

**"The New" New?**  
**Typography?**

A Critical View of the State of Typography

# **The “New” New Typography?: A Critical View of the State of Typography**

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

Joseph A. DiGioia  
Department of Graphic Design  
May 1995

## Approvals

---

Advisor

Professor R. Roger Remington \_\_\_\_\_

Date: \_\_\_\_\_

*May 11, 1995*

Associate Advisor

Dr. Richard Zakia \_\_\_\_\_

Date: \_\_\_\_\_

*11 May 1995*

Associate Advisor

Professor Bruce Ian Meader \_\_\_\_\_

Date: \_\_\_\_\_

*May 11, 1995*

Department Chair

Professor Mary Ann Begland \_\_\_\_\_

Date: \_\_\_\_\_

*5.12.95*

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

Date: \_\_\_\_\_

*MAY 11<sup>th</sup> 1995*

## Contents

---

Introduction .....	1
Choosing a Topic .....	1
Developmental Process	
The Diagram .....	2
General Research .....	2-3
Bibliography Database .....	3
Digital Timeline .....	3-4
The Essay	
Research/Writing .....	4-5
The Application.	
Thesis Identity.....	5
Grid.....	5
Page Spreads.....	5-7
Front and Back Covers.....	7-8
Posters.....	8
Evaluation .....	9
Future Plans .....	9
Conclusion .....	10
Acknowledgements .....	11
<hr/>	
Print Appendices	
Thesis Proposal .....	13-14
Thesis Planning Report .....	15-20
Research Methodology .....	16
Mission Statement .....	17
Goals, Objectives, and Processes/Strategies .....	17-19
Project Timeline .....	20
The Essay .....	21-39
Miscellaneous Quotations .....	21-23
Questions .....	23-24
Final Critical Essay .....	24-34
Endnotes .....	35
Bibliography.....	36-39
Additional Notes .....	40
Glossary of Terms .....	41-44

---

## Digital Appendices

### Research Information

Bibliography Database

Research 1/25

Research 3/25

### Proposals

Thesis Plan/Pro 1/11/94

Thesis Pro State 1/26

Process Diagram sk

Process Diagram eps.

Thesis Abstract Zed

### Timeline Information

Logo

Logo 20%

Logo 40 %

Logo 60%

Typographic Timeline

Timeline Info sea.

Timeline Fonts

Intro Copy

### Logos

Thesis Logo Sketches

Thesis Logo Sketches ii

Thesis Logo Sketch 1/26

Thesis Logo

Thesis Logo 422 eps.

### Essay

3/12 Essay

Essay

Miscellaneous. Quotes &

Preface

Questions

Questions 2/27

*Appendix information committed in its entirety  
to the CD-Rom at the end of this report.*

### Application

Cover Images

Book Images

Page Spreads

Covers

Posters

Thesis Labels

Thesis State. Show

### Thesis Report

Thesis Report q

Report mw

Diagram ii

## Introduction

---

The following thesis report details the process of my graduate thesis application from the selection of a topic through the final printed book. This process information will be presented in chronological order and will be accompanied by printed and digital appendices.

The thesis application attempts to answer several questions concerning the state of typography today through the eyes of a graphic designer. One of my goals from the outset was to produce a scholarly body of work on typography, breaking new ground in critical design thinking. I intended for the viewer to be presented with new and enlightening information. The target audience is a mix of design practitioners, design educators, and design students. My intent was to discuss how the differences between digital typography and traditional typography have led to a new design aesthetic and how this has changed the role of typography in graphic design. I have supported my belief that the current state of graphic design is a continuum in the evolution of graphic form with many historical precedents which validate the new typographic forms. The role of the Macintosh in the proliferation of graphic design was investigated. Also explored were different theories of legibility as they pertain to appropriateness of content.

The visual concept of the application is the presentation of multiple levels of information. There are three blocks of copy on each page, each having the same content, but different typographic treatments. This allows the viewer the opportunity to access the information at a level of the ease/difficulty that is comfortable to them. One block of copy is set centered and justified in Bodoni book; this represents a more classical use of typography. The second block of copy is set flush left, ragged right in Futura book; this block represents a more modern use of typography. The third block of copy is set flush left in Beowulf; this everchanging typeface represents the transformation of traditional typography to digital typography.

## Choosing a Topic

---

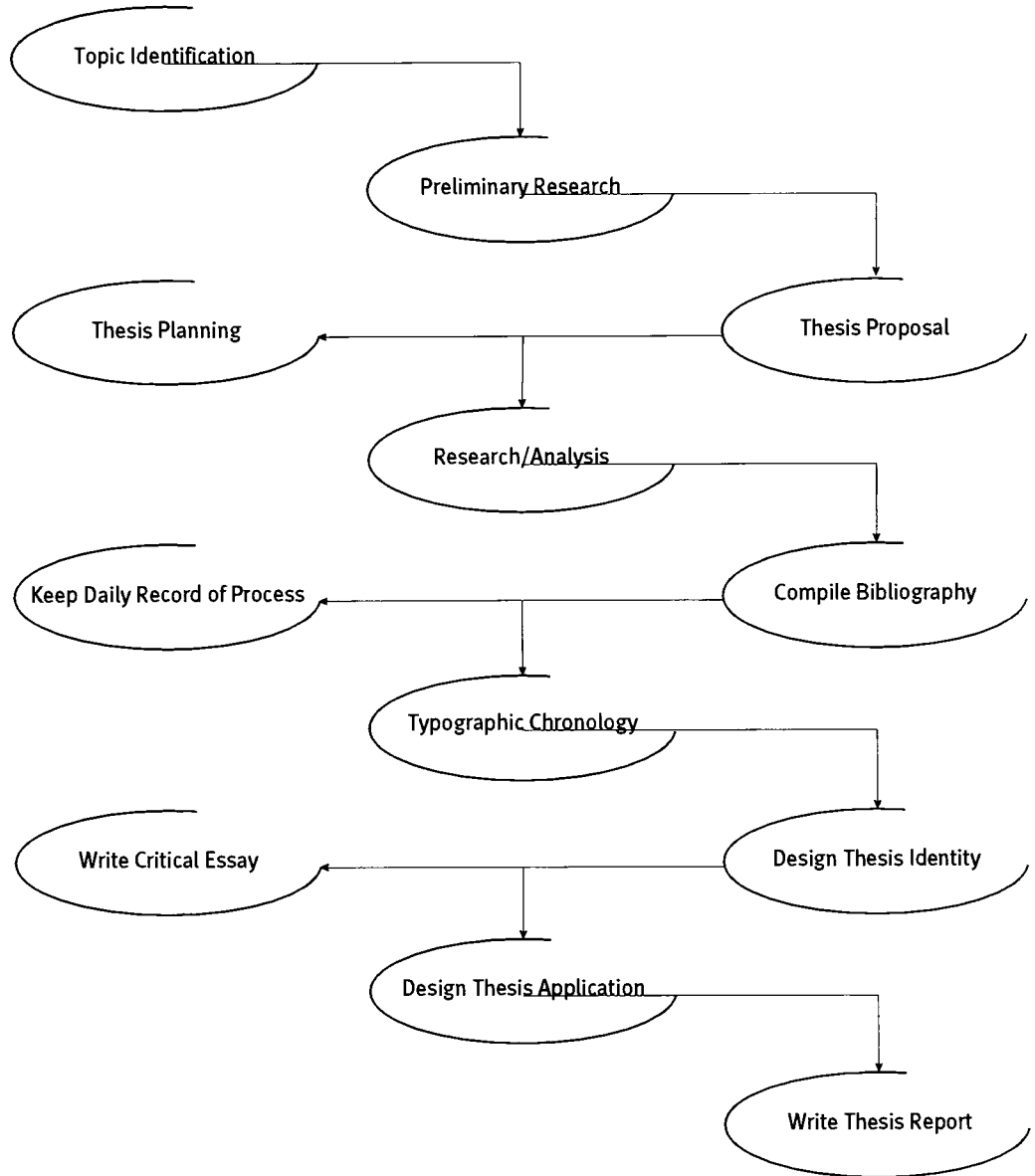
Choosing a thesis topic began in the summer of 1994. I paid especially close attention to past and present design writings. It was an article written by noted design historian/writer Steven Heller entitled "The Cult of the Ugly" that sparked my interest in contemporary typographic thinking. I continued by researching typography and discovered critical writing on typography in the digital realm was scarce. Another reason was to reflect the radical changes in the field of graphic design, as well as, design education. The most noted writing was featured in the design publication "Eye."

I felt that by dealing with typography in the digital era I would be dealing with a relatively new area of study. The idea of newness was important to me. I discussed this with Professor Remington at length during the summer and we agreed this would be a good area of study for me to pursue.

## Developmental Process

---

### Process Diagram



## General Research

---

My research and information gathering began in the summer of 1994 and continued through the writing of my critical essay. I spent numerous hours in the library tracking down articles on typography and typographers. I was constantly looking for materials which might pertain to my topic. I purchased several books on graphic design, typographic history, typographic theory, as well as type specimen books. All these sources helped me to formulate a

---

clear understanding of the breadth of typography. I used the research to familiarize myself with the work of many typographers and designers both past and present, such as: Neville Brody, El Lissitzky, David Carson, Jan Tschichold and Zuzana Licko. The research enabled me to formulate my opinions concerning the current state of typography.

## Bibliography Database

---

The research involved the accumulation of a large amount of material and so I decided that there would be a need to catalog this data. Professor Remington and I discussed the possibility of developing a bibliography database in FileMaker Pro®. We discussed different organizing structures: time, names, products, topics, quotes, etc.. During one of our weekly meetings Roger suggested that I create three separate categories in the database one for notes, one for comments, and another for quotes. I eventually decided on a workable format that allows the viewer several different ways to access the resource. They have the option of researching via: author, title, subject, publisher, copyright date, volume, or book, magazine article, journal, or video. I met with Professor David Dickinson so that I could get his input on my database. David is very knowledgeable in FileMaker Pro® documents so his comments were especially helpful. This database will be useful in the future to anyone who is interested in researching typography.

## Digital Timeline

---

I had my earliest discussions concerning devising a digital timeline with Dr. Zakia and Professor Remington in early November. Dr. Zakia was interested in a cross disciplinary study to show typographic innovations in relation to art and other events. Both he and I believed that this would create a rich experience for the viewer.

I met with former RIT graduate student Erin Malone for approximately two hours. Erin was familiar with HyperCard and was able to give me basic information that assisted me in devising my timeline. I began by going through my research and noting important typographic information and dates. The first bit of data entered was from the timeline I designed for my book *A Post-modern Discourse* completed in the spring quarter 1994. After a meeting with Professor Remington in which he suggested I try and find Rob Carter's book *Typographic Design: Form and Communication* I utilized the timeline in this book in addition to my own timeline. Philip Meggs' book *A History of Graphic Design* was also of great use in the gathering of timeline information. Frederick Hartt's two volume set entitled *Art: A History of Painting, Sculpture, Architecture* provided a wealth of information both in other art fields but also important world events. I continued adding information to my timeline with particularly interesting data coming from an article in *Design Quarterly* #148, an article in *Print* magazine Nov./Dec. 1989, and information provided to me by Professor Remington.



---

In the middle of December Roger suggested that I add an introduction screen to my timeline that would describe my intentions. This would allow the timeline to be a stand alone piece of digital information. I spent some time writing an introduction and when this was completed I asked Erin Malone to assist me in adding additional screens and navigational buttons to the timeline. When this was complete, I took a logo that I had designed for my thesis and added this in varying screens of a color to the timeline to add visual interest. After some refinement I felt it was time to stop working on the timeline for this could have become a thesis project in and of itself. I later submitted the timeline to a publication entitled Zed which was looking to publish the graduate thesis of students from RIT as well as other noted graphic design programs worldwide.

## The Essay

---

### Research/Writing

The overall research of the thesis topic concluded with the more specific research of the critical essay. The writing of the critical essay began by taking notes from the numerous books and articles I had accumulated. Some of the most notable references I came in contact with were, Lewis Blackwell's *Twentieth-Century Type; Looking Closer* edited by Michael Bierut, et. al.; and Jon Wozencroft's *The Graphic Language of Neville Brody 2*. These and many other references shaped my thinking and aided me in being able to reach an informed view on the topic of typographic expression.

The essay began with an outline which is the usual method of beginning a piece of writing. I struggled with this outline and after some discussion with Dr. Zakia and Professor Remington I decided to disregard the outline for a more useful series of questions. The outline was too traditional as well as too linear a method of thinking. The questions came directly from the reading I had been doing. The first draft of these questions turned out to be three pages long. This first draft was a purging of my brain and needed to be refined. I showed this draft to my committee members and all concluded that this was too much to write about. Professor Remington continually reminded me that I was not writing a book, but an essay. I paired this draft down to one page and prioritized the remaining questions. Answering this amount of questions was a more manageable task. I decided to keep the questions more general to allow myself the freedom to answer them in whatever fashion I deemed appropriate for my target audience. While working on the formulation of the final set of questions it was imperative that I remained focussed on my point of view and my target audience. After the third draft I finally had a series of questions that both my committee and I agreed on. Lastly, during a meeting with Professor Remington he suggested the need for an overarching question which would become my introduction. I dealt with this in suggestion in an informal way in that I began to write my introduction.

The writing of the essay began on the eleventh of February. It was important for me to begin at this time for I had a thesis meeting scheduled for the fifteenth of February and I

---

wanted to hand my committee a rough draft. What came of that meeting concerning the essay were the following suggestions: 1) that the essay (and therefore the application) have some type of heading, 2) this essay will give the reader a better understanding of typographic forms of today, their history, meaning, etc., 3) the essay should have a conclusion that will answer the question: what are the “x” most important ideas? and, 4) there is a need to bring in the passion to the topic in some areas of the writing. I continued working on the essay for the next month while at the same time beginning to work on my application. On the tenth of March I decided that there was no more time to refine the essay. If I considered submitting this essay for publication I would continue refining it at that point.

## **The Application**

---

### **Thesis Identity**

On January nineteenth I began spending more time designing and less time researching. It was at this time I began a study of thesis identities. The concept behind them was that they would take their form using typographic means. I took the title of my thesis and applied different typographic variables attempting to achieve a syntactically pleasing identity. I continued to work through different logo forms for approximately four weeks. The real breakthrough came about when I decided on the theme of contrast. The identity lead me to think about how I would approach the thesis application. When I had decided upon the final identity I realized that the idea of juxtaposing different typefaces in one form could make for an interesting final application.

### **Grid**

On the seventh of March I devised a typographic unit grid. I started by printing out sample blocks of copy in the three typefaces I had chosen. They ended up being 10/14 Futura book, 11/14 Bodoni book, and 13/19 Beowulf 23. Knowing this I chose 15 points as my unit and constructed the columns, half columns, margins and gutters as per this unit. I chose to change the sizes of the two main reading texts, Futura and Bodoni, because of the varied x-heights of the two typefaces. The Beowulf was set larger for three reasons, it was going to be gray, the changing characters can be better recognized at the larger size, and it is unusual to see text type this large.

### **Page Spreads**

Professor Remington and I began to discuss different forms in which the final application would manifest itself. My initial idea which we discussed during the summer and the fall quarter was one in which I would execute a series of posters that would push the bounds of typographic expression. But as time went on it became apparent to me that the final application needed to be a culmination of my two year experience and also be a final statement in a portfolio presentation. This made my initial idea of a series of posters much less functional. Roger and I worked through a scenario in which I would write a critical essay which would become the

---

content of a book on typographic expression. I would also take one or two page spreads and enlarge them to a larger poster format for the exhibit.

The preliminary concepts for the thesis application began in the beginning of February with rough notepad sketches while I worked on other facets of the thesis. I began by working out some pragmatic concerns such as the finish size, format, and how the piece would be produced. I also generated a initial cover sketch at that time. Shortly thereafter I came upon the visual concept of multiple levels of information. I decided that it would be interesting to show the same contextual information in three distinctly different typefaces allowing my viewer the opportunity to decide on how much effort they wanted to put into accessing the information I was try to convey. The first time I expressed this concept to my thesis committee was at a full thesis meeting on the fifteenth of February. Even though it was a rough computer sketch it was well received. At that time I showed a two page spread with dummy copy and photos. It needed to become more manageable visually, more accessible to the viewer.

Shortly after I began to gather images that corresponded to my writing. On March seventh I scanned fifty-four images. I knew that I would probably not use each of these but it gave me a good working image base. I took the time to color balance these images so that I would not need to do this later. This involved boosting the contrast to compensate for the fallibility of the printing method.

I began the application by setting up a master page in QuarkXPress®. The master page allowed me to make slight adjustments to my grid without having to make it on each individual page. Once this was completed I could then add pages to the document and each page would retain the grid. The next step was to begin imputing the essay copy into the document. I did this for each of the typefaces on the introduction page. At this point all of the copy was theoretically in the Quark document. I also set my style sheets at this time. This function allowed me to set the parameters for each typeface once and anytime I needed to make a change I would access the style sheet function to make changes to all of the corresponding text. I then created text boxes on each preceding page and linked them. This made the copy flow from the last text box into the new one with the same typographic attributes. So all of the Bodoni text boxes are linked, all of the Futura text boxes are linked, etc. I showed a down-sized dummy to Professor Remington on the eighth of March. He pointed out that there was a very distinct neutral space around the edge of the pages. He asked me how I might consider activating the edges. He reminded me to be concerned with the negative space created by the text blocks and illustrations. There was also the question of how the three paragraphs related to each other and how much they overlapped. Professor Remington suggested that I set parameters for the entire application, both typographic: width of columns, overlap, grid, edges, and variables; and illustrative: how are they dealt with? etc..

I continued by putting all of the text into the book. This helped in determining approximately how many pages would be in the final. At this point I created a small dummy book to help me to visualize the final. From the tenth until the thirteenth of March I refined the page spreads, did some image research and placed all of the images into the book. On the twelfth

---

I printed the first full working sketch. This was a significant point in the process because it allowed me to handle the book and experience how the pages flowed. I made slight adjustments to the pages upon seeing them on paper. The following day I went to UFO Systems to get my first full-sized color output of one of the page spreads for my thesis presentation. Two comments that came from the working sketch was that the headlines were treated in a very traditional manner and how was I going to make reference to the illustrations. These comments came during a weekly meeting with Professor Remington. Afterwards I decided to make the headlines more a part of the page, make them smaller, and I pushed them to the right hand edge of the page to activate that edge. I also made the conclusion more legible than it had been.

On March twenty-first I again went to UFO Systems and this time I printed my first full color proof. I spilt my document into four different postscript files to ease the time of the printing. The entire process took two and one half hours. I then went to my committee members individually to get their feedback on the proof. Overall the committee members were very impressed with the book at this point. Some of the comments were concerning the binding, the text of the preface, making visual references to what I was saying in the headlines by distressing them and also in the page numbers by showing a typographic history in said page numbers, and making the cover more shocking. I took it upon myself to work through each spread page by page making sure that the rags of the lines were good and that there were not too many hyphens, creating more horizontal continuity, refining the negative space and the overall placement of all the elements. I continued to make refinements for the next four days until the twenty-ninth of March. I went to UFO Systems for the last time to print the final copy of the book.

The last pragmatic details included cutting each individual page and spray mounting them back to back, (seven to eight, nine to ten, etc.). I left the side I was going to bind extra long so that I could trim all the pages including the front and back covers together. I also made a last minute addition to the cover which was a piece of thin acetate to create another level of information and also to protect the cover from handling while it was in the gallery. Lastly, I bound the book in an asymmetric fashion using two coordinates on my horizontal grid. I did this in the Media Center punching all the holes in the pages and inserting the binding.

## **Front and Back Covers**

The cover of the book began to take shape March twenty-first. The theme of the cover is that this is my view on the typographic forms of today. Therefore, I used my thesis identity and photographs of myself. At an earlier date I scanned two black and white photographs of myself in at 600 dots per inch because I was not sure as to their final size and if I needed to I could always reduce the dpi at a later date. As it turned out I enlarged them about 400 percent when I used them for the posters so the 600 dots per inch actually turned out to be 150. I worked through a couple of layouts after deciding on the color first draft. I showed this with the first full color proof of the entire book. The overall coloration was violet. This brought into question why violet? I chose the violet because it seemed to play off the white of the rest of the

---

book and because of its regal connotations. After speaking to Dr. Zakia on the twenty-third of March he suggested I use the color as a metaphor for the entire project, specifically newness and that I make it shocking. As we spoke we agreed that a neon-like green might be more appropriate. At that point I returned home to work through my Pantone® color guide and chose PMS 375 as the base color.

I made a test print of this new cover design on March twenty-seventh at UFO Systems and did not like the way the ink covered. It was very streaky and unacceptable. I decided to go to Printing Prep in Buffalo. I made this trip on March twenty-eighth. I was much happier with the quality of this print which was from a Cannon CLC 700 color copier with a Fiery interface. This is the print I used on my final book.

The back cover was used to unify the whole book. I intended from the outset to make it as simple as possible and did so by placing a single thesis logo on the PMS 375 background.

## **Posters**

The posters that accompanied the book in the gallery were 200 percent enlargements of the cover, and pages seven and eight. These pages were chosen by me with the individual approval of my thesis committee. I chose these because they best expressed the visual concepts of the entire book. The cover was to act as a poster for my application. I created a separate QuarkXPress® file which included these three pages. After making a test print at UFO Systems on March twenty-seventh I decided to make these prints along with my cover and back cover at Printing Prep in Buffalo. There was one problem though, and that was I did not have a swatch book that would indicate how the colors would print. So I had to take all of my files that had to do with the posters so I could make any necessary color adjustments on the spot. I decided to make what is termed a Giant Print. When I looked at the color swatch that corresponded to PMS 375 that I used on the cover I was not pleased. But it seemed that this printer reproduced the color I was looking for if I specified PMS 368. At this point I needed to change my Adobe Photoshop® files so that they utilized PMS 368 instead of PMS 375. I did this on a Power PC that they allowed me to use and I stayed to see the first half of the cover print. I supplied Printing Prep with half-inch foam core board and they mounted, cut and laminated the three posters.

## Evaluation

---

Formal evaluation of both the essay and the book was conducted through weekly meetings with Professor Remington. I received more casual feedback from fellow graduate students. I took notes about specific problems and questions concerning both content and aesthetic qualities. Changes were made based on these evaluatory encounters.

The thesis application was on display for three weeks during the thesis show. Comments directed toward the work were extremely positive. The book was constantly being observed and people seemed to be reading the content which was a surprise given the gallery setting. Many students asked about the availability the book in the future. They thought it was both informative and visually interesting.

Professor Bruce Meader and I met in the gallery to discuss the final application on April tenth. Professor Meader was extremely pleased with the book, as well as, the posters. He paid specific attention to the headlines and to the binding as we had discussed possible solutions in our last meeting. He was pleased to see the way I solved these problems. We discussed the possible forums in which I might try to publish the essay. Professor Meader mentioned Information Design Journal, Design Issues, and Visible Language.

On April seventeenth Dr. Zakia and I met in the gallery so that he could review my final solutions for the book and the posters. Dr. Zakia was impressed with the book and thought that my choice of color for the cover was especially well chosen. He also gave positive feedback concerning my treatment of the headlines. He did think that there was a need to discuss how there is a perceptual precedent for the design of typefaces such as Barry Beck's Caustic Biomorph. He said that he would drop some information in my mail folder. (See "Additional Notes")

## Future Plans

---

When it was determined that the application would change from a series of posters to a book in which I would write the text as well as design the pages, Professor Remington and I began to discuss the possibility of submitting the essay for publication. Originally we talked about the possibly of submitting the essay to Design Issues and Visible Language. These two publications seemed appropriate to the scholarly writing I hoped to achieve. In a meeting with Bruce Meader he mentioned another publication, Information Design Journal, to which I should consider submitting the essay. After making some revisions to the present essay I intend to submit it to these three publications. Recently, I sent slides and a thesis abstract to Zed which is a publication interested in graduate thesis work from some of the more prominent programs in the United States and abroad. This was an unexpected submission but I am hoping that my thesis will be accepted for publication.

This thesis has opened my eyes to a subject that I will continue to be interested in and continue to write about well beyond my educational experience here at Rochester Institute of Technology.

## Conclusion

---

This thesis project has afforded me the opportunity to explore the topic of digital typography in great depth. I have taken away a tremendous amount of information in the process and feel that my opinions are expressed with a good deal of knowledge to back them up. I have completed many different aspects of this thesis which I feel will be useful to anyone interested in typography. There is the database of resources which can be a wonderful resource to anyone doing research on typography and its related subjects. There is the digital timeline which could give a design student, as well as, a professional designer a very good understanding of the history of typography. There is the essay which will supply the reader with my view of many different aspects that have led to the "New" New Typography. There is the book, which will not be within reach of the public but is certainly a progressive look at book design. Lastly, there will be a CD-Rom that will accompany this thesis report. This is noteworthy because this format for appendices has been rarely used as a way to show the process of a graduate graphic design thesis. I am extremely pleased with the final outcome of my hard work and feel that I have satisfied the requirements of a Master of Fine Arts degree, as well as, satisfy my own personal standards, which at times was the most difficult obstacle to overcome.

## Acknowledgements

---

© 1995 Joseph A. DiGioia

Written and designed by:

Joseph A. DiGioia

The author has the right to be identified as the author of this work.

All rights reserved.

No part of this publication may be reproduced in any manner without prior permission in writing from Joseph A. DiGioia.

The accompanying illustrations were acquired from various design books and magazines for the exclusive use in this book. They were neither manipulated nor cropped.

This book was created on a Macintosh Quadra 800, using an Apple 16-inch color monitor, Hewlett Packard ScanJet IICx scanner, MDS 88c Syquest drive, and a Hewlett Packard LaserJet 4ml printer. The final pages were created in Quark XPress 3.31, importing Adobe Illustrator and Adobe Photoshop documents. Typefaces used are Bodoni book and bold, Futura book and bold, and FF Beowulf. The final output was done on a Xerox 5770 color copier.

The book is a 100% digital production.

I would like to thank my mother Jean M. DiGioia. Without her unquestioning support and encouragement I would not have been able to further my design education.

I would like to thank my thesis committee members R. Roger Remington, Dr. Richard Zakia, and Bruce Meader, for their support and encouragement.

I would especially like to thank Professor Remington for his support and understanding throughout my stay here at Rochester Institute of Technology.

This thesis is dedicated to the memory of my father, Joseph A. DiGioia.



## Print Appendices

---

**Thesis Proposal for the Master of Fine Arts Degree**

---

College of Imaging Arts and Sciences  
Rochester Institute of Technology

Title: The "New" New Typography?

Submitted by: Joseph A. DiGioia

September 16, 1994

Thesis Committee:

Chief Adviser: R. Roger Remington

Associate Advisers: 1. Bruce Meader

2. Dr. Z. 374-4465

Thesis Committee Approval:  
(signature of Chief Advisor)



September 16, 1994

Approval, Department Chairman:  
(signature of Department Chairperson)



September 16, 1994

Computer needs other than word processing:

Yes \_\_\_\_\_ No

Committee Approval: \_\_\_\_\_

\_\_\_\_\_

---

The subject of this thesis is experimental digital typography and its influence on graphic design. I will explore the theories of legibility and appropriateness as they pertain to typography. I will try to determine whether the current situation is a “movement”, a serious aspect in the evolution of graphic design or just absurdity.

This study may manifest itself in a series of posters which would challenge the ideas of legibility, type as communication and type as image. The designed pieces will ask the viewer to be an active participant in the message making process.

## Thesis Planning Report

---

- Title** The “New” New Typography?
- Client** Rochester Institute of Technology  
One Lomb Memorial Drive  
Rochester, NY 14623
- Designer** Joseph A. DiGioia  
22-2H Fairwood Drive  
Rochester, NY 14623
- Problem Statement** This thesis project will be a culmination of my research on the subject of digital typography. I will **distinguish** between “digital” typography and what is termed “traditional” typography. I will **explore** many different, and sometimes opposing, theories of legibility. I will also be **investigating** the role of content vs. context and how these influence the “look” of the designed piece. I will **support** my belief that the current state of graphic design is a continuum in the evolution of graphic form with many historical precedents. This project will **address** several of the following questions:
- ☛ Is there a discernable difference between what is digital typography besides the fact that digital typography exists in the realm of the computer?
  - ☛ Has the proliferation of typography been spurred on by the new **technology** or is it a reaction to cultural shifts in reading habits?
  - ☛ Is it (digital typography) a call to address the **letterform** in new and more appropriate ways?
  - ☛ Is it a reaction to Modernist “dogmatic” credos which were less universal and more elitist?
- Audience** The target audiences that I hope to reach will be an eclectic mix of design **practitioner**, design **educator**, and design **student**. I hope that this will better enable me to focus my efforts toward a more meaningful application.
- Pre-Application** This study will manifest itself with a critical essay that will be a **culmination** of my thoughts and research. The critical essay will enable me to **synthesize** my research and thoughts into a logical format, as well as, become the word matter for my application. The anticipated publication of my essay in several design journals will assist me in reaching my target audience.
- Application** Having spent some time researching **graphic design**, **philosophy**, **typographic history**, **typographic theory**, and the present state of digital typography I have concluded that the best way for this thesis project to manifest itself would be twofold: one, a **pragmatic** application such as a book that would be a **culmination** of my research and thoughts on digital typography and two, a series of panels that would be enlargements of actual spreads from the book. The panels would speak to the **duality** of graphic design as an informative, as well as, a visually pleasing medium, not unlike painting. I feel that this would be the definitive statement to my two years of study here at RIT.



**Mission Statement**

This thesis project on experimental digital typography will be an analytical and interpretive endeavor that will investigate the ideas of legibility, readability, style, movement, appropriateness, and context to clarify and educate designers and potential designers.

Problem Identification

<b>Goals</b>	<b>Objectives</b>	<b>Process/Strategies</b>
Establish the validity of experimental digital typography	To collect information on experimental digital typography so that the viewer/user will have a better understanding of what it is	Collect articles that pertain to subject  Interview cutting edge type designers
	To compile the history of digital typography since the invention of the Macintosh (1984) so that the viewer will have a handle on the differences between digital, metal and other methods of type setting	Research the history of the Macintosh in books and magazines  Create a diagram that will show the significant historical precedents of the printed page

Research & Analysis

Research and analyze typography in the history of graphic design	To compile historical examples of typographic theory will better enable the viewer to understand typographic theory as it pertains to graphic design	Gather basic typographic theory information  Make a list with visual examples of different typographic theories.
	To identify significant historical typographic innovations so that the viewer can better determine that what is being done today is part of the evolution of typography	Compile both written and visual information on typographic history  Make a chart of above information including a timeline with important typographical innovations
	To collect visual examples of digital typography will better enable the viewer to see the different theories and type faces put in to use	Make an audit of existing examples of digital typography  Illustrate differences between metal and digital type

Research & Analysis	Research and analyze perceptual theory	<p>To aggregate information on perceptual theory will allow the viewer to understand how these theories are helpful in typographic analysis</p> <p>To gather information on legibility and readability so that the viewer will better understand the terms when they are used in the context of this thesis</p>	<p>Conduct interviews with perceptual theorists</p> <p>Compile library research: books, magazine articles, etc.</p> <p>Obtain a copy of thesis by designer Phil Baines (Title: The Bauhaus Mistook Legibility for Communication)</p> <p>Obtain Emigre issues 15 &amp; 18 which deal with current ideas on legibility</p> <p>Research past ideas of legibility (Tschichold &amp; Bayer)</p>
	Analyze societal changes and their effects on the form of graphic design	To compile demographic information on particular graphic pieces (i.e.: Ray Gun, MTV, etc.) the viewer will get an idea of how age, culture, and upbringing play a role in the appropriateness of a graphic design piece	<p>Call magazines etc. for information</p> <p>Check library to see if this information exists in print</p>
Research & Analysis	Analyze research	To reflect on research compiled so that I can better understand its significance as it pertains to what is to be achieved	<p>Read over research and prioritize it</p> <p>Identify deficiencies in research</p> <p>Disregard unusable information</p>
Synthesis	Start preliminary sketches/ideation	To create preliminary sketches to work from so that I can explore many different points of view	<p>Create many pencil roughs</p> <p>Write list of important words relating to topic</p> <p>Begin image compilation</p>
Ideation			

	Continue to develop ideas and comps	To identify semantic and syntactic problems will ensure a strong graphic statement	Devise a grid system (compositional, constructional, or typographic unit)  Consider different interval systems
Ideation		To identify pragmatic concerns at this time I will be better prepared to complete the project on schedule	Research service bureaus  Research paper  Research fonts  Research software to determine if I own all that is necessary
	Get regular feedback from committee members	To get suggestions from my thesis committee will better enable me to make sure I am on track to complete the project as stated	Set up thesis meetings to review progress  Utilize committee to test concepts
Evaluation			
	Design series of posters	To solve the syntactic concerns to ensure a visually pleasing finished product	Combine existing comps etc. into a cohesive poster series
Implementation		To solve pragmatic concerns so that the pieces can be output correctly	Compile all necessary digital information to be shipped to service bureau
	Establish methods of evaluation	To establish evaluation methods will enable me to determine whether I have met my initial goals	Compare solutions to historical precedents  Write evaluation form  Recruit peers for evaluation
Final Evaluation			



## Project Timeline

---

<b>Winter Quarter</b>	November 30th	Classes begin	
	November 30-January 24	Research and analysis of topic Begin image research Start thesis diary	
	December 20	Last daytime classes before break	
	December 21-January 2	Christmas Break	
	January 3	Classes resume	
	January 17	First full committee meeting Discuss project and research, etc. Outline for critical essay	
	January 24-February 7	Synthesis Writing of critical essay	
	February 7-20	Ideation Meet with committee members individually to discuss essay	
	February 15	Full committee meeting Show work to date & new research Discuss direction	
	February 20	Last daytime classes	
	February 20-27	Evaluate work to date	
	February 27-March 3	Winter/Spring Break	
	March 1-March 25	Implementation of final design solutions	
	<b>Spring Quarter</b>	March 6	Daytime classes begin
		March 13-29	First thesis show
March 14		Thesis presentations	
March 28		Full committee meeting Complete application Send off to service bureau	
April 2		Hang thesis application	
April 3-19		Second thesis show Begin evaluation of application	
April 7		Opening for second thesis show	
April 10		Begin written portion of thesis	
April 24-May 10		Third thesis show	
April 28		Have completed written portion (rough)	
May 2		First "final" draft of thesis	
May 11		Full committee meeting Final draft of thesis Get final signatures!	
May 12		Last daytime class	
May 20		COMMENCEMENT!!	

## Miscellaneous Quotations

---

“Communicating the message - not technology or egos - is our job.” Phil Baines noting the role of the designer.

Noise (embellishment) in typography. Signal ?

Typographic experimentation did not start on their own but took their cue from the innovations taking place in the world of fine art circa 1910.

Brody's obsession is questioning the relationship between the printed word and digital language.

Jan Tschichold and Stanley Morison come the closest to serious theory about the design profession.

“Good typographical design, ... is ultimately dependent upon a functional response of the participating elements or tools, to the requirements of the problem and its environmental factors.”

Lester Beall

“To categorize typography as traditional, liberal conservatism or avant-gardism is to ignore the overall question of how typographical design can best serve as an acutely sensitive instrument for communication between divergent ideas and divergent peoples.”

Lester Beall

“Only he is alive who rejects his convictions of yesterday”

Kazimir Malevich

“I have nothing to say (show) and I am saying (showing) it.”

“Everything is beautiful”

“I want to be free without being foolish”

“The highest purpose is to have no purpose”

“Music is the interaction of sound and silence”

“If something is boring for 2 minutes, try it for 4, if still boring try it for 8, if still boring try it for 16 ... Eventually one discovers it's not boring but very interesting.”

Cage seemed to be saying that everything is art. He perceived art as an extension of life. His influence allowed many artists to free themselves from the preconceived notions of art. Although he seemed very unstructured, he was, in fact, very structured in his thinking.  
John Cage

Speaking on the democratization of typography brought on by the advent of computer technology Matthew Carter states: “I believe that this democratic situation is a good thing, experimental and overflowing with various styles, including the good and the bad.”

---

“My revolution is aimed at the so-called typographical harmony of the page, which is contrary to the ebb and flow, the leaps and bursts of style the run through the page. On the same page, therefore, we will use three or four colours of ink, or even twenty different typefaces if necessary. For example: italics for a series of similar or swift sensations, bold face for a violent onomatopoeias, and so on. With this typographical revolution I mean to redouble the expressive force of words”

Filippo Tommaso Marinetti

Laszlo Moholy-Nagy’s manifesto issued upon arrival at the Bauhaus in 1923: “Typography must be clear communication in its most vivid form. Clarity must be especially stressed, for clarity is the essence of modern printing in contrast to ancient picture writing. Therefore, first of all: absolute clarity in all typographic work. Communication ought not to labour under preconceived aesthetic notions. Letters should never be squeezed into an arbitrary shape-like a square.

A new typographic language must be created, combining elasticity, variety and a fresh approach to the materials of printing, a language whose logic depends on the appropriate application of the processes of printing”

“The purpose of all typography is communication. Communication must be made in the shortest, simplest most definitive way.” From ‘Elementaire Typographie’ 1925

“Typography is the arrangement of words to be read”

“All typography is an arrangement of elements in two-dimensions”

Jan Tschichold from Asymmetric Typography

Brody’s intentions for The Face were: “how can design bring a greater dynamism to the content, now that we live in a predominantly visual age? ... following the idea of design to reveal, not to conceal.”

“Design and typography are the ways by which invisible goods are made visible”

Neville Brody

“Seize the eye, then address the intelligence.”

El Lissitzky

“ It’s difficult to measure readability. Legibility can be measured because successive degradations demonstrate how letterforms hold up. But readability is difficult to measure. People read and comprehend best those typefaces which they are most familiar. There is a congeniality factor where type is concerned.”

Matthew Carter

Analogy is the only language understood by the unconsciousness.

Carl Jung

---

The most intelligible part of language is not the words, but the tone, force, modulation, tempo in which a group of words are spoken—that is, the music behind the words the emotion behind the words, the emotion behind the music; everything that cannot be written down.  
Frederick Nietzsche

Type is going to be as abstract as sand on a beach. In that sense type doesn't exist anymore.  
Max Kisman

## Questions concerning topic

---

- Typography** How is typography presently defined?  
What is the role of typography in graphic design?  
What is the purpose of the “New” New Typography?  
What is the difference between a designer of type and a typographic designer?  
Only ten years ago there were approximately 1,000 type faces and today there are over 9,000, what purpose do they serve?
- Technology** How has digital technology influenced typographic forms?  
1) Has the computer democratized type design?
- History** Does typographic history have a role in validating the “New” New Typography?  
1) What significance does the work of the Bauhaus have on today's letterforms, did it have in its day?  
2) How does the NNT relate to movements in fine art?  
How has Modernism (structuralism) and post-modernism (post-structuralism) influenced the “New” New Typography?
- Theory** Are the new digital typographic forms a call to address letterforms in new and more appropriate ways?  
Is the “New” New Typography kitsch, or “Type Deco”?  
Are type designers like N. Brody trying to create a new coding system, one based independent of the letterform?  
How has the NNT addressed to semiotic codes, such as perception, the unconscious, cultural codes, etc.?

---

**Graphic Design** What is the role of graphic design and the graphic designer in the “New” New Typography?  
Is the democratization of design the end of “good” design?  
1) Who will determine what is good design?  
Is it time for a new design vernacular?  
How does the NNT effect the syntactics, semantics, and pragmatics of graphic communication?

## Final Critical Essay

---

**Introduction** The following is a critical essay that attempts to answer questions concerning the state of typography today through the eyes of a graphic designer. I intend to discuss how the differences between digital typography and traditional typography have led to a new design aesthetic and how this has changed the role of typography in graphic design. I will support my belief that the current state of graphic design is a continuum in the evolution of graphic form with many historical precedents and how this history validates many of the new typographic forms. I will investigate the role that the Macintosh has played in the proliferation of graphic design. I will also explore different theories of legibility while looking at the question of appropriateness as it pertains to content.

I will use the term “New” New Typography to refer to the new digital typographic forms and the theory behind them. The use of the term came about when I began to look back at the period in design history termed the New Typography and the radical nature of its claims. I feel it is most appropriate considering the fervor that many of the current new typographic forms are causing in the graphic design community today.

**Typography** When designers think of typography, we invariably consider semiotics which consists of semantics (the relation between signs and the concepts they represent), syntax (the formal relation between signs in a system), and pragmatics (the study of signs in use). Depending upon our concept and our sensibility to typographic form the type can be our main concern or the invisible carrier of our message. In this sense typography becomes “... the raw material that goes into communication, serving man and his exchanges.”<sup>1</sup> However, this definition does not take into account the expressive nature of typography. Type can take on a painterly quality creating an inviting visual texture much the same way as a Jasper Johns painting. It has been said that art director/designer David Carson uses type the way a painter uses paint - to create emotion, to express ideas. Carson uses new typographic forms in his layouts to express the meaning of his concepts and ideas.

When looking at the work of designer Neville Brody one gets the feeling that he too, is striving towards a painterly quality. Brody's designs are visually and mentally dense and there is

---

a certain emotive quality that his typography exudes. It is the typography of our time and culture. It is dependent on the technology, pushing the technology in that Brody is interested in the formal qualities afforded to him by the computer. Brody himself says, "Digital design is like a painting except the paint never dries. It is like a clay sculpture that is always being twisted into new shapes without ever being fired."<sup>2</sup> *Emigre* magazine, too, with its focus on new typographic forms has become the paradigm of this computerized composition. In many instances *Emigre* questions what graphic design is in this digital environment.

Herbert Bayer, Bradbury Thompson, David Carson, Neville Brody; upon hearing these names, what do you think of first, designer, typographer or both? All of the aforementioned are both designer, one who works with type and image and typographer, one who designs letterforms. Matthew Carter, Adrian Frutiger, and Zuzana Licko are more known for their typographic achievements. The interesting phenomenon brought upon by current computer technologies is that because of the ease of manipulation inherent in the software, the designer may more readily cross over and design the type that will be used in the communication of his/her message, removing typography from the exclusive domain of the specialist, placing it once again in the hands of the designer. This has contributed to a breaking down of many previous design barriers.

## History

There have been many different "definitions" given to typography throughout the history of graphic design. Some very utilitarian, such as this definition by Stanley Morison: "Typography may be defined as the craft of rightly disposing printed material in accordance with specific purpose; of so arranging the letters, distributing the space and controlling the type as to aid the maximum the reader's comprehension of the text. Typography is the efficient means to an essentially utilitarian and only accidentally aesthetic end, for the enjoyment of pattern is rarely the reader's chief aim. ... It follows that in the printing of books meant to be read there is little room for "bright" typography." Morison continues, "the good type designer knows that, for a new fount to be successful, it has to be so good that only a few recognise its novelty."<sup>3</sup> This is on the continuum of typography described as a purely technical and utilitarian act. Type is much more than this; it is the visual representation of language. Typography is part of everyone's environment and therefore should be considered as a greater contributor to our culture.

The forms of the "New" New Typography are at the fore of blurring the lines between graphic design and fine art. These typographic experimentations did not start on their own but took their cue from the innovations that took place in the world of fine art at the turn of the century. Many of these "fine" artists of the avant-garde worked commercially. The proponents of Futurism, Dada, Constructivism, De Stijl, etc. moved freely between painting and book design as well as advertising.

Just as Futurist painters attempted to bring movement to the two-dimensional space, so too did the Futurist poets who, through typographic innovation, tried to bring movement to their words. They broke from the traditional vertical and horizontal structure of the page, setting it in motion. In his poster for the New Futurist Theater Company, the painter turned designer, Fortunato Depero, illustrated how the use of flat planes of vibrant color, diagonal composition

---

and angular repetitive forms contribute to a dynamic page layout. Dada, with its rejection of art and tradition, stretched the visual vocabulary of Futurism. By releasing the letterform from traditional phonic symbolism Dada pushed the Cubist concept of the letterform as a concrete visual shape. Dada continued to push typography further from its traditional usage “through a synthesis of spontaneous chance actions with planned decisions.”<sup>4</sup> The designer Kurt Schwitters created an offshoot of Dada which he entitled *Merz*. In his work, Schwitters, combined a strong sense of design with the elements of chance and nonsense proposed by the Dadaists. He wrote and designed poetry in which he played sense against nonsense, defining poetry as the interaction of elements: letters, syllables, words, and sentences.<sup>5</sup> In the early 1920’s Schwitters was deeply influenced by the work of the Russian Constructivists, as well as, contributors to *De Stijl*, especially designer/painter/writer Theo van Doesburg. He and van Doesburg collaborated on a book design entitled, “*Die Scheuche Marchen*” which had as its characters typographic forms. Also, between 1923 and 1932 Schwitters produced twenty-four issues of his periodical “*Merz*” which continued to push the bounds of graphic expression.

In his work of the 1920’s the designer El Lissitzky pioneered a new approach to typographic art which had a huge impact upon graphic design. In designing “*For the Voice*”, with its strict use of Constructivist motifs, Lissitzky proved that a graphic designer can have a definitive style and philosophy and effectively use it to interpret the specific message and content of an assignment. In both Lissitzky and Laszlo Moholy-Nagy we see emphasis placed upon the element of expression - the expression of content through form. In contrast, the designer/typographer Jan Tschichold was more concerned with order and organization. Contrast was emphasized in order “to reveal the logical arrangement of the printed text.”<sup>6</sup>

In 1925, in the article “*Elementaire Typographie*”, a twenty-three year old Jan Tschichold wrote of a new typographic standard that was meant as an introduction for printers to the avant-garde practices of El Lissitzky’s pioneering design work. It spoke of the merits of sans serif type, asymmetric compositions, the benefits of white space and the limiting of typefaces. It also berated the standards of nineteenth-century printing and its static visual qualities created by symmetrical compositions. This article was a synthetic re-statement of the principles of elementary, functional, and modern typography being practiced by Lissitzky, Schwitters and the Bauhaus. These were the “master sources” of the emerging New Typography. In 1928 Tschichold published “*Die Neue Typographie*” which became the revolutionary textbook for functional typography.<sup>7</sup> In publishing “*Die Neue Typographie*” Tschichold introduced, for the first time, a theoretical look at typography devoid of concerns for printing practicality. Tschichold continued to express a need for typographic clarity in his 1935 statement: “Typography is the arrangement of words to be read”<sup>8</sup> and “All typography is an arrangement of elements in two-dimensions.”<sup>9</sup> Typographer Hermann Zapf reiterates Tschichold’s statements in 1960 this way: “Typography is fundamentally two dimensional architecture.”<sup>10</sup>

Around the same time the young designer Herbert Bayer became the head of the typography workshop at the Bauhaus where he began to draw his *Universal* type. An interesting historical

---

lineage is apparent when one looks into the development of Bayer's type. Bayer's interests in designing this type came about from the increasing technological nature of the world and his belief in the rational methods of engineering. He designed letterforms that were reductions of Roman letterforms consisting of interchangeable parts, and thus represented his attempt to express the purity of geometry and an increased functionality. Bayer was rejecting the organic nature of the crafts tradition in an attempt to represent the essential structure of the letterform. His search for universality and efficiency led him to do away with capital letterforms and use only lowercase letters. His most interesting hypothesis was that since speech did not recognize upper-case letters, no visual distinction was needed in his typeface.

Following Bayer's attempt at simplification, designer/painter Josef Albers, in his stencil typeface, employed a building-up method based on elementary forms (squares, triangles, half-circles, etc.) which translated into a typeface that expressed purity, regularity and simplicity. Similarly, Paul Renner, in designing his typeface Futura, relied heavily on precise drafting tools such as the compass, T-square and the triangle. This allowed Renner to escape the traditional methods of type design in favor of the rigidity of mechanical constructions.<sup>11</sup>

Beginning in 1928, Tschichold also attempted to do away with two signs for one symbol, but his attempt at designing his Universal type looked much different than that of Bayer. He mixed both upper and lower-case letters thereby creating a single-case alphabet. In his Universal type design Tschichold reiterates that clarity is the highest goal. Interestingly, he also attempted to create an alphabet that would be much more closely related to speech. This work predates Bayer's "fonetic alfabet" by some thirty years. This is not unlike what concrete poetry, Dada, and Futurism were attempting to achieve in the early part of the century. In his Futurist Manifesto, Filippo Tommaso Marinetti states the need for this type of typographic expression one which would more closely mirror verbal expression.

Designer Bradbury Thompson followed both Bayer and Tschichold in their attempt to create a typeface using only lowercase letters. His Monoalphabet of 1940 used only lowercase letters but increased their size at the beginning of sentences and for proper nouns. In 1950, Thompson designed Alphabet 26 in which he combined both upper and lower-case letters to create an alphabet consisting of only 26 signs. Thompson's goal was also an attempt at clarity and simplicity.

As it turns out, much later we see Tschichold reject the values he proposed in "Die Neue Typographie". In 1959 at the Type Directors Club seminar, Tschichold stated that "good typography has to be perfectly legible and as such, the result of intelligent planning. The classical typefaces such as Garamond, Janson, Baskerville and Bell are undoubtedly the most legible. Sans serif is good for certain cases of emphasis, but is used to the point of abuse."<sup>12</sup> His explanation for this "more prudent" evaluation of typography was that his earlier principles too closely paralleled that of national socialism and fascism, indicating that he believed that there are social implications to both graphic design and typography.

In comparison to the typography of today, through which designers are attempting to expand the normal pretense of the letterform, the designers who worked at the Bauhaus during



---

the 1920's and 1930's looked at a new and ever-changing society and decided that the present form of the letter was possibly no longer valid. There was a drive for simplicity, clarity and humanity that ran through all of these designers' work. They looked beyond the traditional utilitarian view of typography and were designing with absolute clarity in mind. They seemed disconcerted with the salability of their experimentation rather were more interested in searching for much more universal truths connecting the written word and the spoken word along with the growing industrial nature of their contemporary society. But when the "look" of Modernism was appropriated by industry and named the International Style, it lost its moral authority. The letterforms of the past had no place in this modern industrial society where the machine was king. If we project this idea into the post-modern era, the posters that accompany the experimental typeface designs in *Fuse* magazine, which started distribution in 1990, highlight how letterforms might once again become objects of beauty and inspiration rather than the tools of commerce.

## Technology

Before the inception of the personal computer, typography was limited to the few who had studied the drawing of letterforms, had the skills manipulate the precise drawing tools and processes, had quality handiwork and understood the history of type. There was a guild-like sentiment to type design. This inhibited the layperson from designing type because of its technical, craft-like nature. With the advent of the personal computer and the computer programs that allow for the ease of type design, the laborious task of letterform design has been democratized. Now anyone with a computer and the accompanying software can, to a certain extent, design a typeface. What has this meant to typography? This can be answered simply by comparing a type specimen book circa 1985, only ten years ago, with a specimen book of a digital type "foundry" of today. The first thing that stands out is the pure number of typefaces that are available today as compared to 1985 (over 9,000 in some cases as compared to 1,000). This proliferation of type has allowed the designer an expanded voice, the ability to better visually express language. It has allowed the type designer a vehicle to design type that may be specific to each application with a much greater ease than hand drawn type. It seems that this democratization is a good thing for typography and graphic design, but not a well received one. It has lead to a great deal of experimentation and variety of letterforms, both good and bad.

Hermann Zapf contributed this explanation for the need to expand the perimeters of typographic form in 1959: "As there are many splendid types of earlier centuries that we still gladly use in printing, it may perhaps be asked why new types are designed. Our time, however, sets the designer other tasks than did the past. A new type must, along with beauty and legibility, be adapted to the technical requirements of today, ... Just as musicians and artists seek to create some new expression of our time and link it to a rich past, so too must the work of type designers and type founders remain bound to the great tradition of the alphabet."<sup>13</sup> Interestingly, Zapf looks outside of graphic design to explain the inner workings of typography indicating the interconnectedness of design, technology, fine art and music. Similarly, Matthew Carter likens the proliferation of typography to the fashion industry in that it is not necessarily a

---

question of need but want for new typographic forms and their expressive qualities.<sup>14</sup> The Dutch graphic designer Gerard Unger views the need for the expanding typographic choices as a way to excite readers, rather than designers, stating that, “One of the reasons why there is a constant demand for new typefaces is the fact that we get used to the peculiarities of older typefaces. What you see too often doesn’t work anymore.”<sup>15</sup>

When looking at the effects of technology on society on the whole and design in particular one discovers many interesting parallels. At the time of Gutenberg’s movable type the printing press made mass distribution of information possible, encouraging the steady erosion of oral traditions, but in turn lead to the Renaissance, a steady increase in literacy and the educational system. Since 1984 the Macintosh computer has become a common tool for all kinds of creative processes, a way for creative people in all fields to communicate in a common language.<sup>16</sup> The Macintosh has eliminated many, if not all, of the laborious tasks of graphic design and type design freeing these disciplines from the constraints of tradition.

Postscript, the common language of the computer, is a page-description programming language created by Adobe Systems that handles text and graphics, placing them on the page with mathematical precision. Postscript has become the industry standard. Before Postscript type was device-dependent meaning that it was dedicated to the particular equipment used to produce it. What Postscript has allowed for is a competitive field of typeface purchase because the type does not have to match specific equipment (except in the case of platform, be it IBM, Macintosh, etc.)

Never before have technological advances completely overtaken an industry, or for that matter a society, as rapidly as the computer has. It is hard, if not impossible, to avoid the computer technology in today’s society. Whether we are using the ATM at our bank or “surfing” the internet, the computer has become an integral part of our daily lives. Digital technology has thrust itself upon typography and design, as well as, other industries such as music with it’s conversion to compact disk technology, with breakneck speed. This close tie of technological advances to typographic advances is not uncommon. When there was an improvement in router technology in the mid-1800’s there was also a proliferation of wood type. The invention of the Linotype and Monotype machines brought upon significant changes in the present society; allowing machine-set typography to be printed on machine-manufactured paper opening a new era of knowledge, education and again, expanding literacy.<sup>17</sup>

In the digital era, typography has limitless conceptual boundaries which until a few years were unthinkable. If one looks at the type designs of the Dutch typographers Just van Rossum and Erik van Blokland it is clear that they are no longer interested in duplicating the type of a past. They are “using the computer to expand the way people think about type.”<sup>18</sup> Their 1990 type design Beowulf defies the idea that letterforms are identical every time they appear. By programming Beowulf’s characters to change with every keystroke, the type crumbles on the screen. This begins to question the overstated smoothness and sharpness that has become the attainable ideal in printing. They are more interested in the imperfections that are reminiscent in handwritten text. Contradicting the theory that new computer technology has led to new

---

typographic forms, designer Phil Baines feels that much of the typography of the last 15 years is not the result of new technology, but a reaction against previous held creeds about communication.

Some Modernist designers such as Paul Rand and Milton Glaser refuse to see the formal changes that are unavoidable with the shift in technology and culture. Rand refers to the work coming from some of the more prominent design schools in this country as “chaos”. Yet, if placed in the context of its time Rand’s work might have been considered “chaos” as well. His visual referencing of the avant-garde in his advertising was in total contrast to much of what was considered “good” advertising at that time. Glaser, when asked about RayGun magazine, which is designed by David Carson, states, “It is provocative and breaks new ground, but at the same time, the magazine does not seem to understand fundamental laws of communication.” What “laws” are Mr. Glaser referring to? Are there specific laws on the way a magazine has to look regardless of its intended audience? It seems that what Rand, Glaser and others are overlooking is that these “New” New Typographers are designing to communicate in a much more pluralistic society where the design solutions of the past are not always appropriate. It is this inability to see beyond the present forms of graphic design that devalues the Modernist’s argument.

As much as there is an attempt to distance oneself from the traditional letterform it is quite difficult for we have been linked to these traditions for some 300-500 years. It is much easier to convey ideologies when one can break from these conventions and design a typeface which can better express ones thoughts rather than relying on preconceived types that are better for expressing the concepts and ideologies of the past. Old type designs speak to old ideas and cultures and the expressiveness of the designed piece is inherent in these type designs. In opposition to this theory the British designer Phil Baines believes that “new typography is about attitude; arrangement is more important than typeface choice ...”<sup>19</sup> in essence saying that old letterforms laid out in new ways is more progressive than new letterform by themselves. This statement is only partially true. In many instances it is not the type alone that pushes the boundaries of design, but the way in which it is used. This, however, does not lessen the significance that these new typographic forms have made on the process of communication. Seemingly contradicting himself, Mr. Baines also states, “I cannot think of any “classic” typeface which works well in the digital environment”<sup>20</sup> voicing the need for new typographic forms.

By designing type that is more appropriate for our time, designers are once again taking a leading role in the shaping of societal conventions. This is a much closer adherence to design under the true Modernist umbrella which was seen as an activity that can help to improve society and the human condition.

## **Theory**

Semiotics and structuralism view the alphabet as nothing more than a coding system for our verbal language. The Swiss linguist Ferdinand de Saussure introduced the principle of linguistic value which theorizes that the identity of a signifier (letter) rests not in the signifier itself, but

---

solely in its relation to other signifiers. This would suggest that independent of words and sentences, the individual letterform has no intrinsic value and therefore must be judged in this holistic way. When one looks at the intentions of the De Stijl and Bauhaus type designers one immediately recognizes their desire to call attention to the system of their fonts as a whole rather than to the individual letterforms. This seems to support, in typographic terms, what the post-structuralist Jacques Derrida was looking for in his pursuit of “a form or function organized according to an internal legality in which elements have meaning only in the solidarity of the correlation or their opposition.”<sup>21</sup>

Saussure described writing as a sign system separate from speech itself, with typography being one aspect of the broader picture. He saw speech as the original, natural medium for language, defining writing as a system of signs which represent speech. He was infuriated by the opacity and inconsistency of writing and felt that the alphabet had violated the purity of the original, natural, spoken language and was an inadequate form of communication.

Derrida introduced his post-structuralist concepts to the United States in 1966. Post-structuralism, or as it is also referred to, deconstruction involves the examination of texts in terms of language and ideas of which they are composed. It refers to the breaking down of an idea, a word, or value in order to understand how interpretation is based on these parts rather than their actual meaning. Deconstruction brings into question the entire typographic vocabulary, the orientation of the page, and whether type itself should do more than perform its basic historical function of being readable.<sup>22</sup>

Typography, because of its basis on words and language, is a logical visual extension for deconstructive theory. These theories first found their way into the American design aesthetic around 1978 when students of Cranbrook Academy designed an issue of the design journal *Visible Language*. The particular issue (Vol. 12, no. 3) was concerned with post-structuralist theory. But this aesthetic has its roots in European design. It is apparent that both Dada and Futurist typographers were interested in the visual interpretation of the meaning of words to provide emphasis and how it was possible to portray the sounds of words. This deconstruction of the text continues today in the work of David Carson and the London based design firm *Why Not Associates*, as well as many others.

In an interview with the designer/educator Edward Fella, a Cranbrook graduate, he reveals how deconstruction manifested itself in his design work: “irregularity is rigorously thought out, based loosely on deconstruction. If deconstruction is a way of exposing the glue that holds together western culture, I thought ‘what is it that holds together typography? It’s space’ ... So the idea was simply to play with that little bit of space and see if you had a bit of room to maneuver with that glue that holds it all together.”<sup>23</sup> In his work we see the conventions of legibility ignored with wild, irregular compositions that turn out to be surprisingly readable. Fella has suggested that the search for perfect letter-, word-, and line-spacing has led to the stifling of typographic expression.

“The whole duty of typography ... is to communicate to the imagination, without loss by the way, the thought or image intended to be communicated by the author.”<sup>24</sup> The previous quote

---

by Thomas James Cobden-Sanderson, a bookbinder who worked in the late nineteenth-century, brings to mind an interesting concept, "... communicate to the imagination ..." . This suggests that there is a certain amount that the designer/typographer should leave to the viewers imagination, bringing ambiguity into the equation. Is the designer of new typographic forms pushing the threshold of this ambiguity? The advent of the television age has increased our ability to recognize letters and words at a faster rate. Because of this, Neville Brody suggests that fine detailing in typography is no longer important but the overall shape of the letterform is. It can also be said that the negative shape is just as important as the positive shape. Playing with the idea of what is figure and what is ground adds a certain ambiguity to the communication thus increasing viewer participation. The typographer/designer/educator Jeffery Keedy feels that we have robbed society of all ambiguity and therefore interest in our typographic forms. He has stated, "Many people in life feel it's their role in life to destroy all ambiguity. I think that ambiguity is life itself and it's what makes life interesting. We too often assume that people are so stupid that they can't deal with ambiguity. I think people live for ambiguity ..." <sup>25</sup> Keedy creates ambiguity to provide the viewer a place to participate in his message making. This is not a totally new idea when it comes to creating graphic form but when applied solely to typography it has rarely been the case.

### **Legibility**

One of the major debates surrounding the emergence of the new typographic forms is legibility. It seems that the old theories and "rules" concerning legibility are outdated. How does an optimum line width of between 18 and 24 picas, which was determined in 1929, communicate to the readers of today, who have a better tolerance for longer line widths? It is hard to validate these old rules when one looks at the many different ways that we receive information (television, movies, video games, computers, etc.), and understand that society is more visually literate and used to a sophisticated level of coding and pace. Clearly, there is a need to update our thinking concerning legibility.

There is a gray area between what is readability and what is legibility. In studying legibility Dr. Miles Tinker, an internationally recognized authority on print legibility, defines legibility as concern for perceiving letters and words, and the reading of continuous textural material. He theorized that the shapes of letters must be discriminated, the characteristic word forms perceived, and continuous text read accurately, rapidly, easily, and with understanding. In earlier writings he had used the word readability to define what he would later term legibility. It can be said that a minimum requirement for text type is that it be legible, which means that it be large enough and distinct enough so that the reader can discriminate between individual word and letters. Readability is the quality that makes text easy to read, inviting and pleasurable to the eye. Text can be legible, but if the reader gets bored and tired, the designer has not achieved maximum readability.<sup>26</sup>

After an intensive study of letterforms which included both serif and sans serif, done in the 1970's, Adrian Frutiger concluded: "the foundations of legibility are like a crystallization, formed

---

by hundreds of years of use of selected, distinctive typefaces. The usable forms that have stood the test of time are perhaps permanently accepted by humankind as standards conforming to aesthetic laws ... where there are excessive innovations of form of designs of poor quality, the typeface encounters a certain resistance in the reader and the reading process is hindered.”<sup>27</sup>

Some of the most recent thoughts in the debate on typographic legibility are by two of the leading typographers in the digital medium. Typographer Matthew Carter sees the difficulty of defining legibility/readability this way, “ It’s difficult to measure readability. Legibility can be measured because successive degradations demonstrate how letterforms hold up. But readability is difficult to measure. People read and comprehend best those typefaces which they are most familiar. There is a congeniality factor where type is concerned.”<sup>28</sup> Zuzana Licko, designer of many of the typefaces in the Emigre library states, “Typefaces are not intrinsically legible. Rather, it is the reader’s familiarity with faces that accounts for their legibility. Studies have shown that readers read best what they read most. Legibility is also a dynamic process, as readers’ habits are everchanging. It seems curious that blackletter typestyles, which we find illegible today, were actually preferred over more humanistic designs during the eleventh and fifteenth centuries. Similarly, typefaces that we perceive as illegible today may well become tomorrow’s classic choices.”<sup>29</sup> A much more progressive thought emerges when Dutch designer Peter Mertens states, “Letters are legible. If some things are not legible then they are not letters. Illegible letters do not exist. Illegibility does not exist. ...Every text can be made optimally legible. That is, as long as every publication can be poured into a mould, a universal shape, a universal form.”<sup>30</sup>

In summary, legible type and typography require distinction of characters in order to have meaning, but beyond that there is not necessarily such a thing as readable typography. Legible type only holds meaning in relationship to our aesthetic senses, our previous reading experiences, our cultural background, and the time at which we experience said typography.

## **Graphic Design**

What is the role of graphic design in this development of new typographic forms? It seems that graphic design is going to have to take a good hard look at itself and possibly re-define its parameters. The role of the designer has been simply stated as the communicator of messages. Designers should consider these new letterforms when designing a piece so that it may speak to our time and our sensibilities, not to some preconceived notion of what design should look like. Our fall back aesthetic as designers has been the Bauhaus style and its Modernist credos. These ideas of design and communication were fine in their time, but our time calls for design which expands the semantic role of graphic communication. The typefaces of the digital era are quirky, personal and subjective, while the typography of the Swiss International Style strove for simplicity and objectivity. By designing and using new letterforms designers can advance the communication process of generations to come, most of which will rely less on the present forms of communication. Dutch designer Gert Dumbar defines graphic design as a “creative profession and creativity is by definition driven by innovation. It is not easy to convey this characteristic and still be able to transmit a

---

message clearly.”<sup>31</sup> I would agree that it may not be easy but it must continue to be a goal of the designer to convey messages in the most innovative way possible as to promote growth and interest in the field of graphic design, as well as, keep abreast of the needs of a changing society.

## **Conclusion**

When viewing the typography employed in many of today’s design solutions, one must remember the many influences that have driven these typographic innovations. First, there is clearly a reference to historical motifs leading to renewed typographic experimentation. The “New” New Typography has its roots in the turn of the century avant-garde. It is important to realize that there are historical precedents inherent in the “New” New Typography. Understanding that nothing happens in a vacuum, the “New” New Typography came about as a reaction to the communication credos of Modernism which called for design to be the timeless, minimal, geometric, and a self-referential carrier of our messages. In our post-modern society, designers need to be more conscious of the content, expanding problem solving across new territories. Second, not unlike previous typographic expansion, technology is a major contributor to the “New” New Typography. The advent of computer technology and the ease in which it has made the drawing of letterforms has spurred on many of these new typographic forms. The Macintosh has broken down the barriers between designer and typographer and placed typography firmly back in the hands of the designer. The typography of the digital era is no longer privy to the schooled typographer or printer but is in reach of anyone who has access to the software. This increases the democratization of typography which, in the long run, can only be beneficial to the proliferation of graphic design. Typography has taken on a new, significant, role in this proliferation of graphic form. Lastly, the expansion of what is the duty of our alphabetic coding system has led some to challenge our sensibilities and our role as viewer in the communication process. In a society where most of the information received comes from the television, and other digital sources, our old “rules” concerning communication and legibility are in need of re-thinking. It is clear that these “rules” are outdated. Those who continue to harp on the supposed illegibility of many of today’s typographic forms refuse to see the unavoidable effects that changes in culture have had on our ability to comprehend these new letterforms. In this post-modern society “typography is to be seen as well as read.”<sup>32</sup>

## Endnotes

---

1. Chloe Braunstein-Danos, "The Birth of a Typographer," *Graphis*, 295, January/February 1995, p.44.
2. Jon Wozencroft, *The Graphic Language of Neville Brody* (New York: Rizzoli, 1994), p.6.
3. Lewis Blackwell, *Twentieth-Century Type* (New York: Rizzoli, 1992), p.90.
4. Philip Meggs, *A History of Graphic Design* (New York: Van Nostrand Reinhold, 1992), p. 249.
5. Meggs, p. 246.
6. Robin Kinross, *Modern Typography* (London: Hyphen Press, 1992), p.90.
7. Arthur Cohen, "The Avant-Grade in Print," Video, October, 1981.
8. Jan Tschichold, *Asymmetric Typography* (New York: Reinhold Publishing, 1967), p. 54.
9. Tschichold, p. 58.
10. Blackwell, p.133.
11. Ellen Lupton and J. Abbott Miller, *The ABC's of Triangle, Square, Circle: The Bauhaus and Design Theory* (New York: Cooper Union, 1993), p. 41.
12. Blackwell, p.99.
13. Blackwell, p.133-4.
14. "An Interview with Matthew Carter," *Axis*, vol. 54, p. 147.
15. Gerard Unger "Legible?," *Emigre*, no. 23, 1992 p. 6
16. Hitoshi Koizumi, *New Typo Graphics* (Tokyo: PIE Books, 1993), p. 7.
17. Meggs, p. 141
18. David Redhead, "Beyond Beowulf," *I.D.*, 41, no. 6, November 1994, p. 81.
19. Phil Baines, "Ten thoughts which come to mind about design in the 1990's," in *Graphis 95*, ed. Martin Pedersen, (Zurich: Graphis Press, 1994), p. 9.
20. Baines, p. 10.
21. Ellen Lupton and J. Abbott Miller, "A Natural History of Typography," in *Looking Closer: Critical Writings on Graphic Design*, ed. Michael Bierut et. al., (New York: Allworth Press, 1994). p. 23.
22. Chuck Byrne and Martha Witte, "A Brave New World: Understanding Deconstruction," *Print*, 44, 6, November/December 1990, p. 81-2.
23. "Interview with Edward Fella," *Emigre*, no. 17, 1991.
24. Rob Carter, Ben Day, Philip Meggs, *Typographic Design: Form and Communication* (New York: Van Nostrand Reinhold, 1993), preface.
25. Rudy VanderLans, "Interview with Jeffery Keedy," *Emigre*, no. 15, 1990, p. 17.
26. *Designer's Guide to Typography*, ed. Nancy Aldrich-Ruenzel and John Fennell (New York:Watson-Guptill Publications, 1991), p.19.
27. Blackwell, p. 172.
28. Matthew Carter quote (source unknown).
29. "Interview with Zuzana Licko," *Emigre*, no.15, 1990 p. 12.
30. Peter Mertens, "Legibility," *Emigre*, no. 15, 1990, p. 4.
31. Gert Dumbar, "Essays," *The 100 Show: The Twelfth Annual of the American Center for Design* (New York:Watson-Guptill Publications, 1990).
32. Katherine McCoy, "American Graphic Design Expression," *Design Quarterly*, 148,1990, p.16.



## Bibliography

---

### Books:

- Aldersey-Williams, Hugh, et al. *Cranbrook Design: The New Discourse*. New York: Rizzoli, 1990.
- Aldersey-Williams, Hugh. *New American Design: Products and Graphics for a post-industrial age*. New York: Rizzoli, 1988.
- Aldrich-Ruenzel, Nancy and Fennell, John, ed. *Designer's Guide to Typography*. New York: Watson-Guption Publishers, 1991.
- Berman, Art. *Preface to Modernism*. Chicago: University of Illinois Press, 1994.
- Bierut, Michael, et. al., ed. *Looking Closer: Critical Writings on Graphic Design*. New York: Allworth Press, 1994.
- Black, Alison. *Typefaces for desktop publishing*. London: Architecture Design and Technology Press, 1990.
- Blackwell, Lewis. *Twentieth-Century Type*. New York: Rizzoli Press, 1992.
- Broos, Kees, and Hefting, Paul. *Dutch graphic design: A century*. Cambridge: MIT Press, 1993.
- Carter, Rob. *American Typography Today*. New York: Van Nostrand Reinhold, 1989.
- Carter, Rob, Day, Ben, and Meggs, Philip. *Typographic Design: Form and Communication*. New York: Van Nostrand Reinhold, 1985.
- Chwast, Seymour, and Heller, Steven. *Graphic Style*. New York: Harry N. Abrams, 1988.
- Ciampa, John. *Communication: The Living End*. New York: Philosophical Library, 1989.
- Cotton, Bob, and Oliver, Richard. *Understanding Hypermedia*. London: Phaidon Press Ltd., 1993.
- Gill, Eric. *An Essay on Typography*. Boston: David R. Godine, Publisher, 1988.
- Glauber, Barbara. *Lift and Separate: Graphic Design and the Quote/Unquote Vernacular*. New York: The Herb Lubalin Study Center, 1993.
- Heller, Steven, and Chwast, Seymour. *Graphic Style*. New York: Harry N. Abrams, Inc., 1988.
- Hollis, Richard. *Graphic Design: A Concise History*. London: Thames and Hudson, 1994.
- Hughes, Robert. *The Shock of the New*. New York: McGraw-Hill, 1990.
- Kinross, Robin. *Modern Typography: An essay in critical history*. London: Hyphen Press, 1992.
- Lechte, John. *Fifty Contemporary Thinkers*. London and New York: Routledge, 1994.
- Labuz, Ronald. *Contemporary Graphic Design*. New York: Van Nostrand Reinhold, 1991.
- Lindinger, Herbert, ed. *Ulm Design: The Morality of Objects*. Massachusetts: The MIT Press, 1991.
- Livingston, Alan and Isabella. *Encyclopedia of Graphic Design and Designers*. London: Thames and Hudson, 1992.
- Lupton, Ellen, ed. *Graphic Design and Typography in the Netherlands: A View of Recent Work*. New York: Princeton Architectural Press, 1992.
- Margolin, Victor, ed. *Design Discourse*. Chicago: The University of Chicago Press, 1989.
- Meggs, Philip. *A History of Graphic Design*. New York: Van Nostrand Reinhold, 1992.
- McLean, Ruari. *Jan Tschichold: typographer*. Boston: David R. Godine, Publisher, 1975.
- McLuhan, Marshal. *Understanding Media: The Extensions of Man*. Cambridge: MIT Press, 1964.
- Muller-Brockmann, Josef. *A History of Visual Communication*. Switzerland: Verlag Arthur Niggli, 1971.

- 
- Neuenschwander, Brody. *Letterwork: Creative Letterforms in Graphic Design*. London: Phaidon Press Ltd., 1993.
- New Typo Graphics. Tokyo: PIE Books, 1993.
- Poynor, Rick. *The Graphic Edge*. London: Booth-Clibborn Editions, 1993.
- Poynor, Rick. *Typography Now*. London: Booth-Clibborn Editions, 1991.
- Purvis, Alston W.. *Dutch Graphic Design, 1918-1945*. New York: Van Nostrand Reinhold, 1992.
- Rand, Paul. *A Designers Art*. New Haven: Yale: University Press, 1985.
- Rand, Paul. *Design, Form and Chaos*. New Haven: Yale: University Press, 1993.
- Rehe, Rolf. *Typography: How to Make it Most Legible*. Indianapolis: Design Research Publications, 1974.
- Remington, R. Roger and Hodik, Barbara J. *Nine Pioneers in American Graphic Design*. Massachusetts: The MIT Press, 1989.
- Saarinen, Esa, and Taylor, Mark C.. *Imagologies: Media Philosophy*. London: Routledge, 1994.
- Spencer, Herbert. *Pioneers of modern typography*. New York: Hastings House, 1969.
- Spencer, Herbert. *The Liberated Page*. San Francisco: Bedford Press, 1987.
- Thompson, Bradbury. *The Art of Graphic Design*. New Haven: Yale University Press, 1988.
- Tschichold, Jan. *Asymmetrical Typography*. New York: Reinhold Publishing, 1967.
- VanderLans, Rudy and Licko, Zuzana. *Emigre: Graphic Design into the Digital Realm*. New York: Van Nostrand Reinhold, 1993.
- Wozencroft, Jon. *The Graphic Language of Neville Brody*. New York: Rizzoli, 1991.
- Wozencroft, Jon. *The Graphic Language of Neville Brody 2*. New York: Rizzoli, 1994.
- Yelavich, Susan, et al. *The Edge of the Millennium*. New York: Watson-Guption Publishing, 1993.
- Articles:
- Baines, Phil. "Modernity and tradition." *Eye*, vol.2, no. 7, p. 4-6.
- Barnbrook, Jonathan. "Fonts set free (custom font design is revolutionizing typography)" *Design* (London, England) vol. no 514 p24-7 October 1991.
- Bartl, Peter. "Form and technology (technological origins of design principles of Modern and Post-modern typography)" *Mobilia* vol.324 p.4-9 1984.
- Braybrook, Susan. "Cranbrook at Sixty." *Print*, p. 77-89.
- Burnett, Kathleen. "Communication with visual sound: Herbert Bayer and the design of type" *Visible Language* v24 no3/4 p.298-333 1990.
- Byrne, Chuck and Witte, Martha. "A Brave New World: Understanding Deconstruction". *Print*, Nov./Dec. 1990, vol.44, no. 6, p.80-7.
- Carson, David. "Thoughts on the New Typography." *How*, February 1994 p. 68-73.
- Carter, Matthew. "Typography and Current Technologies." *Design Quarterly*, no. 148 1990 p. 55-64.
- Codrington, Andrea. "Redesigning Destiny." *I.D.* January/February 1993 p.16.

- 
- Cornelius, Coleman. "A Man of Letters." *How*, February 1994 p. 62-7.
- Dauppe, Michele-Anne. "Get the Message?" *Eye*, vol. 1, no. 3, p.4-7.
- Dooley, Michael. "Kicking up a Little Dust." *Print*, September/October, vol. 46, no. 5, p. 46-57
- Drucker, Johanna. "Typographic manipulation of the poetic text in the early twentieth-century avant-garde" *Visible Language* v25 p.231-56 Spring 1991.
- Eastman, Mark. "Off the Beaten Path: New Directions in Type Design." *Communication Arts*, November 1994, no. 252, p. 216-221.
- Edwards, Ethan. "Way out West." *Eye*, vol. 3, no. 10, p.54-57.
- "Face to Face Neville Brody and David Carson." *Creative Review*, May 1994, p.28-30.
- Farrelly, Liz. "One from the Heart." *Eye*, vol. 2, no. 6, p. 24-33.
- Friedman, Daniel. "A View: Introductory Education in Typography." *Visible Language*, VII 2, Spring 1973, p.129-144.
- Heller, Steven. "Changing of the Guard." *Eye*, vol. 3, no.8, p.4-5.
- Heller, Steven. "The Shock is Gone." *I.D. March/April 1988* p.62-63.
- Heller, Steven. "Cult of the Ugly." *Eye*, vol. 3, no. 9. p.52-59.
- Heller, Steven. "Two Art Directors and Their Cult(ure) Magazines." *Print*, January/February 1992, vol. 46, no. 1 p. 58-62.
- Hinrichs, Kit. "Character Development: Comments on the New Typography." *How*, February 1994, p. 58-61.
- Horsham, Michael. "I don't use a Mac but I know a man who can." *Eye*, vol. 4, no.13, p. 6-7.
- Howard, Andrew. "There is such a thing as society." *Eye*, vol. 4, no.13, p. 72-77.
- Keedy, Jeffery. "The rules of typography according to (crackpots) experts." *Eye*, vol. 3, no. 11, p. 48-55.
- Kinross, Robin. "The digital wave" *Eye*, vol. 2, no.7, p.27-39.
- Licko, Zuzana, and Vanderlans, Rudy. "The New Primitives." *I.D. March/April 1988* p.58-61.
- Lupton, Ellen. "The Academy of Deconstructed Design." *Eye*, vol. 1, no. 3, p. 44-55.
- Lupton, Ellen, and Miller, J. Abbott. "Deconstruction and Graphic Design: History Meets Theory." *Visible Language*, vol. 28, no. 4, 1994
- McArthur, Douglas. "Sign function and potential of the printed word" *Visible Language* v26 p.282-97 Summer/Autumn 1992.
- Meggs, Philip. "Has Graphic Design Got a Future?" *Print*, March/April vol. 48 p.112-114.
- Meggs, Philip. "For the Voice." *Print*, September/October, vol. 44, no. 5, p. 112-19.
- Meggs, Philip. "Massimo Vignelli vs. Ed Benguiat (Sort of)." *Print*, September/October 1991, vol. 45, no. 5, p. 88-95+.
- Meggs, Philip. "The New Illegibility." *Print*, September/October 1992, vol. 46, no. 5, p. 46-57.
- McCoy, Katherine. "American Graphic Design Expression." *Design Quarterly*, vol. 148, 1990, p.4-22.

- 
- McCoy, Katherine, and Frej, David. "Typography as Discourse." I.D., p.34-37.
- Mills, Mike. "The (layered) vision thing." Eye, vol. 3, no. 8, p.8-9.
- Poynor, Rick. "American Gothic." Eye, vol. 2, no.6, p.64.
- Poynor, Rick. "Design Without Boundaries." I.D., November 1993 p.50-55.
- Poynor, Rick. "Interview with Neville Brody." Eye, vol. 2, no.6, p.8-16.
- Poynor, Rick. "Interview with Malcolm Garrett." Eye, vol. 3, no.12, p.10-16.
- Poynor, Rick. "Neville Brody Faces the Future." I.D., September/October, vol. 41, p. 42-7.
- Poynor, Rick. "Whatever became of the content?" Eye, vol. 3, no.9, p.6-7.
- Rea, Peter. "Interview with Dan Friedman." Eye, vol. 4, no.14, p.11-16.
- Rock, Michael. "Beyond Typography." Eye, vol. 4, no. 15, p. 26-35.
- Rock, Michael. "Emigre Comes of Age." I.D., May/June 1994 p.32-33.
- Rock, Michael. "P. Scott Makela is Wired." Eye, vol. 3, no. 12, p. 26-35.
- Rous, Jan. "The Typography and design of Czech books between the wars"  
Fine Print vol.13 p.19-21 January 1987.
- Spiekerman, Erik. "Matthew Carter." Eye, vol. 3, no. 11, p.10-16.
- Stiff, Paul. "Stop sitting around and start reading." Eye, vol. 3, no. 11, p. 4-5.
- Thrift, Julia. "Rudy Vanderlans." Eye, vol. 2, no.7, p.8-16.
- Videos:
- "American Masters: John Cage" Public Broadcasting Systems New York, NY 1990.
- "Structuring Information". Sharon Poggenpohl, Rochester Institute of Technology  
October 1992.
- "The Avant-Garde in Print" Arthur Cohen, Rochester Institute of Technology, October 1991.

## Additional Notes

---

The following information was presented to me by Dr. Zakia on April nineteenth. He wrote: A number of perceptual studies have shown that the eye is attracted by changes; change in contrast, change in color, change in texture, change in shape, change in direction: the “New” New typography takes advantage of directional change in designing some type so that each letter form undergoes multiple change and therefore is very functional in getting the attention of the eye.

A comparison of the number of changes in the letter E from the typeface Caustic Biomorph compared to a conventional E (Helvetica) shows that there are 116% more changes in direction.



12 Changes



26 Changes

In addition to change in direction as an eye-catcher the “New” New Typography also provides novelty and novelty is often used to attract attention.

1. David Norton and Laurence Stark, “Eye Movements and Visual Perception,” Scientific American, June 1971.
2. Fred Attneave, “Multistability in Perception,” Scientific American, December 1971.

## Glossary of Terms

---

**Agate** - vertical unit used to measure space in newspaper columns, originally five-and-one-half point type.

**Alignment** - precise arrangement of letterforms upon an imaginary horizontal or vertical line.

**Ambiguity** - that which has two or more possible meanings: unclear.

**Anti-aliasing** - the blurring of a jagged line or edge on a screen or output device to give the appearance of a smooth line.

**Ascender** - stroke on a lowercase letter that rises above the meanline.

**Baseline** - an imaginary horizontal line upon which the base of each capital letter rests.

**Bit-map** - a computerized image made up of dots.

**Bit-mapped font** - a font whose letters are composed of dots., such as fonts designed for dot matrix printers.

**Body type** - text material, usually set in sizes from six to twelve point.  
Also called text type.

**Brightness contrast** - relationship between "blackness" of type and "whiteness" of paper.

**Cap height** - height of the capital letters, measured from the baseline to the capline.

**Character** - symbol, sign, or mark in a language system.

**Cold type** - type that is set by means other than casting molten metal. The term is most frequently used to indicate strike-on composition rather than photo or digital typesetting.

**Congentiality** - emotional connotation or "atmosphere-value" of type.

**Compositional grid** - a grid that is achieved by dividing up a page into equal section, usually squares.

**Constructional grid** - a grid formed by the interrelationships of the images used in a composition.

**Counter** - space enclosed by the strokes of a letterform.

**Counterform** - "negative" spatial areas defined and shaped by letterforms, including both interior counters and spaces between characters.

**Context** - the circumstance in which a message is used; also dealing with appropriateness.

**Cursive** - type styles that imitate handwriting, often with letters that do not connect.

**Deconstruction** - phrase coined by French philosopher Jacques Derrida; also called post-structuralism. To deconstruct, or break apart the manipulating visual language and different levels of meaning embodied in a design.

**Descender** - stroke on a lowercase letterform that falls below the baseline.

**Digital typography** - those typographic forms which have been developed for specific use with the personal computer.

**Display Postscript** - a technology by Adobe Systems that allows Postscript commands (for special graphic effects) to be displayed on the screen

**Display type** - type sizes 14 point and above, used primarily for headlines and titles.

**Dissonance** - in design, visual tension and contrast between typographic elements.

**Egyptian type** - typefaces characterized by slablike serifs similar in weight to the main strokes.

---

Em. - the square of the body size of any type, used as a unit of measure.

En. -One- half of an em.

Fixation - pause of the eye during reading sweep, when actual perception of words takes place.

Font - a complete set of characters on one design, size, and style. In traditional metal type, a font meant a particular size and style; in digital typography a font can output multiple sizes and even altered styles of a typeface design.

Foundry type - metal type used in hand composition.

Galley proof - originally, a type proof pulled from metal type assembled in a galley.

Frequently used today to indicate any first proof, regardless of the type system.

Grid - underlying structure composed of a linear framework used by designers to organize typographic and pictorial elements.

Hot type - type produced by casting molten metal.

Incunabula - European printing during the first half-century of typography, from Gutenberg's invention of movable type until the year 1500.

Italic - letterforms having a pronounced diagonal slant to the right.

Kerning - in typesetting, the process of subtracting space between specific pairs of characters so that the overall letterspacing appears to be even.

Leading - the spatial interval between lines, also called interline spacing.

Legibility - is concerned with perceiving letters and words, and with the reading of continuous textual material. The shapes of letters must be discriminated, the characteristic word forms perceived, and continuous text read accurately, rapidly, easily, and with understanding. (Miles Tinker Professor of Psychology University of Minnesota 1963.)

Letterspacing - the spatial interval between letters, also called interletter spacing.

Ligature - a combination of 2 or more letters in one character unit.

Line length - the measure of the length of a line of type, usually expressed in picas.

Linotype - a machine that cases an entire of line of raised type on a single metal slug.

Lowercase - the alphabet set in small letters, as opposed to capitals.

Ludlow - a typesetting machine that produces individual letters from hand-assembled matrices.

Medley typography - a variety of typographic elements (type faces, sizes, etc.) combined.

Modernism - the term used to embrace a wide range of art movements that emerged during the first half of the 20th century.

Modern Roman - term used to describe typefaces designed at the end of the eighteenth century. Typeface with straight, thin serifs, usually no descenders or ascenders for numerals.

Monotype - a trade name for a keyboard-operated typesetting machine that casts individual letters from matrices.

Monospacing - spacing in a font with characters that all have the same set width of horizontal measure; often found in typewriter and screen fonts.

---

New Typography - revolutionary approach to typographic design which developed in Europe throughout the 1920's and early 1930's.

Oblique - a slanted roman character.

Old Style Roman - typeface styles derived from fifteenth- to the eighteenth- century designs with rounded serifs, numerals usually with ascenders and descenders.

Perceptual theory - the study of how humans perceive signs, letterforms, color, etc.

Photocomposition - the process of setting type by projecting light onto a light-sensitive film or paper.

Pica - typographic unit of measurement. Line lengths and column widths are measured in picas.

Point - a measure of size used principally in typesetting. It is most often used to indicate the size of type or amount of leading added between lines.

Post-modernism - the term formally describes the rejection of orthodox modernist purity in favor of updated neo-classical ornamentations.

Postscript - a page-description programming language created by Adobe Systems that handles text and graphics, placing them on the page with mathematical precision.

Pragmatics - the relationships of signs and symbols to their users.

Readability - used interchangeably with legibility to mean "ease and speed of reading printed material at a natural reading distance." Difficult to measure. People read and comprehend those typefaces which they are most familiar.

Reverse leading - a reduction in the amount of interline space, making it less than normal for the point size.

Roman - upright letterforms, as distinguished from italics.

Saccadic movements - in reading, the quick eye sweep from one fixation to the next.

Sans serif - typefaces without serifs.

Serifs - strokes, usually horizontal, at top and bottom of letters.

Semantics - sign theory: the study of the meaning of signs and symbols.

Slab serifs - square or rectangular serifs that align horizontally and vertically to the baseline and are usually the same (or heavier) weight as the main strokes of the letterform.

Swash letters - letters ornamented with flourishes or flowing tails.

Syntactic - the study of how signs and symbols are connected and ordered into a structural whole.

Tracking - the overall tightness or looseness of the spacing between all characters in a line or block of text.

Typeface - the design of alphabetical and numerical characters unified by consistent visual properties.

Type family - the complete range of variations of a typeface design, including roman, italic, bold, expanded, condensed, and other versions.

Typesetting - the composing of type by any method or process, also called composition.

Typographic unit grid - incorporates a mathematical structure to grid design by adding the point size of the type and its leading to achieve a unit. Came into prominence with the Westinghouse style guides designed by Paul Rand.



---

Typography - originally the composition of printed matter from movable type. Now the art and process of typesetting by any system of method.

Visual hierarchy - to identify the grammatical syntax of a message and visually reflect the linguistic relationships within.

Weight - the lightness or heaviness of a typeface, which is determined by ratio of the stroke thickness to character height.

White space - the "negative" area surrounding a letterform.

Woodtype - hand-set types cut from wood by mechanical router. Formerly used for large display sizes that were not practical for metal casting.

Wordspacing - the spatial interval between words, also called interword spacing

x-height - visual size of letters, independent of actual body size.

## Digital Appendices

---

