4.2.3. *Never Mind the Bollocks, Here's the Sex Pistols* album sleeve, 1977, by J. Reid. ([sexpistolsofficial.com](http://sexpistolsofficial.com))**



Fig. 4.4.2.4. *Never Mind the Bollocks, Here's the Sex Pistols*, 1977, back cover, by J. Reid. (sexpistolsofficial.com)

Punk movement in Britain emerged as the manifestation of the struggling working class. Because of the dominating ideology and rise of capitalism many people tried to cope with social and economic problems. Punk movement was the means for youth to expose their reaction against the ruling class. It created its own culture, hence, produced particular visual imagery, clothing and music. The anti-aesthetic, anti-art approach echoing dadaists, surrealists and SI, disturbing, shocking and discordant imagery became the signature style of the period. Do-it-yourself technique, low-tech production, photocopy and collage, the idea of imperfection through representation became the form of representation of despair and frustration peaked in 1970s.

#### 4.4.3 *Typography as Discourse* Poster, 1989, by Allen Hori

Cranbrook Academy of Art, Graphic Design Graduate Program starting from the late seventies and continuing through the nineties was the center of post-structuralist tendencies in design scene. Katherine McCoy and Michael McCoy were leading the program and they were encouraging the students to conduct design experiments. Allen Hori was one of their students who designed the *Typography as Discourse* (1989) poster, which later on became one of the symbols of post-structuralist designs, especially of deconstruction in design.

Cranbrook Academy was influenced by post-structuralist theories most of which were originated from France. “Deconstruction” a term coined by Jacques Derrida in his book *Of Grammatology* (1967), was one of the keywords that the works in the academy were departed from. By embracing the critical theory, deconstruction in design as an attitude suggests multiple layers of meaning, which are to be extracted and received by the audience and proposes relationship between the design works and the viewers. The designers Chuck Byrne and Martha Witte (1990/2001: 247) explain the signification of deconstruction on critical thinking as a process of dismantling in order to figure out the parts that act as “informers”, which produce meaning through the ways they converge. According to them “their interpretation is influenced less by



their actual meaning than by the amount of play in the fabric that holds them together.” The experiments in Cranbrook moved towards a subjective expression and a reaction against clean, structured, ordered and hierarchical, objective language of Modernism. Other than dealing with the commercial value of design as a profession, the graduate students at Cranbrook Academy of Art were also concerned with political, cultural and socio-economical issues.

The designers’ primal objective is to convey messages which are to be viewed and received by the viewers, it is to communicate information. However, the meaning is acquired on different levels based on different aspects of cultural, sociological, economical, historical, and other backgrounds of the designers and the viewers. The state of the meaning is in continuous flux. This multilayered reception of the designs are visualised through fragmented, layered, decentralized, and non-hierarchical structures.

The center of attraction of formal attributes in Modernism is shifted towards the meaning produced by the interaction of the audience with the design. There is no more one fixed meaning, but multiple meanings produced through the interaction of the designer, work and the receiver. Katherine McCoy in “Typography as Discourse” (1988) states that, “the focus is now on expression through semantic content, utilizing the

intellectual software of visual language as well as the structural hardware and graphic grammar of Modernism.” (Armstrong, 2009: 83) Type started to be treated as an object not just only to be read but also to be seen. The relationship between image and text moved to another level. Type became an image, a mode of representation, more than just being a text. It has fused from a verbal domain to a visual one.

When we look at the scenery in the domain of typography, we see specific alterations. The change in the typographic landscape after International Style first manifested itself with New Wave typography which was dealing with similar problematics, such as the need for typographic expression using radical syntactic structures. Wolfgang Weingart who is the pioneer of New Wave, was actually trained by Swiss masters in Basel. In his teaching years he and his students at Basel pushed the boundaries of typographic design by defying Swiss Typography, which was based on rationality, and they experimented on notions of legibility and readability by using varying type weights, off-grid structures, variations in kerning and leading, and so forth.

Cranbrook Academy acted one step further and addressed also the issues in typographic design by experimenting on semantic and pragmatic structures in order to form a two ways communication between the designed work and the viewer. Allen Hori's 1989 poster *Typography as*

*Discourse* is an example for such an exchange. *Typography as Discourse* (1989) poster was designed as an announcement of a lecture given by Katherine McCoy on January 19, 1989. The poster demands effort from the viewer because of how its organization is structured. (Fig. 4.4.3.1)

In “Absolutely the ‘worst’”, Rick Poynor (2008: par. 6) explains the technique of the making of the poster as such:

Hori constructed the poster as a mechanical artwork, with manual letterspacing, Rubylith masking film, tracing paper and acetate overlays, and an elaborate mark-up. He sent intricate type compositions from the Macintosh to an output service and collected the hard copy next day.

The poster is a colored one with a yellowish background. The texts are used as negative and positive visual elements on that background. The first elements that the viewer reads on the poster after seeing the design as a whole are the shape and image in the center, the brackets, the words “see”, “READ”, “McCoy”, the copyright signs and the majuscule letter “D”. As the viewer approaches to the poster she starts to read other written information like “Typography as Discourse”, “DIRECTION”, “NEW”, flipped texts “NEW DIRECTIONS IN TYPOGRAPHY” and “DISCOURSE” and another level of information is read when one comes even closer. What Hori did was to play with the orientations of the words, their kernings, baselines, axes, and their relation on the format to each other and to the paper. The hierarchical structure of the poster is different from the conventional set of rules. The viewer, at first glance

cannot receive the name of the lecture, the name of the lecturer, its place and time but she sees some keywords that the lecture is about. The poster definitely seeks for audience participation and through the layering of content the information given is open to interpretation. It does not only create a radical syntactic structure but also a semantic one where the audience receives information about the content of the lecture by the organization of the text and image on the format. The information distributed on the paper are connected on a semantic level, where each one of them are the keywords for the new typographic discourse that is influenced by the critical theories. As the eye starts to see and read the text, the poster invites the viewer to explore the content. The text of the poster contains paradigms such as on-off, visual-verbal, see-read, image-text, presentation-reception, representation-perception. The selected text works on another level than being informative about the event. It forces the viewer to question the oppositions, suggesting that typography is an element not only to be read but also to be seen. Hori argued that he “realized graphic design could be read in much the same way that photography could be read—this was the first most liberating moment—where typography had the power to communicate more than the actual words it represented, where additional meaning was formed on the intentions of the designer.” (as quoted in Bucher, 2004: 10) New Wave’s echoing of the avant-garde movements like Futurists had done by applying the typography through playing with and experimenting on

syntactic structures is moved progressively one step further by including literary and semiotic theories.

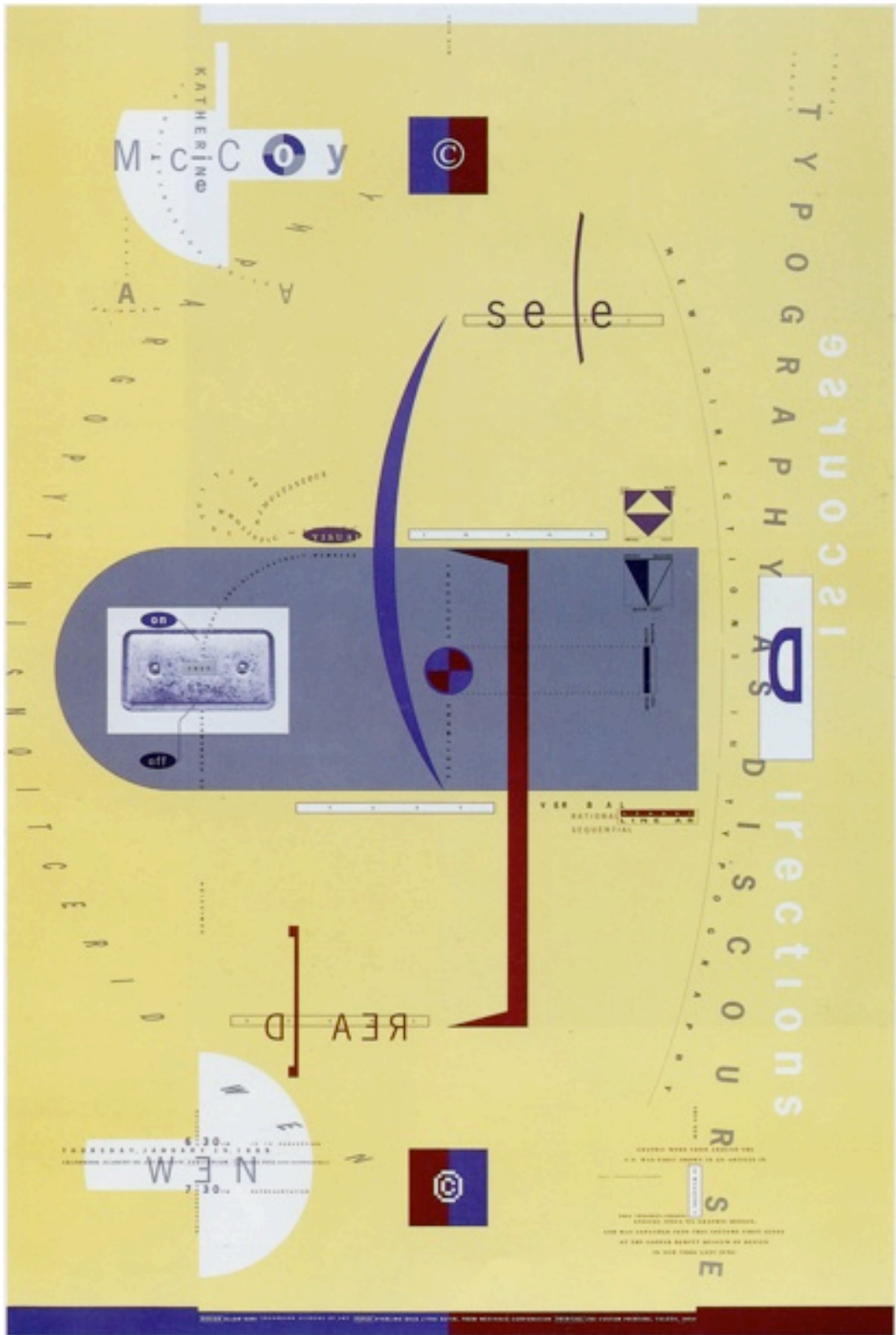


Fig. 4.4.3.1. *Typography as Discourse*, 1989, poster, by A. Hori. (Poyner, 2003: 58)

The idea of deconstruction in graphic design was intensely experimented at Cranbrook Academy of Art and many design scholars who helped the evolution of the design scene like Edward Fella, David Frej, Lorraine Wild, Scott Makela, Jeffery Keedy are graduates of the school. Works done with literary theories like deconstruction was at first appeared to some as controversial and even ugly. However, the underlying methodology and theories when combined with different techniques and technology enforced the idea of critical thinking and analysis.

#### **4.4.4 *Poème Électronique*, 1958, by Edgard Varèse**

*Poème Électronique* (1958) is a piece composed for the Philips Pavilion at the 1958 World's Fair in Brussels. (Cox and Warner, 2007: 17) Philips Corporation commissioned Le Corbusier for the design of the Philips Pavilion. Le Corbusier wanted to create an “electronic poem” (Le Corbusier and Petit 1958: 23) and for the sound design of the project he chose, moreover, insisted on working with Edgard Varèse. Iannis Xénakis acted as the principal coordinator of the project and was responsible for the interlude *Concrèt PH*, which the audience would hear at the entrance and the exit of the pavilion. The pavilion was shaped like a stomach, narrow at the entrance and the exit and formed out of nine hyperbolic paraboloids which created sections that the audial composition could be

spatialized, hence a multimedia experience that encompasses variety of sources would be actualized. (Fig. 4.4.1.1)

*Poème Électronique* (1958) turned out to be a multimedia work that offers visual, aural and spatial experiences. The visual and aural components include film, colored lighting, light projections, machine noises, distorted organ music, bells, percussion, electronic sounds, human sounds and selections from *Étude pour espace*. (Mondloch, 2004: 58) The main idea was to create an immersive experience that would fascinate the audience by highlighting the technological mastery of the Philips Corporation.



**Fig. 4.4.4.1. *Philips Pavilion*, 1958. (medienkunstnetz.de)**

As the audiences enter the pavillion they hear the transitional piece *Concrèt PH* and then they experienced an 8 minute visual, aural and spatial environment that were composed of Le Corbusier's film, light projections, and Varèse's sound piece. The *Poème Électronique* was a piece playing over the Le Corbusier's black and white film composed of photographs but was designed independently from the film or the visuals. The film had 7 thematic parts, which were *Genesis* (0"-60"), *Spirit and Matter* (61"-120"), *From Darkness to Dawn* (121"-204"), *Man-Made Gods* (205"-240"), *How Time Moulds Civilization* (241"-300"), *Harmony* (301"-360"), *To All Mankind* (361"-480"). These visuals were accompanied by Varèse's electronic piece.

As Kamien (2010: 500-501) stated, the sequence of the sounds in *Poème Électronique* can be documented as:

- 0" Low bell tolls. "Wood blocks." Sirens. Fast taps lead to high, piercing sounds. 2-second pause.
- 43" "Bongo" tones and higher grating noises. Sirens. Short "squawks." Three-tone group stated three times.
- 1'11" Low sustained tones with grating noises. Sirens. Short "squawks." Three-tone group. 2-second pause.
- 1'40" Short "squawks." High "chirps." Variety of "shots," "honks," "machine noises." Sirens. Taps lead to
- 2'36" Low bell tolls. Sustained electronic tones. Repeated "bongo" tones. High and sustained electronic tones.  
Low tone, crescendo. Rhythmic noises lead to
- 3'41" Voice, "Oh-gah." 4-second pause. Voice continues softly.
- 4'17" Suddenly loud. Rhythmic percussive sounds joined by voice. Low "animal noises," scraping, shuffling, hollow vocal sounds. Decrescendo into 7-second pause.



- 5'47" Sustained electronic tones, crescendo and decrescendo. Rhythmic percussive sounds. Higher sustained electronic tones, crescendo. "Airplane rumble," "chimes," jangling.
- 6'47" Female voice. Male chorus. Electronic noises, organ. High taps. Swooping organ sound. Three-note group stated twice. Rumble, sirens, crescendo (8 minutes and 5 seconds)."

This sequence is similar to the zapping experience on a television or the MTV effect, where the viewer is exposed to vast amount of fragmented imagery and sound. However, considering the realization date of *Poème Électronique*, this multimedia work had a great impact on the audience.

As a pioneer of electronic music Varèse argued in 1959 on the additive value of technology as follows:

Our new liberating medium-the electronic-is not meant to replace the old musical instruments, which composers, including myself, will continue to use. Electronics is an additive, not destructive, factor in the art and science of music. It is because new instruments have been constantly added to the old ones that Western music has such a rich and varied patrimony [...] (Cox and Warner, 2007: 19)

Apart from recorded sounds, this piece also features generated electronic sounds. Varèse sought the importance of producing sounds through “a new medium of expression.” (2007: 19) Hence, in 1939 in “Music as an Art-Science”, he mentioned such a machine that would be able to produce new sounds, sounds that would not imitate nature or existing sounds, and was capable of offering fertile possibilities for the composers to discover potential, new usages. He saw the advantages of such a machine as,

“liberation from the arbitrary, paralyzing tempered system; the possibility of obtaining any number of cycles or, if still desired, subdivisions of the octave, and consequently the formation of any desired scale; unsuspected range in low and high registers; new harmonic splendors obtainable from the use of sub-harmonic combinations now impossible.” (2007: 19) Sound in *Poème Électronique* is experienced with such features. Moreover, it is designed as a piece that would be projected in a space where the location and the movement of the audience would gain significance. Instead of an experience, where the audience stayed still and contemplated the piece, she would move around, move towards or away from the sounds, grasping some by the result of the exact location of her. Thus the vast amount of speakers, the architecture, the lightings and the visuals added to the creation of such an experience.

#### **4.4.5 *Frog+*, 2003, by Merzbow**

Masami Akita known as "Merzbow" started his career in late 1970s with tape music and percussion as 'improv'. (Hegarty, 2002: 196) As Hegarty (2002: 196) further explains in his article titled "Noise threshold: Merzbow and the end of natural sound" the name "Merzbow" refers to Kurt Schwitters' concept of 'merzbau'. (Fig. 4.4.5.1) This very name seemingly summarizes his entire oeuvre, despite Akita's statement:

“the name is only important to my early work, which I thought related to the concept of Merz-bau”. (Pouncey, 2000: 29) *Merzbau* signifies Schwitters's transformation of rooms in houses (mostly in Germany and Norway) with grotto-like surface, numerous columns, sculptures, and pieces by Dadaists. (merzbau.org)



Fig. 4.4.5.1. *Merzbau*, 1933, by K. Schwitters. (merzbau.org)

His first work *Om Électrique* (1979) was a *musique concrète*; in Hegarthy's words:

The material is relatively simple: drones, amplified percussion, distortion effects, and, in the final track, a range of objects...with no suggestion of harmony, melody or tonality, but there is still an element of musicality – things, at least, are clearly being played, pieces constructed..." and the sense of rhythm with 'drumming' stops, slows, speeds up, misses 'beats'. (Hegarthy, 2002: 196)

This explanation along with Merzbow's approach clearly manifests that his work has never been a random noise and/or a collage of various sources, but a planned construction or composition even with the elements of improvisation. Nonetheless, his *Metal Acoustic Music* (1980) proves that there are different forms of noise and this album is not considered as *Musique concrète*. (Hegarty: 197) On the other hand, as it is also detected by Hegarthy, for Bayle, *Musique concrète* is not totally associated with "noise" but it is a music that uses all kinds of sound extracted from life. (Chadabe, 1997) In this respect, Merzbow underlines different types of noises and his mastery over combining and using these noises. In his later works such as *Hybrid Noisebloom* (1990), *Music for Bondage Performance* (1991), *Noisembryo* (1994) and many others, he works on the absence and the evasion of content and meaning along with the musicality of noise and recorded sounds. (Hegarthy, 2001) Accordingly, Merzbow himself states that, "When I use words, say album titles, they are not chosen to convey any meanings. They are merely selected to mean nothing." (Woodward, 1999: 40)

Merzbow released the album *Frog+* in 2003 that includes the LP *Frog* in 2001 and additional material. The tracks in the album are based on samples gathered from the sounds of the frogs and of the nature.

The transformation and utilization of sounds from nature into digital samples creates an immediate effect and amplifies the intensity of the perception of the viewer. Merzbow uses these samples as noise variations and builds his music upon them. The subversion of the use of sounds from nature reveals a darker interpretation of the nature. Hence, he is also active advocate of animal rights. So, this might also be assumed as a reaction through the hard and extreme noises that he creates and uses against all of the visual and aural discord, created by humans that suppress the nature. He stated in one the interviews he gave that, “Sometimes, I would like to kill the much too noisy Japanese by my own Noise.” (Cox and Warner, 2007: 61).

The album inhabits not only the recordings of the frogs, but also roaring and growling sounds, repetitive buzzes, piercing noise, distorted beats, and further loud noise which the source could not recognized. It oscillates between natural sources and artificially produced sounds and noises.

Hegarty (2002: 199) elucidates on this oscillation as a tension:

There is a further internal tension of ‘natural’ against ‘synthetic’ which there is not space to explore here: Akita regards analogue equipment as being effectively acoustic – nearer to natural sound, hence the use of older equipment. The favouring of analogue

equipment is a testament to its noise-making, including incidentally.

Such a tension always comes to its climax point when none of the sources –that of nature and that of artificially produced– could not be distinguished due to distortions, mutations, cuts, and ambiguous passages in a controlled chaos.

**4.4.6 *The Knotted Constellation (Fourteen Rotted Coordinates)*, 2011, by Kim Cascone**

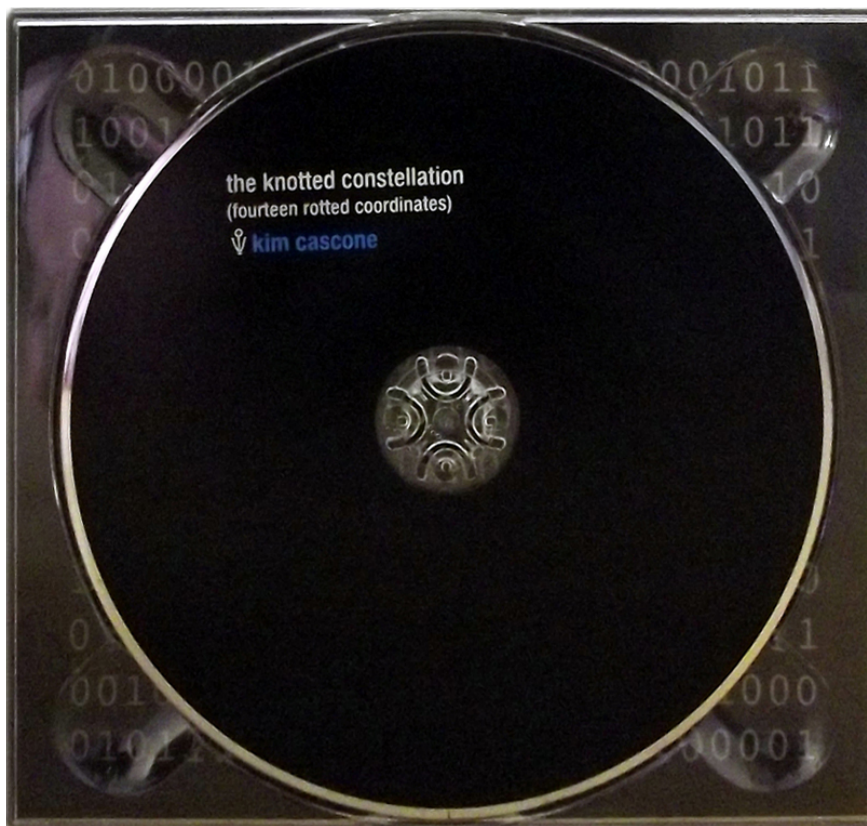
*“The medium is no longer the message in glitch music: the tool has become the message.”*  
Kim Cascone

Kim Cascone is an American composer of electronic music. He released *The Haters*, *Asmus Tietchens*, *Merzbow*, and *Arcane Device*, as well as, his own projects *Poison Gas Research* and *Heavenly Music Corporation* with his record company "Silent Records." Silent Records focuses on the ambient, industrial and electro-acoustic music. Just like Merzbow, he started his experimental productions in 1970s and inspired heavily by 1980s of industrial music. Following similar noise-based waves with industrial noise, micro-sound, ambient, and glitch music came into scene. Kim Cascone's infamous article 'The Aesthetics of Failure' (2000) regards this progression as "post-digital movement" and detects the emergence of

glitch along with the utilization of error, cut and paste compositions and looped-based applications.

As also discussed earlier, the sources of glitch music are malfunctioning or damaged audio recording devices and technology –scratched and skipping CDs, bit rate reduction, hardware noise, electric hum and distortions, bugs, errors, vinyl scratches and system error– (Cascone, 2000: 11).

In the same line of producing, Kim Cascone's latest release *The Knotted Constellation (Fourteen Rotted Coordinates)* (2011) is a gathering of wide range of unconnected, individual and diverse soundscapes and samples from all over the world. (Fig. 4.4.6.1) These soundscapes merges field recordings with acoustic and electro-acoustic devices and electronics. There is no direct significance of the location of the recordings, hence, some recognizable sounds such as running water, sound of the church bells, railroad sounds, helicopter sounds, public service announcements.



**Fig. 4.4.6.1. *The Knotted Constellation (Fourteen Rotted Coordinates)*, 2011, by K. Cascone.**



Nevertheless, none of these recognizable sound pieces construct a meaning or a narrative plot when they are merging together with glitches and noise samples composed of micro-sounds. They feel as if they came together coincidentally or just by mistake. This quality makes the entire work an abstract entity.

*The Knotted Constellation (Fourteen Rotted Coordinates)* (2011) appears as a detailed collage in which the density of the noise samples, glitches, pulses, resonant buzzes, and the soundscapes vary in a rather composited way, while keeping the sense of coincidence and randomness. Cascone rarely uses transitions, but mostly uses cuts and immediate silent moments. Therefore, some of the sequences of the work seems to be independent and some sequences contains juxtaposed elements.

#### **4.4.7 Towards an Aesthetics of Glitch**

As the previous section examined the selected works thoroughly particular keywords manifested for each of them. Typographic works reveal the following aspects, which mark an emerging pattern through their production, transmission and consumption processes. One common key concept is the use of technology either conceptually or as an instrument. Marinetti's work *At Night, Lying in Bed She Rereads the*

*Letter from Her Gunner at the Front. SCRABrrRrraaNNG* (1919) brings with the attributes of dynamism, new syntax, new semantics, visual analogies, variety and contrast, subversion, active, and perceptive audience, and a shocking effect. Jamie Reid's works *Anarchy in the U.K* (1976), *God Save the Queen* (1977), and *Never Mind the Bollocks, Here's the Sex Pistols* (1977) put forward features like experimentation, collage, multiple layers, détournement, new syntax, new semantics, subversion, visual ascriptions, shocking effect, effort from the viewer on constructing messages.

Allen Hori's deconstructionist work *Typography as Discourse* (1989) sets forth the constituents as fragmentation, layers, expression, new syntax, hence new semantics, and active audience.

Aural works exhibit keywords that also point out a set of occurring clusters. Edgard Varèse's work *Poème Électronique* (1958) presents a multimedia project which highlights layering, immersion, active audience, technological enhancement, transformation, abstraction, hypermediation, and expression. Merzbow's pieces in the album *Frog+* (2003) exert variety, noise, audial analogies, a new language, layering, abstraction, and hypermediation. Kim Cascone's record *The Knotted Constellation (Fourteen Rotted Coordinates)* (2011) utilizes layering,

abstraction, hypermediation, subversion, planned actions to be perceived as coincidences.

The common traits that are manifested in these works are extracted and used as basis for composing the *Glint: Audiovisual Glitches* project in order to investigate the status quo of the new media samples and their designations within digital culture. Common factors can be outlined as 1. hypermediacy (a sense of a presence of the technologies used), 2. new syntax, 3. new semantics, 4. subversion, 5. layering, 6. variety, and 7. contrast.

Hypermediacy is present in all of these works because of the fact that the technology used as a tool, an instrument, moreover as a new language can be traced in any of these works, thus reminds the audience of its presence. The design elements are used out of their conventions, so they introduced new syntagmatic structures leading to new semantic relations and readings. All the examined works use subversion of either the utilization of the tools, the process, or the meanings generated. Formation of new syntagmatic structures both calls for and results in multilayered works both compositional and conceptional wise. The produced works become open systems in the sense that they acquire audience participation in the generation and/or perception of the pieces. This

multilayered structures are made possible with the implementation of design principles of variety and contrast.

First and foremost, the *Glint* project is regarded as a system that is formed of subsystems. It is designed concentrating on the above observed concepts, while integrating the types of aural —conceptual, oceanic, minimal— and visual —fragmented, replicated, linear, complex, and physically manipulated— glitches that were defined separately by Iman Moradi and Torben Sangild into the audiovisual work.

#### **4.5 *Glint: Audiovisual Glitches*, 2010, an Experimental Video on Glitches and Glitch-alikes, by F. Şenova Tunalı**

This section analyses the audiovisual project *Glint: Audiovisual Glitches* based on its production, development, distribution and consumption. *Glint: Audiovisual Glitches* is a 3 minutes video project that combines digital typography and sound design via the concept of *glitch*. As stressed earlier, glitch manifests the existence of technology, media used and the interface implemented. It occurs as a common ground and an intermediary in both visual and aural domains.

The main reason behind selecting a theme that associates with the idea of error and malfunction is to trace a possible pattern occurring in both domains that would imply an existing operational logic of digital culture. The name *Glint* carries multiple connotations with it. *Glint's* meaning being “a glimpse, glance or gleam”, “a tiny quick flash of light” and “a brief or slight manifestation or occurrence”<sup>2</sup> indicate more than just a phonetical resemblance with the word *glitch*. Glitch occurs as momentarily manifestations within the system and disappears afterwards, it is unexpected, unpredictable and has a shocking effect. (Şenova Tunalı, 2012, 45(3): 296) *Glint: AudioVisual Glitches* suggests such an experience, a narrative that is shaped by the addition of the glitch-alikes which give significance and meaning to the composed audio and visual materials. Glitch as a manifestation does not effect the content and its organization, however, it effects the viewing experience drastically. A glitch that occurs in a system distracts the user/viewer/participant, uneases her and causes a discomforting experience. *Glint's* aim is to produce an audiovisual experience that stimulates interest, is intriguing and constructed by glitch-alikes which does not result in such discomfort experienced by the viewer.

Although glitches are undesired occurrences, the project tries to change this understanding by adding intentionality to the concept, thus

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<sup>2</sup> glint. (n.d.). Dictionary.com Unabridged. Accessed May 06, 2010, from Dictionary.com website: <http://dictionary.reference.com/browse/glint>

transforming the idea of glitch into a design element. Every design element should carry a sense of intentionality. Since design is a problem solving activity, there should be zero tolerance for accident or coincident within a work. Design is a conscious activity and the whole process is shaped by decisions made by the designer. The only way for a design to look accidental is dependent on pure consciousness of the creator of the piece. Hence, considering *Glint: Audiovisual Glitches*, using glitches as design elements within the project brings a fresh viewing experience that forms the audiovisual continuity throughout the video. Selecting a common theme that can be applied and has already manifested itself in both domains serves as a relating aspect that forms a common audiovisual language, which is based on same principles. Because of these reasons, *Glint: Audiovisual Glitches* is also grounded on intentionality in order to give a sense of *ghost in the machine* idea, that has its own logic and operating system. When visual glitches are produced by the designers they are considered as glitch-alikes because of their nature and generation methods. They are the planned, designed and interpreted forms of failures that are generated by the system circumstantially. Therefore, *Glint* is absolutely not a project that is formed by the mixture of random glitches. It imitates the visual and the auditory characteristics of glitches on a conscious level in order to present a different viewing and listening experience.

*Glint* tries to address the representation of technological status quo and the culture's reception and reflection of it. It aims to represent the signifiers of digital media in a way that the user/viewer/participant is always reminded of the existence of the medium that the content is offered with. Instead of creating an immersive and immediate experience, it is constructed upon the principle of *hypermediacy* where the user is always made aware of the technology, in a sense made aware of the window with which she uses to reach out to the content by remediating the data as a conscious decision made, using a fault, a drawback of that very same digital technology. The glitches act as actualizations of many possible manifestations, which the user of digital technologies can encounter any time.

The analysis of the project *Glint* is aimed at providing similar patterns of production, development, distribution, and consumption. The project is approached through an intense analysis by deconstruction of the elements, and the treatment of digital typography and sound design domains as systems in order to use systems approach in comprehending the underlying operational logic. When the project is broken up into pieces and analysed, each part can be considered as a system with which assumptions can be made about a bigger system that encompasses the relatively small ones.

The analysis of the project consists of the study of the preparation of the project, growth of research, accessing and processing of knowledge, generation of ideas, making of sketches and the storyboards, transformation of such ideas into visual and audio materials, the software and hardware used in this process, the association of these software, the graphical user interface (GUI) that the designer and the viewer are confronted throughout the process, bringing together of the audio and video tracks, distribution channels and means, the distributed signifiers, the relationship between these signifiers and the status quo, people who consume this project by accessing, watching and reflecting on it, and the culture that is originated by these consumers. The analysis of each of these stages and elements manifest the digital culture, which has defined set of rules and processes, thus, has an operational logic.

Each stage when brought together forming a meaningful body, signifies some different aspect of digital culture. The role of the designer, the assumed responsibility that she undertakes, the equipment used in achieving this goal, the distribution channels and the ways in which the production is utilized and consumed are different indicators of digital culture. So the process from the production to the consumption of the project, indicates what Manovich calls a *cultural interface*, where people can interact with data through the use of computers. Although the video itself is a complete, closed form where no additional data can be used once



it is finished and rendered, the way that is produced, distributed and accessed are designations of open forms and they welcome feedback mechanisms. Thus, it implies interactivity and participation.

A more sophisticated version of the video can be implemented once this study receives feedback. This new version can be more responsive, can allow real-time interaction and participation of the user and even the computer. However, for now it is beyond the scope of this study, because of the reason that the full intentionality of the designer is taken as a criteria in the formation and usage of the glitch-alikes as design elements to be used in the formation of the semantics and the narrative of the video. As mentioned before in the investigation of the project, systems approach is used in order to assess *Glint: Audiovisual Glitches* as a comprehensive whole to draw meaningful conclusions.

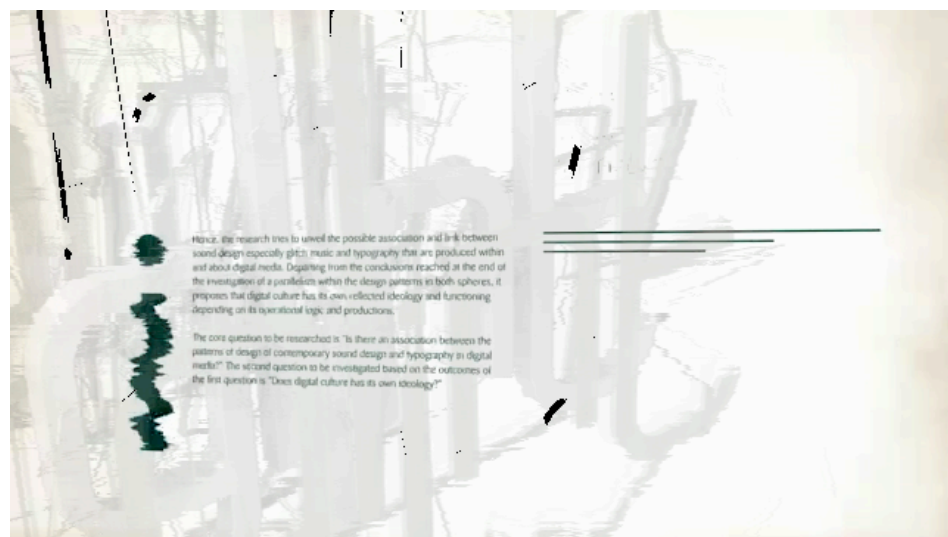
The visual materials of *Glint* were prepared using raster and vector based digital imaging and editing software (like Adobe® Photoshop®, and Adobe® Illustrator®), hex editor (such as OxED), motion graphics, editing and animation software (like Adobe® After Effects®). Scenes were prepared on imaging and editing software, and animated on motion graphics software. Glitch-alikes are prepared both using plug-ins that are implemented in the software, displacement maps, and by altering the hex coding of the files of the scenes and the pre-composited video pieces.

The sound design of *Glint* video is prepared by using sound editing, sequencer and synthesizer software, synthesizer and effects plug-ins (*Virtual Studio Technologies* that use digital signal processing), and video and audio editing software such as Native Instruments Absynth, Ableton Live, Glitch VST, and Sony Vegas Pro. By using oscillators in the digital synthesizer patches are formed. These patches are then transferred into another audio editing software and various tracks are created, which are assigned to different virtual instruments. Afterwards, these tracks are tampered in a VST plug-in which is an effects sequencer that has different sets of effects where the output is based on the user-defined seeds. As the final process, the designed audio track and the video track are brought together on an audio and video editing software.

The *Glint* video demonstrates how glitches operate in three levels as (i) aural: (ii) visual: and (iii) textual. In the aural level, the sound of the video inhabits variety of different elements in a glitch-like composed way. Although the sound should be the main element that provides "continuity" of the flow in the video, it has cuts, resonant buzzes, pulses, and glitches in it. Nonetheless, it is synchronized with the visual elements and such glitches, cuts, shifts, twitches, and overlapping frames. In the textual level, the video displays titles, keywords, and body text extracted from Kim Cascone's article "The Aesthetics of

Failure” (2000), explaining the term 'glitch' along with the other features of the "post-digital movement" and excerpts from this study.

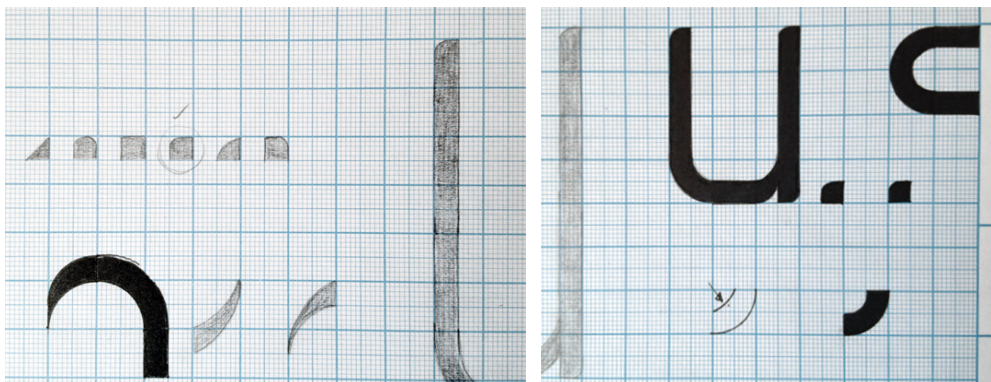
The video inhabits recognizable visual, aural, textual elements. However, all of these elements are subject to distortion, reverberation, and unexpected pulses. Moreover, the video is composed of sequences which are either independent and separate from each other or fuse into each other as a continuation of its arbitrary flow rather than an explicitly applied transitions. This flow provides a sense of shifting ground and a rising tension along with the applied visual effects and the sound. The scene is always in flow and motion, hence, never stays stable more than few seconds and eventually creates a vertigo effect. While the graphical elements shifts on horizontal and vertical axes, the designed font *Glint* has the capacity to move in a three dimensional environment by using the z-axis. (Fig. 4.5.1)



**Fig. 4.5.1. Video Still from the *Glint* video, 2010, by F. Şenova Tunalı. ([vimeo.com/42112176](https://vimeo.com/42112176))**

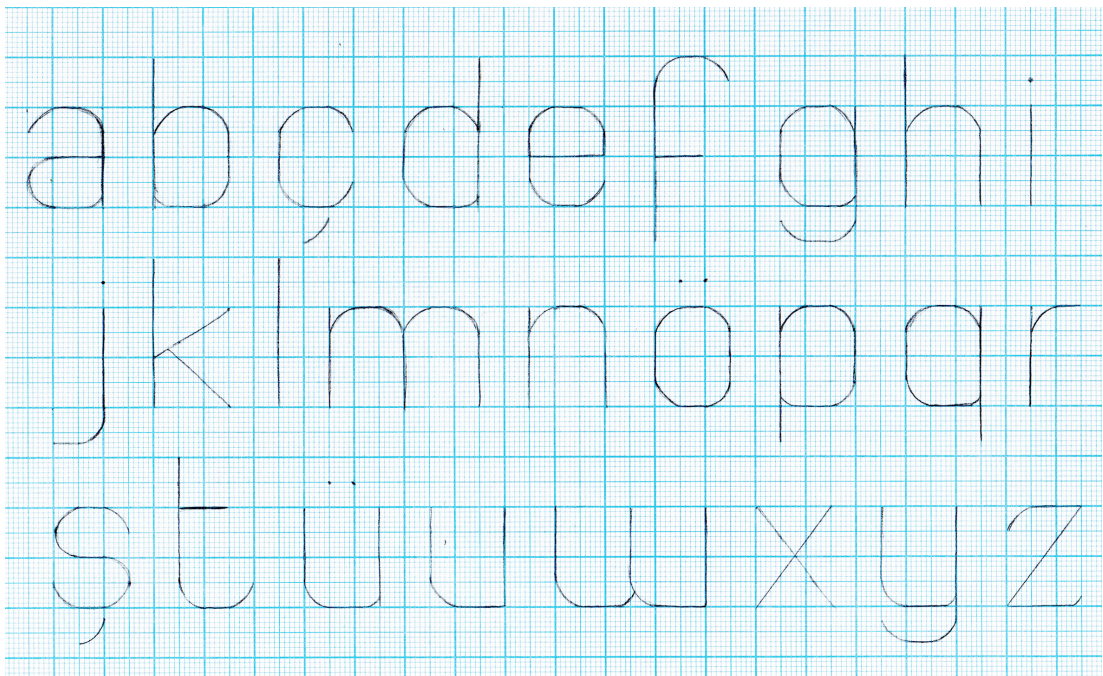
For the execution of the video, along with the composed sound, graphic elements and typeface used an additional typeface is designed. The name of the typeface is same as video's, *Glint*. The need for creating a new typeface emerged out for both adding a unique value to the work and experiencing the process and revealing the logic of operation of the production for digital media.

The typeface making process first began by making idea sketches and trying to find a suitable form for the general look of the text that would fit the context of the video. Through the design process of the typeface including the glyphs containing letters and numbers basic design principles were taken into consideration. The typeface was designed to be consisted of minuscule letter forms. The unity of the forms of each letter as well the their coming together, the visual balance, variety and contrast were the important features that would form a whole and manifest the continuity of the letter forms. (Fig. 4.5.2)



**Fig. 4.5.2.** *Glint* typeface detail sketches, 2010, by F. Şenova Tunalı.

After the idea sketches were made, the selected ones were transferred onto a millimetre scale paper in order to form a grid structure that would define the underlying structure of the letters that forms a system. (Fig. 4.5.3) Then the prepared draft is transferred to the computer and through the usage of a font editing software *FontLab Studio* the final decisions were made about the design of the typeface, including the general forms, the heights of the ascenders and descenders, the x-height, the cap height, m-space, the decisions of the curves and straight lines that form the stems, bars, bowls, legs and shoulders, strokes, spines, etc. of the forms, their connecting points, stroke width, tracking, kerning and letter-spacing.



**Fig. 4.5.3. *Glint* typeface, 2010, (hand-drawn onto millimetre scale paper),  
by F. Şenova Tunalı.**

The outlines of the typeface *Glint* is then converted to True Type Face format, which is a commonly used type format that is compatible with both *Mac Os* and *Microsoft Windows* operating systems. Although the typeface is designed to be used in the video it can also be used elsewhere. (Fig. 4.5.4)



Fig. 4.5.4. *Glint* typeface, 2010, by F. Şenova Tunali.

Jessica Helfand (2001: 237) argues in “Electronic Typography ” on the distinct nature of digital typography as follows:

Comparisons with printed matter inevitably fail, as words in the digital domain are processed with a speed unprecedented in the world of paper. Here, they are incorporated into databases or interactive programs, where they are transmitted and accessed in random, non-hierarchical sequences.

The *Glint* typeface used as an additional element in the video that creates intrusion over the scenes. It’s treatment in the video is different from the rest of the imagery. However, its interaction with the designed soundtrack helps to form a unity within the video, as it adds to the collage of different aural and visual elements through juxtaposing, overlapping and forming variety.

By borrowing the idea from Hitchcock’s technique "suture", inspired by Lacan’s explanation of “sliding signifiers”, regarded as "in flickering in eclipses" by Oudart (quoted in Heath 1977, 18(4): 58), the *Glint* video attempts to make the usage of 'suture' even more visible. (Fig. 4.5.5) Yet, through the traces of the afterimages of the passing scenes and the flickering and malfunctioning transition effects, which appears when there is no transition —but functions as immediate visual cuts that duplicates immediate sonic cuts.



**Fig. 4.5.5. Video Still from the *Glint* video, 2010, by F. Şenova Tunalı. (vimeo.com/42112176)**

While the entire video looks totally digital —with the usage of the digitally designed fonts, the digitally composited soundtrack, and the other digitally produced graphic elements— the scanned sketches of the design on millimetre scale paper gives the hints of the hidden analog intervention in the video. In this respect, the video merge analog traces with digital applications.

The *Glint* video formulates variations of typographic elements as a comparison to structures encloses architecture. By borrowing from the architectural terminology, the sound makes connections through articulation, contiguity, composite order, structure, inter-congruity, variety, simultaneity, proximity, hierarchy, and fracture.





**Fig. 4.5.6. Video Still from the *Glint* video, 2010, by F. Şenova Tunalı.  
([vimeo.com/42112176](https://vimeo.com/42112176))**

Last but not least, the variety of the line qualities (thin, medium, thick typographic structures) and the usage of the numerous different graphical elements (letters, body text, numbers, lines, display text...etc) are both used individually, moreover in a crowded way by allowing juxtapositions and overlapping settings. (Fig. 4.5.6)

Digital realm manifests itself primarily on its mathematical structure. Digitizing appears not only as a historical mark but it also demonstrates a shift in social, economic, psychological and political modes of representations and means of communication. Various interactions are actualized through digital mediatory tools.

The audiovisual project *Glint* can be used as an analogy of digital media when considered as a system, which originates from other subsystems. Following the argument set forth by Mark Nunes (2011: 4) a system needs to be operating flawless in order to be kept under control. Dominant ideologies within the systems act as controllers, they acquire power over every constituent of the system. However, error manifests itself as an entity emerged from the “out of control” state of the system. Error appears as something, which resists the system, emerges out of a flow within the system. Every system tries to eliminate the errors, noises, glitches, dissonances that are materialized. Since the errors are actualized within the system and has effects on the system it is resisting, its essence belongs to that system, whether it is occurs as an entity or a concept. It originates out of that system and has traces of that system. Likewise, the glitch-alikes in the video *Glint: Audiovisual Glitches* manifests the very system, hence the technology and the digital platform that it is produced with and within. However, a system would use the errors as a feedback mechanism, in order to correct what is threatening itself. The more the errors are generated and try to resist the system, the more the system can define its boundaries by correcting what is causing the errors to be manifested and strengthens its power relations. However, this is valid for errors and noises but not for the glitches. As explained

earlier, glitches occur from the resonances that are not predictable within the system and their actualization is always a potential inherent in the system.

The digital culture offers processes of production, distribution and consumption on a different pace. It accelerates each of these processes, hence, it creates supply and demand by transforming the characteristic of digital essence into advantages. Thus, it creates commodities out of everything produced within the system.

Designed visual and aural glitches, errors, and noises emerge as reactions to the ideologies governing digital culture or try to emphasize digital realm's technical imperfections, as a result of the disillusionment about the system. The locus of control (the power groups) commodifies these reactions, for instance by transforming them into visual styles or musical trends. Hence, the resistance becomes a product to be consumed as it had happened in the Punk movement that was discussed earlier in this study.

Tim Barker mentions the “degrees of freedom”, an expression regarding Manuel DeLanda's work on the philosophy of science that, “refers to the ways in which an object may change.” (Nunes, 2011: 46) “Degrees of freedom” defines what can be altered in the system, it sets forth the limits and boundaries of the system. Consequently, the system tries to

have full control over these parameters. Although, digital culture promises democratization and freedom, the governing ideologies by using the modes of resistances as feedback mechanisms, takes control and creates the illusion of countless possibilities.

## **CHAPTER 5**

### **CONCLUSION**

This study aimed at conceiving how digital media operates via forming new audio-visual languages that modifies and restructures information societies. The flux of visual and aural culture became more apparent with the technologic advancements and the increasing access to digital apparatuses.

As mentioned earlier, communication technologies are not neutral spaces, thus, they do not only transmit information, they convey them through channels administered by set of rules, which are effected by and have effects on societies, that are part of an existing ideology. Communication technologies, especially digital media, possess the power to create and shape societies.

This research probed into the concepts of production and consumption of digital typography that manifest the logic of digital media by following an analogy of the patterns in contemporary sound design which act on the developments within digital technologies. Therefore, this study also investigated the concepts of noise and glitch, following an analogy of the aural designs as used in Sound Art.

The study followed General Systems Theory and conducted historical surveys, in order to reveal patterns that emerge from the analyses of the visual and aural examples. As Paul Alcorn (2003: 289) stated, “The systems view was presented as one logical way of organizing information and structuring relationships that exists among the various facts of society as it reacts to technology and the consequences of our own ingenuity.” Thus, carrying out historical surveys was significant in the sense that they displayed patterns that repeated in their production and consumption processes.

After the clarification and explanation of the methodologies used and their originations, one chapter in the study probed into the historical survey of digital typography starting from 1900s, reaching present, grounding the rationale transposed earlier. It tried demonstrate the cultural, sociological, technological and historical relations. Then the sound design sphere in 20th Century were analysed, progressing from Futurists to the present *status quo* of digital media. The analyses of six

examples from the visual and audial scenes manifested the possible association between digital typography and contemporary sound design. Last but not least, the analysis of the video project *Glint: Audiovisual Glitches* is conducted.

The *Glint* project follows the paths of the case-studies that this thesis studied and analyzed. To begin with, the video gives a direct textual reference to Kim Cascone's key article on glitch 'The Aesthetics of Failure' (2000). Subsequently, typographic elements act in accordance with the designed soundtrack. The seemingly static visuals are distorted, shifted, transformed and manipulated with the glitch-alikes that are digitally produced. The text becomes an image with the intervention of the sound and the additional visual distortions, fragmentations, cuts and overlappings.

The text produced by the *Glint* typeface acts as a three-dimensional object that hovers around and disturbs the calm, even static composition of the layer beneath it, which includes varying sizes of text. It interrupts the monotonous narrative progression of the video and invades the screen in immediate moments. There is a resemblance to Merzbow's approach of silencing the noise with noise. Moreover, it renounces the dynamic, even chaotic nature of the futurist typography. By invading the screen and intervening the scenes, it manifests an anarchic nature similar to the

Reid's typographic examples. It appears as a collage, with a different visual language and displays a different nature from the other visual elements. Both the text with *Glint* typeface and the processed video are deconstructed through digital treatment. Thus, the video suggests multiple layers of meaning, that will be extracted by the viewer.

The *Glint* video also mimics the major aspects of the sound works that map the basics of the glitch music and the post-digital movement in Cascone's sense. First of all, the video merges fragments of sound pieces with digitally produced noise samples and glitch-like elements (these are designed elements and not spontaneously come into view, therefore, the video intends to imitate the forms of glitch in a wide spectrum). This is a characteristic approach of Kim Cascone's works in general and these shifting elements clearly disturb all the possible narratives. As it is valid both for Merzbow and Kim Cascone, the video distorts, cuts, and reverb all recognizable sounds. The *Glint* video constantly comes to an abstract state in a tidal way, which is also another attribution that could be found in the works of Edgard Varèse, Merzbow and Kim Cascone. By replicating Kim Cascone's structure of processing pieces, The *Glint* video also gives a noticeable emphasis to immediate cuts, pulses, and micro-sound noises. The usage of the digitally produced elements with hidden analog interventions overlaps with Merzbow's intention to bring these two worlds –analog and digitally produced objects/devices/tools together. The video also tries to apply Edgard Varèse's attempt to connect spatial and



architectural elements with sound by connecting the structure of the typographic elements, which address the architectural terminology, with the sonic aspects. Finally, while individual elements are entitled to form their individual spaces, they are also becoming the subject for crowded scenes with juxtapositions. Both the audial and visual glitch-alikes are signatures of the media used, they act as the reminders of the very technology that is used. Hence, all the intentions of breaking the system and deconstructing the layers reinforce the system and put forward and recalls the existence digital media.

Digital culture, with its new semantics and new art forms and creative narratives, actualizes what the avant-garde artists were trying to achieve (to bring art and daily life together by blurring the boundaries and to revolutionize the forms of expressions). Glitch aesthetics is located at the edge of Modernism. It has strong associations with the avant-garde movements. Digital culture is at the centre of this transformation, that locates cultural and societal organizations by blurring the boundaries between the private and public domains. As Jack Burnham stated, “[t]he survival strategy of all social organizations, including the art system, is that of transforming the preferred information into values” (1969, p. 50) In this sense, glitch as an aesthetic form is located in this cultural realm. The system is capable of reproducing itself through politic. artistic and cultural inputs by transferring the resistances manifested through

techniques, methods and tools into styles and trends. We are all experiencing digital culture, via all digital media we use as part of daily lives.

The revealed association between the production and consumption of digital typography and contemporary sound design suggests that there is an emerging pattern in these works. The logic of operation of this system can be traced in the production and consumption of products in the society. These processes seemingly promise a democratized, free, non-hierarchical, equal societies, however, they create spaces, where the ideologies operate flawless and every act of people are documented, recorded and even predicted. The more we try to resist, the more we are trapped in it.

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