

# CONCERNS OF SIGN DESIGN

A critical guide for  
designers, design  
students, and art  
practitioners

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Guidance by: Prof. Mandar Rane

REPORT

P2

# Approval Sheet

This Communication design project entitled “ *Concerns of sign design*” by Sanskruti Landage, Roll No. 216450007 is approved in partial fulfillment of the requirements for a Master of Design Degree in Communication Design.

Project Guide: Prof. Mandar Rane 

Chairperson:

Internal Examiner:

External Examiner:

Date: 18th November 2022  
IDC School of Design,  
Indian Institute of Technology, Bombay.

# Declaration

I declare that this written submission represents my ideas in my own words and where others' opinions or words have been included, I have adequately cited and referenced the sources.

I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated any idea/data/ fact/source in my submission.

I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been appropriately cited or from whom proper permission has not been taken when needed.

Name: Sanskruti Landage

Roll no: 216450007

Date: 18/11/2022

# Acknowledgement

I am deeply grateful to Prof. Mandar Rane for his valuable guidance at every stage of the project as well as all the professors for their feedback during every presentation. All the suggestions really helped me narrow down my project topic and offered me clarity.

I am also thankful to Divya Gagnani who readily helped me with letting me use her research project as the foundational content for this project, along with taking me through the study thoroughly.

I also wish to thank my parents and friends for their constant support and love. And lastly the authors of the wonderful books, who penned down their experiences and learnings which really helped me to understand the intricacies of my project and the amazing world of editorial design.



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# Abstract

The design of a graphical sign involves its creation by the designer followed by testing for its interpretability using established testing methods. But the results of these tests can be misleading due to inexplicable factors like cultural knowledge, immediate environment, ability to process information, at the user's end and thus they can demonstrate agreement even for ambiguous signs.

This points out another problem in the test results- they do not guarantee the quality of the sign.

Signs that aim to become international standards especially, should achieve maximum possible clarity in their message

and quality in their design. which is also why it's important to ensure that the sign submitted for testing represents the designer's finest work.

This study further investigates the designer's process of creating a sign and presents a method to achieve a reasonable level of confidence in the designer of its comprehensibility. Then, additional testing of such a sign will be necessary to verify the designer's prediction.

# Purpose of the project

Understanding the nuances and various requirements of the brief will lead to a more effective graphic sign. Prior to actually designing, a designer's chances of progressing along the design continuum are increased by a thorough grasp and division of these.

This book's/booklet's objective is to provide an analytical viewpoint, strategies for analyzing the brief, and ways to apply it as a framework for building a graphical sign before sending it for testing.

It discusses how to handle the creative process in the context of a graphical sign and how this framework can be utilized as an underlying grid to construct much more intricate graphical systems.

## Graphical sign, what does it mean?

A graphical sign is a visual stimulus created to persuade people of a certain message. Sending an encoded message via a channel such that the recipient can receive it and decode it is the act of communicating. Through print or digital media, it conveys an encoded message that is often created to be easily decrypted within a specific time range by its users. The study of semiotics aids in the knowledge of how meaning is created at both

the sender and receiver ends, which is helpful in visual communication.

Visual cues can be understood more readily than verbal or written cues, which is why graphic signs are utilized to convey information. They facilitate message retention and can transcend the limitations of spoken and written scripts, making it more accessible.

# History

Long before written language was created, humans had been exchanging symbols and images for over hundreds of centuries. Chinese characters, current phonetic alphabet, and even ancient Egyptian hieroglyphs are all based on pictorial representations. Around 7000 languages and many dialects are spoken around the world today. The only language that gets beyond these restrictions is one that uses images rather than words.

Signs have been used in trade, manufacturing, and commerce for millennia. People have had to advertise their company to the wider public since they began producing tools, goods, and services. Few marketing goods have been in existence as long as signage;

usually are the first thing prospective customers see and hear about any firm. Furthermore, they serve as a cornerstone of the company's branding strategy, identity, and much more, distinguishing it from its competitors by becoming noticeable, recognised, and unique, enabling it to develop its own individuality.

# Motivation

A lot of information is conveyed through signs. They attract attention, express a message, compete with their surrounds, and create meaning for the recipient in a short period of time.

From the beginning, it was found that there was no information available on the issue of message transmissions in the area of considerations for designing a sign. We may develop a wayfinding education model that aims to help explain the how and the why behind navigating, independent of the ultimate location, by taking navigation behaviour difficulties into account. But as designers, how can we impart the proper approach to a given brief when designing a sign? What are the requirements to take into account and leave out? in a conventional

classroom's static environment.

The primary reason for creating this booklet was to bring together the information for designers, design students, and art practitioners who want to embark on the journey of sign design. To introduce a new perspective which can help them take a step back and analyse their design decisions while designing a graphical sign.

Carried out as a masters research project by Divya Gagnani, this study became a conversation starter for me and my peers. It proactively enabled me to ask questions which were often overlooked in the initial stages of the design process.

To mention a few,

- What is the subject matter?
- How people interact with the defined graphic sign?
- What is the context and location?
- Are there any supporting design items in the system?
- What works and why?
- What didn't work and why?
- How can this study add value for the reader?

As designers, we frequently want definite answers or a technique as part of the design process, and ambiguity bothers us. What if we utilise our discomfort as a springboard for new conversations and perspectives?

# Why booklet?

This project would take the cause of studying the process of designing signs and how designers can use it as a scaffolding while designing symbols/icons. Leading to the question of how?

The text guides the reader through a variety of considerations and serves as a conversation starter. Its antecedent was a research article, however it was subsequently realised that it would work well as a chapter in a book, which may appear in the future. Using case studies and market research to flesh out the nuances, transforming it into a booklet sounded ideal since it would handle the issue of accessibility and handling without overburdening the reader intellectually.



# Research

To get an idea of what information is available, I decided to look further into parallel research studies on sign design and what approaches are easily accessible to obtain a better picture of what information is available.

For example: Comprehension of Pictorial Symbols: Effects of Context and Test Method

(Jennifer Snow Wolff, Michael S. Wogalter), addresses the two factors involved in the evaluation of pictorial symbol comprehension: context (absence vs. presence of photographs depicting the probable environments where a symbol would be seen) and test method (multiple choice with less vs. more plausible

distractor alternatives vs. open-ended).

Methods like these increase the dependence on the testing methodologies than a designer would want to, and the outcomes achieved out of these methods do not guarantee the best outcome. Such methods further just act as a reasoning for poor quality of graphic signs.

On the other side, I experimented with several production techniques that emphasise editorial design. I looked at them according to a few criteria, including the categories, how each booklet differs from the others in terms of the information it offers, the visual language, the design elements, the types of information they are related

with, and identification and branding. I did, however, limit my research to topics that are relevant to design in the global market and made an effort to become knowledgeable about editorial design. Additionally, many of these booklets contain unique material that they convey through a variety of narrative techniques.





**Comprehension of Pictorial Symbols: Effects of Context and Test Method.** HUMAN FACTORS, 40(2), 173-186.

Wolff, J. S., & Wogalter, M. S. (1998).

**Graphical symbols – Public information symbols : ISO 7001:2007**

**Paper and on-line testing of graphical access symbols in three countries using the ISO 9186 comprehension test**

Foster, J., Koyama, K., & Adams Austing. (2010) Information design journal

**Oral and Written Symbol Comprehension Testing: The Benefit of Cognitive Interview Probing.**

BRANTLEY, KIMBERLY. (Under the direction of Michael Wogalter.)

...and more.

# Anatomy of a booklet

Booklets use a unique visual language and pay close attention to the product's anatomy to establish its message. The anatomical details on the front page are placed in such a way as to generate a style that can be used to convey context.



# Kicker

A label placed above the headline

# Masthead

The title or name of a publication or the title displayed on the top of the first page

# Stand-first/ deck

Acts as a bridge between headline and body copy and sets the tone of the editorial piece

Insight Edition, August 2012

S  
3

# TRUST & MONEY

Now entrants are shaking up the UK financial services market. Supermarkets and retailers are taking the fight to the traditional powerhouses of the industry, the High Street banks.



Arnold Le Sauter, Vice President

**T**he concept of selling financial products via retail outlets is not new, and a number of joint ventures and "own-brand" offerings already exist. However, the financial services industry that catered to the 18 million people who shop at its 542 stores every week, while Marks & Spencer has recently announced the opening of its first in-store branch in its Marks & Spencer outlet in London, along with plans to open 50 in-store branches by the end of 2012. Other new entrants to the banking market – such as Metro Bank – are borrowing concepts from the retail environment (easier opening hours, more customer-friendly stores, etc.) and applying them to financial services. At the same time, Tesco, the world's third largest retailer by sales, has also extended its Tesco Bank offering by including mortgages along with its other financial services, in addition to the credit cards, savings accounts, and other products that it currently offers to its 6.5 million customers. By combining well-known brands with an established infrastructure that has been optimized for sales, a small handful of these retail businesses are likely to lead the charge into financial services. However, it remains to be seen whether these new players will be able to generate substantial revenue from their foray into this market, since many customers may be reluctant to combine their private financial matters with their weekly trip to the shops, and most seem to have little appetite for buying more complex products, which would require advised sales.

**Caption**  
Details about image

Insight Edition, August 2012



popular choice with those earning between £10,000 and £25,000 with 38% of this group naming Tesco as their preferred supplier for a current account, compared with just 17% of those earning more than £25,000 per year. Forty-three percent of these higher earners would prefer to use John Lewis for their current account, compared with just 8% of those earning less than £10,000 per annum. John Lewis was also a more popular choice than Tesco amongst those living in London and the South East of England, whilst those in the North East of England were twice as likely to choose M&S (33%) over Tesco (14%), and three times more likely to choose M&S over John Lewis (11%) for their current account. When asked which factors would most likely persuade them to choose a particular retailer for financial products and services, 40% of respondents said that price, whilst just under 30%, said an existing relationship with the retailer. Of all the groups, price was most important to 16-24 year olds, with nearly half of those questioned (48%) giving this answer, whilst price was least important to those aged 55 and over (28%). Men (43%) were slightly more interested in price than women (39%), whilst women (30%) were more interested in their existing relationship with the retailer than men (27%). The ability to mix financial planning with everyday shopping

**Footer**  
Page number (aka folio), notes or references on both sides or only on the right side

# Dateline

It mentions the months of the booklet publishing

# Body text

Page number (aka folio), notes or references on both sides or only on the right side

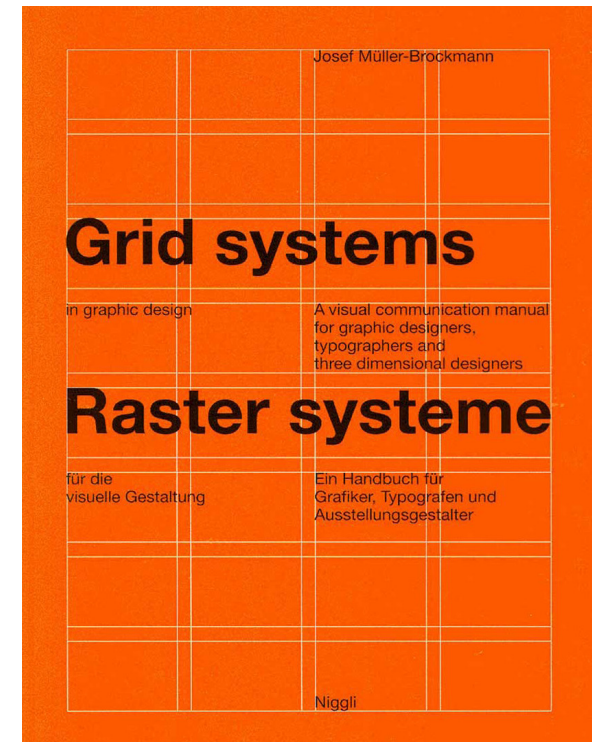
» END



# Grids & Layout

The publication design's architecture is the next essential aspect to understand after the booklet's anatomy. The Grid System, which assists in organising the content so that there is a specific aesthetic balance, frequently shapes the editorial's architecture. During this design stage, it is also important to take the reader's planned order of content consumption into account. Thanks to Josef Muller's "Grid Systems in Graphic Design," Cath Caldwell & Yolanda Zappaterra's "Editorial Design," Timothy Samara's "Making and Breaking the Grid," and numerous audio-video resources accessible on the internet, I was able to learn how grids are studied in the context of fulfilling various objectives in publishing design. These works provided me with

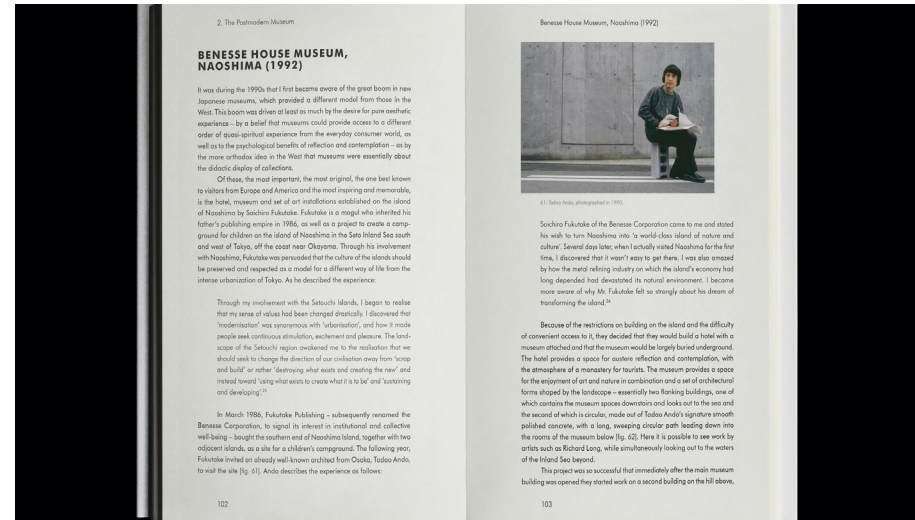
insight on how to approach producing layouts, particularly during editorial design.



## CONCERNS OF SIGN DESIGN

Highly legible sans-serif fonts. Striking composition. A mixture of clean photographic images and copy. Promoting balance between form and function, placing emphasis on logical design and clear lines. The grid and the combination of photos and typography to attract the eye in while maintaining readability were a few findings from strong grid layouts I observed.

## PROJECT II REPORT FALL SEMESTER 2022

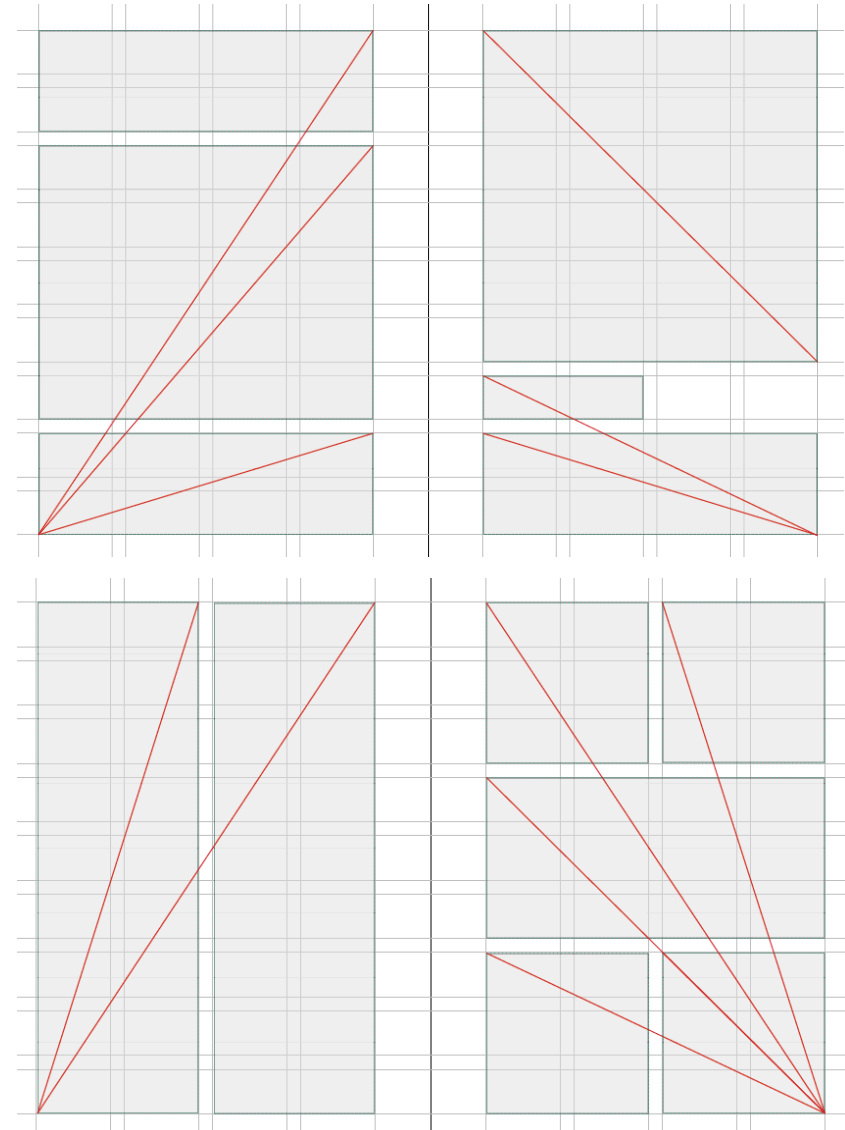
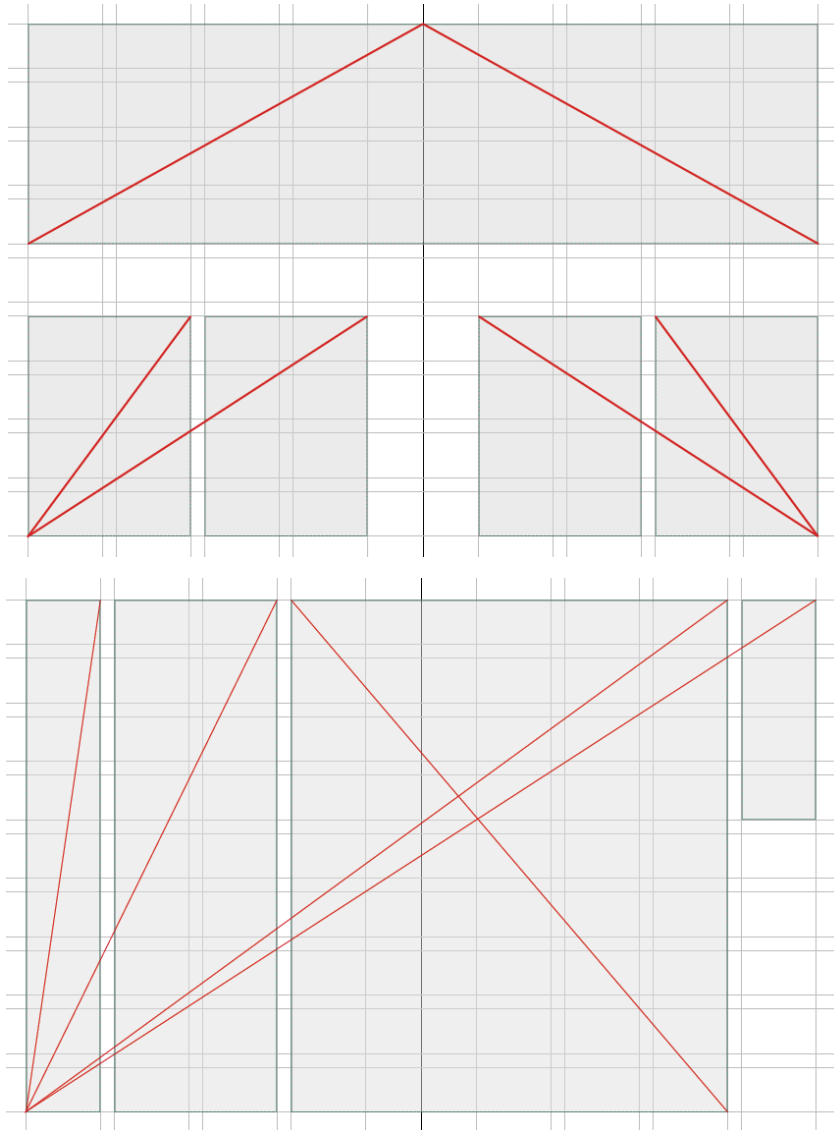


**Background:** The International Typographic Style peaked in the 1950s and 1960s, becoming the lingua franca of designers and influencing collective graphic design aspirations for years. Of course, all trends come and go. By the end of the 1960s, new trends were developing that quickly claimed their position at the pinnacle of design. In particular, in the 1970s, a yearning for a more natural, softer appearance began to dominate. And, as Europe's postwar balance became more solid, it began to seek a variety of styles. While this style fell out of favour, it never completely vanished. In fact, it became a standard in graphic design.

IDC SCHOOL OF DESIGN,  
IIT-BOMBAY

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## 4X9 GRID EXPLORATIONS

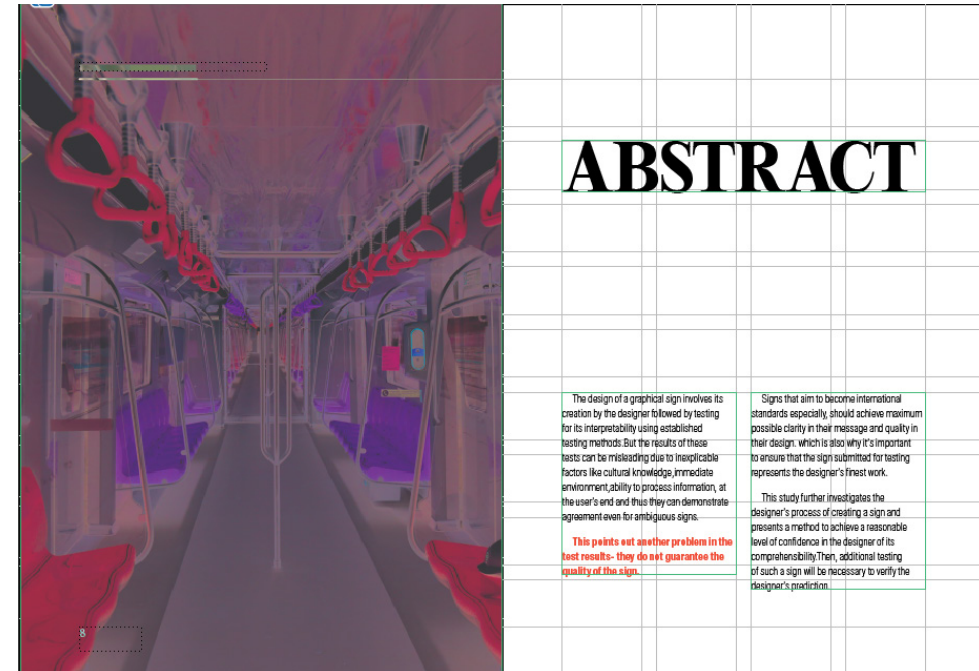




## CONCERNS OF SIGN DESIGN

I began by creating simple ones with fewer grid fields after understanding a little bit about how the grid system functions in an editorial design. Later, I experimented with more intricate grids like 6x6, 4x6, and 3x9 until I found one with 4 columns and 9 rows that was appropriate for the size of the booklet I was focused on (C5, 162mm x 229mm).

## PROJECT II REPORT FALL SEMESTER 2022



I ran across issues trying to combine words, graphics, and photos. There were very few alternatives available to accommodate the many types of information I was dealing with due to the nature of the content.



# Typeface

Keeping up with the swiss style, the distinct typefaces employed by the pioneering designers became a signature of their work since the typography in the Swiss style was so important. I wanted to experiment with different typefaces, and see how serif and sans serif fonts can be bought together to create an identity for this editorial design, by keeping it simple but quirky.

My initial explorations had a condensed sans serif body text, as it was clean and easy to read, but after printing my first mockup it came to my notice that it burdened the reader after a few paragraphs, which was undesirable. Post that I started looking for serif fonts because of the paucity of features in the parafoveal perspective, serifs on the extremities of ascending and descending

characters can assist enhance the form of the words by lending emphasis to these sections of the letters.

In the search for a precise and elegant narrow serif that was designed for the long-form copy with a big enough personality to make a statement as a title, I stumbled upon 'Editorial new' by Pangram Pangram foundry. The curves are lushier, a bit more exaggerated to give these weights and ultimately the editorial design more personality as a title font.

For the body text, 'Sangbleu serif Light' was chosen, with its modest contrast, more economical horizontal proportions and larger serifs, SangBleu is designed for unobtrusive text and continuous reading which was the demand of the design.



## SANGBLEU SERIF FONT

**AaAaAaAa** *AaAaAaAa*

**AaAaAaAaAa** *AaAaAaAaAa*

**AaAaAaAa** *AaAaAaAa*

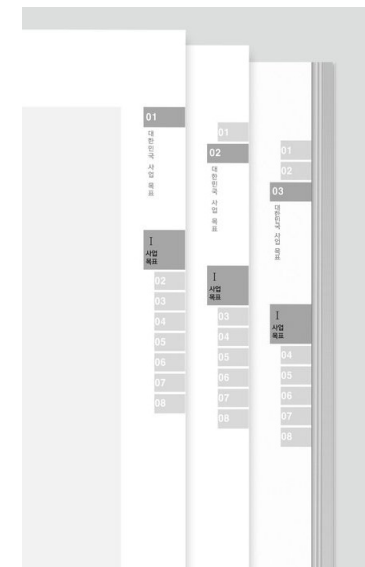
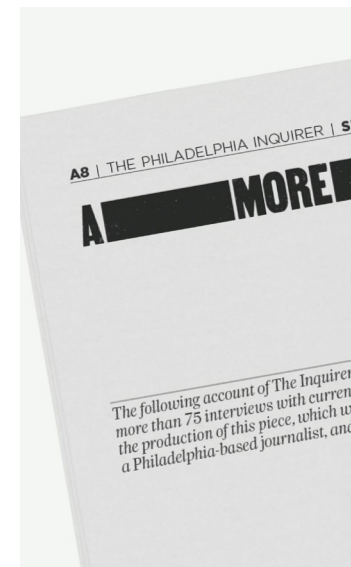
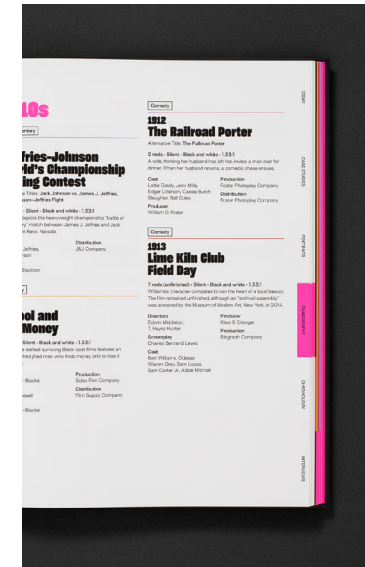
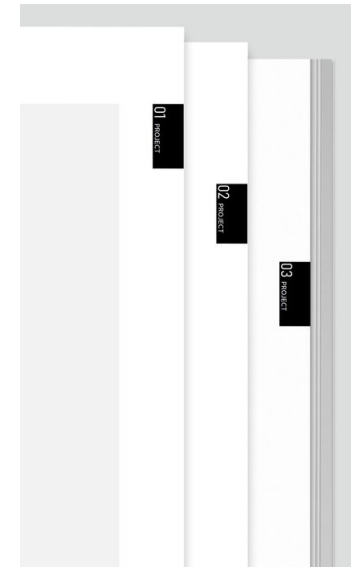
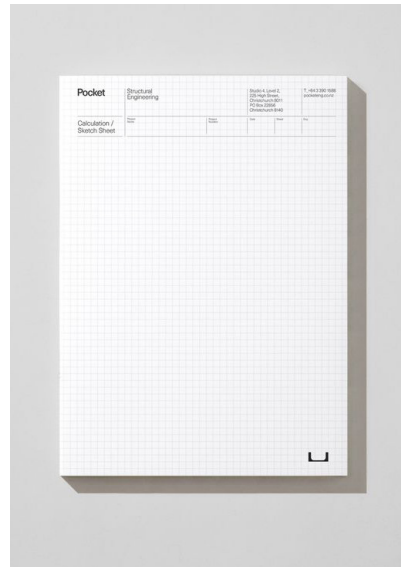
**AaAaAaAa** *AaAaAaAa*

**AaAaAaAaAa** *AaAaAaAaAa*

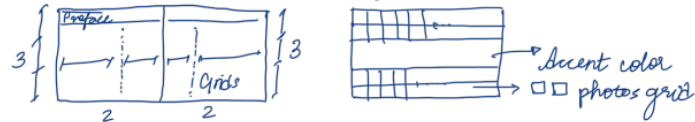
# Visual language

Several visual elements were explored keeping in mind the audience who'll be consuming this data. Considering the mood and emotions which I want to evoke through this design, the color palette was kept in alignment with the content and hues closer to primary colors were used.

Further more thought was given into the other tangible elements which can make the experiencing of reading more fun, like the footer, kicker, pull quotes layout.

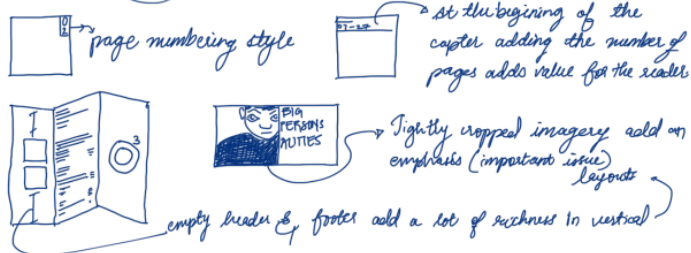


## 1) Commercial prints design (book I)



- Black on red for high detail pages look great

Black dark



## Dwaine Vroomen - Charlotte Sal/Karin ter Laak (book layout)



## Pentagram

### How to

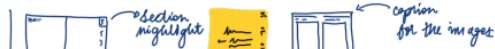
Book design

grid used



to environmental graphics, packaging, books & websites, many times all in one project.

## Regeneration



## Black cinema 1898-1971

### Deborah Roberts 'in'



### Graphosc, The companion

"Layouts are bold and considered, with headlines and pull quotes set in the custom typeface —, designed by —, based on —"

"Bodies of text are pitched to follow the grid" "Give photographs plenty of space to breathe."  
"Futura - forward looking theme".  
"Written for fellow designers, — list offers observations, tips & bits of advice that everybody can use".  
"Clean & sparse layout complements the simple aesthetics and subtle —".  
"Commentary on contemporary ... culture".

Neue Display Black (Normal) (wide) (ultra)

Topic-

Content - booklet in print size - dummy

Read - structure

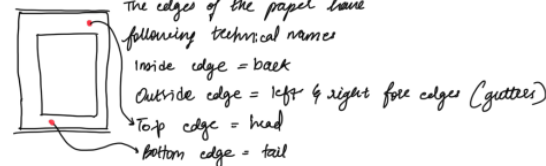
Categories - expand

Intro - preface elements of book

Case studies → NOT AS A STUDY  
Descriptive study  
Construction of type area:  
ICONS → PROBLEM → PAIN POINT

DIN SYSTEM for paper A5 ... A4

Berthold font



SUGIURA

Making sketches for grids:

## Notes & observations

# Structure of the content

Building upon the already existing research paper content, I spend the first half of the project on refining and editing it, along with adding the missing parts. Multiple iterations were made, and peer proof reading gave insights on the flow of content, and how well the message is communicated.

## Contents of the book

001	Introduction
002	The trouble with creative process in graphic sign design
003	Understanding the problem
004	Sign design and testing
005	Case studies
	Asking questions
	Subjectivity
	Critique
	Observations
006	Divergent thinking
007	Semantic components
008	Syntactic components
009	Pragmatic components
010	Graphic design and gender
011	Conclusion

1<sup>st</sup> Draft

## Table of contents

Abstract
Introduction
History
Define communication,
Define graphical sign,
Define semiotics
Build visual context
(The trouble with creative process in graphic sign design and understanding the problem)
Sign design and testing
Study
Asking questions,
Subjectivity,
Critique,
Observations,
Divergent thinking
Results
Discussion
A guide,
Break down the message,
Essentials of a well-designed sign
Semantic components,
Syntactic components,
Pragmatic components
Graphic design and gender
Conclusion

3<sup>rd</sup> Draft

## Table of contents:

<b>1. Abstract</b>
<b>2. Introduction</b>
-Purpose of this book
-Graphical signs and what they mean
<b>3. History</b>
-Story of ISOTYPE
<b>4. Sign design and testing</b>
<b>5. The study (method)</b>
<b>6. Results</b>
<b>7. Discussion</b>
-A guide to designing an icon for priority seating- pregnant woman
-Essentials of a well designed sign.
-Semantic component
-Keeping inclusivity in mind
-Striving for successful communication even in isolation
-Predicting and tackling error zones
-Syntactic Component
-Considering conventions
-Correct positioning on the scale of real to minimal
-Skill at graphic creation tools
-Correct form for the intended function

-The appropriate execution of the cues  
-Pragmatic component  
-Factoring the placement of the sticker in context  
-Legibility

## 8. Conclusion

Chapter names yet to be changed

5<sup>th</sup> Draft

# Final structure of the booklet

## 01 Abstract

## 02 Introduction

- Purpose of this book
- Graphical signs and what they mean

## 03 History

- Story of ISOTYPE

## 04 Sign design and testing

## 05 Method

## 06 Results

## 07 Discussion

A guide to designing an icon for priority seating- pregnant woman

Essentials of a well designed sign.

### Semantic component

- Keeping inclusivity in mind
- Striving for successful communication even in isolation
- Predicting and tackling error zones

### Syntactic component

- Considering conventions
- Correct positioning on the scale of real to minimal.
- Skill at graphic creation tools
- Correct form for the intended function
- The appropriate execution of the cues

### Pragmatic component

- Factoring the placement of the sticker in context
- Legibility

## 08 Conclusion

## 09 Appendix

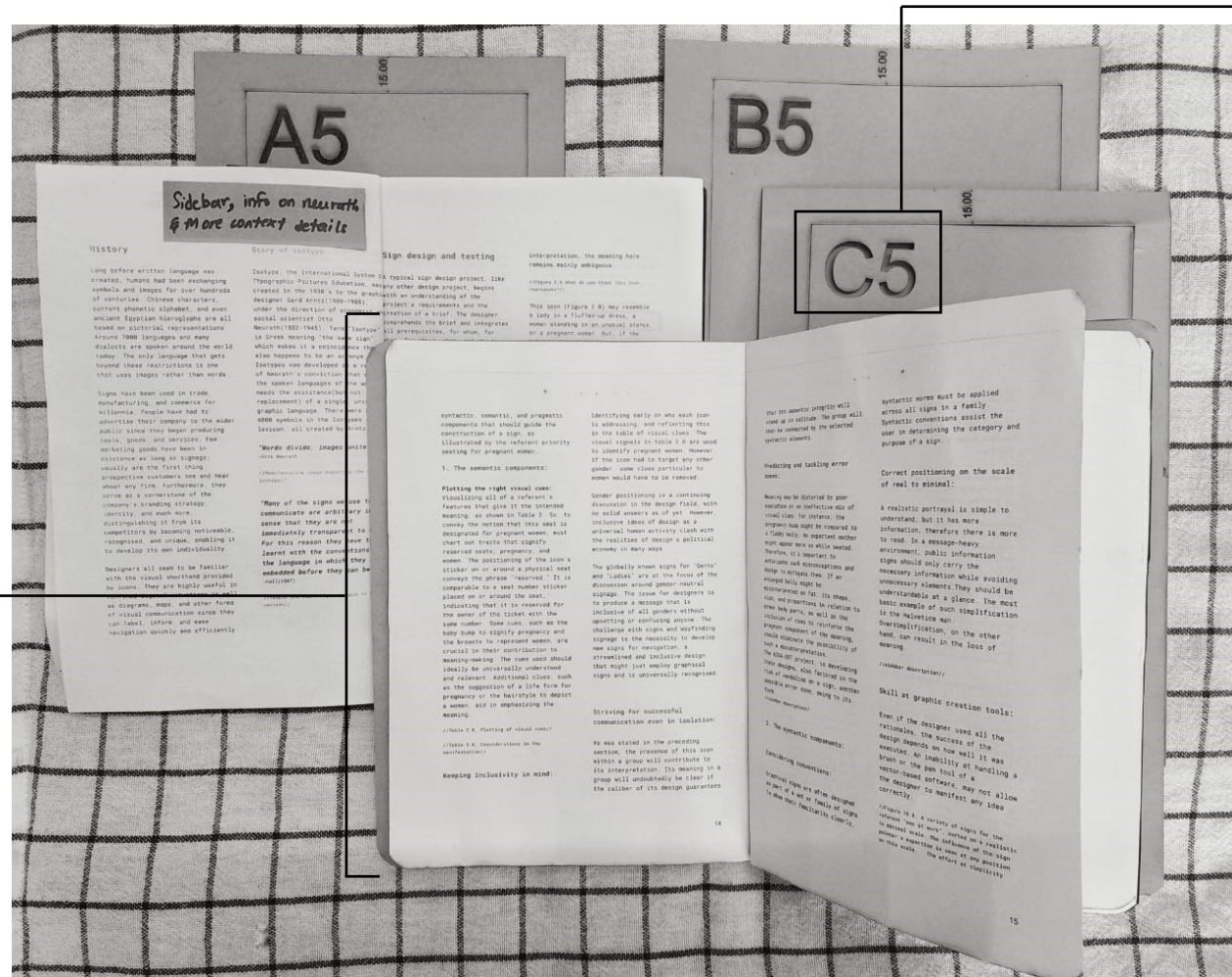


## C5 Size

3 sizes were considered for the booklet publication: A4, B5, C5. Due to multiple text sidebars and a 4x9 grid, a decision of selecting C5 size was made to maintain the clean layout and ease of carrying it.

## 5<sup>th</sup> Draft mockup

This draft was made exclusive of the illustrations and photographs to get an overview of the content. To further circulate it amongst peers for proof reading.





# Excerpts from the Final Book









# Conclusion

The issue of receiving false results owing to variables at the user end has been addressed multiple times in the comprehensibility tests for graphical signs. However, there is another issue that these deceptive data highlight that need attention. The problem is that these findings may pass confusing indicators as understandable. There is no verification to ensure that the sign submitted to the test is clear and of high quality. As a result, before testing the comprehensibility of a sign with people, it is vital to consider its design.

A comparison of several designers' creative processes of a sign reveals crucial aspects that might push the design of the sign to either a safe or an erroneous zone. The two

most important parts are the articulation of the message to be delivered and its embodiment with the applicable rationales. The articulated message directs the designer to employ a series of rationales that appear in the final design. We proposed a method for converting the articulated message into a series of visual cues. These cues will assist the designer in developing the correct meaning and objectively reaching a degree of confidence that the developed icon will be understood as intended. At this stage, the icon should be shown to the user to put their expectation to the test. Yet there will be degrees in the quality of manifestation of the right set of cues. This quality is subject to the ability of the designer in getting all the cues together as a whole.

# Learnings

I was completely uninitiated in the field of graphic design, particularly sign design. Despite the intimidation, I really enjoyed the experience of starting from scratch. This project taught me that small details, when carefully considered and supported by logic, may significantly alter the outcome of a design. My guide made sure I challenged myself, which resulted in a steep learning curve for me. By stepping outside of my comfort zone and attempting something new, I learned that sometimes all it takes is to keep trying new things and iterating until you are satisfied with the outcome.

There is no denying that the world of publication design is very different. My primary sources of knowledge are

publications, which I study and assimilate. As this was my first attempt, there was a lot of unlearning and starting to learn that took place along the process. I'll now focus on the project's future scope and wherever I can search for ways to put the notion into practise into my other projects, in ways I didn't expect before.

I'll be submitting a booklet, but the learnings from the project are more valuable to me right now because I can already see myself looking at layouts, grids, and type with a new perspective. Having said that, I would have liked to explore additional ideas and test out various copy sizes.

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- [1] ISO. (n.d.). ISO 7001:2007(en) Graphical symbols – Public information symbols. (ISO) Retrieved from <https://www.iso.org/obp/ui/#iso:std:iso:7001:ed-3:v1:en>
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- [3] Brantley, K. A., & Wogalter, M. S. (1999). Oral and Written Symbol Comprehension Testing: Benefit of Cognitive Interview Probing. *HUMAN FACTORS AND ERGONOMICS SOCIETY 43rd ANNUAL MEETING*.
- [4] Wolff, J. S., & Wogalter, M. S. (1998). Comprehension of Pictorial Symbols: Effects of Context and Test Method. *HUMAN FACTORS*, 40(2), 173-186.
- [5] Young, S. L., & Wogalter, M. S. (2000). Predictors of pictorial symbol comprehension. *IEA 2000/HFES 2000*.
- [6] The task and questionnaire for the study. Retrieved from <https://mrane.com/portfolio/icondesign/>
- [7] Task submissions- icon designs and decisions/process documents. Retrieved from [https://drive.google.com/drive/folders/1dvsDFVAB2gdkJHeQGIMi6hC-H\\_YRgh8?usp=sharing](https://drive.google.com/drive/folders/1dvsDFVAB2gdkJHeQGIMi6hC-H_YRgh8?usp=sharing)
- [8] <https://dloy3.wordpress.com/2014/02/23/a-worldly-language-without-words-the-isotype-movement/>

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