Rethinking The Paper Poster In The Digital Era
Abstract

The focus of this thesis is on the shifting position of the poster, acknowledging the fact that the contemporary media landscape has been greatly disrupted by digital medium. Popularity of the digital screen on public surfaces or as personal device displays raises the question of whether or not the paper poster is dead. Although the interest of this thesis does not focus on the digital counterpart of the paper poster, it investigates beyond the conventional perception of the paper poster and explores the idea “What can poster be, if not a poster?” The author of this thesis explores what follows when the paper poster loses its significant position of informing and advertising. The research was conducted by two main methods: practice-based research and qualitative interview. Consequently, this thesis offers new insights into what poster art can be in the 21st century.

As a response to these issues, the author produced an artwork that simultaneously pays homage to printed poster art, as well as presents it as a refashioned new medium—paper electronics. The artwork consists of a small installation of a paper electronics poster that produces sound when connected to a media player with an audio cable. Electronics are applied to a paper poster, which are intended for visitors at the exhibition space to interact with. The artwork is described in detail, analysed, documented, and situated within the field of new media art. The author also presents the challenges that need to be overcome in order to establish an equilibrium between the aesthetic attributes, the paper’s characteristics, the expressive circuits, the technical properties of the paper speaker, and the viewer’s interaction. Therefore, this thesis is devoted to presenting a personal artistic experiment as a reflection that resonates with the shift presently occurring within the context of contemporary media.

Keywords  paper poster is dead, new media art, interactivity, paper electronics, remediation
This Is Not A “Poster, Only Better”: Rethinking The Paper Poster In The Digital Era

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1 Introduction

This thesis is an outcome and reflection of my master’s studies, where I reached beyond my major study of Visual Communication Design to explore the New Media program. Therefore, my thesis presents relevant topics from the aforementioned areas. However, this work is more importantly a self-reflection of my own practice through my personal experience and thoughts regarding a constantly-shifting context.

New knowledge and skills sparked a desire in me to reconsider my own practice. As a response to this, I produced a personal work which is described, analyzed, and situated within the context of a larger discussion (detailed in the second part of this thesis). I begin the chapter (‘About My Work’) by presenting my background and values in order to provide the reader a better understanding of my motivation for producing work of a personal nature. This resulting work was a small interactive installation specifically created for the exhibition Graduation Show in Seoul, with a given topic. However, the artwork evolved beyond the initial theme into introspective stand-alone work. Although the work started as mockery of my own profession—a graphic designer glorifying the poster design—the thesis’s topic progressed, becoming a contemplation of the question “What happens if paper poster is perceived dead?” Answering this question followed with
the another question “What can a poster be, if it is not a poster?” Therefore, thesis provides both theoretical and personal background and motivation for investigating beyond the conventional perception of the poster and to explore the idea poster, that is not a poster.

As the final artistic piece, I present a work which uses paper as the foundation for applying electronics circuits. When the work is exhibited in an exhibition space, a viewer can interact with it and, as a result of interaction, produce sounds through the poster’s electronics.

Although the work is a personal artistic experiment, it does resonate with the larger conversation concerning posters and new media in contemporary media culture. I expand on the topics of the poster today and new media art in the literature review chapter. The first section of the literature review presents the significant features of the poster, as described by historical and contemporary artists, designers and scholars. More importantly, it describes the poster in the present moment. According to 2016 Warsaw Poster Biennale¹ entitled The Poster Remediated, the poster is going through a process of remediation, as the paper poster is being influenced by the ubiquitous digital screen. The opening of the second section serves as a nexus by presenting the theory of remediation, whereby new mediums appropriate old mediums.

The second section focuses on new media and interactivity in order to explore beyond graphic design and to introduce design concepts that are not familiar to the classical paper poster. The purpose of these sections is to present the framework for analyzing my own work.

¹ Warsaw Poster Biennale is the world’s largest and most prestigious event dedicated to poster art and in 2016 it marked 50 years of its existence.

My research is positioned within the contemporary media landscape, which has been greatly disrupted by digital medium. Consequently, this change has affected the printed poster and refashioned its form into a digital medium, present in both the public space and online. This shift could be interpreted as the paper poster now being redundant: the poster is dead. However, as it will be described in details later on in this thesis, I do not necessarily believe this to be the case. Furthermore, my artwork responds to this, paying homage to printed poster art and presenting it as a refashioned medium—paper electronics. Rather than the theoretical research, the main purpose of this thesis is a reflection of this practice, providing insight into my personal exploration within design and art practice. My personal work and literature review intertwine as I ponder the past and the future of the poster form.

To conduct my research, I selected two main methods: practice-based research and qualitative interview. The former, as described by Linda Candy [1], is a research in which “a creative artefact is the basis of the contribution to knowledge.” I created a personal artwork that I reflect on extensively.
The subsequent practice-based research followed, “highlight[ing] the crucial interrelationship that exists between theory and practice.” What followed was the personal interview based on the method proposed by Delbert C. Miller and Neil J. Salkind [2], in which I elaborate a detailed schedule with open and closed questions. The interview was conducted with a creative duo: practitioners Nadine Nakanishi and Nick Butcher (known as Sonnenzimmer) on November 25th, 2016. The main goal was to introduce and emphasize new viewpoints and professional insights concerning my literature review. Overall the research of this thesis is personally motivated, which, according to Estelle Barrett [3], creates “personally-situated knowledge”.

Through the building and presentation of the series of interactive paper electronic works, the possibility of rethinking the poster as an art form in digital era can become plausible. The poster is an outcome of available technology, and as such the paper medium too can follow the shift from analogue to electronic realm. The thesis is devoted to investigating of the relationship between poster format and technology, focusing on the present moment. Although digital technology is prevalent, the scope of my work does not include the concept of the digital poster. This also resonates in my final piece, as is not a digital poster, but rather a paper-based work that expands on conventional possibilities via available technologies.

To summarize, this thesis is written in order to present and support my personal work and values. Therefore, the thesis research has been conducted as a means of linking my personal experience and thoughts to a constantly-shifting context. Because I am presenting an artwork, I believe that subjective narrative is a necessity. Therefore, this research does not include various aspects to justify the objectivity required for the theoretical research. The significance of this thesis is my personal storyline, placed within the contemporary discussion of re-casting an old medium and finding it a new context.

How to read this thesis:

about using term ‘poster’:
It is difficult to provide a clear definition of where the concept of the poster begins and ends, as well is precisely what can and cannot be considered a poster, especially since the aim of this thesis is to reach beyond the fixed viewpoint of the current medium. At the beginning of the literature review, a poster is presented as a visual entity that communicates a temporal message. Throughout this thesis, the term ‘poster’ is mainly considered in this manner. However, this thesis also includes posters that do not follow the straightforward conventions, examples of which are mainly presented at the end of the first section of the literature review. Additionally, I sometimes
refer to my work as a poster, although it does not fit definition of a poster as “a communicative two-dimensional rendering of a temporal message with a goal of advertising” [4] and is by nature more ambiguous.

**terms:**
This thesis does not distinguish between expressions: graphic design, visual communications, visual communication design, and graphic arts.

I am aware of both the subtle and obvious differences between areas of new media art (such as digital media art versus interactive art). However, in this thesis I will use the general term of “new media art” to encompass these fields for the ease of the reader.

**medium:**
This work defines the term ‘medium’ as a “mode or a system of communication that extends our ability to exchange meaning.” Drawing, typography, film, photography, and networked digital communication are all media that have features that are dependent on how they are produced, reproduced, and distributed [5].

**media:**
plural form of ‘medium’.

**use of images:**
This thesis only contains images that present my work. This decision is based on three reasons. Firstly, all images of the works I refer to are widely accessible; in the case that a reader should desire to see and read more, there is a footnote including detailed information and the correct source. Secondly, most examples are in format of videos, and adding still images as part of this written thesis proved inadequate. Thirdly, I desire to keep the focus on my personal work.

The aim of the photos is to give an overall view of the process and to present the final outcomes and not as technical documentation.
2 Literature Review

In the second part of the 20th century, a considerable amount of literature has been published on the topic of poster design. These sources usually investigate the history of the poster, significant designers, visual language, and techniques used in poster making. The author of Graphic Design: A Concise History, Richard Hollis supports this by claiming that the simplest way to approach the discussion of graphic design is to address individual graphic artefacts from a specific time in history [6]. For the purpose of forming a consistent literature review, I also included these types of resources. However, the aspects supported by these resources are not the dominant interest of my master’s thesis: central to my main topic are recent publications, exhibition catalogs, and online sources established by respected and relevant magazines and/or authors. This choice reflects the desired timeframe, which investigates significant current discussions in graphic design. Due to this decision, I also conducted an interview with established practitioners Sonnenzimmer, a creative duo from Chicago who primarily express their visual ideology as commissioned screen-printed posters (though their body of work also includes interdisciplinary projects from art installations to music).

This chapter is divided into three sections. I begin with investigating poster from two different perspectives: the designer’s, and the scholar’s. Next, I elaborate on the issue of the poster’s current situation and its relation to the expression ‘the poster is dead’. Taking into consideration that printed posters are gradually disappearing from advertising in public space, I present a few examples of onscreen poster applications that have ‘killed’ the printed version. Since the interest of the thesis is more focused on artistic posters, this chapter also addresses the ‘death’ of the poster as an art form. Finally, I end the chapter with a discussion and examples of the alternative options imaginable within the field of poster creation.
2.1 Understanding the Poster

One of the oldest books I have come across on the topic of the poster is *Making a Poster*, which was written in 1938 by graphic designer Austin Cooper. It serves as a handbook on how to design a poster. His explanation of the poster is:

The poster is chosen to serve as a reminder, a stimulus, a missionary; as propaganda in pictorial form. It must be fashioned in a manner that will readily attract, or compel, attention. Having successfully caught the eye, it must then deliver its message with equal success—swiftly, succinctly, effectually—and with possible conviction, weight and persuasion.

Cooper clearly understood the poster as a medium to transfer a message and attract the viewer's eye.

In 1966, Italian designer and author Bruno Munari wrote the book *Design as Art*, in which he describes his perception of poster. This source is rooted in design practice and is still often referred to. He explains that a poster “must jump out at you, surprise you, capture your attention by an act of banditry” [9]. Additionally, to achieve an attraction-grabbing design, he believes that a poster must differ from others, done so by experimenting with unusual colors and forms. He argues there is one basic type of poster that is by far the most visually persuasive: an arrangement of “a red disc on a white background” [9]. He ascribes its effectiveness as a preferred poster composition due to the isolation of a striking color of a circle on a white background, since the circular shape is a form that draws in viewer's focus and does not allow it to escape. In contrast, the white background ensures no visual connections to other posters.

Moreover, he argues, is another important point to consider: “Posters are usually designed as single entities, enclosed within their particular dimensions, and then pasted up on walls and hoardings three or four together and sometimes more” [9]. According to Munari, a poster is designed as a visual entity, but should be combined with other reproductions of the same design to amplify its presence in space.

Milton Glaser, master of memorable poster designs in the second half of the 20th century, is still active in this field. Today, he describes poster as an assignment given to him by “an agency or by institution to convey information about an event or an attitude” [10]. At the same time, Glaser describes that poster-making entails working on a large surface, a surface that is significantly bigger than other formats within the graphic design field. In his opinion, a good poster is the one that contains memorability, reconciling the issues of clarity, ambiguity, and mystery simultaneously on a large surface [10] and a poster format allows him to explore “alternative visual and philosophical possibilities” [11]. Also concerning the memorability of a poster as emotional impact on audience, authors of the book *New Poster Art* agree that besides the transfer of information, the most appropriate criteria for judging the effectiveness of a poster’s design should be its emotional impact [12]. Therefore, the poster is considered as “a medium that can inspire, overwhelm and inform the public” and that “paper, letters, images, photographs and color form a unity. Feelings and emotions. Unexpected similarities and contrasts” [12].

Sonnenzimmer states that the “poster is a communicative two-dimensional rendering
of a temporal message with a goal of advertising” [4]. Nadine Nakanishi of Sonnenzimmer continues:

As a graphic artist, the poster is a discipline that combines typography, illustration, photography, aesthetics, your own form of language. Thus there are so many friction points in there that open up more space to explore. For me it’s the master discipline of the graphic arts. The poster is a moving canvas that is very democratic and international, I feel deeply connected to that” [4]. Nick Butcher adds that the poster allows him to be an immediate part of culture: “To make a graphic statement in the now, that is meant for now, that should speak about the current state of the world, I love that. It’s a way of partaking and conversing with everybody” [13].

The above-mentioned views focus on message transference, striking visuals, visual language, emotional impact, and the methods of expression. Nevertheless, by shifting a review from designers’ views of their own practice to more theory-based publications, few other aspects are taken into consideration when discussing the poster [14], such as “social circumstances in which the works are produced, the prevailing aesthetic and stylistic influences, and the means and techniques of their production” [6]. Based on these points, this chapter briefly presents three possible approaches to analyzing a poster: **subject matter**, **visual language**, and **technological factors**.

Visual communication establishes “meaningful representations in a specific context” [5] that respond to society at a particular time in history. Consequently, we can detect the ideas that a poster advocates or advertises at a certain time and place in history based on the image- and text it contains [14]. For example, there are studies that examine war propaganda poster and compare them to prevalent ideas of ideology and how these ideas differ, depending on who ordered the poster’s production [7, 14].

In reference to the second approach of **visual language**, I will refer to an exhibition in Cooper-Hewitt museum and resulting book, both created by Ellen Lupton under the title *How Posters Work*. Graphic designers use visual language (form, color, image), as well as text to explore simplicity and complexity, uniformity and profundity, and moments and narratives on the surface of the poster [15]. Lupton divided the exhibition into the following sections: *Focus the Eye, Overwhelm the Eye, Use Text As Image, Overlap, Assault the Surface, Cut and Paste, Simplify, Tell A Story, Amplify, Say Two Things at Once, Communicate with Scale, Exploit the Diagonal, Make a System* and lastly, *Make Eye Contact* [15]. She used these descriptions to categorize the posters depending on the visuals shown.

The world of poster is tightly linked to **technology**, first and foremost as techniques of print and tools of production. Designers use different tools and techniques to create the visual language of a poster, which can influence visual output, both consciously or unconsciously. Meredith Davis [5] claims that people assign certain attributes to paper and printing technique, and that the quality of the surface has attached meaning. Secondly, technological affordance addresses the issue of “[t]he technology by which visual message is created, produced, reproduced and distributed defines more than their material nature” [5]. Different printing techniques also influence
the possibilities of the quantity and quality of production. Today, print technology has a level of affordance that demands certain qualifications and resources to reproduce content by print, whereas the internet does not have the same affordance and its main purpose is to disseminate a message in a much shorter time [5]. The technology used also influences the format itself. Therefore, we no longer discuss the format of print alone, but also the format of display. We experienced this shift from paper to screen, a shift which has influenced the poster drastically. Nevertheless, a change of format can be influenced by technology that is neither tightly connected to printing nor digital display: for example, the vertical portrait poster medium has morphed into a landscape frame as viewers have shifted from pedestrians to drivers [16]. The rise of so-called billboards appeared when the viewer had to see it from a moving vehicle [16]. Other examples include repeated posters put on a wall in sequence, which can achieve a hypnotic effect as a viewer is in motion on an escalator or metro [16]. A bond between technology and format is also appraised later on in the literature review and thesis development.

2.2 The Poster is Dead
In recent years, the expression ‘posters are dead’ [14,17,18,19] has become popular, as it reflects the rise of electronic devices from the 60s onward. Although it is clear that printed posters have been affected by the shift in digital era, it is hard to claim that printed poster is dead. During the 2016 Warsaw Poster Biennale under the name The Poster Remediated, its chairman David Crowley responded to the question of whether or not printed posters are dead with “posters aren’t dead, they’re just off the wall” [18] and suggested that we need to pause and take a step back to examine the state of the poster. He believes that poster is not dead, because the form of the poster is still present. As a matter of fact, it is going through the process of remediation⁴, observable as fewer posters are printed and more posters are distributed to us on a small smartphone device or animated on subway screen [18]. Crowley is certain that posters are not dead as a form, but that the printed poster has been refashioned by ubiquitous digital screens [18]. The possible death and simultaneous remediation of the poster can be explained in many different ways.

I will present a few examples of digital era, which demonstrate how the poster form is navigating through itself through the digital realm. One of these is the static digital poster, which is a poster form that exists in digital form and can be physically made and transformed to digital medium for the purpose of distribution. Since many posters are made by using digital tools and then printed, they exist in both forms. Today, most of the promotion campaigns have two entities [13], the printed version and the web version, and position of the printed poster is to affirm the digital realm [4]. Therefore, the same poster is used for totally different platforms and is not as bound to the medium. Nakanishi adds that the crucial point to understand is “that analog and digital realms inform each other, but at the same time they exist in their own realms simultaneously” [4]. Hence, a paper poster should take advantage of the print, and similarly, a digital poster should adopt features of the digital realm, such as motion graphics or interactive elements.

4 Remediation is a process of refashioning old medium in new medium [remediation]. Warsaw Poster Biennale focused on ways how printed posters is remediated on television, cinema screens and Internet. Theory behind the remediation is explained in second part of literature review.
Digital posters are also present on public surfaces where passersby trigger an **interactive screen**, animating its content when it recognizes an individual or starting a verbal communication with its viewer. For example, a campaign by a non-profit organization tried to raise money for education of girls in third-world countries. This advertisement appeared only to female viewers to demonstrate what it means, if basic choices are taken away based on one’s sex⁵. These screens are based on visual recognition and visual analysis technology to create a personalized message. This kind of technology is also finding its way into the poster medium as an artificial intelligence-driven poster or augmented reality poster. One particular advertising agency designed a fake coffee product and designed many initial variations of different posters to promote the product⁶. They claim that they invented an artificially intelligent poster that evolves and generates new, unique ads based on how much attention poster composition attracts the public eye. Augmented reality posters expand on the paper medium when users view printed poster with the help of a smart device; the user has to download an application that was created for the purpose of transcending certain printed design. While viewing the poster in reality, a viewer can see many augmented layers of visuals on a screen of your smart device. Sometimes sound design is also used. For example, the NO AD app is a collaborative project that fights against numerous advertisements in the New York subway system, transforming billboard advertisements into art pieces on the screen of a smart device⁷.

The following conclusion can be drawn from the presented poster examples: technology has expanded the limits of the conventional poster into many different fields, and many different explorations of technological potentials are arising. However, so-called **new media posters** [16] are still more or less an exception. The examples chosen present a wealth of possibilities; they serve as a reference to investigate the reaction of the graphic design field to these transformed posters.

My research revealed that many various types of posters appeared, along with many corresponding names and definitions. In the book *New Poster Art*, Cees W. De Jong states that the printed poster is not dead, but rather explains that the ‘printed poster’ is just developing alongside the ‘new media poster’, and that they are not interchangeable [12]. From Jong’s words, I can posit that the aforementioned new media posters should not be considered as posters and that the term ‘poster’ is mistakenly used in the absence of a more appropriate alternative. Nakanishi offers her view on the shift of both the poster as medium and its related term:

> Posters today refer more to the area of activity, whereas messaging or advertisement was illustrated on a piece of paper. As posters are freed from their original function perhaps it would benefit to add a new definition to the original etymology. [4]

A rise of onscreen posters has contributed to the reevaluation of the poster form, and as Crowley states, we should not be “frightened of the rise of the digital screen” but rather “embrace the digital era, as an age of prosperity for the remediated poster” [18]. He foresees an uncertain future for “the classical idea of the format—a print on paper which is pasted up on the walls or billboards of our towns and cities.”
Though his claim might leave us feeling uncertain about the future of the printed poster, he adds that this familiar format is not the most fascinating nor the most significant form of the poster today. The ‘death’ of the poster can therefore be interpreted as the death of printed poster, though the idea of the poster will live on and flourish in the digital realm. Contrary to Crowley, Butcher argues that poster is not dead, and that printed poster remains unchanged. Due to low printing cost and high accessibility, the printed poster still has a strong physical presence. As long this is true there will be a poster culture.

In our digital era, advertising has moved from the streets to online. Additionally, this corresponding factor explains why some consider the poster ‘dead’. A world of visual communication is growing; therefore, new emerging methods are becoming more significant and powerful. As a consequence, the poster has lost prestige role as a singular visual entity. The poster is now a subsidiary medium in the digital realm, since digital format fulfils main aspects of advertising campaigns. As a result, “the poster has lost its central significance or singularity.”

Another aspect of the ‘death of the poster’ needs to be investigated in this thesis: namely, the artistic merit of the poster, which is located in the ambiguous area between art and design. In his article entitled The end of an art form? the great graphic designer Timor Kalman states that “[b]efore, posters used to sell things artfully; now they attempt to sell things scientifically.” In 1991, Kalman raised concerns that public spaces were being filled with big adds and barely resembling the poster form. He blamed advertising for ‘killing’ the art form of the poster. He claims that in marketing-driven countries such as the USA, the artful poster is predominantly a notion of the past. Clients who order posters are interested in promoting and selling a product, and that although the aim of the poster was always to promote, the way in which products were promoted has changed from artful to systematic.

A review of the book, Very Graphic: Polish Designers of the 20th Century, also supports this idea and offers an explanation of posters selling things artfully versus systematically. Polish posters have been well known for their rich history and exceptional art form. These posters were produced long before graphic design was established in Poland. At that time, the country’s economy was in such a sad state that products were sold very cheaply. Counterintuitively, this resulted in poster artists being able to design in a manner and style they enjoyed, since they were not pressured from marketing department to actually sell anything. In comparison, an American movie company would expect a graphic designer to design a film poster that showed the leading actors’ faces; however, Polish designers were not pressured with this systematic approach. What resulted were exceptionally artistic interpretations of a movie. This demonstrates what can occur when the poster is unleashed from predominate ideas of systematic advertising, pushing the limits of its practice and following artistic merit: it then becomes an art poster. Art posters implicitly advertise a subject, thus a poster as artwork does not consider its purpose directly. However, this does not mean that an art poster is not made for a client’s needs of promotion, but rather is connected to
its designer having conceptual and aesthetic freedom [23].

To summarize, the process of remediation has led the conventional form of the poster to experience a rapid transformation in an age of the influence of ubiquitous digital screens. The digital era has brought many changes into the poster world, and traditional forms have had their difficulties in coping with these changes, from designing posters for the internet through the exploitation of technological affordance to categorizing and providing terminology. These difficulties and the overflow of digital posters have led the majority of the graphic design field to believe that printed poster as we know it as defunct, or ‘dead’. Posters primarily handle the role of advertising, and since advertisement moved online, Stefan Sagmeister argues that the printed poster “utility as far as [a] medium of proper promotion or advertising is extremely compromised” [19]. He continues by stating that posters are still present due to designers who still love to make them—essentially a creation of nostalgia. Butcher agrees that “[n]ostalgia plays important roll in poster art” [13]. Butcher proposes that at present, posters often don’t serve their traditional role: [They] don’t work as traditional posters, as advertisements. They are a nostalgic idea of what poster used to be; hence they are used as a souvenir. These posters don’t end up on streets and fight for someone’s idea; they end up in someone’s home as a memento. [13]

From this viewpoint, one can assume that the printed poster will not be forgotten soon. Furthermore, by listening to Crowley’s words of embracing the omnipresent age of screens and exploring the possibility of technology, remediating printed poster art into the digital format may be an inevitability.

2.3 Posters, But Not a Poster
One of the goals of this thesis is to find out how technology and the essence of posters work together. Therefore, I presented examples that established a shift of the paper poster to the screen. However, this section attempts to step back from the digital poster and focus on its printed counterpart. I present various poster forms that express the essence of posters in an original and imaginative way. These study cases are by artists that remEDIATE posters as art, as well as a critical commentary to our media culture [18]. To provide a vast range of standpoints, I also chose an example from a fiction book that was inspired by the poster format and addresses political issues. I finish the chapter with my work of a paper poster combined with electronic components, presenting interactivity in a form without screens. The aim of this section is to go beyond conventional perception by exploring the question “What can a poster be, if it is not a poster?”

My first example is by the French director Georges Melies, often referred to as ‘the first screen artist’. In 1906, Melies made a short film entitled Les Afiches en Goguette (translation: The Hilarious Posters). The plot behind the three-minute film is based on a wall full of advertising posters. The characters first depicted in these posters come to life and interact both with each other and the pedestrians that pass by. This is visionary work because it conceptualizes a future of animated and interactive posters, a concept which only now—a century later—is being put into practice. As this fact is not already impressive enough,
Melies presented his film just few years after the first posters appeared[2] on the streets of France.

My second example is the role of the poster in the dystopian novel 1984 by George Orwell, addressing the topic of totalitarian regimes and society ruled by surveillance. In the novel, the phrase “Big Brother is watching you” refers to the surveillance of the citizens by Big Brother. However, no one really knows who Big Brother is, society only knows Big Brother as a male face printed on the poster. In the book, Orwell describes this poster:

On each landing, opposite the lift-shaft, the poster with the enormous face gazed from the wall. It was one of those pictures which are so contrived that the eyes follow you about when you move. BIG BROTHER IS WATCHING YOU, the caption beneath it ran. [24]

As the story develops, the presence of Big Brother in poster form develops and appears on screen, but the story never reveals if Big Brother actually exists as person. Orwell got the idea for the novel from a real situation, and even the ubiquity of the Big Brother posters had its precursor [25]. Orwell’s printed poster is remediated as an on-screen poster to amplify its political message. Why this poster is particularly fascinating is due to the shifting perception of who is watching whom. Literature reviews discussed that passersby are the ones who are viewing the poster and not reverse. Exactly this notion is presented in 1984, where the poster is ‘watching’ a public, what is only now becoming a reality.

I will now discuss a contemporary example. Vermibus, an activist artist who removes existing advertisement posters, repaints images in a manner resembling the gesture of painting and returns them to the public space [26]. Posters gain new aesthetic values, while addressing a very narrow conception of beauty in the world [26]. He states that his work is not so much about the message, but about the medium, space, and the people that interact with his work. The NO-AD app (mentioned already in a previous chapter) is one of Vermibus’s works, a project that also aims to achieve awareness of the space itself without assigning a new message or meaning [26]. Another artist, Jordan Seiler, also works closely with outdoor advertisements, using the approach of redesigning public space [27]. He covers advertisements with simple but visually appealing patterns or blank images as a critique to the social aspects of the advertising impact. Seiler believes that public space belongs to the people, and advocates the democratic use of it. Therefore, he does not question the poster form, but rather questions what posters represent in a public space [27].

The following poster examples I present still use paper as a medium, but also represent more interactive cases from the field. Firstly, Kate Stone in her TED talk (in 2013) explains how she as a scientist became interested in more creative work, which was her starting point for creating typical printing presses to manufacture interactive electronics, such as touch-sensitive ink technology and printed circuits. She presented a simple poster with an image of drums, which was connected to her smart device. Every time she touched the image, she triggered a sound from her smart device. Her company currently produces unique and cost-effective posters that are also placed on public surfaces. The experimental design studio Trapped in Suburbia⁹ produces similar works, but presents these works in
galleries as opposed to the public realm. In addition to posters that include touch-sensitive ink technology with sound output, Trapped in Suburbia's posters also have small motors attached to them to achieve motion. They frame their work as traditional graphic design combined with new technologies, and often focus on poster design. They claim that their work does not function as a presentation of ideas, but as embodiment of ideas. While investigating the field, more examples were found combining the poster as medium with added electronics. Such example is the L-INK poster, a cross between a poster and a lamp. On the paper—shaped in the usual format of a poster—conductive ink trails and LEDs have been added to both produce the feel of a poster design and achieve illumination¹⁰.

In conclusion, these examples portray the poster as a less of a conventional form and investigate the more conceptual dimensions of what a poster can be. Authors of these works address their creations as posters; however, based on definitions from the first part of the review someone may argue that the presented cases are not posters.

As elaborated in the first section, the digital era has disrupted the field of graphic design; therefore, designers are adjusting their work for digital needs and experimenting with many different formats. Additionally, the field is struggling with defining newly emerging poster formats. Therefore, the graphic design field requires a wider understanding and awareness of new tendencies in the field of media. Exploring fields beyond graphic design has been the most important aspect of my personal exploration during my master's studies.

I chose to focus the second section of my thesis on the understanding of new media, mainly because I believe that the new media field would situate and help me to analyze my personal work better than the field of graphic design. The aim of this literature review is not to define new media and interactivity, but to provide a framework that will later serve to assist the analysis of my work. I will therefore present frameworks and ideas, not a discussion. The purpose of this review is to shape and define new media in the context of this thesis, not to review contrasting ideas. For the needs of my thesis, I narrowed down the range of topics in new media to just a few; the new media chapter presents the new media field in the scope of artistic endeavors that
emphasize the relation between medium and artistic work. Furthermore, it presents the role of technology in relation to new media artworks. I also present and discuss the concept of interactivity, due to its significant position in new media and its presence in my work. The literature also discuss interactivity in comparison to a communication model used in graphic design. The review continues by presenting relevant elements of interactivity in artwork.

I open the second section of the literature review by explaining a process called remediation. In the previous literature review, I mentioned some examples whereby the printed poster medium reaffirmed its position within our culture as digital medium. In this section I will recontextualize these changes through introducing the theory behind remediation, and using it as a bridge between the conventional printed media of graphic design and contemporary media artwork. The concept of remediation is explained with the key publication by Jay Bolter and Richard Grusin’s *Remediation Understanding New Media*. I base my entire review on their book since it is their term I am using.

2.4 Remediation

*Remediation Understanding New Media* was written almost two decades ago, and it is little wonder that the term¹¹ surfaced in the last decade of the twentieth century due to ubiquitous digital media. However, the authors explain that remediation is not a new phenomenon—the same process has been present in Western visual representation¹² for last few centuries. For example [28], they compare an inner space of a cathedral between three mediums: a painting from the seventeenth-century, a photograph few centuries later, and a virtual reality of the 1990s. All three outcomes try to place the viewer in the same space, while simultaneously attempting to deny the pre-existing medium and the act of mediation. In other words, the goal of virtual reality is to present the space better than painting and even better than photography [28].

Remediation in new media does exactly the same as its predecessors have done; new media wants to be perceived as a “refashioned and improved versions of other media” [28]. Remediation is a distinguishing feature of the new digital media, and authors argue that remediation is “the representation of one medium in another”, as new media reform or improve older media [28]. The improvement or refashioning of a medium depends on characteristics of the remediated medium. This improvement can be demonstrated in a number of ways, such as by becoming more lively, exciting, effective, immersive, or realistic. For example [28], a user in virtually reality experiences a world in a first-person perspective, which contributes to user’s immersion with virtual reality and makes the user forget that she/he is actually viewing graphic images, not reality. Another example is if we compare communication as the exchange of texts on screen, telephone calls, and videoconferences, the latter being perceived as the most effective way of communication among those mentioned [28]. Therefore, improvement in
remediation processes can be witnessed as new digital visual media “honor[s], rival[s], and revise[s]” old media, such as painting, photography, film, television, and print [28]. Additionally, the process of remediation not only influences new media, but also old media. While new media refashions older media, the older media transforms itself as a response to the challenges of new media [28]. For example, television is an old media that has refashioned itself to resemble the internet, which is a new media that remediates previous media in the first place [28]. Thus, the remediation process works in reciprocally. The authors address this as the double logic of remediation, which involves two important concepts of remediation—immediacy and hypermediacy. **Immediacy** is explained as a medium’s desire to erase itself, i.e. to be transparent. This aim is to make a medium transparent so that “user is no longer aware of confronting a medium, but instead stands in an immediate relationship to the contents of that medium” [28]. Taking this into account, transparent medium such as digital technologies always appear as being a remediated or improved version of old media. This is due to the attempted erasure of the old medium and denial of mediation. Due to novelty of a ‘new’ media, this new form inevitably requires a corresponding term. Paradoxically, a new media defines itself on the bases of the features of the media it attempts to erase and simultaneously tries to deny [28]. *Remedia-
tion* illustrates an example from the futuristic movie *Strange Days*, in which a character puts on a headset that provides an experience of the world in a continuous, first-person perspective. This device is called ‘the wire’ and the movie character claims, “[t]his is not like “TV-only-better”” [28]. This example shows that ‘the wire’ is not addressed as improved TV or having any connection with TV, but when it needs to be defined, then it confirms the comparison that is being denied. Opposite to immediacy is **hypermediacy** [28]. If immediacy relies on transparency, then hypermediacy relies on opacity. Therefore, hypermediacy want us to be aware of the medium or media, such as a photorealistic graphic that the viewer does not accept as real or possible. A manifestation of hypermediacy can be subtle or obvious, however, the authors state that awareness of the medium causes a desire for transparent immediacy in the viewer [28]. The result is a paradox: hypermediacy striving for immediacy [28].

Above all else, remediation in new digital media is **a balance between immediacy and hypermediacy**, since neither total immediacy nor total hypermediacy is possible [28]. As immediacy cannot erase traces of prior media, hypermediacy cannot or does not desire to erase the impression of the medium [28]. For instance, live news coverage and sporting events are good examples of immediacy [28]. Since live reports shown on television are shot in an energetic manner, the viewer feels as though they are a part of the scene, and the television gives the viewer an authentic experience of the reported event. At the same time, a layer of hypermediacy is present on the screen in the form of report graphics and titles, or the running text commonly found at the bottom of the screen during live news, which give viewers additional information about the event or further information (such as websites) [28].

It would seem that “all mediation is remediation” [28]. Rather than claiming this as a
truth, the authors explain it as reaching an “extended historical moment” and that all current media function as mediators [28]. There are three ways of approaching this argument, but for the purpose of this thesis I present only the following: “[r]emediation as the inseparability of mediation and reality” [28]. Modern art is used to explain the reality of mediation, since it played a key role in this process [28]. In many cases, the essence of modern painting is not to represent an external world but to underline the reality of the act of painting and its product. Therefore, modern art is grasped as authentic, precisely because it denies the representational function of painting in the traditional sense. This characteristic of modernist painting supports the need to distinguish mediation and remediation from representation. By separating ‘the real’ and ‘the representational’, modern painting “achieves immediacy not by denying its mediation but by acknowledging it” [28].

2.5 New Media

Margot Lovejoy, a digital artist and historian of art and technology, presents a framework that describes new media work as a relationship between the artistic work and the medium. She categorizes three groups: the first group are comprised of “artists who use new media as a medium, creating work that is produced and presented by means of new media and makes use of the medium’s characteristics”; the second group are “artists who use new media as a tool for the production of more traditional art forms;” and the third group are “highly collaborative collective groups who use a wide range of forms and media—such as video, performance, robotics, and internet capability—to create interdisciplinary forms” [29].

Even though distinguishing and categorizing work of art by use of a medium can be helpful for research, it can be also dangerous to set up predefined boundaries for the understanding and interpretation of a work of art [29]. Therefore, regardless of the medium, the aim of the art stays the same—to make a statement in a unique way that is possible only as an outcome of a creative process.

Within the vast field of new media work, technology plays different roles in an artists’ work. On one side are new media artists who consider their art as commentary on larger political, social, and spiritual values surrounding us, who perceive the exploration of their medium as subsidiary [29]. On other side are new media artists who produce their work in order to demonstrate the latest technologies, showcasing technical advancements. In the case of the latter, these artists focus their discussions on a particular medium rather than focusing on a concept [29]. These two groups are used to illustrate extremes, though in reality artist are balancing between medium and message in order to amplify the social, philosophical, and political issues of our time.

Artists whose productions engage “digital technologies as a medium” are usually surrounded and inspired by hybridized and collaborative environments [30]. Many media artists become researchers and scholars, and they “regard their art as a form of knowledge and see their primary goal to locate and represent meaningful aspects of this constantly shifting context” [30]. On this note, Vesna Victoria, an artist and professor, offers an interesting view of artists who work closely with technology. Often artists working with
technology are well informed, and even more importantly, inspired by innovations that take place in science [31]. Consequently, new media art practices that utilize digital technology are frequently embedded with references to science. To communicate and translate scientific innovations, artists often turn to contemporary philosophy; this puts artists in a position between science and the humanities [31]. According to Charles Percy Snow, artists are between two cultures, as they bridge the gap between the humanities and sciences [5]. However, this bridge actually has three points, since artists who utilize new technologies are the link in an active dialog between three sides. This bridge presents the idea of a third culture—a connection between art, science and technology [31]. Moreover, these artists are a nexus between two cultures due to the exceptional nature of art, which allows for both poetic and deliberated interpretations [31]. Nonetheless, danger may arise if artists do not confirm artistic interpretations of scientific data with the experts from the field [31]. Artists who counsel with scholars from a wide variety of disciplines can create an artwork that links and blends many worlds.

2.6 Interactivity

This chapter outlines modes of communication that are needed for the understanding of how ways of communication changed in the second half of the previous century. One aim of the thesis is to provide a framework for comparing the printed poster (i.e. a one-way communication) to interactive artwork (i.e. a two-way communication).

The one-way communication model¹⁴ consists of sender and receiver; the former is the origin of a transmitted message and the latter is the destination [33]. Information is transmitted along a channel, which is a medium for communication. In visual communication, such means for delivering the message are print, digital networks, and projections. This model has its origins in 1949 and is used to explain the 'theoretical basis for visual communication'; therefore, it is still relevant when explaining the communication method of the printed poster [5]. In other words, a poster communicates by sending the message one way, from sender to receiver over a channel in the presence of noise. The one-way communication model does not expect a response, which could contribute to a continuous exchange of information and does not address “the interpretive consequences of context” [5]. However, the Emmerat/Donaghy model¹⁵ of communication from 1981 acknowledges the role of context and feedback [34]. The two-way model includes two communicators, whereby the receiver has an influence on how the communication is constructed. The sender sends a message to the receiver, and the receiver becomes the sender and responds to the original sender [5]. Similar to the one-way communication model, the elements on which the two-way communication model are based are: source (or communicator), message, medium, and receiver (or audience) [5]. The source is the creator of the content that is produced for the active audience. The message which refers to the content is distributed through a channel (a medium). In more traditional media, the message is disseminated through single modality, such as text for print media or sound for radio. In comparison, modern interactive works feature more modalities within a single medium [35]. The receiver is the one that
responds to content of the message. (For the purpose of my thesis, I will be using viewer or audience.) The main difference is that the two-way model includes feedback, therefore making two-way communication a reciprocal process. A series of communication exchanges is the basis for understanding expression—interactivity [36].

There is a large spectrum of interactive works. Some works use point-and-click navigation, a form of interactivity used in a computer-based platform. There are large-scale installations that fully encourage and embrace participation [30]. The jury of Prix Ars Electronica in 2004 set three criteria for recognizing a broader definition of interactivity for the works in their Interactive Art category [37]. They are as follows: first, “mediation by computer is not a requirement”; second, “constraints of “real-time” and directness of interaction should be relaxed”; and third, “passive interaction” is accepted [37]. The third criteria raises the issue concerning the belief that interactive works need an active audience [37]. On one hand, passive participation can be a major concern and indicative of an identity crisis of the interactive work [37]. On the other hand, it represents the open-mindedness of art field, as well as acceptance of the artistic exploration of new interaction approaches that can deeply engage the audience. Following the idea of passive interactivity, “[a]ll arts can be considered interactive, if we consider viewing and interpreting a work of art as a kind of participation” [29]. It refers to an inner dialog that happens while viewing conventional artworks: the viewer is not a truly passive participator, but rather an active interpreter who engages with a work visually and mentally, albeit not bodily.

The artist is still the one who creates the work and invites viewers to create their own narratives or interpretations of the works. This is why interactive art needs a viewer to complete the work [38]. A congruence of factors emerged in the time of digital revolution that created the discourse of authorship and audience within interactivity in new media works. Questioning the role of art, artist, and audience was a tremendous change that appeared within the field of interactive art. Though the artist is still the main creator of the artwork in digital era, the loss of authorship control is a significant factor in most new media works, particularly in those that have a self-generating form or high degree of participation [29].

An important element of the interactive work is an interface, which serves as an encounter between artwork and viewer, and allows the viewer to dialog with the form [30]. An interface is a distinguishing feature of interactive works, “most often a screen for output and input and a few buttons” and offering the user necessary information [39]. An interface’s characteristics consist of different “logic, aesthetics, and dynamics” to represent a sufficient interface [39]. According to Lev Manovich, the combination of physical object and screen as an interface that carries information are quite frequently not combined in a satisfying manner; therefore, he refers to the interface as a “friendly alien” [39]. To achieve a better fusion of interface and interactive artefact would require going beyond traditional interfaces (such as text presented on flat and rectangular screen surface). There
is an emerging field of unconventional interfaces, which experiment with different shapes and materials of interfaces to produce shape-changing interface, transitive material, organic user interface, or by other non-traditional means [40, 41].

Another aspect of interactivity for artworks is how the interaction is set up, particularly applicable to new media artwork presented in an exhibition space. Firstly, presenting new media artwork in the exhibition context can be challenging, because new media art usually demands some sort of interaction that needs to be explained to the visitor. Often an artwork requires inviting the visitor to touch the work, whereas more conventional art forms exhibited in museum are forbidden to touch. This factor can sometimes be difficult to introduce to an audience unfamiliar with new media art. Another aspect entails the thorough planning of the steps of interactions, as well as how these are implemented. A visitor has to read instructions, understand, experiment, and learn how to handle “unique navigational metaphors” [42]. Moreover, as one of the visitors interacts with the artwork, others might observe her/him, therefore the experience of the work is not only orientated to the one who interacts with it but also to the ones who perceive the work through the interaction of the others [42].

Various manifestations of interactivity promote the awareness of gaining valuable insight of the artwork by engaging with it. However, it is important to understand that even though interactivity is an important aspect of the new media artworks, it does not mean that interactive artwork embodies meaning due to its interactivity [43]. Interactive artwork creates meaningfulness by means similar to traditional artwork—by engaging with a message that influences audience to change or affirm a view of the subject matter. Therefore, an exchange between artists, artworks, and audiences contributes to activation of an emotional response and understanding of the message, and not the action itself.

In conclusion, the artist creates an interactive work with the desire to obtain some form of collaboration that would provide an experience to and immerse audience in time and space, awakening new insights. The real challenge of the interactive artist is “how to elevate the medium or use it in a way that gives the user or the participants another point of view when everyone is interacting with familiar technological devices” [44]. The medium is a complex challenge, especially when taking in account a “complex contemporary societal condition” [44].
Diagram illustrates my work process for better understanding of different development and production stages of my artwork. Since I present personal work, I also illustrated a line that presents how certain moments connected to how the production of the piece influenced on my motivation and sanity.
3 About My Work

FROM IDEA TO EXHIBITION AND AFTERMATH

In the fall of 2015, I joined the Media Lab course titled Production Clinic led by producer Pipsa Asia-la, who formed and realized the idea of presenting a New Media Graduation Show in Seoul, South Korea. On one hand, the aim of exhibition was to promote Media Lab Helsinki in another country, and on the other hand, it was an opportunity to give students the experience of participating in an exhibition from the beginning. At the beginning of the school year the theme of the exhibition was given. From there, students had to conceptualize, design, build, and present their artworks. The Graduation Exhibition Show consisted of seven works representing different aspects of the theme and title When the Tiger Smoked a Pipe. This is the Korean equivalent of the phrase ‘once upon a time’, and it is a common opening sentence of Korean fairytales. The idea was to create works that would represent New Media through thoughtful interactive art and innovative technology.

This chapter is devoted to presenting my motivations, describing the created works, further tying the literature review to my work, and offering an overview of my working process. The first section focuses on the background of the work prepared for the Graduation Exhibition Show in Seoul, and provides insights prior to the show. Because this work is tightly linked to my personal motivations and thoughts, I begin the chapter by explaining the factors that led me to question my own practice, as well as the concept I desired to express through my final work. In the second section I present the work shown in Seoul, describing different elements such as setup, visuals, technical specifications, and audiences responses. I present this work in detail, because it greatly influenced further development of the work up to its current state. The aim of the third section is to situate my work within the subjects presented in the literature review. Additionally, I offer insight relating to how I approach my work critically. I then explain how further improvements were developed in the fourth section. The reader will note a change of the past tense used for describing the work in the second section to present tense used in subsequent sections, as the former description refers to the work presented in Korea, and present-tense framing of the work applies to the artwork that have been produced as a continuation of my initial work. There are few parts of my work that I felt critical of and therefore decided to produce new works for purpose of this thesis, presenting them as the final outcome. In addition to the explanation of the improvements, I reflect on my work process, including obstacles I had to overcome as well as high points of this new workflow (in comparison to my practice as graphic designer). During the writing of this thesis I was working on the final piece, which I showcase as a final artwork.
3.1 Background

My personal background

During the second year of my studies, I intended to expand my curriculum with a minor in New Media in order to challenge my skills and perceptions. After studying graphic design for several years, I somehow felt resentful toward the practice. There were multiple reasons that caused me to desire to express my creativity in a new manner. While observing the outcomes of New Media courses, in which students built prototypes, small devices, games, installations, and similar objects, I realized that I was missing out in tactile production and experimenting with new media. Reflecting back on my practice, I spent most of my time designing and finalizing my designs on the computer, which started to feel like a routine and systematic execution rather than a creative process. However, I should highlight that by no means I am saying that I do not feel passionate about the digital realm or graphic design. It was something in addition to this that I desired.

My professional and personal life intertwine design and art practice, therefore it is important for me that I enjoy my work to an extent. At the time, I felt as though I was having identity crisis as a graphic designer: even the program that I have been attending changed its name from Graphic Design to Visual Communication Design. I applied to gain one title, but will graduate with different title. Although these categories do not necessarily matter to me, the idea of a program’s need to change its name made me question and contemplate my role as a graphic designer.

Going back to the fall of 2015, I realized that I would soon finish my studies and made a decision to take advantage of my situation by learning something new. As a result, I registered for several New Media courses to gain knowledge. Of these courses, Production Clinic was by far the most engaging, challenging, and demanding concerning self-initiative.

Out of seven students, I was the only one who did not study in New Media and therefore I assumed my work would differ from the other works dramatically due to my background and skills. Consequently, I desired to emphasize my background as a graphic designer and express my pursuit for a reevaluated identity through this work in addition to the given theme.
**Concept development**

The aim of my artwork was to intertwine three aspects: my identity as a visual designer, my identity as a new media artist, and my interpretation of the exhibition’s theme. **As a visual designer**, I decided to express my feelings toward the practice as a self-mockery of my profession. Many of my other works include humor, cynicism, or self-mockery as an angle of perspective for viewing the subject matter that I wish to expose. I therefore used the same approach for this work, executed by mocking myself as a graphic designer and poster as the practice’s “ultimate” medium. These words underline my idea: “Hello, I am Maja and I am a graphic designer. I design posters and I hope someday I will save the world with a poster.”

Similarly to my interpretation but with a more serious voice, graphic designer Timor Kalman also saw a relationship between poster and designer:

> Virtually every graphic designer will tell you that, of all the media one would design, the poster is the project of choice. It’s perfect. It’s big. Words are not important; pictures tend to behave and allow themselves to be pushed about. And, best of all, it’s the type of project that goes down in design history. It’s how, and frequently why, the great designers in history are known. It’s about the simplest way you can explain graphic design to your parents: ‘I do posters’. [21]

My impression of his words is almost as he is saying, “I am a poster.”

In the literature review, I supported my stance that the poster had or still has an essential role in the graphic design world. Firstly, exploring the medium and creating a new visual expression is a core element of the graphic design practice. A designer creates a poster in an attempt to disrupt minds and emotions. Poster design presented itself a supreme discipline for graphic designer [13]. Furthermore, the poster is also considered as a “unique record of our social history” due to our constantly-changing society [16]. And although the poster may have lost its importance as main visual communication tool in public space, its position among designers and cultural institutions remains firmly anchored. The significance of the poster is demonstrated by numerous poster competitions, poster conferences, and museums dedicated only to posters; articles and books are still being published regularly on the topic. All of this reinforces the importance of the posters¹⁷. Secondly, as Kalman suggests, the poster is a go-to identifier that non-designers or those outside of the art field can recognize as belonging to the graphic designer. Toward the end of my research, I still felt that poster would be the right choice in presenting myself as graphic designer at the exhibition, also reinforcing my position regarding the current shift in graphic design. In addition, it allowed me to explore the medium and visual language between the practices of design and art.

Soon after, I started another course called Programming for Artists, taught by Matti Niinimäki. It was here that I gained basic knowledge concerning the principles of electronics, which sparked a huge wave of interest and determination in me. I familiarized myself with paper electronics¹⁸, which I found to be a perfect fit for my work. I started to read and research the small field of paper electronics, scrolling through various examples and tutorials. By listening and reading interviews
with artists and scholars from the new media field on this topic, a new layer of identity as a new media artist began to develop for me.

Another aspect I needed to develop at the time was my interpretation of our exhibit’s theme *When The Tiger Smoked A Pipe*. The opening line of Korean fairytales can open a door to a mystical and forgotten worlds, where heroes fight the impossible and magic is used to secure their victories. The seemingly impossible becomes possible, an idea that can challenge a reader to confront the impossible in their own lives. This resonated with me when it came to using technology in my work, and the notion of impossible was namely the impression that people form when paper produces sound. This is also where the name of the work—im.possible—derives from. Paper electronics are not part of current everyday life and the knowledge of how technology actually works is reserved mainly for professionals within the field. For example, the electronics inside a loudspeaker are fairly simple, but they are packed into a speaker casing and removed from our eyesight, trying to convince us that it is something out of our reach of understanding. Therefore, sound ‘coming out’ of paper seems impossible, and using paper electronics contributes to the magical outcome. Through implementing this project I wished to inspire visitors to rethink the technology around them.

### 3.2 Description of the im.possible

In this section I illustrate the technical specifications, setup (photo 1), and audiences’ reactions at the exhibition space in Seoul. The paper poster was mounted to a transparent frame and hung from the ceiling, onto which paper electronics were added to form a paper speaker. This was connected to a self-built amplifier hanging from the paper. On one side the amplifier was connected to a power supply, and on other side to a smart device using a headphone cable (3.5 mm audio cable). A small pillar standing next to the poster was the resting place for a super magnet (neodymium magnet), used by exhibition-goers to interact with the poster. A description of the work was displayed in both Korean and English, part of which were instructions on how to interact with the work. The instructions were placed next to the headphone cable, which was freely hanging on a hook glued to the pillar.

The instructions (photo 2) were presented as follows:
How to interact with the work: 1. Plug in your phone by using the cable; 2. Turn on volume and play a song on your phone; 3. Place the magnet on the paper in the middle of the spiral.

Elements used to produce the sound are: neodymium magnet, machine-cut copper coil, amplifier, power supply, wires, cables, and the electrical signal provided by the visitors’ device. The event of the sound coming from the paper begins as a song initiated by a smart device¹⁹. While the song is playing the signal travels to the amplifier, which then amplifies the signal. From there, the amplified electric signal goes into machine-cut coil (in my case, a thin vinyl-cut copper spiral), thus transforming the coil into a temporary electromagnet. As the fluctuating electrical current flows through

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¹⁹ This could be a smart device, or any other media player that outputs an audio signal.
the coil, the electromagnet either attracts or repels the magnet. Therefore, the coil pumps sound waves into the air, causing differences in air pressure and creating what is known as a sound phenomenon [45, 46].

Moreover, the visual language of the work was an abstract language of geometric shapes used to communicate a contemporary aesthetic. The shapes that formed the composition were rectangles, lines, and triangles that faded into the surface. The color palette, geometric shapes, and rhythmic composition were in balance with the geometric shape of the shiny copper circuit. This visually-impressive poster functioned as an eye-catching physical object and invited the audience to approach and explore the meaning behind the two visual layers. I decided to use the abstract approach because I wanted to strip the poster of any clear or direct visual message. In order to support the idea that the paper poster has lost its role as a conveyor of temporal information, I reassigned the poster as a visual entity that focuses on visual appeal, abstractions, and ambiguity rather than representation.

While observing the exhibition space at the opening event, I noticed that when visitors approached the work, they did not immediately determine what it was about. However, when the viewers familiarized themselves with the instructions and followed the steps, sounds appeared and viewers were impressed. As is often the case with works that demand the user to read instructions (even concise instructions), the participants tended to become shy and distanced. However, the visitors who managed to make the poster ‘sing’ (with or without my help), were impressed, confused, and intrigued. Their fascination contributed to further engagement with the work, manifesting in shuffling through songs and exploring the surface of the poster with the magnet. Therefore, the audience became part of establishing a context for the artwork. While interacting with the poster, the visitors often looked to see if something was behind the paper that they had not noticed before. Even more, they clearly wanted to know how the sounds were being produced by the paper.

To sum up, I desired to present an impossible concept as possible, which was demonstrated with sound coming from the paper. The mystery of the work was produced by the simplicity and transparency of the technology used: all components were visible to the viewer and played with a reality that is neither obvious to the senses nor within the realm of the average understanding of sound²⁰. I managed to create a simple speaker that was seamless as an element of the poster surface. At the same time, wires connected to the poster gave the visitor an impression that it is not ‘just a poster’.

3.3 Analysis and Contextualization of the Work
While conceptualizing how to transition from the paradigm of graphic design to that of new media, I decided that I would focus on the manner of the message transference. The importance of the message was stressed in both literature reviews, and I have made a case for the poster as an excellent method for communication and new media art as an act of immersion. Both construct their message in many layers to achieve clarity or mystery, uniformity and complexity, moments and narratives. Although communication of the subject matter is crucial for both types
of work, the manner in which the message is transferred differs. A poster containing a temporal message is placed within public space, and therefore the instantaneous transfer of the message is of the utmost importance. While dealing with a poster we address its viewer as a passerby, not as an audience or user. The passerby can be a viewer, but usually their view is more glimpse than gaze. In comparison, new media art demands more attention and time to convey its message than a poster in the public space. Additionally, interactive artwork, such as installations, demand participation from the audience. On the contrary, a poster may call for participation, but not with poster itself.

The poster functions via the one-way communication model: it does not expect a response that contributes to a continuous exchange of information. The classical poster as a one-way communication model does not incorporate contemporary ideas of communication, interactivity being one of these concepts. Since my work is means of discussing what a current poster could possibly be, I find it crucial to integrate interactivity into my work.

The poster work presented in this thesis is based on a two-way model of communication, requiring a response from a viewer in the form of action. Initially, the viewer is merely presented with a paper hanging in the middle of the exhibition space communicates with its visual language. A moment later however, the viewer notices more than just a hanging paper: namely, a metal element attached to the surface of the paper and connected with wires, as well as the magnet placed on the pillar. These clues invite the viewer to explore the work further and go beyond the initial impression. Therefore, the work waits for the viewer to respond with an action, and the instructions direct the communication. At first the outcome of the interaction is not clear, but is unveiled as the user follows the steps given by the instructions. When the visitor plugs in their phone, plays a song, or approaches the poster with a magnet, the poster responds with a sound. By interacting, a visitor can influence the loudness and audio source.

I also analyzed some other element of communication, such as defining the source, medium, message, and receiver. The source of communication in my work is an experience gained by interacting with the work. The medium I produced consists of paper electronics that produce another medium—sound. The message of my work at the exhibition was focused on the impossible becoming possible and corresponds to the exhibit’s theme. However, in the improved artwork created as the final outcome of this thesis, I emphasize aspects of self-reflection and my view of media culture at the moment. The message of my final work is a self-reflection of my practice, which I presented in a remediated medium as a response to expression that the paper ‘poster is dead’. The receiver of the message is an audience, who responds to a visual message and the written message (instructions). By intertwining these elements, I wanted to offer an experience that embraces the audience and invites them to reevaluate their perception of the subject matter.

Furthermore, I frame my work as a small-scale installation with an interactive system that attempts to embrace the viewer by asking their participation. Taking into consideration the previously-mentioned Prix Ars Electronica set of criteria for the Interactive Art category, computer mediation is not needed and inter-
action can be passive. Based on these criteria, I claim that my work belongs among interactive works. Additionally, my work without interacting with it does not convey the message in its richness.

My work is an example of a very tangible interaction design that uses paper surface, magnet and cable as the interface. The interface of an interactive artwork serves as an encounter between the artwork and the viewer, providing the viewer an opportunity to have a dialog [29, 30]. Paper as my chosen material for this project definitely works as an unconventional interface; the paper's surface enables space for both the visual expression and interface for adjusting sound. The viewer has to use a magnet and approach the poster closely; addition to magnet, the whole paper becomes an interface for the exploration of sound. This affords the work yet another layer—tangibility. Allowing the viewer to touch, especially, the paper interface adds value to the work, since people assign certain attributes to the surface and physical qualities of a paper [5]. Tangibility is definitely an aspect that I want to cultivate in my work, however, the material has its disadvantages due to its fragility, and consequently this feature compromised the quality of my work. Paper as a medium truly caused me a lot of frustrations during the making of this work, since paper is fragile for transporting, handling, and exposing as an interface. In addition, adding electronic components was difficult since electronic components are not originally made for paper. Adding components onto the paper was a stressful process and demanded numerous testing prototypes. Although there were moments I felt the work was futile, paper electronics were ultimately the perfect fit to create a work that hopefully changes the perception of paper and poster, as well as a suitable material from which to build an artwork by hand.

Consequently, I have decided to continue with paper electronics and pursue working with interactive art while hoping to find the answer to the question of "how to elevate the medium or use it in a way that gives the user or the participants another point of view when everyone is interacting with familiar technological devices” [43]. Therefore, my work desires to challenge the viewer with paper electronics in a poster format with the intention to bring forth new perceptions of poster art and paper, while they interact with familiar smart. As well, I have tried to present a new view on the technology behind the speaker by 'taking out' the main components that are generally hidden inside the casing of a familiar speaker object and placing them onto paper.

Further investigations followed the Korea exhibit with the urge to situate my work. To position my work as new media, I use Margot Lovejoy's framework, which describes new media work as a relation between artistic work and medium. From the presented groups in the literature review I would argue that my work follows the concept in which artists "use new media as a medium, creating work that is produced and presented by means of new media and makes use of the medium's characteristics" [30]. My work was created and presented by means of new media, meaning that I experimented with and created the paper electronics, a medium which belongs to the field of the new media. I make use of the medium's characteristics, since I use technical features of that medium and endeavor to
elevate the medium through artistic means. Some could argue that my work belongs in a group of “artists who use new media as a tool for the production of more traditional art forms” [30]. However, my work was inspired by traditional poster art even if the final outcome is not a traditional art form. I believe that by applying layers of interactivity, paper electronics, abstract visuals and connectivity to a digital device, I refashioned the work. Thus, I desire to present it as new media work, not as traditional art.

Another issue needs to be addressed: the role of the sound in my work. I have already mentioned the issue of low volume and distorted sound, what I do not perceive as a devastating problem since my work is not sound art piece. The sound signal in my work focuses on the presence of sound and not on the sound itself. I relate the sound in my work to other contemporary artworks that use sound without being specifically interested in musical/acoustic features. In new media works, sound is often a part of interactive installations, screen-based art, or performances. This sound often responds to different kinds of user inputs or sonifies data [47, 48]. Additionally, “the experience of everyday life is increasingly mediated by a multitude of mechanically reproduced sounds ... In parallel to this, cities are noisier than they ever were in the past” [49]. To recap, the sound produced in my work is a feature that allows the viewer to understand the message, but is not message in and of itself. It is a commonly-used medium in new media art and medium that is known to everybody, as most of people have a speaker of some sort of another near them most of the time.

My work consists of refashioned versions of the paper medium. Because the medium of my work is not simply paper but paper electronics, I therefore encapsulate one medium in another. My paper electronics art, which I refer to as a poster, is lively, exciting, and immersive while also honoring, rivaling, and revising the traditional presence of the poster. My work is a response to the idea that the paper poster is not ‘dead’ and can be refashioned without using a digital screen. Therefore, as a critical commentary to our culture I decided to elevate paper as a medium into a new medium that still resembles its predecessor.

My work follows the concept of the double logic of remediation—immediacy and hypermediacy. Hypermediacy is present in my work through exposing all of the elements of my circuit to the viewer. My medium is therefore opaque. The viewer can clearly see all the electronic components, the copper circuit and connections that are used, all of which comprise my paper electronics. Bolter and Grusin state in Remediation that awareness of the medium causes a desire for transparent immediacy in the viewer. For the more developed versions of my work, I decided to use surface-mounted components and presented the circuit in a very expressive and unique manner. The work is intended to give the viewer the impression that they are not observing the electronic components and circuits. However, in my final art piece, immediacy could not erase traces of the paper electronics and hypermediacy could not do not desire to erase the impression of the medium.

To conclude, I do not frame my work as a poster, but at the same time still address my work as a poster. The process of remediation points out this paradox, as I define my work on the
basis of the features of the old medium, paper
poster, and at the same time try to deny that
my work is a poster. Finally, my work is not like
"poster-only-better."²²

3.4 Aftermath

I received positive response from the audi-
ence at the opening event, which was demon-
strated by engagement with the work and
questions from the viewers. This inspired me
and gave me the confidence to pursue this
topic and project as my thesis work. However,
rather than focusing my work solely on the
theme of the exhibition, I detached it from
that context and chose instead to respond to the
constantly-shifting context in the media field.
I am happy with the results from Korea, but
cannot claim that I am satisfied. This sub-
sequently led me to decide to produce new
works for purpose of this thesis and present
them as the final outcome.

Further developments derived from the
critical viewing of my work are condensed into
two categories of potential improvement. Firstly,
there is a need to shape a stronger concept,
which I already presented and supported with
theory. Secondly, I would like to rebuild the
poster and make it more representative and
sufficient. Examples of the latter point might
include adding an amplifier on the paper,
planning the interaction more thoroughly,
creating a louder sound signal, enhancing the
works’ identity with a new title, or enriching
the visuals.

The newest version of the work includes a
newly-built amplifier with surface mounted
components, which achieve seamless paper
electronics and improve the sound quality. I
continued to test new spirals (which function
as the coil of my speaker) to ensure a louder sound²³, as well testing different conductive
materials. I provide documentation of my
prototypes and proces on the following pages.
Furthermore, the sonic interaction has the
potential to introduce expressive gestures as a
new level of engagement [50]. To achieve this
I improved the quality of the sound, as well
as the arrangement of the work’s comprising
elements (magnet, electronics, using different
spirals).

As an improvement of the interaction, I re-
thought the setup of elements, as in where and
how to place the magnet, cable, poster, frame,
instructions, and wires. For example: having
a super magnet freely placed on a table can
be dangerous, since it can attract other metal
elements or interfere with magnetic compo-
nents in electronic devices. To have a frame
around the poster definitely contributes to the
stability of the paper while interacting with
it, but at the same time it is an added element
to the visual perception of the work. Setting
up the work in an exhibition space is always
site-specific and requires testing on-site.
Unfortunately, during writing this thesis I did
not have a space to showcase this work in a
proper exhibition place where final tailoring
of the setup could take place. Therefore, this
thesis presents a final setup envisioned for
a possible exhibition event, presented in the
diagrams at the end of section.

Although visitors at the exhibition in Seoul
found the poster visually appealing and mes-
merizing, it did not meet my personal stand-
ards and expectations of my potential as a
designer: I felt that the visual language lacked
profound expressiveness. Therefore, for the

²² Reference to the movie
Stranger Days quote "This
is not like ‘TV-only-bet-
ter’... this is life.”

²³ Sound would be improved
by using embedding piezo
speakers between paper
layers. However, by doing
this I was afraid I would
compromise the transpar-
cy of my work
newest version of my work I reconsidered my own approach and aesthetics. More specifically, I created a contemporary dialog between color, form, and circuit in order to achieve a distinct and unified aesthetic. The poster’s surface has become my playground of visual experiments of shapes, colors, expressive coils, and circuits. While working for Graduation Show exhibition I also longed for a more expressive circuit design, which at that point was difficult due to restrictions of the width of the copper tape (max width was 130mm), as well as my still-developing understanding of electronics. By resolving all mentioned aspects, I improved my work and developed notably different aesthetics.

As stated before, I chose not to continue to focus on the theme When The Tiger Smoked A Pipe and the concept of impossible becoming possible. I therefore needed a new title that would effectively convey my message: a work that simultaneously honors the values of graphic design field while searching for new meanings outside of rigid or prevailing ideas of its field. While conducting my practice-based research, I was introduced to and inspired by the idea of remediation. In Remediation, the authors often and enthusiastically link their ideas to the movie Strange Days, more particularity to the quote “This is not like “TV-only-better”…this is life.” I too believe this echoes the ambivalent and clashing context of the contemporary media situation, and reflects the thoughts I desire to express with my work. Consequently, I decided to title my artwork This is not a "poster, only better".

Ultimately I produced posters with different coils, amplifiers, and visuals. To truly understand the works presented in this thesis, the reader should understand these works’ process of creation, as well as the context of paper electronics. While developing my work, I encountered plenty of difficulties varying from technical problems to conceptual choices. I have already explained conceptual challenges and how I manage to establish meaningful connections between aesthetic attributes, paper characteristics, paper speaker mechanisms, and digitally-driven sound. The bigger issues to resolve were technical challenges, due to my beginner’s knowledge of electronics and combining different expertise into the production of the final work. Due to these challenges I only manage to improve the speaker paper poster, although I initially desired to build a series of interactive paper electronic works as rethinking of the poster as an art form as a final thesis work. I present these ideas at the end of this section.
PAPER

I printed on three different inkjet papers to test print quality, as well as how it worked with the coil and paper’s characteristic when hung. I was also interested to know if the sound resonance would vary depending on the paper used. Because I did not want to use carton material or apply poster material onto board, I did not test high-weight papers. As result, I can say that the loudness of the sound did not change and that all the papers I tested vibrated similarly. If I were to achieve the sound that resonates more on a paper medium, I would have to use a stronger amplifier and higher power supply.

The most expensive paper that I tested ‘falls down’ nicely when hanged. However, it was fragile to deal with, as well as not being able to sustain a full surface of printed color by acquiring an undesirable wave to its texture.

50 x 70 cm.

Paper strongly curls, thus hanging it freely is challenging. Additionally, I noticed that the print on this paper was damaged the easiest while applying electronics. This poster was smaller than other two, though this did not influence on the sound.

70 x 100 cm

This paper has a bit of a ‘plastic’ feel, a quality which I do not find disturbing. Due to its properties, it ‘falls down’ excellently and is easy to handle (e.g. creases do not appear as fast as on other tested papers). I choose this paper for further developments due to its characteristics, price, and good print quality.
In the book Make: Electronics [45], I discovered how properties of a wire coil influence the sound. Simply said, the more turns of coils there are, the louder the sound gets. However, in my case the coil was spread across the sheet of the paper and I was using foil, not wire. Therefore, I had to make many tests to truly understand how the shape of the foil coil influenced the sound. From my experience, the logic stays the same: the more turns, the louder the sound. The thickness of the line and space between them also have an influence: the thinner the line, the louder the sound. Surprisingly, ‘crazy’ shapes did not influence the loudness of the sound. However, if the coil is not circular, loudness occurs inconsistently across the surface (i.e. when moving over it with the magnet, some parts are louder than others with no reasonable pattern).

I tested coils with the same input device, amplifier, and magnet. The coil that produces the loudest sound was established by listening to it and not by measuring. My friends Lisa and Marija also made a battle-of-coils and determined the loudest. The loudest from photo 6 is pictured top right.

The coil needs two points that are connected to the audio cable. My beginner’s mistake was to reverse the spiral from the innermost segment outwards again (as seen on square shape spiral). This resulted in the electromagnetic field deleting itself, resulting in a weaker sound. The same phenomenon occurred if I made a hole in the paper and continued with the spiral on the other side. Therefore, the best solution was to cut a more or less straight piece of copper, isolating it from bottom side and attaching it over the spiral (as seen on the circular spiral). The same effect was achieved if I made a hole in the paper and continued as a straight path.

I designed and tested many different coils. I desired to experiment with expressive shapes, but when designing them I had to keep in mind the principles of the electromagnetic field. The main restriction lies in the spiral shape and having two parts (one where the current enters, and one where it flows out).

I tested different materials: copper foil, conductive thread, and conductive paint. I attained the best results with copper foil (with a resistance of 1 Ohm). With the conductive thread (resistance 23 Ohm) I was also able to produce a sound, albeit weaker. However, conductive paint did not work due to its high resistance (resistance 12 kOhm).

To test particularly large coils I had to purchase bigger copper foil, which is very expensive and delicate to handle. Therefore, I could not make many tests and I cannot conclude any insights.
In Korea I used the TDA 2003, which I had to solder on a board with other components. It could get up 12W of output if I used 16V power supply, however, I had troubles with the amplifier heating up. I used a heat sink to cool it down.

I noticed some other builders using the LM386 amplifier. However, for my coil it is not strong enough to produce a sufficiently loud sound. Its output is 1.25, and changing the gain made sound heavily distorted.

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For the thesis version of my work I decided to use the LM 4871 amplifier, since it uses a low power supply of 5.5V. This still gives me an output of up to 3W by adjusting the gain to 8 Ohms. One photo shows a setup on a breadboard and another on the paper.

I tested many amplifiers, both ones that I could build myself to those that are commercially produced. As described in the section titled Aftermath, finding a suitable amplifier for my work was challenging.

For some posters I also decided to use the TDA 2012 amplifier by Adafruit, attaching the board on the backside of the poster. The output power is 2.8W at 4 Ohms with a 5V supply. Another similar option is MAX98306, with a 3.7W output into 3 Ohms impedance speaker. Unfortunately its board is a bit too big.
The field of paper electronics is not mainstream, I therefore had to **overcome many** barriers when searching for resources regarding issues I may have had with the circuits I was building. In addition, I felt as though I had reached the end of internet while searching for materials such as copper foils, silver paints, through-hole components, transparent adhesives, and other less common materials. The main reason for these difficulties were not that materials did not exist, but rather that I often required different sizes or technical specifications than what was offered. For example, conductive copper tape is a common product in electronic shops, but finding copper foil with a width more than the standard 3 cm was challenging and expensive. A similar problem occurred with silver paint, which I also intended to use for circuit paths: I needed ink that would have silver particles that would go through a screen print’s mesh and not damage the paper. I found few products that would suit my needs, but it was sold in an amount that was intended for fixing a circuit, not for printing on paper in large scale. Screen-printing silver paint seemed perfect, however, searching for a company that would sell it was overwhelming and I usually received no responses to my inquiries. Another difficulty I encountered related to the amplifier components. After searching and testing different amplifiers (photos 11-15), I decided for LM 4871, because it has good output and does not require many additional parts such as resistors or capacitors to function. Initially, surface-mount components appeared to be a good solution to achieving visually seamless paper. However, when the components were delivered I quickly realized that I would not be able to solder them directly onto paper. I etched my own printed circuit boards (PCBs), photo17, (although for final work I used a manufacture break board), which would allow me to connect the surface mount amplifier with other components on the paper circuit. This solution was not desirable, but a compromise had to be taken since the through-hole LM 4871 is a now-obsolete component now that less through-hole components are currently being produced. I wanted to use through-hole components because they are bigger and therefore easier to handle, and can be mounted directly onto a paper circuit. Overall, there were moments where I felt that the task was too daunting—materials I needed were the wrong size or prohibitively expensive and the components I needed were not sold anymore or the delivery was far more expensive than the actual component itself.

The bright side of my building experience was the inspirations I received from **maker culture**, where builders describe and document their electronics. My work would not exist without an online community, as well as my thesis advisor, all of whom explore unconventional ways of working with electronics. Online I found many projects that utilised similar components and materials. Two female builders who enthusiastically create their own electronics were of particular inspiration to me—Jie Qi and Hannah Perner-Wilson. They made plenty of tests with different materials and components, as well as hacking various paper electronics. Additionally, they documented the projects fairly well with videos, photos, and lists of the materials and components. I spent a lot of time studying their materials, reading articles, or listening to their talks. Their work focuses on testing materials and finding new approaches to using electronics in order to create skillful
and creative electronic circuits. I perceive my work as a continuation of their work. For example, Hannah Perner-Wilson experimented with many different conductive materials and has also built paper speakers. This was a great starting point for me to learn how paper electronics work. The final outcome of her work (A Kit-of-N-Parts) was a collection of different circuit samples and online documentations of her findings.

Although my work process included many tests and prototypes, this was not the aim of my work: my ambition was to produce final standalone work. I therefore spent a lot of time considering my audience and the self-sufficiency of the exhibited work while designing the required electronics. Above all, my expressive circuits had to be visually appealing and intriguing while also being safe and efficient as standalone installation within the exhibition space. My final work is a compromise between sufficient circuit, contemporary aesthetics, and message.

What appeals to me most about paper electronics is the freedom they offer of doing things the way I want and to break rules or reasons. After all, I am putting electronic components on paper in order to produce sound or movements; I enjoy misusing materials, transforming mediums, and testing boundaries.

I see the future of my work as a continuous improvement and building of new ideas. I might consider assembling and documenting all my test results and insights as a blog for other people who desire to do similar work.

**New Works**
The other posters in the series follow the same principles: **visually seamless paper electronics**.

That serve to elevate the paper medium. In addition to paper speaker posters, I imagined that the posters that could use wire that changes shape when an electric current is introduced, allow me to create paper that produces movement. As viewers approach the poster, a sensor would recognize their presence and the paper would change its form. The poster would contain information, such as a small text or other visual element that would invite visitor to approach the poster. As the visitor comes closer to the poster, the poster would begin to curl in order to hide parts of its surface. The idea behind this work is a timid poster that does not allow the viewer to read or see certain content on the poster. Additionally, I would like to experiment with different materials and build on the idea that not only is the viewer watching the poster, but that also that poster is also watching back. Additionally, other works could include thermochromic pigment that changes the color when the conductive materials heat up. I could regulate the heat that is produced as the electric signal flows through the conductive materials.

Lastly, I could use a microprocessor to achieve wi-fi connectivity and connect my work to the wider world.
COIL WITH ALL SMD COMPONENTS AMPLIFIER

COIL WITH PROFESSIONAL AMPLIFIER

COIL WITH BUILD AMPLIFIER ON A BOARD

SET UP 1

SET UP 2

SET UP 3

SET UP 4

SET UP 5

SET UP 6

MAGNET IS BEING SWUNG BY A MOTOR

AUDIO PLAYER ALREADY PROVIDED

AUDIO CABLE PROVIDED FOR VISITORS AND FREELY HANGING MAGNET

MAGNET AND AUDIO PLAYER SET UPS
I was in constant battle with the copper foil. These photos present copper foil being cut, how the material creased while being fed into the cutter machine, and how copper detached from base material while cutting. A better decision may have been to use copper sheets. I cut it on a Roland vinyl cutter, and after testing many settings I achieved the best result by setting the pen force to 80 gf and the speed to 1cm/s.

**photo 16**

**photo 19**

Electronics need to be applied on the paper at the exhibition place due to its fragility.

While producing this work I did not have a studio. I often had to transport posters and electronics across Helsinki, from print shop to home to school to FabLab.

**photo 18**

At the Design Factory I etched printed circuit boards (PCBs) in order to mount the SMC amplifier LM 4871 onto them.
4 Conclusion

In recent years and more than ever since its birth, the format of the poster has changed drastically due to digital media. Public surfaces have blossomed with digital screens and advertising has moved online, demonstrating that advertising has embraced digital technology. Nowadays social media also has the role of informing and advertising. In this arena, the form of poster is also present, albeit as a digital medium. As stated in previous chapters, these two factors are the most prominent reasons contributing to the paper poster losing its significant role as a printed communication form. However, there are also other factors such as the weight of clients’ input concerning design, rise of other forms of visual communication, littering laws, and car traffic.

Nevertheless, it could be concluded that the omnipresent digital screen24 ‘killed’ the paper poster. A contrary interpretation might view that the digital screen may have also saved the poster form in the digital era. This can be observed through poster form in the digital realm experimenting with the potentials and limits of its medium. However, explorations of the paper medium and envisioning its possibilities are still in the initial stages. Most of these outcomes are experiments produced by researchers that are documented in research papers, or artworks created by artists that are showcased at exhibitions. I believe that the results from both
fields fuel each other, producing inspiring and outstanding works.

The significance of this thesis is the personal work I have produced as a response to the shift occurred in the context of contemporary media. And although I agree that the poster has lost its important position in visual communication field, I do not agree that the paper poster is in fact dead. My work attempts to prove this by exploring new possibilities by responding to the question “What can a poster be, if it is not a poster?” I believe my work elevates paper as a medium, going beyond graphic design and situating itself in the field of new media art.

To achieve my vision of paper as a refashioned medium, I investigated and tested paper electronics as an art practice. The final work does not respond to some qualities that the classical poster contains (such as informing and promoting in the blink of the eye). However, I introduced a new aspect that is not familiar to the paper poster — interaction. Interactivity allowed me to present my work to an audience in new manner and placed my work within the framework of contemporary modes of communication. Two other distinguishing features of my work are its abstract visual language and its removal from the public space. To imagine that today’s role of a poster is not to inform and advertise allows the poster to become something else, a on both a conceptual and visual level. For this reason, the paper poster is not placed on the wall of a public space, and can instead live in a new environment such as an exhibition space.

During my research, I did not find many similar works discussed or promoted within the graphic design field, which was also one of the reasons that led me to explore other fields of new media. The concept of remediation offered me a great insertion point into new media art production; creating a new medium that refashions an old medium. This idea resonates well within my work, since my work is comprised of the remediated medium of paper electronics.

My work resembles the paper poster; however, it desires to offer new insights into what poster art can be in the 21st century. Most importantly, the aim of my work has been to find the right equilibrium between a meaningful concept and the appropriate choice of medium to successfully express myself and inspire others. The main challenge was to establish a connection between the aesthetic attributes, the paper’s characteristics, the expressive circuits, the technical properties of the paper speaker, and the viewer’s interaction.

In conclusion, consider these memorable words by the great American novelist William Burroughs: “I remember attending an exhibition called, ‘Photography: The End of Painting.’ And, of course, it wasn’t at all.” The exhibition assumed that because photog-
raphy was refined, painting was no longer a viable expression. However, this was clearly not true. Like Burroughs, I feel comfortable to state that this is not the end of the poster. After all, painting has had a position to represent the physical reality, and with the invention of photography it gained the ability to become abstract. The same can be said of the poster today: the paper poster may have lost the role of informing and promoting, a realm now belonging to the digital as well as the refashioned digital poster. Now, the paper poster can become something else.

In the movie The End of Print by David Carson from 1995.

Possible Topics for Further Research:

A research approach I would be interested in pursuing as a continuation of my work or similar work would be to address this topic through the perspective of post-digitality. Pragmatically, post-digital refers to a dissatisfaction with digital information systems and media gadgets. Taken a step further, post-digital merges ‘old’ and ‘new’ media and often reinvestigates and reuses digital technology, or applies network structures known in digital media in analog terms. Tendencies of the field include experimenting and maker culture (DIY agency) in a spirit described as “neo-analog do-it-yourself” [51].

Viewing the concept of remediation from different perspectives presented in this thesis is to understand a particular medium in relation to the past and present media, as well as the relationship between medium and audience, evaluating other dimensions of medium that echo socioeconomic factors.

A valuable discussion could take place regarding the contemporary aesthetics of electronic circuits added to unconventional surfaces, as well as how to achieve an equilibrium between sufficiently-functioning circuits and a thoughtful artistic expression.

One topic that this thesis did not discuss is e-paper. E-paper is a technology that imitates the appearance of traditional ink on paper, and could present interesting outcomes that may truly remediate paper as a medium. This is an area I will certainly keep in my thoughts. In the present moment there are some examples that demonstrate the possibilities of e-paper, however, I have never personally handled it. Since paper electronics are not and perhaps never will be used for commercial purpose, it is my opinion that e-paper could offer a viable solution of combining digital features, especially constant connectivity to the internet, with a material that is less fragile than paper while still preserving the physicality of paper.

I am also aware that my thesis is constrained within Western culture; an interesting investigation would be to break from this fixed viewpoint.
5 Bibliography


Interview with Nick Butcher & Nadine Nakanishi was conducted on 25th November 2016 in Helsinki by Maja Tisel.
Nick: I think the function of a poster is to build a message. So it’s this old idea that a poster is a piece of paper that is trying to communicate a message through image and text—most of the times. It’s important to distinguish between a print and a poster. Basically, a print is a recording or a representation of something; whereas a poster is a more condensed form of a print that is trying to communicate directly. We should also not mix up posters with signs. Because signals are always “true” and posters are a temporal communication device. For example, a poster that advertises a concert refers to something that exists at a specific time.

Nadine: A poster is a communicative two dimensional rendering of a temporal message with a goal of advertising. Perhaps posters today refer more to the arena of activity, whereas messaging or advertisement was illustrated on a piece of paper. →

Nick: Posters used to represent the forefront of the visual culture; they were the most expressive and the biggest. People connected to the current visual language through posters. On the other hand, today’s posters are just a part of campaign and they are secondary to a digital interface. For instance, you have a campaign poster and when you visit its web page, it looks like the poster. So the poster has lost its central significance or singularity. As a result, we are surrounded with more instances of digital things and posters become secondary.

Nadine: I believe it also depends how posters are made and by whom. If a designer makes it, it perhaps serves as a status quo symbol, for example “Look at me, I can design this”; meanwhile if it is

As posters are freed from their original function perhaps it would benefit to add a new definition to the original etymology.

1. How would you define a poster?
2. In your opinion how did the perception of the poster change in last 50 years?
hand painted in India, it’s perhaps considered a gesture of craft, or just serves as a service job. So the function can differ if you take geography into account. In technology-based Western economies today the poster is affirming the digital realm. It serves as some sort of authenticity tool. It is interesting to follow the relationship between the analog and digital poster and how this shift happened and how it informs each other. At first we had a printed poster and afterwards it was documented in the digital realm. But now I observe that often the avatar proceeds the poster, meaning being stuck on a piece of paper. In my opinion, this never work, as it’s serves more like signage.

Nick: I have noticed that posters, which really stand out, are the ones that were not intended for digital use. Because they retain autonomy from the screen and, in doing so, retain a vitality that can be made only outside of the computer platform.

Nadine: I don’t think the paper poster is dead at all. The connections you make on a paper you don’t make digitally. Paper gives us personally a lot more possibilities because we are allowed to make a piece of art and do not have to compete with the marketing end of this matter. Additionally, I feel

Nick: Contrary to “death”, I think now is a good time for posters. A printed poster used to carry all the information; however, now this job can be split between the analog and digital realm. Take painting, it held a position to represent the physical reality, it couldn’t become abstract. In other words, painting couldn’t get abstract until we had photography. The same goes for posters now. Posters don’t have to render all the information, they just have to stand out and get your attention.

Nadine: It depends also on legislation, for example littering or “post no bills” laws. Take Chicago in 90s, there were much more posters around than today. Due to the change in laws, that landscape changed. Now, in 2016, you cannot paste your own poster up wherever you want in the city. This changed the poster production and tradition where we live.

Nick: →

Nadine: So, do you think that poster on paper is dead or still alive?

To continue previous question. At The Poster Remediated David Crow-ley stated: “Instead of being frightened of the rise of the digital era, as an age of prosperity for the reme-diated poster,”

Nick: How do you see future of the poster?
Posters will basically remain unchanged. As long as it’s easy and cheap to print something out, there will be a poster culture. It is the most direct way to get a message across in a physical space.

Nick: Posters are more than just bringing imagery to the paper. They also communicate the process of building these images and maybe that can be a message. We screen print our images and our images are different than offset printed. It is a picture about a picture and how a picture works.

Nadine: We do a lot of improvisation. We use the medium as a vessel for our image making ideas.

Nick: For me a poster is to be part of culture immediately. To make a graphic statement in the now, that is meant for now, that should speak about the current state of the world, I love that. It’s a way of partaking and conversing with everybody. This will feel fun forever, because you can play with expectations and you can emote in some weird way. It’s different than making art, because art, at the end of the day, gets shoved away to museums, gallery spaces, storage, and comes with its own baggage. In contrast to posters, which are here to hijack a structure of communication and be able to be seen or heard. I respond to that.

Nadine: For me, as a graphic artist, the poster is a discipline that combines typography, illustration,
photography, aesthetics, your own form language. Thus there are so many friction points in there that open up more space to explore. For me it's the master discipline of the graphic arts. The poster is a moving canvas that is very democratic and international, I feel deeply connected to that. Even if you cannot read the type on a poster, you still can feel the attraction and the impression it leaves on you. I never feel excluded by a poster, they do not have a gatekeeper. It's just you and a graphic image that someone is sharing with you.

Nick: A wall of interactive posters in a public space could be asking for too much attention, which might be a turn off for people. These types of posters will have to find interesting ways to grab people's attention. Some kind of poetry must emerge for the medium to work in such an environment.

Nadine: I think interactive posters will develop in the direction of having added information. For example, “snap your fingers if you need more information about this”. I recall an awareness campaign from the ad council around three years ago: it was advertising a hot line meant for children who were in abusive homes. The telephone number could only be seen at a certain height from the ground, which was set at the average measurement for children between 6 - 9 years old. Interactivity has to serve as an added value so it doesn't create redundancy for the medium. For us poster making has two layers that need to be mastered or at least envisioned: a communication level and an artistic level. The same probably goes for interactive posters; it should develop two layers that don't fight each other but create a higher outcome in terms of reachability with the message.

Nick: Both. Nostalgia plays an important roll in poster art. Similarly, people still make records or anything tactile. But as designers, it is our job to make people care about them. It used to be much more multidirectional, now it's basically our job to make people remember them, and to remember the power of a simple gesture, such as hanging something on a wall.

Nadine: I appreciate your question here — to call designers out. What an important thing to do! I think on a do-it-yourself level, people make posters because it is a powerful tool to go and print your message out and put it up on a wall. No matter if you are a designer or not. In the United States the self-made, commissioned, or designed poster culture still exists largely because of touring bands and venues. Music posters really made a lasting foundation in our country through the psychedelic posters that were created in the 60s. Political resistance posters of that time too, make for a strong legacy. A large part of that history spreading was due to people printing posters that weren't “designers”. So, I think it's a spiritual medium for people, like folk music, and yes, people still do care.

Nick: But many posters today don't work as traditional posters, as advertisements. They are a nos
talgetic idea of what poster used to be; hence they are used as a souvenir. These posters don’t end up on streets and fight for someone’s idea; they end up in someone’s home as a memento.

Nadine: ↓

If you increase foot traffic in an area, you increase the likelihood of posters “living”. If you kill foot traffic, you kill posters. Perhaps with increased foot traffic in virtual reality we will see more digital posters? Haha!