 TYPOPHOTO: The Visual Dimensionality

Kitae Kim

5-20-2000

Follow this and additional works at: http://scholarworks.rit.edu/theses

Recommended Citation

This Thesis is brought to you for free and open access by the Thesis/Dissertation Collections at RIT Scholar Works. It has been accepted for inclusion in Theses by an authorized administrator of RIT Scholar Works. For more information, please contact ritscholarworks@rit.edu.
TYPOPHOTO: The Visual Dimensionality

Thesis Process Documentation
Approvals

Chief Advisor:  Associate Professor Deborah Beardslee

Date  19 May 2000

Associate Advisor:  Professor R. Roger Remington

Date  May 12, 2000

Associate Advisor:  Associate Professor Heinrich Klinkon

Date  May 12, 2000

School of Design Chairperson:  Associate Professor Nancy Ciolek

Date  June 6, 2000

I, Kitae Kim, hereby grant permission to the Wallace Memorial Library of RIT to reproduce my thesis in whole or in part. Any reproduction will not be for commercial use or profit.

Date  May 21, 2000
Rochester Institute of Technology

A Thesis Submitted to the Faculty of
The College of Imaging Arts and Sciences
in Candidacy for the Degree of
Master of Fine Arts

TYPOPHOTO: The Visual Dimensionality

by Kitae Kim

May 20, 2000
Acknowledgements

Dedicated to the memory of my father:

Chunku Kim (August 10, 1942 - March 7, 1999).

To my mother and little brother in Australia for their endless support and love.

To Professor Deborah Beardslee for her clear guidance in organizing my thoughts systematically.

To Professor R. Roger Remington for his extensive knowledge of Design History.

To Professor Heinrich Klinkon for helpful suggestions and guidance in opening my eyes to the real vision of design.

To all my peers in the 2000 class of Graduate Graphic Design, Rochester Institute of Technology, New York.
# Table of Contents

Thesis Problem Definition

Introduction

Precedents

*Malerei Fotographie Film (Painting Photography Film)*

*Language of Vision*

*Process: A TOMATO Project*

Research

Synthesis

Integration of Typography and Photography

Morph

Dimensionality

Ideation

Implementation

Evaluation

Further Implementation

Retrospective Evaluation

Dissemination

Conclusion

Endnotes

Appendices
Appendices

Appendix A  Dynamic of the Metropolis (film script)

Appendix B  Timeline of Design History

Appendix C  Brief Biographies and Visual Examples of Designers and Design Groups

Appendix D  Model of Human Communication by David K. Berlo

Appendix E  A Semiotic Triad by Charles Pierce

Appendix F  Matrix A: Analysis of Historical Typophoto Approaches

Appendix G  Matrix B: Analysis of Typophoto in the Present by Media and Approaches

Appendix H  Cover Page of Broom Magazine by Moholy-Nagy

Appendix I  Glossary of Terms

Appendix J  Bibliography

Appendix K  Interview Transcripts - Jimmy Chen (typographic.com)
This thesis will first document how both typography and photography have merged into a pure form of communication: typophoto. Simultaneously, the study will refine the visual parameters for understanding the concept of typophoto through an examination of the works of a number of designers, design movements and visual theories. The final goal of this thesis study will be to explore a new interpretation of typophoto and to extend its use in the new digital era.

In 1925, the designer, painter, photographer and film maker Laszló Moholy-Nagy first mentioned the concept or theory of typophoto in Malerei Photographie Film. Typophoto was a manifesto of visual communication which closely integrated typography and photography to give an unambiguous message through different planes and media. Exploring typography and photography, Moholy-Nagy sought to understand how both disciplines had been influenced by other art training and how they had developed by means of techniques and time constraints. Furthermore, the idea of typophoto was extended into other fields such as film, where, as a kinetic form of the media, it could interpret the concept of typophoto efficiently (See Appendix A).

Today’s fast-paced trends and fashions in visual communication require an increased understanding of and accessibility to a complex system of information and media as they move toward 'Motion' or 'Kinetic' art. The designer needs not only to implement the application, but he/she is also required to be a "messenger": a visual communicator or commentator. As media development and technological constraints have become increasingly diversified, the task and responsibility of the designer in problem-solving has become more difficult and complicated. Simultaneously, in light of Moholy-Nagy’s progressive and innovative approaches to use two disciplines as a unified form, today’s designers and artists must acquire cross-field abilities and experiences. Consequently, typophoto provides us with an effective if complex way to develop our creativity.

This thesis documentation first discusses what typophoto is and then explores how the visual message can be made unambiguous by incorporating the notion of typographic and photographic communication. In other words, typophoto could be a powerful vehicle for solving the problem of the ultimate goal of communication: to send a message.
The word typophoto is fascinating to design trainees and professionals because they are aware of the importance of the relationship between typography and photography. Although typophoto derives literally from the words typography and photography, its meaning goes beyond what can be read and seen as typographic and photographic communications. The concept of typophoto not only represents the use of these two different disciplines, but also predicts a new environmental form of communication with various disciplines and technology, such as electric signs (multimedia), display printing (signage), audiology (sound), and film (motion graphics). However, before the thesis could attempt a new interpretation of typophoto, the earlier meaning and form of typophoto had to be researched to give a clearer understanding of the history of the concept of typophoto. To achieve this complicated process, three main precedents were examined to show how the initial idea of typophoto was a provocative concept that combined two different optical processes or disciplines with contemporary art training such as painting, sculpture, architecture, film, etc. Each precedent covered a different period from the 1920s to the 1990s. These works include:

1. *Malerei Fotographie Film* (Painting Photography Film) by Laszló Moholy-Nagy, 1925.
Laszló Moholy-Nagy's *Malerei Fotographie Film* supplies this thesis with the historical framework needed to understand the concept of typophoto. It also provides a link between the proposed thesis topic and the other Modernist movements in typography and photography that were taking place at this time.

Moholy-Nagy published first communiqué on typophoto in the eighth volume of the *Bauhausbücher* series of fourteen publications from the Bauhaus. He wrote about the idea of a new communication form and how the meaning and form of communication had gradually changed. In this critical essay, Moholy-Nagy argued that the collaborative and experimental works between typography and photography were a response to rapid societal changes. *Malerei Fotographie Film* also suggested new visual approaches for the development of visual communication. Moholy-Nagy emphasized the importance of using the photographic process and imagery to create a new kinetic relationship for representational forms and means. For example, in the second chapter of his book *Dynamic of the Metropolis* (Appendix A), Moholy-Nagy created a film script to represent the innovative and progressive combination of photographs, typographical layout and symbols to suggest simultaneous or poly-cinema (kinetic form). This film script illustrated not only the potential of the camera combined with the dynamics of movement but also the visually striking integrations of photographs and text: typophoto. Each page of this script was divided into sections by the strong rhythms of diverse images and text with black horizontal and vertical bars. He further created a sense of discord by placing the word "tempo" in different directions and sizes with varying frequency on each page. This script clearly represented kinetic movement with creative uses of forms to produce the most meaningful message. He also interwove photographs into the text, as well as placing them separately following the text, to make striking visual statements which supported the ideas laid out in the preceding text.

The following text (pages 4-6) is quoted from *Malerei Fotographie Film*.
Neither curiosity nor economic considerations alone but a deep human interest in what happens in the world have brought about the enormous expansion of the news-service: typography, the film and the radio.

The creative work of the artist, the scientist's experiments, the calculations of the business-man or the present-day politician, all that moves, all that shapes, is bound up in the collectivity of interesting events of simultaneity in the long term. The technician has his machine at hand, satisfaction of the needs of the moment. But basically much more: he is the pioneer of the new social stratification, he paves the way of the future.

The printer's work, for example, to which we still pay too little attention has just a long-term effect: international understanding and its consequences.

The printer's work is part of the foundation on which the new world will be built. Concentrated work of organization is the spiritual result which brings all elements of human creativity into a synthesis: the play instinct, sympathy, inventions, economic necessities. One man invents printing with movable type another photography, a third screen-printing and stereotype, the next electrotype, phototype, the celluloid plate hardened by light. Men still kill one another, they have not yet understood how they live, why they live; politicians fail to observe that the earth is an entity, yet television (Telebor) has been invented: the 'Far Seer' - tomorrow we shall be able to look into the heart of our fellow-man, be everywhere and yet be alone; illustrated books, newspapers, magazines are printed - in millions. The unambiguousness of the real, the truth in the everyday situation is there for all classes. The hygiene of the optical, the health of the visible is slowly filtering through.

What is typophoto?
Typography is communication composed in type.
Photography is the visual presentation of what can be optically apprehended.
Typophoto is the visually most exact rendering of communication.
Every period has its own optical focus. Our age: that of the film; the electric sign; simultaneity of sensorily perceptible events. It has given us a new, progressively developing creative basis for typography, too. Gutenberg's typography, which has endured almost to our own day, moves exclusively in the linear dimension. The intervention of the photographic process has extended it to a new dimensionality, recognized today as total. The preliminary work in this field was done by the illustrated papers, posters and by display printing.

Until recently typeface and type setting rigidly preserved a technique which admittedly guaranteed the purity of the linear effect but ignored the new dimensions of life. Only quite recently has there been typographic work which uses the contrasts of typographic material (letters, signs, positive and negative values of the plane) in an attempt to establish a correspondence with modern life. These efforts have, however, done little to relax the flexibility that has hitherto existed in typographic practice. An effective loosening-up can be achieved only by the most sweeping and all-embracing use of the techniques of photography, zincography, the electrotype, etc. The flexibility and elasticity of these techniques bring with them a new reciprocity between economy and beauty. With the development of photo-telegraphy, which enables reproductions and accurate illustrations to be made instantaneously, even philosophical works will presumably use the same means — though on a higher plane — as the present day American magazines. The form of these new typographic works will, of course, be quite different typographically, optically, and synoptically from linear typography of today.

Linear typography communicating ideas is merely a mediating makeshift link between the content of the communication and the person receiving it:

COMMUNICATION ← TYPOGRAPHY → PERSON

Instead of using typography — as hitherto — merely as an objective means, the attempt is now being made to incorporate it and the potential effects of its subjective existence creatively into the contents.
The typographical materials themselves contain strongly optical tangibilities by means of which they can render the content of the communication in a directly visible – not only in an indirectly intellectual – fashion. Photography is highly effective when used as typographical material. It may appear as illustration beside the words, or in the form of 'phototext' in place of words, as a precise form of representation so objective as to permit of no individual interpretation. The form, the rendering is constructed out of the optical and associative relationships; into a visual, associative, conceptual, synthetic continuity: into the typophoto as an unambiguous rendering in an optically valid form.

The typophoto governs the new tempo of the new visual literature.

In the future every printing press will process its own block-making plant and it can be confidently stated that the future of typographic methods lies with the photo-mechanical processes. The invention of the photographic type-setting machine, the possibility of printing whole editions with X-ray radiography, the new cheap techniques of block making, etc., indicate the trend to which every typographer or typophotographer must adapt himself as soon as possible.

This mode of modern synoptic communication may be broadly pursued on another plane by means of the kinetic process, the film.

Laszló Moholy-Nagy, 1925.
Language of Vision, Painting, Photography and Advertising Design by the Hungarian-born designer Gyorgy Kepes offers an example of the analysis and evaluation of communication forms, as well as providing a concrete basis of visual elements to categorize the forms of typography and photography for the thesis. It also helps in understanding the comparison between typophoto and experimental typography in different historical periods. The most important idea from this work is Kepes' understanding of spatial composition within the context of visual communication. This idea influenced this thesis study in its implementation stage by encouraging experimentation (see page 50-53) in the idea of spatial forces and experiences to during the creation of an interactive space. Furthermore, Kepes' clear analysis of spatial forces - rhythm and equivocal space - helps to define the organization of the optical sequence. Finally, his broad study of visual representation and understanding of perception in different forms guides the implementation process of this thesis.

Kepes discussed the visual language that was used in most design processes, and suggested that it can convey facts and ideas in a wider and deeper range than almost any other means of communication. He analyzed visual language in its various forms, such as painting, photography and advertising design, and argued that it must be readjusted to meet its historical challenge of educating audiences to a contemporary standard, and to help them think in terms of form.

In his first chapter, Kepes mentioned that positions, directions and differences in size, shape, brightness, color and texture are measured and assimilated by the eyes. Since each shape, color, value, texture, direction, and position produced a different quality of experience, an inherent contradiction must arise from their being on the same flat surface. These virtual movements of optical qualities molded and formed the picture space, thus acting as spatial forces.

In the second chapter, visual representation, Kepes suggested that visual representation has three parallel tendencies: the tendency to approximate in a two-dimensional relationship the totality of spatial experience - it was a synthesis which included not only what one sees but what one knows about the thing seen; the tendency toward the most precise graphic recording of objects projected on the retina; and the tendency toward a representation of the content of desire and will. He also mentioned that the simplest form of spatial units such as dot, line and space are the perception of a single experience.
Process: A TOMATO Project gives another dimension to the thesis study by comparing different technologies and media in the past and the present. It also helps strengthen critical thinking skills through the further understanding of form and space. Additionally, this precedent gives a clearer idea of how to evaluate the object more expressively and narratively. The most important lesson learned from this precedent was how to organize information and represent information in different technologies and media such as motion graphics, experimental typography and installations. Finally, the use of innovative and progressive forms of visual language provided various examples of form and meaning for the thesis.

In the 1990s, new interpretations of photographic image and typography appeared in various forms and media. The works of TOMATO offered a good example for investigating the new concept of integrating images and words since the group was not about design in any traditional sense. TOMATO was founded in 1991 in London when nine artists from various backgrounds had the same conceptual motives – to create a visual form which could be adapted to fuse the audience’s evolving needs within the different contexts of society. Process: A TOMATO Project employed various techniques and concepts such as audiology, photomontage, digital photography, experimental typography, performance, installation, and even poetic literary representation to extend the goal of visual communication. It means that their vehicle to express their personal experiences was not limited by technologies and media. Instead, they used any number of possible technologies and media to accomplish the communication goal to send a message.

All work is about experience and the mapping of that experience, and for us TOMATO is where we go to compare these maps. In effect we bring a map from one territory and overlay one upon another to see what happens. This is how our individual work evolves, and how we work together.

A collaborative achievement that appeared in different mediums and representations in the book, including paintings, photography, digital imagery and installations, the works of TOMATO were not so much about ideas, though it was richly informed by them, as about emotion and expression, an attempt to snatch and log the fleeting multiple details and momentary atmospheric sensations of daily experience.
The aim of the research was to obtain a general idea of how designers used typography and photography and how they incorporated the two different disciplines to create a powerful vehicle for conveying a clear message for the audience. The transition to using both typography and photography was gradual, but, in general the evidence of the concept of typophoto can be found in designers' works from the 1920s to the present. For example, many modern magazine layouts which incorporated typography and photography in the late 1920s were of American design. Moholy-Nagy noted them as examples of typophoto because the supportive text beside the photograph in the layout clearly communicated a strong visual message to the audience. In this section, analysis of visual examples and references provide the thesis study with a context in which to understand and visualize the concept of typophoto. Prior to the actual research, five questions were asked to set the boundaries of research in relation to this thesis study:

1. How can the notion of typophoto be incorporated with new techniques and other disciplines in the present?
2. Where can we find an example of typophoto and what knowledge can we derive from it?
3. Who was/is working closely with the concept of typophoto?
4. What kinds of visual approaches and techniques do industry or designers create for the future?
5. How does typophoto influence the communication methods of the future?

The aim of this research was an attempt to answer the above questions; the object of this research was to gather visual examples and theories to analyze the influence of typophoto in the past, the present and ultimately to predict the new mode of communication in the future.
All the visual examples (see page 80-91) that were gathered during the research stage had to meet the following criteria to represent the concept of typophoto in different designers' examples:

1. Evidence of using photography
2. Evidence of using typography
3. Evidence of combining both disciplines
4. Innovative approaches
5. Evidence of collective thoughts on typophoto

Because the use of typography and photography varies according to different media, forms and periods, the examples were divided into two matrices (Appendix F and G) in the synthesis stage: analysis of historical typophoto approaches and analysis of typophoto in the present by media and approaches. These matrices helped the reader understand how the concept of typophoto was developed over time and how designers understood the formal practice of typography and photography. Furthermore, the research provided a timeline with a general idea of graphic design history (Appendix B).
To gain a clearer understanding of the concept of typophoto in design history, selected designers were studied using the five criteria mentioned on the previous page. The selected designers represented periods of graphic design history from the late 19th century to the present. At the same time, design firms or groups were also selected in order to analyze and compare their works with the concept of typophoto. The selected designers and design groups (Appendix C) were:

**Individual Designer:**
1. Kurt Schwitters (1887-1948)
2. El Lissitzky (1890-1941)
3. Alexander Rodchenko (1891-1956)
4. Laszló Moholy-Nagy (1895-1946)
5. Alexey Brodovitch (1898-1971)
6. Lester Beall (1903-1969)
7. Gyorgy Kepes (1906-present)
8. Saul Bass (1920-1996)
9. Wolfgang Weingart (1941-present)

**Design Groups:**
10. Bauhaus (1919-1933)
11. Tomato (1991-present)
12. Raygun (1989-present)
Kurt Schwitters

Schwitters claimed that his complex designs combined Dada's elements of nonsense and chance with strong design properties. In *Merz* magazine, Schwitters wrote and designed poetry that played sense against nonsense. He defined poetry as the interaction of elements: letters, syllables, words, sentences. After collaborating with El Lissitzky and Theo van Doesburg, Schwitters devoted his time to advertising design using typographic forms.

In the design application of the thesis, designing poetry and experimental typographic forms helped create a clear message while also suggesting a direction for the audience's perception through such typographic communications as letters, words, sentences and paragraphs. Using the notion of Schwitters' works (randomized use of letters, words, and sentences), the literal expression can be visualized as an image.

El Lissitzky

El Lissitzky's initial idea for visual study could be summarized by PROUNS (an acronym for "projects for the establishment [affirmation] of a new art"). PROUNS introduced three dimensional illusions that both receded (negative depth) behind the picture plane (nought depth) and projected forward (positive depth) from the picture plane. Since he studied architecture at Darmstadt, Germany, the mathematical and structural properties of architecture became the basis for his art. He called PROUNS an interchange station between painting and architecture, which indicates his synthesis of architectural concepts with painting. His book and poster design significantly showed the dynamic use of space and form. His most remarkable contribution to graphic design remains his symmetrical and asymmetrical contrast of pages and typographic forms. The example of *Broom* magazine represented the structural use of space which imposed the modular structure and mathematic order of a grid upon his designs (see page 81). This magazine example represented different approaches in understanding our conventional perspective of the object and it was differentiated from Moholy-Nagy's (Appendix H).

The new concept of incorporating two disciplines in PROUNS offered the opportunity to refine the concept of typophoto in this thesis. In addition, El Lissitzky's innovative and progressive approaches to understanding space and typography offered a way to work the installation of text and image in space: interactive space.
3 Alexander Rodchenko

Rodchenko rejected a social and political role for the artist, believing the sole aim of art was to realize perceptions of the world by inventing forms in space and time. As a Constructivist, he devoted his artistic ability to graphic design and photojournalism.

Constructivism influenced many parts of this thesis study, especially the notion that the functionality and utility of the application must serve the audience, which resembles the ultimate goal of visual communication: to send a message.

4 Laszló Moholy-Nagy

See page 3-6.

5 Alexey Brodovitch

Maximizing the use of white space and razor-sharp type on clear, open pages, Brodovitch introduced a new approach toward editorial design. He sought a musical feeling in the flow of text and pictures. The rhythmic environment of open space balancing text was energized by the art and photography he commissioned from European artists including Henri Cartier-Bresson, A. M. Cassandre, Salvador Dali, and Man Ray. Brodovitch taught designers how to use photography in modern editorial design.

Understanding Brodovitch’s works offered the chance to consider the compositional relationship between typography and photography. His intuitive decision on page layout not only represented the most natural layout for the perception of the audience, but also suggested ways to understand the spatial forces.
6  Lester Beall

Beall understood the New Typography and the Dada movement's random organization, intuitive placement of elements, and role of chance in the creative process. He also incorporated the past and present in his application of old wood typefaces and the symbolic use of graphics. His advanced design module generated a rich level of information structure using photomontage, symbols and colors to show visual contrast layered in space.

Beall's works helped this thesis to create and visualize the hierarchical use of information using various elements such as illustrations, photographs and letters.

7  Gyorgy Kepes

See pages 7 and 100.

8  Saul Bass

His extensive knowledge of programmed visual identification systems and motion graphics changed how information was used to give a clearer message to the audience. For example, through the sensitive movement of typographic elements (such as letters, words and sentences) and photographic images he incorporated typography and images in his movie titles he encouraged the audience to understand and imagine the content of the movie.

The symbolic and iconic use of typography and images in Bass's works greatly helped in understanding the kinetic relationship between the physical shape of the information and the actual message-making. It also helped in exploring ideas in the ideation process more expressively.
Wolfgang Weingart

Weingart's intuitive, expressive typographic experiments, appearing on poster designs, utilized wide wordspacing and letter spacing, step rules, reversed type blocks, unpredictable contrasts of type weight, and diagonal or random placement of letterforms in open pages. His clear and deep understanding of typographic form created an effective way to communicate with the audience. The unambiguity of typographic treatment in his design clearly interacted with the audience to give clearer information. He also explored the typographic imagery made possible with PhotoLithography, incorporating collage, enlarging and overlapping halftone dot patterns and experimenting with type in the design elements to create a dynamic solution for visual communication.

His experimental typography expanded conventional typographic treatment (type as type). It helped this thesis to attempt new trials with various techniques and methodologies. As with other pioneers in graphic design, he also attempted to create a new form of visual language utilizing typography and the photographic process. As a result, Weingart's work is the most relevant to this thesis study.

Bauhaus

For the purpose of this thesis, the influence of Moholy-Nagy in Bauhaus was of most interest. Although graphic design disciplines were not included in the curriculum at Weimar, constituent elements like photography and typography were taught, most particularly by Moholy-Nagy. He explored painting, photography, film, sculpture and graphic design. He also introduced new materials and visual means including kinetic motion, light, and transparency. In the first publication of Bauhaus, Moholy-Nagy wrote, "Typography is a tool for communication. It must be communication in its most intense form. The emphasis must be on absolute clarity." This commitment to a NEW TYPOGRAPHY was integral to the Modern Movement's wish to explore different ways of living, particularly in relation to developing technologies.

The slogan of Bauhaus was "Art and Technology, a New Unit," and its educational representation make it an important movement for the thesis study because of its integral exploration of how to utilize two different disciplines: typography and photography.
Typohoto: The Visual Dimensionality

Research Selected Designers and Design groups

11 Tomato

See page 8.

12 Raygun

As new directions in design were introduced into the mainstream through personal exploration and design education in late 1980s, editorial designers for specialized magazines applied computer experimentation in their pages to represent their ideas. Raygun explored the possibility of rejecting conventional notions of typographic syntax, visual hierarchy, and imagery. With David Carson as its art director between 1992 and 1996, Raygun achieved its stylish and characteristic form with unconventional page spreads, unusual cropping, and a kinetic spatial environment where type and image overlap, fade and blur.

Two major influences were computer softwares, QuarkXpress and Adobe Photoshop, which certainly changed graphic design in the 1990s. The use of these two graphic programs helped this thesis in the experimental exploration of using typography and photography. In addition, any rejecting of conventional design of text and image resulted in a new idea in the design application, to have multiple layers to make one single page.
Additionally, three visual theories and the meaning of typographic and photographic communications were studied to help conceptualize the design application.

1 Human Communication Theory Model
2 Semiotics
3 Visual Perception
4 Typography vs Photography
Typophoto: The Visual Dimensionality

Research Representative Theories (Continued)

Human Communication Theory Model (David K. Berlo)

The process of human communication first developed by David K. Berlo described a method of verbal and visual message making that can be practiced by artists, architects, and designers. This communication model provided support for the logical and structural information of the communication process as it was applied to visual messages, which increased the probability that the viewer would understand and respond in the desired manner. (Appendix D)

The model has four stages: Source, Message, Channel and Receiver.

Source: The source or encoder is a person or group of people who generate and send the message. The source or encoder can be influenced by external factors such as cultural value, social context, creativity, knowledge, attitudes, educational background, visualizing skills, etc.

Message: The message is the intended statement, idea or cognitive object. The message code is the physical figure or form of the message used singularly or in combination; verbal language or visual language composed of signs, symbols, terms and definitions, structure or syntax and so on. The visual message can consist of symbols, marks, photographs, illustrations, imagery, objects, environment, etc.

Channel: This is the mode of sending the message to the receiver. In other words, the senses (taste, touching, smell, hearing or seeing) are affected by the media and materials (print, film, television, multimedia, etc.).

Receiver: The receiver or decoder is a person or group of people who are intended to get the visual or verbal message. The receiver or decoder is influenced by external factors such as cultural values, social context, creativity, knowledge, attitudes, educational background, visualizing skills, etc.

The most important part of this communication model was similar to the linear communication model of typography created by Moholy-Nagy (see page 4-6).

This communication model was used to provide a logical sequence for the message and form in the design application of this thesis study. It also provided extensive information on how to create the nonlinear communication module in the synthesis stage (see page 23).
Semiotics (Charles Pierce)
Charles Pierce delineated a sign as a relationship between an object and an idea, how this is represented, and how the object and idea communicate.12 This relationship was clearly visualized as a triad (Appendix E). When people perceived and interpreted the object/idea, there were three ways to represent the object/idea: iconically, indexically and symbolically. An iconic representation looks like the object: a photograph or image of a flower looks similar to a flower. An indexical representation is an indirect reference embedded in the message of the object/idea, such as the skid marks on the road from a tire used to represent the sudden movement of a car. A symbolic representation is a metaphor referenced in the memory as a sign, mark, or object. For example, a beautiful flower can often be compared to a beautiful lady.

Numerous poetic messages in the design application of this thesis were incorporated using the theory of semiotics. Iconic and symbolic uses of numeric type and graphics were also used. An understanding of the signifier and signified helped to build the narrative and expressive message of personal experiences in the application production.

The intelligence of perception (Rudolf Arnheim)
According to Rudolf Arnheim, the progress of perception can have these following operations in general: active exploration, selection, grasping of essentials, simplification, abstraction, analysis and synthesis, completion, correction, comparison, problem-solving, combining, separating, and putting in context.13 These operations are only methods of analysis by which a person treats the cognitive objects or materials. Cognition is the mental process involved in the receiving, storing and processing of information: sensory perception, memory, thinking, learning.14 Arnheim attempted to extend the meaning and term of cognition to include the process of perception. He suggested a visual perception as visual thinking or cognition.

In the ideation and implementation stages of this thesis study, semiotics and the idea of visual perception helped clarify the cognitive process that enabled the audience to access a clearer message from the design application. These ideas helped the audience perceive without making them stop to analyze the message of the design application.
4 Typography vs. Photography

The conventional meaning of photographic and typographic communication must be understood in order to extend their form and meaning. Both forms of communication have unique visual means through visual syntax, sequential orders, and cognition. To explore the concept of typophoto, both disciplines need to be examined through their common elements: spatial force and experience.

Photographic Communication
If we are unable to decode the message, we read the object as a pure form. In other words, we are trying to "feel" the message through an image which is created by our visual thinking: a cognition. A photographic image can interpret this pure form of the object as a strong visual message instead of just reading it literally.

Generally, people think of photography as a mechanical means of recording the object. However, in a creative environment, it is a genuine medium of expression and offers a correlation between the rendering and removing of visuals. Thus, the acceptance of photographic communication assumes that the use of all graphic means of expression through the cumulative relationship of visual elements such as lines, halftones, areas of intensity, visual illusions, positive and negative space proves beneficial. The characteristic training of photography can be counted on to provide the perfect rendering of visuals which can have both form and meaning. It also gives designers and artists the opportunity to learn to utilize the objectivity of visual communication (send a message) for creating a new spatial experience.

Typographic Communication
Reading might be described as a linear activity, and as early as 1920 Moholy-Nagy considered the linear structure of typographic communication. This linear structure travels along the line of characters which formed from words into sentences, from sentences into paragraphs and from paragraphs into thoughts.

Because of improvements in technology, typographic communication has an opportunity to develop what we want to do with type, how we want text to be read, and what we read to shape the individual character, words and paragraphs as images. Typographic communication can also extend its capability spatially by spacing, kerning, leading and line breaks.
The thesis study assumed that typophoto not only suggested using two disciplines, photography and typography, but also required an understanding and incorporation of the changes in technological and social conditions. In other words, typophoto was less a formal practice and more an ideological concept which meant that the initial concept of typophoto could remain as it was, while the representational form was changed. The reading of these various texts, theories and visual examples thus provided a concept of typophoto which still offered an effective way of presenting a creative, new application. The idea of the design application of this thesis study is the installation of text and image in space while exploring and juxtaposing the similarities and differences between typography and photography. Through this new approach, the concept of typophoto can be revitalized as a new communication mode.
Using Moholy-Nagy's linear typographic communication module to pinpoint the role of communication, the communication goals of typography and photography were compared and synthesized to create an extended communication module for the thesis study (see page 23).

Sampling of existing designers' works further revealed how pioneers of graphic design used both typography and photography to communicate their messages. The thirteen selected designers and design groups covered a range of applications (magazine layouts, album jackets, posters, and interactive media development), media (print, film, and multimedia) and art movements (Constructivism, Dadaism, Suprematism, Bauhaus, New Typography, etc.) (Appendix F).

Two matrices assisted in understanding the formal relationship between typography and photography in these designers' works. The first matrix showed the analysis of historical typophoto approaches (Appendix F). It represented different examples of typography, photography and experimental forms of works. It clearly showed the difference between periods and styles in using typography and photography to send a clearer message. The second matrix represented the analysis of typophoto in the present by media and approach (Appendix G). In this matrix, this thesis study attempted to explain how two different disciplines fused to create a stronger message by using different technologies and media.

The next two pages (23-24) offer the explanatory diagrams of a communication model and cognitive process. These explanatory diagrams suggest the fundamentals for understanding both typographic and photographic communication in the past and present.

Finally, the results of previous research identified three parts of the synthesis process:

1. Integration (a synthesis for the most exact visually-oriented message of typography and photography)
2. Morph (a phenomenon of transforming the message between typography and photography)
3. Dimensionality (a metaphor for extending the ability of our visual communication in the future)

These three parts contributed to the conceptualization and formulation of the design application of this thesis study.
Basic Communication Module:
Linear structure

Nonlinear Communication Module:
Multi-layered structure

Typophoto: The Visual Dimensionality

Synthesis Explanatory Diagram 1

Basic Communication module
Developed by Moholy-Nagy in 1925

Nonlinear Communication module
Developed by Kitae Kim in 1999
This is a representational diagram of message coding by our brain. According to this diagram, typophoto is the most balanced form of communication. The diagram shows how our brain works with the two different disciplines by using two different senses – verbal and visual – to obtain two different indications of the message.

**Typography (text, verbal)**

- **Connotative**: The message is verbally and literally interpreted to represent.
- **Denotative**: The message is visually interpreted to represent.
- **Verbal**: relating to, or associated with letters, words, and sentences.
- **Visual**: relating to, the sense of sight such as light, object, and space.

**Photography (image, visual)**

- **Connotative**: The message is verbally and literally interpreted to represent.
- **Denotative**: The message is visually interpreted to represent.
- **Verbal**: relating to, or associated with letters, words, and sentences.
- **Visual**: relating to, the sense of sight such as light, object, and space.

**Typophoto**

- **Connotative**: The message is verbally and literally interpreted to represent.
- **Denotative**: The message is visually interpreted to represent.
- **Verbal**: relating to, or associated with letters, words, and sentences.
- **Visual**: relating to, the sense of sight such as light, object, and space.
Typophoto starts with the integration of typography and photography, and the successful integration of these two forms is undoubtedly a long-term pursuit in the creation of the most exact visually-oriented message. (Sound offers another possibility to create a clear message, but the use of sound cannot be studied further because of the tight time frame of the thesis study.)

The analysis of the visual examples showed a trend toward communicating through the use of typography or photography in different applications, content and media. In those visual examples which integrated the two disciplines, it is hard to see which discipline is dominant, since both disciplines were treated equally rather than emphasizing one over the other; in other words, they supported each other as a unified form.

Specifically, the result of the analysis showed that the integration of typography and photography has progressed since the increased importance of mass communication in society. It is directly linked to the fact that visual messages have appeared with increasing frequency as the available media has expanded in each period. Using typography or photography alone obviously cannot provide the fine communication structure necessary to convey complex information to the audience. It's only through the integration of typography and photography that a unified form emerges which gives a sense of understanding whereby you can read the image as text or vice versa. Within the context of typophoto, the physical shape or form is less important than the idea of how the designer can expand the possibilities of using typography and photography to visually encode the message and make the audience understand.
Typophoto is the phenomenon of transformation between typography and photography through better communication. This thesis study defines ‘morph’ as a phenomenon of transforming the message between typography and photography.

The question of why text can be an image or an image can be text was constantly explored by pioneers in graphic design history. It could be seen as an experimental attempt to provide a formal justification for using text as an image or vice versa. Aesthetically, the issue of text as an image or image as a text only focused on the shape to the exclusion of function, which is the most important factor in visual communication. However, in the context of modern society, this was not always needed to convey complicated information, as long as the audience was actively involved; otherwise, the goal of visual communication – to send a message – could not be accomplished.

Throughout the research, the morphing of typography and photography offered a solution to the problem of how to send a message because of typography’s ability to morph information into an image, which in turn could be described visually as suggesting the multiple viewpoints of reading. This was because the given layers in the environment created a kinetic form of information which could be read on many levels. This artificial environment, formed from the integration of typography and photography, helped the audience visualize the message by making them interact directly. As the research of the visual examples showed, many designers attempted to create an environment which did not contain hierarchical orders of reading or interpretation. Instead, all information was embedded into the theme, form and shape. Consequently, the audience did not need a context for the information as they read what they saw through applications, content and media and understood what they imagined.

In a majority of visual examples in the early 20th century, generic uses of typography and photography were not yet clarified enough to create a visually clear message. However, the most recent examples found in multimedia, on the web, and in film show an image embedded into the form of the text and the text morphed into an image, allowing for more effective communication – this phenomenon creates a new definition of communication: dimensionality.
Typophoto: The Visual Dimensionality

Synthesis Dimensionality

Dimensionality is a metaphor for extending the ability of our visual communication in the future. An understanding of dimensionality not only offers one way to communicate the message from the design solution to the audience, but also gives a two-way transmission between the application and the audience, thus making it interactive. The dimensionality of typophoto will use a three-dimensional spatial experience to give a more visually-oriented message.

A space is coordinated by three axes: x, y and z axis. Our communication has utilized only the x or y axis; horizontal or vertical. It means that in our visual communication, a one-way transmission and a passive role for the audience are used dominantly, offering only a limited and linear model of communication (see page 23). The concept of typophoto will change this structure of communication and make our visual communication a three-dimensional shape. The possibility of visual communication in three dimensions will use the z axis (spatial experience) to interact with the audience in order to expand the capability for encoding and decoding information.

Analysis shows that as new approaches in visual communication emerge, dimensionality is one of the important factors which make it possible to improve typographic and photographic communications in the future. Through dimensionality, the concept of typophoto can succeed in the present, while creating the most appropriate form of communication in the future.
The ideation process divides into three frameworks:

1. **Volume Modulation** (Conceptualizing)
2. **Visual Fundamentals** (Exploring)
3. **The New Kinetic Concept of Spatial Articulation, Vision in Motion**
   (Visualizing the form and meaning)

Each part clearly represents what are the major considerations necessary to create visual forms and messages for the audience.

A non-traditional poster was determined to be the best design application for this thesis study. Several experimental approaches were discovered as a result of interviewing the designer, Jimmy Chen, and were performed in the research and synthesis stages (see page 9-27). Three steps in the synthesis stage, integration, morph and dimensionality, helped to improve the new visual approaches for the design application of the thesis. Subsequently, the ideation stage followed the above frameworks to create a new environment for interactivity and accessibility for the audience. The first step, volume modulation, helps to conceptualize an effective way of integrating typography and photography. The second step, visual fundamentals, explores and juxtaposes the similarities and differences between typography and photography into a new form. The last step of the ideation process utilizes the previous two steps to visualize a strong message.
Volume Modulation

The first approach was to conceptualize the topic through a volume modulation, suggested in Moholy-Nagy's *Vision in Motion*, to help the student understand the spatial forces at work in the installation. The five stages of volume modulation are:

1. Blocked-out (drawing rough sketches)
2. Modeled (extending dimensions)
3. Perforated (dividing segments)
4. Equipoised (making a balance between segments)
5. Kinetic (creating connections to make an expressive and narrative form)

These five stages seemed at first to be ambiguous and confusing concepts to apply to this thesis. However, they offered an interesting element in the new use of typography and photography: the three-dimensional form of type. Through its use of space and composition, this new form provided an alternative way to explore communication using both disciplines. Within a three-dimensional space, the structure of typography and photography was broken down into small segments and then re-composed in a new shape — typophoto.

The next page shows some of the ideation sketches which incorporated computer aided skills (using Adobe Photoshop, Adobe Illustrator, and Adobe Dimension) to create three-dimensional forms. Each represents an example of different stages of the volume modulation process, with the final stage — kinetic — combined previous four stages of the volume modulation to create the final shape.
Typophoto: The Visual Dimensionality

Ideation (Continued)

Three dimensional type form from normal text. Extruding with modeling modulation

PHOTOGRAPHY

Two dimensional type (outline) with perforating modulation

Two dimensional type (outline) with perforating and equiposing modulations

TAMARO

tempo

Typophoto is the concept of what we think and see the object through the retina. The object is distorted and tweaked by the lighting as illusion. However, Typophoto is not about the illusion. Typophoto is the exploration of the illusion with critical analysis of the structure in our communication methods. Typophoto is about

Three dimensional type (outline) with kinetic modulations.
Visual Fundamentals

The eyes react to the visual because these elements affect the viewer’s physiological and psychological perception. Both typographic and photographic communication contain a strong visual element which can be organized by the visual fundamentals shown below. Within typographic and photographic communications, visual fundamentals can be explored and amplified to organize and communicate information to the audience. They include many different elements that can be used as directions of perception, textures (materials) and artificial illusions (psychological effects). The following list shows categories of visual fundamentals which were regarded as key elements in creating the form of the design application for this thesis.

1 Basic visual elements: dot, line and space
2 Direction: horizontal, vertical, oblique and converging or diverging
3 Texture: rough and smooth, shiny and dull, shaded and clear
4 Artificial illusion: psychological illusion and physiological illusion

The selected visual fundamentals were explored in both typography and photography to create the pure form of typophoto. The following visual elements are found in both typography or photography.

**Typography**
- Type variables
- Leading/kerning
- Color coding
- Physiological illusion
- Textures
- Orientation or direction
- Dot, line and space

**Photography**
- Light variables
- Figure/ground
- Color coding
- Physiological/psychological illusions
- Tone
- Orientation or direction
- Dot, line and space
The third approach was to use the same methodology that Moholy-Nagy suggested (Appendix H). He strongly emphasized the use of photography in art and graphic design fields. He introduced the photograph as an additional element to create a perfect form which conveyed the clearest message to the audience. The following are the original definitions of the new kinetic concept of spatial articulation:

1. Vision in motion is seeing while moving.
2. Vision in motion is seeing moving objects either in reality or in forms of visual representation.
3. Vision in motion is a simultaneous grasp.
4. Vision in motion is a synonym for simultaneity and space-time; a means to comprehend the new dimension.
5. Vision in motion also signifies planning, the projective dynamics of our visionary faculties.

The above definitions clearly clarified what and how vision in motion could be applied to make a communication model to represent the concept of typophoto. While applying this approach to the design application of this thesis study, a brainstorming session was used to gather a list of words that represent the first look of typophoto. The next three pages (33-35) show the word lists which were generated from the brainstorming session to help visualize the design application. Circled or highlighted words in the lists were chosen because they were closely related to the idea of typophoto. These selected words were used as a sketch for the third step of the ideation process. These word lists helped define the kinetic relationship of typography and photography. For example, the word illusion linked with view, vision, and dream. This forced juxtaposition created the new kinetic relationship between selected words. This new relationship was used to make a symbolic, iconic, and indexic message to help the audience to understand what typophoto is.
Word List 1: Selected words were randomly selected to closely relate with typography and photography. Then the new relationship was made by the forced juxtaposition of selected words.
Word List 2: Selected words were randomly selected to closely relate with typography and photography. Then the new relationship was made by the forced juxtaposition of selected words.
Word List 3: Selected words were randomly selected to closely relate with typography and photography. Then the new relationship was made by the forced juxtaposition of selected words.
After the brainstorming session, new visual approaches were developed. For example, to represent the shape and meaning of the word illusion, the symbolic use of other related images could be used or a new synthetic image could be created from the relationship of forced juxtaposition. Since several approaches were applied to the ideation stage, the visualization of the form for the design application changed from an exhibition design to an experimental interactive installation. The reason was that the conventional poster (two-dimensional format) could not suggest the strong spatial experience necessary to interact with the audience. The kinetic relationship from the concept of typophoto created an interactive space needed to visualize and volumize the form and meaning of typophoto.

Additionally, the effect of visualizing layers was achieved through the repetition of the word 'typophoto', typographic variables and the use of photographic imagery and processes. To avoid overly complex figures in each layer, all variables and repetition were limited to emphasize strong visual elements. The word 'typophoto' was repeated in all layers, but visual variables in the letterforms of 'typophoto' were applied differently. Through seeing different figures of the word 'typophoto', the audience will see a new figure of the word 'typophoto'. Furthermore, the visual expression of the message was created typographically and then communicated to the audience narratively.

The following image is a simple schematic diagram to help the reader understand the sequence of the design application.

![Diagram](image)

The next four pages (37-43) presents the main ideation sketches.
Ideation (Continued)

Ideation Sketch 1-1 (typography panel)

- Headlines must be different from the character context of total image.

- Text + text = headline + headline = image + image = typography.
Ideation (Continued)

Ideation Sketch 1-2 (typography panel)

Purpose: How both different fields can be integrated and interpreted with subject, perception, and photography. A visual form is extracted from the shadows of the first or last frame's screen data. The similarities and differences of photography and typography can be interpreted as a visual form, which is generated from looking (Blank & Battle).

- Perception
- Cognition
- Both fields can be interpreted by individual audience

Multilayered structure:
- Visual layer
- Conceptual layer
- Test
- Visual syntax
Ideation (Continued)

Ideation Sketch 1-3 (typography panel)
Contrasting Relationships between black and white with the finest transitions of grey

"Visually striking combinations of photograph and text"

Staccato rhythms

"STACCATO... RHYTHMS"

[Diagram of a design layout with various dimensions and notes on placement of text and graphics.]
Ideation Sketch 3-1 (integration panel)
Typophoto: The Visual Dimensionality

Ideation (Continued)

Ideation Sketch 3-2 (integration panel)
**Typophone: The Visual Dimensionality**

**Ideation** (Continued)

Ideation Sketch 4 (photography panel)

How the negative/positive space can create this ambiguous image in the sky scrapers.
What is the goal of the design application of this thesis?

1. Seeking possibilities for extensive use of typographic and photographic communication.
2. Introducing typophoto with suggestive approaches beginning with the ideation stage.
3. Interacting with the audience and helping them understand what typophoto is.

Through the above three objectives, the goal of the application was identified as:
creating the interactive space and changing the role of the audience in communication.
Typophoto: The Visual Dimensionality

Implementation Continued

- Schematic Diagram from the Ideation stage.

Typophoto is the visually striking combinations of photographs and text.15

Interactive Space
The installation of an interactive space provided an environment where the audience could participate with light and layers of typophoto. The installation included three parts with four panels: First, four layers of plexiglass (translucent); second, four layers which interact with light and the audience; and third, four layers which were hung in place every 3 feet. This distance allowed room between layers so that the audience could more fully participate in the typophoto installation. Light reflects in the first and last layers to project type to the middle two layers. This approach creates an effect of multi-layered images and texts through four layers. The flexibility and elasticity of typophoto are thus represented in this installation of text and image.

Precedents and other references were incorporated into the actual layouts to provide concrete thoughts related to the understanding of typophoto. The iconic, indexic and symbolic uses (see page 19, Semiotics) of typographic variables were represented through the experimental uses of forms and the broken link of individual characters, fragmented type images and meaningful quotes from designers. These elements were used to help the audience think about what typophoto is. The quotes and expressive sentences were also used to attract their attention. The quotes and sentences in each layer provided not only information about the new culture of typophoto, but also raised questions about how to react to this progressive concept.

The application not only presented a definition of typophoto, but also suggested how the spatial experience might assist the audience in further visualizing the concept of typophoto. The visual and literal message also used typographic variables and photographic variables (see page 31) to represent the notion of sound. By moving through the sequence of four panels, the audience was encouraged to experience the dynamic movement of lines, dots, and space which create typographic and photographic imagery within the four panels. This dynamic movement leads the audience to participate in the artificial interactive space of the design application.
The Role of the Audience

The message included with the design installation asked the audience a few questions on how they interacted with the messages (i.e., are you free from structures around you? if you are, you are dead period), but also encouraged stimulation of new thoughts and visions. Because this thesis saw the audience's role in modern communication as a passive one based on a linear communication module (see page 23), it sought to change their role in communication and encourage them to become ACTIVE by participating in and interpreting messages from the application.

The idea of time-based media where the position of the audience is fixed significantly influenced the concept of typophoto. The symbolic use of the numeric numbers in sequences in the installation reversed the original notion of time-based media, which fixed the position of the audience while the information passed by. Instead, this notion of time-based media was reversed to contradict audience passivity and change its role in visual communication to be ACTIVE.

The application of the thesis study attempted to define what typophoto meant to the audience. In other words, a more active role for the audience was established.
The sequential order of the application (see page 42-45) had a two-way interaction: from the first sequence to the third and from the fourth sequence to the second. In other words, it represented a movement from the 'Typography' layer to 'Integrations' and from the 'Photography' layer to 'Integrations.' The following is a unit description of the application.

Layer = representational unit | Sequence = individualized information by panel
(A layer can be worked individually, a sequence needs to incorporate with others.)

Designing and Making Messages: 3 Layers
The message the three layers sought to convey was how images and text could be formulated as a pure form of communication. Each layer strongly reflected the idea of how typographic or photographic communication flows within the context of the visual scene. It is a narrative and cumulative form which encourages the audience to read. The sequence of messages went from the first layer to the last, with a numeric character and symbol to help the audience notice the sequence, and thus prevent them from confusing the cumulative meaning of the entire experience.

Typography Layer
In the first sequence, the audience was provided with meaningful messages about typophoto in different places and with a definition of typophoto from personal experience in the right corner. The notion of sound pitch was suggested by the rhythmical arrangement of type. Typographic images in the middle of the layer started to deconstruct the meaning of typographic communication and the overall image of the sequence. This deconstruction progress ended in the layer of 'Integrations,' and transformed the image of typographic communication into typophoto. This information and these messages directly supported the idea or concept of typophoto and represented an image of typographic communication. The most important step to creating the first layer was to use typographic variables and experimentation to emphasize the typographic message.
Integration Layers

In the second layer (the second and third sequences), information was given to explain the integration between typographic and photographic communication and to show what elements are regarded as important in visual information. Poetry and expressional statements of typophoto were designed and used for this layer to ask the audience questions and provide answers for this new form of communication. This second layer eventually combined the second and the third sequence to make an integral form representing the 'Integrations' layer. Many experimental typographic images were also used to represent the deconstructual process of the type image from the first sequence.

The use of experimental typographic images represented the photographic process of compositional arrangement and it extended the meaning of typographic communication to photographic communication. Symbolic uses of typographic images were used by rejecting the traditional notion of visual communication.

Additionally, in this layer, information represented the process of volume creation,16 which was originally introduced in Vision in Motion by Moholy-Nagy. As with other critical examples from multimedia or web design, the installation needed to have a dimensionality to communicate complicated information because of its web-like structures. The installation of text and image could be misunderstood as a display design to show the shallow depth of information which would fail to link the audience to the next sequence. In this particular case, a three dimensional form was suggested to give a narrative message within the volumic space, and it also influenced the whole creation of messages with its suggestive process: Blocked-out, modeled, perforated, equiposed and kinetic. The physical shape of three-dimensional form not only conveyed complicated information, but also rejected the linear structure of typographic and photographic communication.

The redundancy of mirroring text and images from the second sequence to the third sequence appeared to create kinetic relationships between messages and sequences. The second and third sequence were working as one layer as mentioned in the previous paragraph. Basic visual elements (see page 31) utilized to implement the second and third sequences included redundancy, reflection, placement, scale, etc. To emphasize both images and text, text was outlined against a background of pixilated images. The pixilated imagery represented the symbolic use of the digital image that will be used in the future. It also suggested that images could be transformed to text or vice versa by analyzing and understanding basic visual elements (see page 31).
With the second and third sequence, the 'Integrations' layer was completed to show the transition and transformation between typographic and photographic communication by creating a new image through overlapping.

3. Photography Layer
In the fourth sequence as the third layer (this can also be the first sequence as mentioned earlier; see page 47), the manipulation of the image from a chimney and a photogram (circles) was used to represent the physicality of photography. The use of a mirrored image (from the first sequence) was consistent with the 'Integrations' layer. The contrast of using different sizes and weights of type for 'typ' and 'photo' gave an indexical representation of what this sequence was about, because the difference of scale and weight of 'typ' and 'photo' obviously showed individual dignity within the layer. The kinetic motion was re-interpreted by using numeric numbers with poetic questions; like other sequences, this sequence also asked the audience questions. The audience was asked to find the difference between an illustrated image of a chimney in the middle-left of this sequence, and a photographic image of a chimney in the middle-right. This contradiction of using the same images symbolically showed how the image of the object could be used and understood differently by means of techniques and because of the audience individuality, but interpreted with the same weight and value. In other words, we have experienced the visual illusion with our own perceptions. Everyone could see different images from the same object, but the entire meaning from the object could not be changed. Overall, the detail of this sequence led the eye of the viewer to the message in the right-bottom of the page.

The following example of poetry was used to help the audience be stimulated with asking and answering by themselves.

SEE what you WANT
IMAGINE what you SEE

EVERYTHING is more complicated than VISUAL

I see is what I IMAGINE
tell me about your story
Typophoto: The Visual Dimensionality

**Implementation** Application

First sequence: 'Typography' layer
Second sequence: 'Integrations' layer
Third sequence: 'Integrations' layer
Fourth sequence: 'Photography' layer
**Typophoto: The Visual Dimensionality**

**Implementation**  Installation Description

Application configuration:

Each sequence panel size: 28" x 50" (plexiglass size)
Material: transparent photographic quality film (up to 720 dpi) mounted on plexiglass

Number of sequences: 4
Number of layers: 3 (the first and last sequence stand alone as individual layers, and the second and third sequence are joined together as one layer).

Light: uses ambient light through the gallery window and available halogen light.
Installation: 4 x 1/8 inch thick plexiglass with mounting film prints.
The application of this installation is for educational purposes. Its form and presentation were an experiment to measure the level of audience perception and give them an active role in communication. Within the space created by the three layers, the audience could walk around and see what they were interested in. The information from the layers created new meaningful questions that they could ask and answer by themselves. The interactivity and accessibility of the installation of text and image accomplished the two goals of the implementation part of this thesis study. The design application showed how the audience could participate in information gathering and select and understand a clearer message.

Information could be formatted by any medium or any technology. This thesis study suggested that typophoto is not a message, but a form. It is a form to contain the message to stimulate the audience through interactivity and accessibility. Additionally, typophoto is a new way of representing visual information in the area of communication. Because typophoto will be much more prominent in our daily life in the future, it means that we must interact with its form and meaning more readily. This installation of interactive space was an ideal tool for measuring audience perception as well as being a precursor to the new idea of interactivity and accessibility.
Evaluation of the project occurred simultaneously with the thesis exhibition. The target audience received an evaluation form (shown below) which consisted of evaluation questions addressing particular aspects of the installation. Specific questions also addressed the issue of project improvement for future implementation.

1. Overall, do you understand the intended goal of this thesis project?
   yes  no

2. What do you think of the aesthetics of this design application?
   successful efficient normal not appropriate (you can select only one)

3. Which part or process of this design application do you appreciate the most?
   material installation content form meaning (you can select what you want)

4. Do you understand the designer's message through this form and orientation?
   yes  no

4-1. If yes, what is the designer's message? If no, please explain.
   Please write briefly and use the back of this page.

5. What do you feel was the strongest aspect of this particular design application as related to the overall topic of the thesis?

6. Do you think that you gained something from experiencing the application?
   If so, please explain.

7. Do you understand more clearly what typophoto [the integration of typography and photography] is after experiencing this application?
   yes  no

8. What could be changed in the final four-part poster application to make the intended message more clearly accessible and understood?
Typophoto: The Visual Dimensionality

Evaluation Preliminary and Intermediate Evaluations Summary

1 Overall, do you understand the intended goal of this thesis project?
yes: 23  no: 6

2 What do you think of the aesthetics of this design application?
successful: 27  efficient: 1  normal: 1  not appropriate: none  (you can select only one)

3 Which part or process of this design application do you appreciate the most?
material: 29  installation: 22  content: 16  form: 1  meaning: 11  (you can select what you want)

4 Do you understand the designer's message through this form and orientation?
yes: 18  no: 9

4-1 If yes, what is the designer's message? If no, please explain.
Please write briefly and use the back of this page.
- new relationship of typography and photography
- typophoto is the new communication method
- the definition of typophoto: a close integration of typography and photography
- new theory of visual communication?
- typophoto: typography + photography
- Exploration of typography and photography opens new era of graphic design.
- Typophoto is a new word which creates the new method of visual communication.
- Typophoto will govern the visual communication in the future.
- The role of typography and photography in graphic design can be fused together: typophoto
- new idea of using typography and photography
- Typophoto is an experimentation of using typography and photography
- The integration of two different disciplines will open the new aspect of visual world.
- understanding, negotiating, and adjusting of two different things, typography and photography

5 What do you feel was the strongest aspect of this particular design application as related to the overall topic of the thesis?
- transparent materials
- plexiglass
- experimentation
Evaluation
Preliminary and Intermediate Evaluations Summary Continued

- interaction
- accessibility
- creativity
- layouts and design skills
- the aesthetical decision
- typographic imagery
- This work looks like fine art! It is a communication art!
- typographic variables, illustrations, photographic imageries
- Technical success of this design application (translucent plexiglass - thermal printing) is efficiently delivering the message of typophoto.

6 Do you think that you gained something from experiencing the application?
If so, please explain.
yes: 18  no: 6
- visual information is clearer than verbal.
- The way of communication can be explored to the new way.
- The installation of your works are very informative and detailed to explain what typophoto is.
- Your installation is a non-linear information structure. This could be the same notion of what interactive multimedia or web development are looking for.
- The experience through four layers gave me a streaming information until I finished to walk. It is a new experience.
- understand a definition of typophoto
- how to integrate typography and photography
- Typographic imagery can be seen as photographic image.
- concise organization of streaming information through the design application.
- interesting to know how typography and photography were integrated through translucent plexiglasses.
- interaction between the audience and application

7 Do you understand more clearly what typophoto [the integration of typography and photography] is after experiencing this application?
yes: 22  no: none
8 What could be changed in the final four-part poster application to make the intended message more clearly accessible and understood?
- Size of text could be enlarged.
- Overall, it is clearly introducing the idea of typophoto, but text are yet to be clearer. It is hard to understand how to read.
- A definition of typophoto (8)
- Any relationship between messages in different layers?
- Using color
- Using light sources (artificial or natural light)
- Try to use more open space than the exhibition
- The subject of the thesis is hard to be understood because there was no explanation of why your application is important.

After the exhibition (March 13-29), the application needed to be revised to better communicate the intended messages. The physical environment and material were effectively communicated to the audience, but messages in the application were not perfectly understood by them. The link of messages seemed to be broken while the message was not successfully transmitted through the three layers. This communication problem could also have happened because the application design was highly reliant on personal experience. To solve this communication problem, the following questions were considered to improve the effectiveness of the application:

1 What is the main communication goal of the project?
2 How can it be modified and refined to give a clearer message?
3 What would be an appropriate message which contains the most meaningful information about typophoto?
4 How can the message of the project communicate to the audience? Any particular cognitive process?

After asking the above questions, the original application was revised to increase the audience's understanding of typophoto (see transparency prints after page 61).
**Typophoto: The Visual Dimensionality**

**Further Implementation**

**Headlines**

Adding headlines in different positions to the four sequences helped to create clearer communication through the layers. These messages had a poetic rhythm to help the audience understand the concept of typophoto. The structure of these headlines was short but highly expressive and identical. The addition of new messages helped create the new kinetic relationship of information through the four sequences and three layers.

The first sequence: read individual characters > words > sentences > paragraphs > image
The second sequence: read the image = decode the message
The third sequence: form + meaning = encode the message?
The fourth sequence: read dots > lines > space > image

The size and weight of information in the sequences was also enlarged for better perception. The plexiglass medium as well as the arrangement of images and text helped the audience to see the four sequences as a single merged composition.

**Navigation**

To increase the interactivity and accessibility of the application for the audience, navigational notations was placed on the top corner of the pages. These insertions helped the audience to appreciate the sequences and layers of the application. The goal of adding new graphic elements in the application not only suggested which sequence or layer they read, but also how they connected the sequences to understand the design solution in its entirety.
After three full committee meetings, it was determined that the communication within the design application needed to be clearer for the audience. It successfully achieved the two main goals of the design application of the thesis study, but the message of what typophoto was not clearly shown in the application sequences. A new idea emerged which would increase the accessibility of the application. Two new sequences were added in front of the first sequence and at the end of the last sequence. These new sequences provided the definition of typophoto and represented its accessibility. The new sequential installation is shown at the bottom of the page.

These added sequences will help the audience to think about what typophoto is before they explore the interactive space of the four main sequences.
is the close integration of typography and photography.

is a new spatial experience.

is not a message, but a form.

is a phenomenon of our visual illusion in space.
**Typophoto: The Visual Dimensionality**

**Dissemination**

**Gallery Presentation**
The design application was exhibited at the RIT Bevier Gallery (March 10-March 30, 2000). The installation of text and image represented the similarities and differences between typography and photography. Three layers of the installation encouraged the audience to think about the definition of typophoto and to become part of the interactive space where the installation of text and image were created. The gallery presentation helped the audience experience the meaning and use of typophoto.

**New Media Presentation**
Professor Jeff Sonstein in the Information Technology Department reviewed the initial concept of the design application, and reviewed and evaluated it with Information Technology Graduate students on May 15, 2000. He introduced the concept of information structure on the Internet by comparing it with the idea of the design application. He would like to evaluate the notion of a multi-layered structure to transmit clearer information by comparing the idea of the design application with the concept of the Internet's information structure.

**Future Presentation**
The design application could expand its accessibility and interactivity by accessing another discipline or using new technology. Interactive multimedia development would help to accomplish the further modification of the design application. Audiology (sound development) would also help to enhance the concept of typophoto. The new kinetic relationship could be created by using sounds. These enhancements for typophoto could make a new communication method that could embed complicated information and represent it more synthetically.
Conclusion

Vision in Motion is simultaneous grasp. Simultaneous grasp is creative performance - seeing, feeling and thinking in relationship and not as a series of isolated phenomena. It instantaneously integrates and transmutes single elements into a coherent whole. This is valid for physical vision as well as for the abstract.20

The goal of this thesis was to create an interactive space and change the role of the audience in visual communication through the concept of typophoto.

Research suggested that the concept of typophoto could be understood not just as the use of typography and photography but also required an understanding and incorporation of the changes in technological and social conditions. Simultaneously, throughout the examination of different designers and design groups, the initial concept of typophoto hasn’t changed but it has been applied differently to create a clearer message for the audience.

Each process of the thesis offered a great opportunity to analyze differences and similarities between typographic and photographic communication. A clearer perspective for representing synthetic information from various processes and approaches was elucidated by the ideation and synthesis processes.

Throughout the thesis process, typophoto not only represented the integration of typography and photography but also suggested the adoption of various forms and meaning from different creative sources. The ultimate goal of typophoto doesn’t restrict the limits of the communication method, but the extensive use of various forms, techniques and media does allow typophoto to be a distinctive concept among others.

The aim of this thesis was to push the boundaries of what can be achieved with an understanding of time and technological influences. Thus, the concept of typophoto was re-interpreted as a broader methodology of visual communication. This thesis study sought to show that the communication of the future will expand through the visual dimensionality of typophoto.

Typophoto is the close integration of typography and photography.

is a new spatial experience.

is not a message, but a form.

is a phenomenon of our visual illusion in space.
Endnotes


4 Ibid., 53.

5 Ibid., 68.

6 Ibid., 68.


Endnotes Continued

11 Ibid., 22.


13 Ibid., 337.


17 Ibid., 153.

18 Hight, Picturing Modernism, 184.

19 Moholy-Nagy, Vision in Motion, 218.

20 Ibid., 12.
Dynamic of the Metropolis: Sketch for a Film Also Typophoto (Original title)

The manuscript sketch Dynamic of the Metropolis was written by Moholy-Nagy in the year 1921-22. Although the film script couldn’t be made into a movie, the dynamics of this progressive layout provided this thesis with much of its inspiration. The initial idea of this manuscript was that no work (of art) can be explained by the sequence of its elements. In addition, it suggested that the totality of the sequence, the sure interaction of the smallest parts upon one another and upon the whole are the imponderables of the effect.
A sketch of a manuscript for a film

Written in the year 1921/22

L. MOHOLY-NAGY:
DYNAMIC OF THE METROPOLIS

First, animated cartoon of moving dots, lines, which, seen as a whole, change into the building of a zeppelin (photograph from life).

Crane in motion during the building of a house
Photographs: from below from above

Hoisting bricks Crane again: in circular motion
Close-up.
The movement continues with a car dashing towards the left. A house, always the same one, is seen opposite the car in the centre of the picture (the house is continually being brought back to the centre from the right; this produces a stiff jerky motion). Another car appears. This one travels simultaneously in the opposite direction, towards the right.

A tiger paces furiously round and round its cage

Row of houses on one side of the street, translucent, races right towards the first house. Row of houses runs off right and reappears from right to left. Rows of houses facing one another, translucent, rushing in opposite directions, and the cars moving ever more swiftly, soon giving rise to FLICKERING.

This passage as a brutal introduction to the breathless race, the hubbub of the city.

The rhythm, which is strong now, gradually slackens during the course of the film.

TEMPO TEMPO TEMPO TEMPO

Quite clear — up at the top — signals:

(Close-up.)

All automatic, au-to-ma-tic in movement

Shunting yard Siding

TEMPO TEMPO TEMPO TEMPO

The tiger: Contrast between the open unimpeded rushing and the oppression, constriction. So as to accustom the public from the outset to surprises and lack of logic.
Appendix A Continued

Warehouses and cellars

Darkness

Becoming gradually lighter

The appurtenances of civilisation heightened by making countless levels intersect and interpenetrate. The train from below: something never experienced before.


Association for laborious telephoning. Dream-like (glass-glass-glass); a gradual turn simultaneously prepares the viewer for the movement of the approaching aeroplane.

The face of the man telephoning (close up) — smeared with phosphorescent material to avoid producing a silhouette— turns VERY CLOSE to the camera; above his head to the right (translucent) the aeroplane is seen approaching in a spiral from far off.

AN ANGRY LYNX.

The wheels. They turn to the point when the vibration fades.
Low aerial photograph over a square with 8 streets opening into it.

The vehicles: electric trams, cars, lorries, bicycles, cabs, bus, cyklonette, motor-cycles travel in quick time from the central point outwards, then all at once they change direction; they meet at the centre. The centre opens, they ALL sink deep, deep, deep —

a wireless mast

Under the tramways the sewers being extended. Light reflected in the water.
Typophoto: The Visual Dimensionality

Appendix A Continued

ARC-LAMP, sparks playing. Street smooth as a mirror. Pools of light. From above and oblique with cars whisking past. Reflector of a car enlarged.

SCREEN BLACK FOR 5 SECONDS

Electric signs with luminous writing which vanishes and reappears. YMONOHOLYMOH

Fireworks from the Lunapark. Speeding along WITH the scenic railway.
A man can remain oblivious of many things in life. Sometimes because his organs do not work quickly enough, sometimes because moments of danger, etc., demand too much of him. Almost everyone on the switchback shuts his eyes when it comes to the great descent. But not the film camera. As a rule we cannot regard small babies, for example, or wild beasts completely objectively because while we are observing them we have to take into account a number of other things. It is different in the film. A new range of vision too.

Devil's wheel. Very fast. The people who have been slung down stand up unsteadily and climb into a train. A police car (translucent) races after it. In the station hall the camera is first turned in a horizontal, then in a vertical circle.


Punch and Judy show.

CHILDREN

Public, like waves in the sea.

Girls.

Legs.

Jazz-band instruments (Close-up).

Football match. Rough. Vigorous TEMPO.

METAL CONES — empty inside, glittering — are hurled towards the lens, (meanwhile) 2 women draw back their heads in a flash. Close-up.

(in order to scare the public. A dynamic moment too.)
A glass of water (expanses of water with glass rim in close-up) in motion like a fountain; spurts up; Jazz-BAND with the TALKING FILM Fortissimo; Wild dancing caricature, Street-girls.

**THE TIGER**

**BOXING**

Close-up. ONLY the HAnds with the boxing gloves.

Slow-motion, SLOW-MOTION.
Slanting chimney smokes; a DIVER emerges from it; sinks head first into the water.

**THE DIVER**

Smoke puffing like a cauliflower, photographed over a bridge when a train is passing underneath.

Propeller in the water in action. Mouths of the sewers under and above the surface of the water. By motor-boat through the canals to the garbage and refuse collection depot.
Scrap is converted into factory work.
Mountains of rusty screws, tins, shoes etc.
Paternoster lift with view to the end and back.
In the circle.

From here the whole film (shortened) is run **BACKWARDS** as far as the Jazz-Band (this backwards too).

From **FORTISSIMO-O-O-O** to **PIANISSIMO**

Glass of water
Identification of corpses (morgue) from above.

Military parade

**MARCH-MARCH-MARCH-MARCH**

**WOMEN RIDERS-LEFT**
The two shots printed one above the other, translucent.

**LEFT-LEFT-LEFT**
Stockyards. Animals.
Oxen roaring.
The machines of the refrigerating room.
Lions.
Sausage-machine. Thousands of sausages.
Head of a lion showing its teeth (Close-up).
Theatre. Rigging-loft.
The lion's head. TEMPO-o-O
Police with rubber truncheons in the Potsdamer Platz.
The TRUNCHEON (close-up).
The theatre audience.
The lion's head gets bigger and bigger until at last the vast jaws fill the screen.

The frequent and unexpected appearance of the lion's head is meant to cause uneasiness and oppression (again and again and again).
The theatre audience is cheerful - and STILL THE HEAD comes! etc.
Dark for several seconds

DARK DARKNESS

Large circle

TEMPO---O---O
Circus from above, almost a ground-plan.

Lions, Acrobat on skis.
Clowns.
CIRCUS

CLOWN

Dressage

CIRCUS
Trapeze, Girls.
Legs.
Clowns.

LIONS.
LIONS!

CLOWNS.

DRESSAGE

Dressage.
Waterfall thunders. The TALKING FILM.
A cadaver swims in the water, very slowly.

Military. March-march.

Glass of water.

In motion.

SHORT-FAST

Spurts up —
The timeline shows the historical and relative events that produced the concept of typophoto.

1835
Talbot, 1st photographic negative

1881
Ives, halftone screen

Mergenthaler linotype machine

Lanston typesetting machine

Eastman Kodak camera

1909
Analytical Cubism

1888
Russian Constructivism

1920s
Beats the Whites PROUN

Moholy-Nagy at Bauhaus

1923
Schwitters

El Lissitzky The Isms of Art

1924
Moholy-Nagy Bauhaus established

1925
Tschichold

The New Typography

1928
Beall

Chicago Tribune Ad

1933
Brodovitch art directs Harper’s Bazaar

1934
Rodchenko serial covers, Mess Mord books

1951
Brodovitch Portfolio magazine

1968
Weingart joins Basel school of design faculty

1970s
The international typographic style becomes dominant throughout the world

1972
Weingart 1st American lecture series

1997
Est. 150 million web pages

The influence of digital media invades graphic design
Designer

Kurt Schwitters (1887-1948)

Artist, typographer and poet. Born in Hanover, Germany. Published *Merz* magazine featuring the work of progressive artists like Hans Arp, Théo van Doesburg, and El Lissitzky. Along with Jan Tschichold and others formed the *Ring neue Werbegestalter* in 1927.
Designer

El Lissitzky (1890-1941)

Russian designer, painter, architect and photographer; born in Smolensk province. Studied architecture at Darmstadt Technische Hochschule, Germany. El Lissitzky brought the philosophy of Constructivism to industrial and graphic design. His pivotal role in typographic theory is generously acknowledged by Jan Tschichold in his seminal text *Die neue Typographie* (1928).
Designer

Alexander Rodchenko (1891-1956)

Artist, designer, photographer. Born in St. Petersburg. Along with Vladimir Tatlin and El Lissitzky, he was a leading figure of Russian Constructivism. In 1921, he abandoned 'pure art' in favor of a visual communication that would serve the needs of society. His pioneering constructivist typography, with its geometrical severity, heavy rules and bold, hand-drawn Sans Serifs, was inextricably linked with the politics of revolution.
Designer

Laszló Moholy-Nagy (1895-1946)

Film maker, designer, painter, writer, educator and photographer. Born in Hungary. Awareness of avant-garde art movements, including Constructivism and De Stijl, took him to Vienna. Associated with Hans Arp, El Lissitzky, Théo van Doesburg and the Naum Gabo. His typographic achievement included designing the Bauhaus prospectus and a number of the fourteen books published by the school after 1925. Later, he worked closely with György Kepes at the Institute of Design in Chicago.
Designer

Alexey Brodovitch (1898-1971)

American editorial art director and photographer. Born in Russia, Brodovitch worked in Paris designing and illustrating store displays. After moving to America, he became an art director of Harper's Bazaar followed by freelance work and work with the Ayer advertising agency. He redefined the role of the art director and introduced new ideas in editorial graphics and photography. His dynamic layouts combined bold typography with adventurous fashion and reportage photography from great photographers like Man Ray, Henri Cartier-Bresson, Richard Avedon and Irving Penn.
Designer

Lester Beall (1903-1969)

Contributed to the Modern Movement in American graphic design before the influx of European immigrant designers in the late 1930s. He was an early innovator in the development of the design manual as a method of controlling the disparate elements of a corporate identity scheme. He also used the integration of photography and typography variables in his design concept.
Designer

Gyorgy Kepes (1906-present)

Hungarian-born designer recognized for his graphic and exhibition design and for his contribution to design education. Influenced by Walter Gropius and Laszló Moholy-Nagy whom he met during the early 1930s in Berlin. He established the Center for Advanced Visual Studies at MIT. Throughout his teaching career he practiced as a designer, producing outstanding work for Container Corporation of America and *Fortune* magazine.
Designer

Saul Bass (1920-1996)

Graphic designer responsible for numerous innovative and memorable title sequences and promotional pieces for films. He studied with Gyorgy Kepes at Brooklyn College, New York. Bass's technique for film titles was to reduce the array of predictable images to a minimum of graphic elements. Early examples include Otto Preminger's films *The Man with the Golden Arm* (1955) and *Anatomy of a Murder* (1959).
Designer

Wolfgang Weingart (1941-present)

Self-taught graphic designer, typographer and influential teacher who pioneered Post-Modernism. He challenged the rational order and dogmatic rules of the International Typographic Style with his intuitive, expressive typographic experiments. His experiment of typography appearing on poster and cover designs utilized wide wordspacing and letter-spacing, step rules, reversed type blocks, etc. During the mid-1970s he began exploring the graphic imagery made possible with photolithography, incorporating collage, enlarging and overlapping halftone dot patterns and experimenting with design elements to create uniquely dynamic solutions.
Group

Bauhaus (1919-1933)

German design school which attempted to create a new unity between art and industry by rejecting any division between decorative and constructional techniques. Bauhaus was the most important educational enterprise underpinning the development of the Modern Movement in graphic design. Although graphic design was not specifically included in the curriculum at Weimar, constituent elements like photography and typography were taught. Moholy-Nagy wrote that typography is a tool of communication. It must be communication in its most intense form. The emphasis must be on absolute clarity in as seen the Bauhaus press, *Staatliches Bauhaus in Weimar 1919-1923*. 

![Image of Bauhaus poster]
Group

TOMATO (1991-present)

TOMATO was founded in 1991 in London when nine different artists from various backgrounds had the same conceptual motives to create a visual form which could be adapted to the audience’s evolving needs and in different contexts; they are not about design in any traditional sense.
Typograph: The Visual Dimensionality

Appendix C Continued

Designer

Raygun (1992--check! -present)

Raygun is a thought and a culture. Raygun magazine shows provocative and progressive magazine layouts with unreadable text and ambiguous imagery. The content of the magazine is about music and the designers narratively expressed the content of the magazine through their own interpretation.
The Model of Human Communication by David K. Berlo

<table>
<thead>
<tr>
<th>Source</th>
<th>encode</th>
<th>Message</th>
<th>Channel</th>
<th>decode</th>
<th>Receiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication skills</td>
<td></td>
<td>Elements</td>
<td>Setting</td>
<td></td>
<td>Communication skills</td>
</tr>
<tr>
<td>Attitudes</td>
<td></td>
<td>Structure</td>
<td>Hearing</td>
<td></td>
<td>Attitudes</td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
<td>Content</td>
<td>Touching</td>
<td></td>
<td>Knowledge</td>
</tr>
<tr>
<td>Social-Cultural Context</td>
<td></td>
<td>Treatment</td>
<td>Smelling</td>
<td></td>
<td>Social-Cultural Context</td>
</tr>
</tbody>
</table>
A Semiotic Triad by Charles Pierce
<table>
<thead>
<tr>
<th>Name</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gyorgy Kepes</td>
<td>1906-present</td>
</tr>
<tr>
<td>Saul Bass</td>
<td>1920-1996</td>
</tr>
<tr>
<td>Wolfgang Weingart</td>
<td>1941-present</td>
</tr>
<tr>
<td>Bauhaus</td>
<td>1919-1933</td>
</tr>
<tr>
<td>TOMATO</td>
<td>1991-present</td>
</tr>
<tr>
<td>Raygun</td>
<td>1992-present</td>
</tr>
<tr>
<td>Alexey Brodovitch</td>
<td>1898-1971</td>
</tr>
<tr>
<td>Lester Beall</td>
<td>1903-1969</td>
</tr>
<tr>
<td>Typography</td>
<td>Photography</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Kurt Schwitters</strong> (1887-1948)</td>
<td><img src="Smerz1920s.jpg" alt="Image" /></td>
</tr>
<tr>
<td><strong>El Lissitzky</strong> (1890-1941)</td>
<td><img src="ElLissitzky.jpg" alt="Image" /></td>
</tr>
<tr>
<td><strong>Alexander Rodchenko</strong> (1891-1956)</td>
<td><img src="Rodchenko.jpg" alt="Image" /></td>
</tr>
<tr>
<td><strong>Laszlo Moholy-Nagy</strong> (1895-1946)</td>
<td><img src="Moholy-Nagy.jpg" alt="Image" /></td>
</tr>
<tr>
<td><strong>Alexey Brodovitch</strong> (1898-1971)</td>
<td><img src="Brodovitch.jpg" alt="Image" /></td>
</tr>
<tr>
<td><strong>Lester Beall</strong> (1903-1969)</td>
<td><img src="LesterBeall.jpg" alt="Image" /></td>
</tr>
</tbody>
</table>
Emphasis on Technology

Emphasis on Clear Message

Emphasis on Ambiguity

Emphasis on Ambiguity

Emphasis on Form
### Appendix G: Matrix B: Analysis of Typophoto in the Present by Media and Approaches

<table>
<thead>
<tr>
<th>Media and Approaches</th>
<th>Emphasis on Form</th>
<th>Emphasis on Technology</th>
<th>Emphasis on Clear Message</th>
<th>Emphasis on Ambiguity</th>
<th>Emphasis on Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Print</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*97*
This important example of typophoto was done by Moholy-Nagy in 1922. The work from the title page of the journal Broom reveals how he utilized typography and photography to maximum effect. This thesis study started to explore the ideation process from this image and Lissitzky's Broom cover (See Appendix C).
### Appendix I

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angle of vision</td>
<td>The limited range or sign of an object from a stationary point.</td>
</tr>
<tr>
<td>Ascender</td>
<td>That part of certain lower-case letters (b, d, f, h, k, l, i) which extends above the x-height.</td>
</tr>
<tr>
<td>Asymmetric</td>
<td>Modern typographic design style formulated in Germany during the 1930s that rejects the traditional typography arrangement of type on a central axis (symmetry) and advocates the functional, dynamic placement of typographic and visual elements. Asymmetric design strives to create a visually balanced arrangement of contrasting elements.</td>
</tr>
<tr>
<td>Asymmetry</td>
<td>Lack of symmetry designating an unequal spatial arrangement.</td>
</tr>
<tr>
<td>Bauhaus</td>
<td>It means building house in German. German design school which attempted to create a new unity between art and industry by rejecting any division between decorative and constructional techniques. Bauhaus was the most important educational enterprise underpinning the development of the Modern movement in architecture. Although graphic design was not specifically included in the curriculum at Weimar, constituent elements like photography and typography were taught, most particularly by Moholy-Nagy. In the first publication of the Bauhaus press, Staatliches Bauhaus in Weimar, 1919-1923, Moholy-Nagy wrote: ‘Typography is a tool of communication. It must be communicated in its most intense form. The emphasis must be on absolute clarity.’ This commitment to a New Typography was integral to the Modern Movement’s wish to explore different ways of living, particularly in relation to developing technologies.</td>
</tr>
<tr>
<td>Bayer, Herbert</td>
<td>1900–1985 Austrian born graphic and exhibition designer, architect, photographer and painter who pioneered Modernism in European and American design.</td>
</tr>
<tr>
<td>Beall, Lester</td>
<td>1903–1969 Contributor to the Modern Movement in American graphic design before the influx of European immigrant designers in the late 1930s. During the 1950s and 60s was responsible for numerous major corporate identity programs.</td>
</tr>
<tr>
<td>Concept</td>
<td>An idea, thought, theory, or notion conceived in the mind.</td>
</tr>
<tr>
<td>Contour</td>
<td>The outline or outermost edge of a plane that defines its shape.</td>
</tr>
</tbody>
</table>
Dada

Literary and visual art movement that developed in Switzerland in 1916. Responding to the futility of the first World War, a group of poets and artists set out to ridicule established values and beliefs. Pioneered in Zurich by the poets Tristan Tzara and Hugo Ball and the artist Hans Arp, the movement quickly spread to other major cities like New York, Paris, and Berlin. The need to shock required new forms of visual communication with bold typography, collage, and photomontage emerging as favored techniques.

Descender

The part of a lower-case letter that appears below the x-height.

De Stijl

Dutch art movement and magazine originated by the painter and designer Theo van Doesburg in 1917. De Stijl, which influenced the international avant-garde throughout the 1920s, was committed to a unity of the arts.

Equilibrium

The state that occurs when a number of forces act upon a structure and the structure does not move, or if already moving, does not change its state of motion.

Form

A total three-dimensional whole such as an object, geometric solid, product, sculpture, or architectural structure.

Futurism

Revolutionary art movement founded in 1909 by the Italian writer and poet Filippo Tommaso Marinetti. Conceived as a literary movement, it subsequently embraced all the arts including painting, sculpture, music, and architecture. Futurism encouraged the emergence of the typographer/poet, challenging the tradition of the printed page and the predictable sequence of typographic information. Type elements and collage were used in a dynamic manner to create picture-poems, early forerunners of concrete poetry.

Gestalt

“Whole” configuration or form.

Illusion

An inaccurate or false perception; a contradiction between what is perceived through the senses and what actually exists.

Kepes, Gyorgy

1906-present. Hungarian born designer recognized for his graphic and exhibition design and for his contribution to design education.

Kerning

Term used when the spacing between certain type characters is adjusted to achieve an even and consistent letter spacing. Kerning would normally be necessary in letter combinations such as To and VA, where the excessive space between the two characters is adjusted to create an overlap and produce a better fit. Letter spacing programs, including a kerning facility, are available in most filmsetting and computerized typesetting systems.

Kinetic

Describes motion caused by force in a volume or structure.
Typho: The Visual Dimensionality

Appendix I Continued

El Lissitzky 1890–1941. Russian designer, painter, architect and photographer; born in Smolensk province. Lissitzky brought the philosophy of Constructivism to industrial and graphic design.

Man Ray 1890–1977. Artist, designer and photographer. Born in Philadelphia, US, his early training was as a painter. He met Michael Duchamp and the photographer Alfred Stieglitz in 1915 and along with Duchamp formed a New York Dada group in 1917. He went to Paris and made significant photograms (Rayograms) while he was in Paris. After got back to New York, under Herbert Bayer’s direction he contributed to the advertising and design programs devised for the Container Corporation of America.

Moholy-Nagy, Laszló 1895–1946. Film maker, designer, painter, writer, educator and photographer. Born in Hungary, he studied law in Budapest, but his education was interrupted by war. Awareness of avant-garde art movements, including Constructivism, De Stijl and Dada, took him to Vienna. His typographic achievement included designing the Bauhaus prospectus and a number of the fourteen books published by the school after 1925. Moving to Berlin in 1928, he established himself as a typographer, set designer and film maker.

New Typography Revolutionary approach to typographic design which developed in Europe throughout the 1920s and early 30s. A highly visible component of Modernism in graphic design, the new typography combined elements of the work and writings of William Morris with aspects of contemporary art movements like Cubism, Futurism, Dada, De Stijl and Constructivism.

Perceptual Describes something understood through sensory stimuli, as opposed to an abstract concept.

Photocomposition Generic term for typesetting systems that utilize photographic principles to produce display and text setting on film or paper.

Photomechanical Photomechanical etching process used to produce line or halftone plates for letterpress printing.

PhotogramPhotographic image that records the shadows of an object placed between a light source and light sensitive photographic paper. Great subtlety can be achieved depending on the transparency or translucency of the selected object. No camera or film is involved in the production of a photogram.

Physical Describes materials, objects, products, or environments that actually exist tangibly in space.

Proximity The distance between elements. The law of proximity states that elements that are nearer to each other in a composition will be seen as belonging together.

Rand, Paul 1914–1996. Seminal figure in American graphic design who explored the formal vocabulary of European avant-garde art movements including Cubism, Constructivism and De Stijl and developed a unique, distinctly American graphic language.
Rodchenko, Alexander 1891–1956. Artist, designer, photographer. Born in St Petersburg. From 1911 trained at the art school in Kazan, moving to Moscow in 1914. Along with Vladimir Tatlin and El Lissitzky, he was a leading figure of Russian Constructivism. In 1921 he abandoned ‘pure art’ in favor of a visual communication that would serve the needs of society. His pioneering constructivist typography, with its geometrical severity, heavy rules and bold, hand-drawn sans-serif, was inextricably linked with the politics of revolution.

San Serif Typeface characterized by letters without serif forms and with main strokes of consistent thickness.

Semantics The relationships among signs and symbols and the objects they represent.

Semiotics The theory of signs first set forth by Charles Morris. Semiotics describes relationships between signs and their referents; semiology is the science or art of signs.

Serif Characteristic terminal stroke normally at the top and bottom of the main strokes of letters in a Roman typeface. There are four main types of serif: bracketed, hairline, slab, wedge.

Slab Serif Those typeface designs characterized by rectangular serif forms. The junction of the serif to the vertical can either be at right angles or bracketed. The thicker parts of curved letters in a Roman alphabet are angled in a distinctive and discernible direction. This angle of stress, or shading, varies from the oblique to the vertical.

Syntactics The study of the formal properties or signs and symbols and their relationships to other signs.

Type a) Term applied to range of typographic output from any type composition system.

a) Traditional term for unit of metal with raised typographic character. The face of a relief character is inked to printing by Letterpress. Words are formed by joining individual metal characters together. The size of the metal body varies according to the size of the letter required.

Typeface Alphabet created for the purpose of reproduction. The individual characters of a typeface are designed to work in different combinations and to remain consistent when reproduced by printing.

Typophoto Moholy-Nagy defined typophoto as the concept of the close integration of typography and photographic image in his critical essay.

Typography Arrangement and specification of type in preparation for printing. Traditionally associated with printing from metal type; now equally applied to typesetting produced by any type composition system.
Weingart, Wolfgang 1941-present. Self-taught graphic designer, typographer and influential teacher who pioneered post-
Modernism. Weingart's intuitive, expressive typographic experiments, appearing on poster and cover
designs, utilized wide wordspacing, step rules, reversed type blocks, unpredictable contrasts of type
weight, and diagonal or random placement of letterforms. During the mid-1970s he began exploring
the graphic imagery made possible with photolithography, incorporating collage, enlarging and overl-
lapping halftone dot patterns and experimenting with design elements to create uniquely dynamic
solutions.

**X-height** Body height of any lower-case character that has neither ascender nor descender (as typified by x, but
also including a, c, e, i, m, n, o, r, s, u, v, w, z).
Appendix J

Bibliography

Theories

A Primer of Visual Literacy

Vision in Motion.

Language of Vision, painting, photography and advertising-design

Basic Visual Concepts and Principles

Visual Thinking

Icons: Magnets of Meaning

Image Music Text

Design Discourse

Graphic Design Sources

Perception and Imaging

Black Letter: Type and National Identity

MOHOLY-NAGY Painting Photography Film

Camera Lucida
Appendix J Continued

History

*Graphic Design: a Concise History*

*A History of Graphic Design*

*Alekandr Rodchenko*

*Dada Performance*

*The Struggle for Utopia: Rodchenko Lisitsky Moholy-Nagy 1917 - 1946*

*El Lisitsky: Life, Letters, Texts*

*El Lisitsky 1890–1941: Architect, Painter, Photographer, Typographer*

*Pioneers of Modern Typography*

*Graphic Design in America: A Visual Language History*

*Laszlo Moholy-Nagy Biographical Writings*

*Shock of the New*

*20th Century Type Remix*

*Graphic Design in the Mechanical Age*
<table>
<thead>
<tr>
<th>Contemporary Design</th>
<th>Project; A Tomato Project</th>
</tr>
</thead>
</table>

*Bareback. A Tomato Project*


*Dictionary of Graphic Design and Designers*


*A typographic journal of new york: mmm...skyscraper i love you*


*Cyclops Albert Watson*


*Dimensional Typography*


*RayGun Culture*


*Hot designers make cool fonts*


*FOTOGRAFIKS*

Typophoto: The Visual Dimensionality

Appendix J Continued

Journals

Typographic Directions

Idea magazine
Tokyo: Seibundo Shinkosha Publishing.

Typography into the New Millennium volume 01

Baseline international typographies magazine
Kent: Bradbourne Publishing Ltd.

Graphis
New York: B.Martin Pedersen.

Print
New York: Print Magazine.

Emigre
Sacramento: Emigre
The following is the transcript from interviewing the web artist and designer, Jimmy Chen.

From: jimmyCHEN <jimmy@typographic.com>
To: kitae kim <lcxt1611@rochester.rr.com>
Date: Monday, March 6, 2000 10:33 AM
Subject: Typophoto

1. When was typographic.com founded and what is the objective of the company?

Typographic was founded at 1996 while I was working for another company. It was a source for personal experimentation with web design, more specifically, in typography. My personal objective for the site is to explore my capabilities with both design and technology. And the goal of the company is to design sites is to provide design solutions for any clients.

2. Please tell me your personal experiences in design or related fields.

Most of my experience that I have had in the design field was through trial and error. Because the Internet was still in its early stages, there were no book references that I can use, so the only way to learn is through personal discovery and discussions with peers. Overall, the experience has been great. Not only am I able to do what I love to do, but also meeting people around the world.

3. What is your major consideration in the designing process?

Creativity is the most important factor for me in the design process. As a designer, I do stress that upon myself and the clients that I work with. Other than the creative aspect of work, I also stress the production and the implementation process. Without process, the design may not happen. But there are other fundamental considerations that are very important too, such as communication. A design is useless if the audience cannot understand it.
With regard to my first thesis proposal (PDF file), Moholy-Nagy’s approach was technically close to the meaning and form of typophoto. It was the shock against the appearance of the new advertising design. Types are embedded in images or vice versa. Throughout the changes in different periods, we can say the role of typographic communication has changed. What you think of typographic communication these days?

Typographic communication now has branched out to new areas because of technology. (I am only speaking from new media’s point of view) The audience in some way is able to tolerate various styles of designs. Although sometimes it is chaotic, overall, it helps the evolution of design as well, because the Internet is still in its infancy state, technologists are creating applications for the web to look like printed pieces.

To give the audience a clear message, do you think that all messages have to be clearly worked out?

Yes, I think in order for mass communication to happen, the message must be straight to the point. The less visual noise the easier for them to understand. I hold that true for client work... but for personal work, the sky is the limit. I don’t need to really communicate anything if I chose not to. I would like to think that I am creating art pieces instead of designs. The unclear message will tend to send out mysterious vibes. And that will create some tension and possibly excitement. To read and interact/react will make the message even more meaningful.

Please tell me your opinion of the relationship between typography and photography.

Even though typography and photography can work independently, using them together will help to emphasis the message. When using both in a design, one will need to be more important than the other. If the photograph is the message, then typography should be the supporting elements, and vice versa for the typography.
Appendix K Continued

7. To present a unified message or meaning, how do you process your design with type and image?

It really depends on the solution that is needed for the problem. Designs that require more photographic work will be approached from its composition and colors. From a collection of photo, I select one that will work with the layout the best. It is sometimes difficult to work with photographs because in web design the downloading is a very big factor, and there are a lot of factors involved, such as navigation and content. So after the photo has been selected, the layout will reflect the "theme" of the photo. Typographic treatments to a design to me is a little simpler. The shape of the character, the look of a typeface will then influence the design. Because typefaces are more flexible, sometimes the design can take place a little easier... but not all of the time.

8. When I see your typographic solution in your design (typographic.com), readability and legibility are sometimes ignored. Is it because you don't need to think about it and just make it aesthetically pleasing the eye of the audience?

Making them illegible is not my primary focus when I start designing the site. But when I get into the design itself, I find it more and more interesting to hide the obvious message. The text itself is the supporting cast member of the piece. Using colors, photos and shapes to create the appropriate feeling is what I like to do best. In some ways, I like the message to be subliminal. from that, people can read different things from a design. It's like a piece of artwork, it's up to personal interpretations. Now I am moving closer to motion graphic... so all the previous factors come into play, but with the added challenge of time. Time creates rhythm and for a piece to communicate, it needs to be presented well. Like reading and music... there needs to be an underlying structure.

Jimmy Chen
He started Typographic back in late 1996 as an experimental section, part of eLogicCommunications (Venice Beach, California) where he was Creative Director. It began as a "Text Powered" creation, but it somehow just evolved into a more typographic thing. After eLogic, he designed at Studio Archetype in San Francisco. He graduated from California State Polytechnic University, Pomona as a graphic design major. He mainly designs for the web. A lot of his designs start out as a creative experiment and then get incorporated into whatever he is working on.