Design Research Project:
HISTORY OF DESIGN TIMELINE

Guide: **Prof. Mandar Rane**
Submitted by: **Vishnupriya Kaulgud 126250002**
                      Divya Bharadwaj 126250004
Visual Communication, 2012-2014
IDC IIT Bombay

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APPROVAL SHEET

The project titled **'History of Timeline'** submitted by **Vishnupriya Kaulgud**, is approved for the partial fulfilment of the requirement for the degree of **'Master of Design' in Visual Communication**.

Guide: _____

Date: **14/7/2014.**

DECLARATION

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

I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified 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 properly cited or from whom proper permission has not been taken when needed.

Vishnupriya Kaulgud
IDC IITB 2012-14

ABSTRACT

A timeline is a display of events in an order that exhibits prominent trends and helps understand the reason for such occurrences. There have been several timelines available for art movements and design. However, most of these are meant to document the history that art and design charted in the West. There wasn't a cohesive timeline to display the evolution of design in India.

The aim of the project was to create a design timeline emphasizing on the evolution of design in India. However, it still tries to fulfill the key moments from the History of Design in the West in order to serve as a holistic reference for any design student in India. It focuses on typography and graphic design while covering the scientific, socio-economic, political, and art influences.

INTRODUCTION

Historic timelines, mostly linear and chronological, are a helpful quick reference to understand key moments and trends for any subject. They have often been helpful for academic and research purposes. The project of creating a History of Design Timeline was initiated with this very primary aim, i.e. to create a cohesive reference for any design enthusiast, which encompasses all the essential information about iconic designers and influential events.

However, during the study of existing timelines, it came to our notice that there have been several attempts to capture design history in the form of a timeline. However, most of these have been from the point of view of the 'Western World'– primarily Europe, Americas and Oceania. Most of these timelines had little or no information on Indian design. Therefore, this led us to aim at trying to record the evolution of design in India through our timeline.

However, this was a fairly difficult task as very little is ever documented in India. Even though National Institute of Design, Ahmedabad has tried to document it's own history but no timeline so far has tried to look at the basic course of design that has been in India thus far. Though, due to the time constrains and the nature of this project we chose to pick on the key moments to plot on the timeline instead of giving detailed information on each of these.

Design can never exist on it's own. Much like Art, design can never exist in isolation and needs to be studied in context. Different trends and evolving ideologies in design are a result of various socio-economic or political changes. These may also be heavily influenced by the advancement of technology and people's responses to it. Thus, it was crucial for us to adapt that in the timeline. It was also a well thought out decision, as it is deemed necessary for designers today to understand this coexistence of design with the society.

WHAT IS TIMELINE?

A timeline is an actual picture of events that happened in history. Timelines can be LINEAR or COMPARATIVE.
(Ref.: http://literacy.kent.edu/)
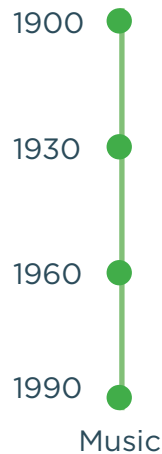
A **linear timeline** shows a picture of events as they occurred in a certain period of time. Use a linear timeline for one subject and time frame. A linear timeline can be written horizontally or vertically.

A **comparative timeline** shows two or more subject areas which occurred at the same time; it shows readers the "big picture." A comparative timeline might compare historical events in two or more countries or compare two or more subjects like music and art.

Defination: A representation or exhibit of key events within a particular historical period, often consisting of illustrative visual material accompanied by written commentary, arranged chronologically. (Dictionary meaning)

RESEARCH &
STUDY METHODOLOGY

For research and study several existing timelines were referred. These timelines were not specific to just design but other fields too. The aim was to study existing timelines and understand the most comprehensible manner of information structuring and representation in order to define the approach for the project.

It was figured that in most extensive timelines, layering of information worked better. However, keeping in mind the target user, it was decided that layering would be prioritized as per the significance of the subject. Also the timeline in itself was used for chunking or division of the data. With the timeline in the center, generic design influences and events on top, and typographic timeline at the bottom – the division of information was done in order to aid comprehension.

Specific history of Art and Design timelines were also referred to in order to pick out key moments and influences during the history of design. These key points were also picked from journals, websites, and books. The more difficult task was to narrow down on the points which were absolute essentials in order to not overpopulate the timeline.

One of the bigger challenges was to get information that has not been documented especially about design institutes and key projects done in India. To gather this information a few professors and designers were interviewed. These are the people who have been a witness to the journey of design in our country. Prof. Sudhakar Nadkarni, who was a part of NID until he went on the establish Industrial Design Centre, IIT Bombay was interviewed by by Prof. Sudesh Balan, who was generous enough to share it with us for reference. Prof. U A Athavankar, one of the first professors at IDC, was also interviewed to get information on key moments and projects done especially at IDC.

The other key reference was the webpage – Design in India, which is an initiative to document the design history, and various design resources, schools, associations, and industries in India.
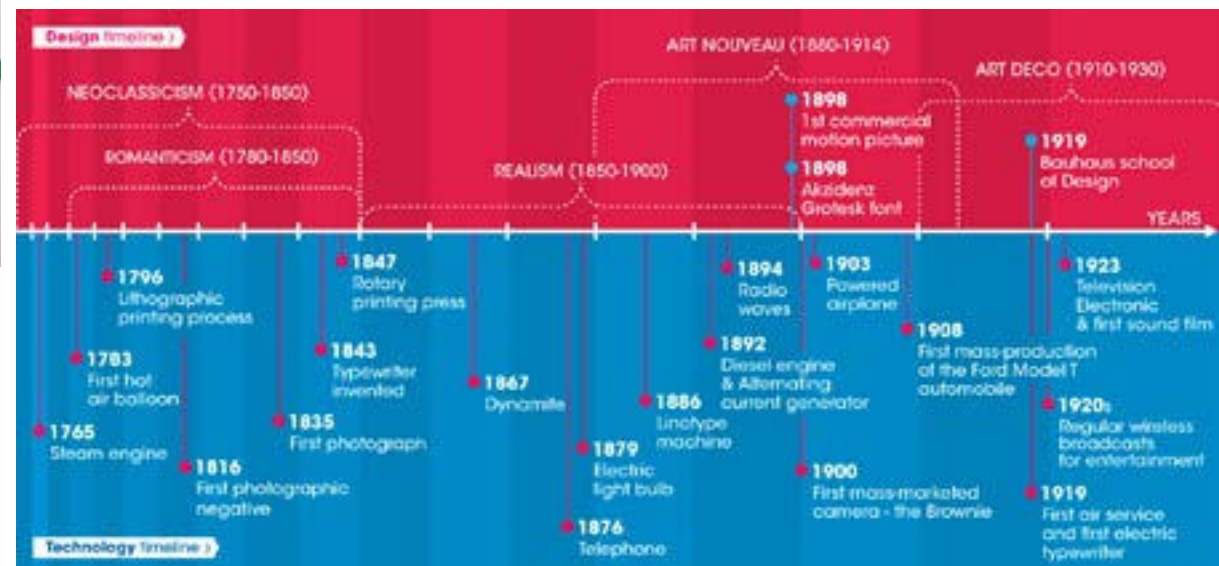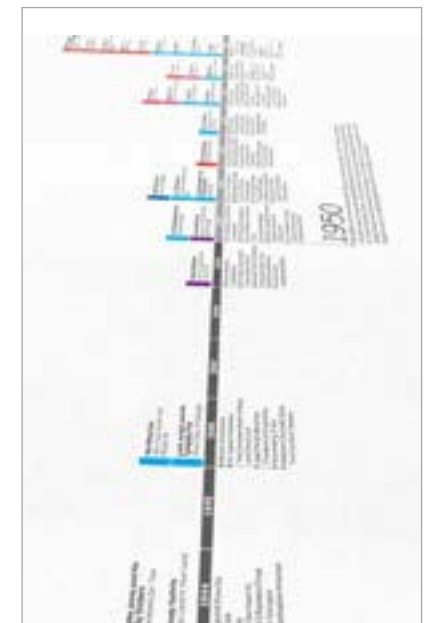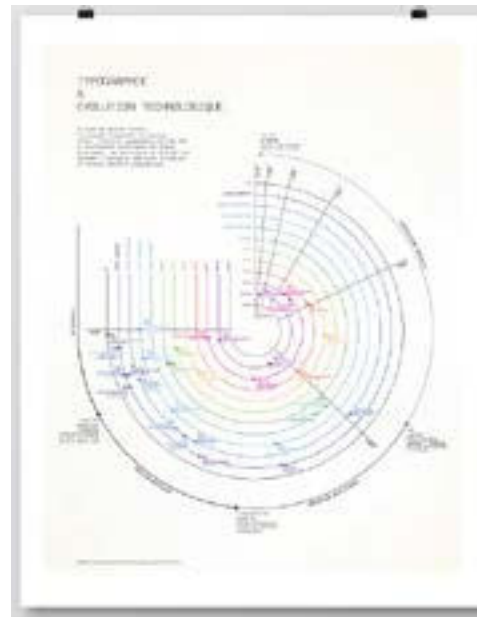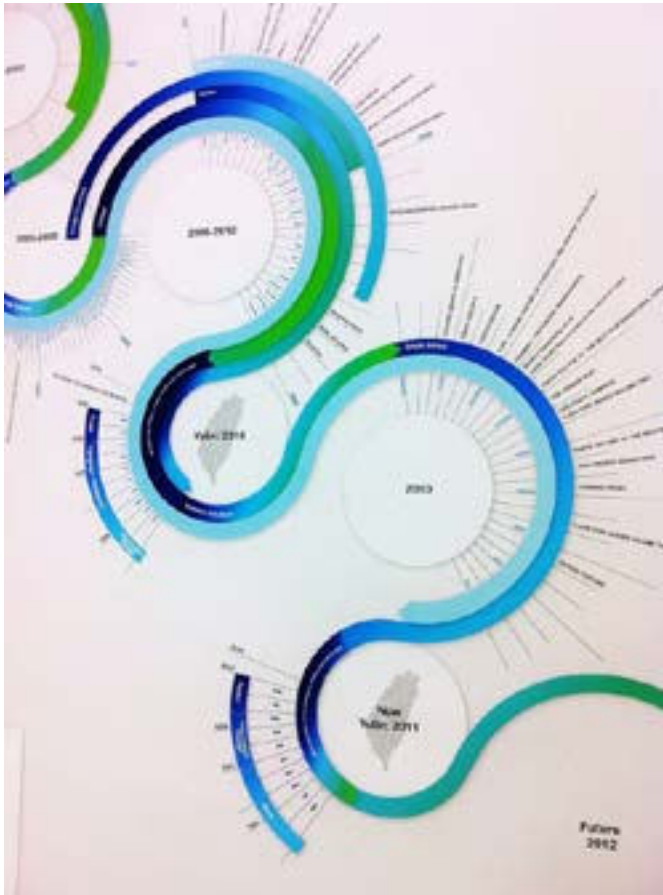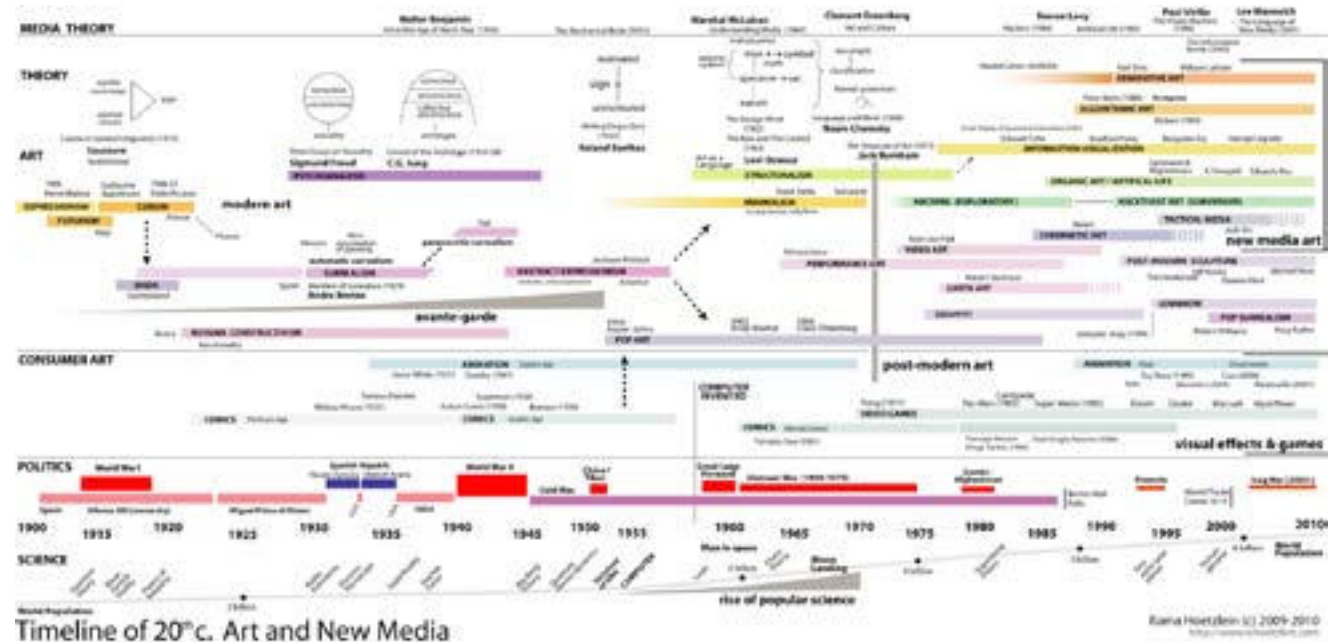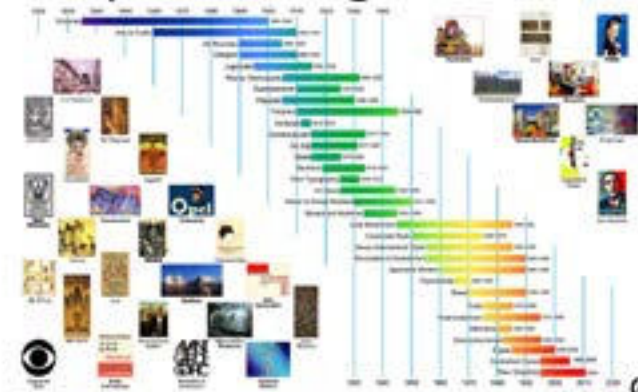
INTERVIEWS

PROF. UDAY ATHAVANKAR

The modern movement and Bauhaus in which I was interested. I had no training in Industrial Design. In 1972-73-74 there were many draught in many rural parts. Hence he got connected to NGOs. There were many ideas discussed during that period about development. Many new books and people by whom we were influenced. There were books like 'Design for Real World'. Then we thought some India centric design could come up rather than to follow the abroad culture. And also we wanted to do things for our own and not copy anything. We spent a lot of time to make it a India centric model. The grounding for working for rural India, NGOs started from there. Three journals published at that time Output 1, 2, 3 in which problems and tackled problems were written about. The most famous article, which was talked about, was the 'Ghamela' (Containers for collecting cement and bricks) that construction workers used which is not seen as design problem at all. But we studied it and found many problems out of that. The focus changed purely because atmosphere at that time, national scenario as well as thinking promoted that idea.

Around 80's the period change and the political thinking changed and we also changed accordingly. We were not very industry oriented, as the industry itself was not developed. But our interest for working for poor, children, disabled have been thought.

Who joined when?
Prof. Nadkarni, joined initially then Prof. Athavankar joined, and after 6 months Prof. Chattopadhyay and Prof. A.G.Rao joined. After that Prof. Munshi then Prof. Kirti Trivedi then Prof. Bapat joined. Then we had another ergonomics where Prof. Ray came in early 80's.

Key projects In IDC
The first project came to IDC was my project, which was designing of the post box. It happened by luck where once Mrs. Indira Gandi visited IIT and saw the project and said 'I want this outside my home'. So everyone made it happed and quickly stared manufacturing one. Now Prof. Chakravarthy has taken it up ahead and made new designs. The next big project was telephone. But that never came up. Voting machine was the next big thing, which was done by Prof. Rao and Prof. Poovaiah. I did my first game in 1973, which was rural development game. It helps farmer to understand farming and investment of farming. This game won international award but unfortunately no company manufactured it.

PROF. NADKARNI

Joined JJ School of Arts – applied arts – mentor Yashwant Choudhary (from JJ then joined London Central school of arts for graphics design) joined Siba in Switzerland then joined Siba in india – on of the best symbol designer.
Came back from UK – working together in advertising agency – Asked him to join Hfg Ulm school in Germany – Industrial Design – philosophical and intellectual part of design – not skill based

Mr. Uggs Gujolo?! Was invited to NID. He asked Nadkarni to come back to NID – Gira and Gautum Sarabhai were heading NID. Got into teaching. Kumar Vyas – Product Design went to Ulm for 6 months – They both worked on Product Design program in NID – was to train desingers – not an educational institute

Herbert Lindinger – Theoretical Guide – suggested academic programmes for NID – GDPD begun.

Gira and gautum were in regular touch with people from outside india... people visiting

V N Adarkar – advisor at NID - director in JJ
Govt. wanted to start a design school and Adarkar was the advisor – allocated space here in Bombay. He wrote to Nadkarni that Govt. wants to start a design institute in IIT.

Experimental thing for 5 yrs. – Bombay was the right place – Bimal Sen – Education Secretary, Govt. of India went to Ulm to discuss the starting of a design program in Bombay.

His degree n theoretical project –
Design as a help/ assistance for a country like India.

When they started the design program – challenge was to figure out what should the structure be – whether or not to follow the ulm basic design program or change it according to our environment. They changed quite a lot. Initially they had to follow it entirely as the time was short and they couldn't experiment with their own program. Another reason was that ulm program was the most critical for our economy as we also had lack of resources and ulm's philosophy was that we had to do the minimal thing... no exaggeration.. no redundancy in your design. All this required a good thought process and he thought is was very important to adapt this. Of course to improve the sensitivity of the designer we had to include other things like exposing students to outside painter and theater groups to develop their body language. Sociology was introduced in design for the first time. Ergonomics studio was a big thing as no other design school had an ergonomics studio or ergonomics lab – they were outsourcing these things.

Other IIT profs. Realized this is not just an artistic thing but a scientific and methodical program for problem solving. The process was much like engineering. They themselves suggested to make this diploma into a degree program considering the kind and amount of work undertaken by students.

Success stories.
Interesting thing happened to IDC, within the few years of its inception was that it was, in Exceed Congress in Japan where the IDC program could be the model program was acknowledged as the best design model for all developing countries. Got full energy to see that the projects we take are of some sort of social relevance. They knew they could not lure the industry because they were more interested in serving the elite and no one wanted to do products for which will fetch them less benefit. However, they didn't realize if we mass-produce these products even they will be beneficial. They seemed to be influenced by the foreign agencies. And mostly a lot of engineers who were product developers at that time used to bring products from western countries and they used to duplicate them under their names. There was no initiative by them to develop their own products and try it out as it involved a lot of risk and investment in it. But ultimately one gets a lot of benefit from all these things since you are developing product for your own requirement. And this market was big. Now they realize these things.

They never developed the culture of innovation and development. Therefore we lost a lot of time during the innovation period in copying and even we weren't strong enough to enforce this thought onto the industry and show them how this could really benefit our economy.

Good thing that happened was a lot of our students went into different directions. They starting working with the industry and started showing some sort of a result. Somewhere heading the institutions – eg. NID: Pradyuman Vyas was an IDC student, Srishti – Kumkum Nadig; symbiosis design, MIT pune – IDC students are heading. India Is backward in a lot of ways and in his opinion the western influence can not really affect us much because there are still many areas that need basic design intervention. Then we wanted to get into Service Design and system design – not just think about the solution but how to implement the solution.

Why the coming technology will not really affect us is because design is the core and we have to develop our own agricultural, scientific and medical equipment and therefore there are a lot of areas to be explored. So the influence will be for good and not for disadvantage.
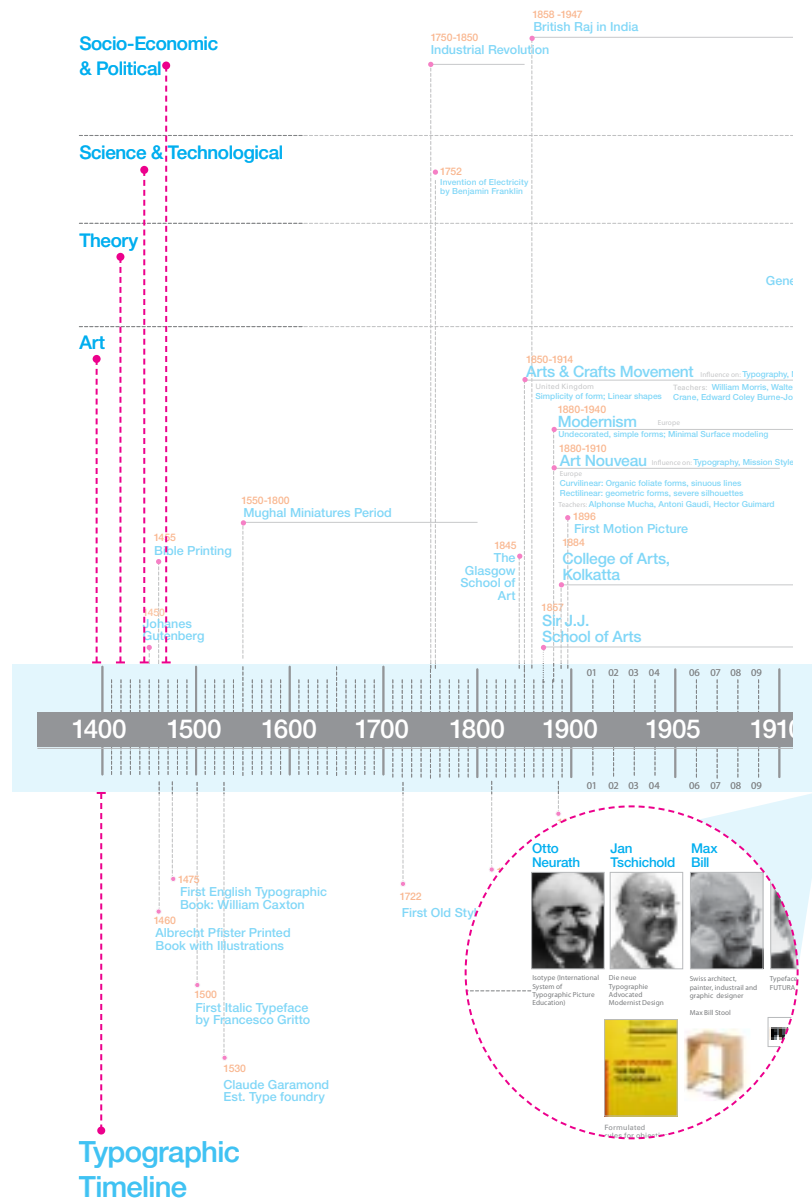
CONTENT ON TIMELINE

The timeline is divided into two major parts where the top half features generic design and art influences, and events in different fields; and the bottom half is a typographic timeline with key typographers and design books that seem essential.

This division of information was done in order to aid comprehension by avoiding cluttering of all the information only along one axis. Also in the top section of the timeline the order of placement of influences are as per importance where Art movement influences and generic design events come first. As we move up along the Y-axis it goes to various theories that have been apadted by design, to technological advancements that altered the approach towards design, followed by the socio-economic and political changes that influenced the trends and focus in design over the years.

CATEGORIES:
PART 1
Socio-Economic & Political
Science & Technology
Theory

PART 2
Typographic Timeline

Timeline diagram

Socio-Economic & Political

1858 -1947
British Raj in India

1750-1850
Industrial Revolution

Science & Technological

1752
Invention of Electricity
by Benjamin Franklin

Theory

Gene

Art

1850-1914
Arts & Crafts Movement   Influence on: Typography,
United Kingdom   Teachers: William Morris, Walte
Simplicity of form; Linear shapes   Crane, Edward Coley Burne-Jo
1880-1940
Modernism   Europe
Undecorated, simple forms; Minimal Surface modeling
1880-1910
Art Nouveau   Influence on: Typography, Mission Style
Europe
Curvilinear: Organic foliate forms, sinuous lines
Rectilinear: geometric forms, severe silhouettes
Teachers: Alphonse Mucha, Antoni Gaudi, Hector Guimard

1550-1800
Mughal Miniatures Period

1896
First Motion Picture

1845
The Glasgow School of Art

1845
Bible Printing

1884
College of Arts, Kolkatta

1857
Sir J.J. School of Arts

1455
Johannes Gutenberg

1400 1500 1600 1700 1800 1900 1905 1910

01 02 03 04 06 07 08 09

Typographic Timeline

1475
First English Typographic Book: William Caxton

1460
Albrecht Pfister Printed Book with Illustrations

1722
First Old Sty

1500
First Italic Typeface by Francesco Gritto

1530
Claude Garamond Est. Type foundry

Otto Neurath
Isotype (International System of Typographic Picture Education)

Jan Tschichold
Die neue Typographie Advocated Modernist Design.

Max Bill
Swiss architect, painter, industrial and graphic designer
Max Bill Stool

Typefac
FUTURA

DESIGN

Socio-Economic & Political

1858 -1947
British Raj in India

1750-1850
Industrial Revolution

Science & Technological

1752
Invention of Electricity by Benjamin Franklin

Theory

Art

1850-1914
Arts & Crafts Movement
United Kingdom | Teacl
Simplicity of form; Linear shapes | Cran

1880-1940
Modernism Europe
Undecorated, simple forms; Minim

1880-1910
Art Nouveau Influence on
Europe

Socio-Economic & Political

1750-1850 Industrial Revolution
1858 -1947 British Raj in India
August 1947 Independent India and Pakistan
1914-1918 First World War
1939-1945 Second World War
1955-1975 Vietnam War
1991 Liberalization Of The Indian Economy
2003 - 2011 Iraq War

Science & Technological

1752 Invention of Electricity by Benjamin Franklin
1951 Colour Television
1957 First Computer Released
1969 First Computer Mouse, Douglas Engelbart
1984 First Macintosh Introduced
1995 Internet Introduced
2001 iPod introduced
2010 iPad introduced

Theory

1915 signifier / signified / sign
Lectures on General Linguistics, Ferdinand de Saussure
1920 Gestalt Theory of Visual Perception
Johann Wolfgang von Goethe, Ernst Mach, Christian von Ehrenfels, Max Wertheimer, Wolfgang Köhler, Kurt Koffka, and Kurt Lewin ????
1980 Structural Information Theory, Emanuel Leeuwenberg

Art

1850-1914 Arts & Crafts Movement Influences on Typography, Mission Style, United Kingdom
Teachers: William Morris, Walter Crane, Edward Coley Burne-Jones
Simplicity of form; Linear shapes
1880-1940 Modernism Europe
Undecorated, simple forms; Minimal Surface modeling
1880-1910 Art Nouveau Influences on Typography, Mission Style, Europe
Curvilinear; Organic foliate forms, sinuous lines
Rectilinear; geometric forms, severe silhouettes
Teachers: Alphonse Mucha, Antoni Gaudi, Hector Guimard
1895 First Motion Picture
1928 Warner Bros. First Sound Motion Picture
1958 India Report Charles and Ray Eames
1954 Lalit Kala Academy Founded
Wassily Kandinsky, contributed theories of geometry
His bauhaus text book - Point and line to plane
Basic Course should lay bare a universal vocabulary
Constructivist Laszlo Moholy-Nagy
1999 Electronic Voting Machine Launched, Designed by A G Rao and Ravi Poovaiah
2004 IIT Kanpur, Procuct Design Launched
2010 Indian Rupee Symbol announced, Designed by D Udaya Kumar
Maeer's MIT Institute of Design

Typographic Timeline

1455 Bible Printing
1450 Johanes Gutenberg
1550-1800 Mughal Miniatures Period
1475 First English Typographic Book: William Caxton
1460 Albrecht Pfister Printed Book with Illustrations
1500 First Italic Typeface by Francesco Gritto
1530 Claude Garamond Est. Type foundry
1722 First Old Style Caslon
1816 First Sans-serif Font
1886 Linotype Machine by Ottomar Mergenthaler

1845 The Glasgow School of Art
College of Arts, Kolkatta
Sir J.J. School of Arts
1918 Kala Bhavan, The Art College was conceived as part of Shantiniketan an university set up by the Tagore family
1919 Kala Bhavan, Shantiniketan Teachers: Nandalal Bose, Benode Behari Mukherjee and Ramkinkar Baij
BAUHAUS
1919 Weimar
1923
1925 Dessau
1933 Berlin
Teachers: Wassily Kandinsky, Paul Klee and Oskar Schlemmer
1950 MSU Baroda The Faculty of Fine Arts
ULM School of Design
National Institute of Design
Prof. Hans Gugelot visit to NID
1979 Industrial Design Centre, Decade of Design Experience by Prof. K G Rao
1980 Masters of Design in Industrial Design launched
IIT Delhi Product Design launched
1990 IISc Bangalore Product Design launched
IIT Guwahati, Department of Design
Symbiosis Design School
Sristi Design School
IDC launches Ph.D Research Programme in Design
IDC Animation Programme launched
IDC Mobility & Vehicle Programme launched

Fixtures / Portraits

Otto Neurath — Isotype (International System of Typographic Picture Education)
Jan Tschichold — Die neue Typographie Advanced Modernist Design
Max Bill — Swiss architect, painter, industrial and graphic designer. Max Bill Stool
Paul Renner — Typeface designer FUTURA
Josef Muller Brockmann — Swiss Graphic designer and teacher. Grid Systems, 1961. Swiss Graphic Design
Emil Ruder — Swiss Typographer, Faculty of the Schule für Gestaltung Basel (Basel School of Design). Typographie
Wolfgang Weingart — Internationally known graphic designer and typographer
Armin Hoffman — a Swiss graphic designer well known for his posters, which emphasized economical use of colour and fonts
Wilam Crouwel — Dutch Graphic Designer Faculty of the Schule für Gestaltung Basel, Basel School of Design
Otl Aicher — designed pictograms for 1972 Summer Olympics in Munich. Co-founder ULM school. Designed the typeface Rotis
Anton Stankowski
Hermann Zapf — German typeface designer. Palatino and Optima
Karl Gestner — Foundation year at the Basel School of Arts and Crafts. He ranged the text left, unjustified – a novelty attacked by some of the purest. He is know for his grid for CAPITOL Magazine
Helmut Schmid
Adrian Frutiger — Studies in Switzerland at the Basel School of Design under Emil Ruder, Kurt Hauert and Robert Buchler
Max Miedinger
RP Lohse
Calestino Piatti
Max Huber — an influential Swiss twentieth-century graphic designer

Swiss Graphic Design
1920 - 1950 International Typographic Style

1400 1500 1600 1700 1800 1900 1905 1910 1915 1920 1925 1930 1935 1940 1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015

EVENTS

SOCIO-ECONOMIC & POLITICAL

DATE	EVENTS
1750-1850	Industrial Revolution
1858-1947	British Raj in India
1914-1918	First World War
1939-1945	Second World War
1947	Independent India and Pakistan
1955-1975	Vietnam War
1991	Liberalization Of The Indian Economy
2003-2011	Iraq War

Socio-Economic
& Political

1858 -1947
British Raj in India

1750-1850
Industrial Revolution

1914-1918
First World War

August 1947
Independent India
and Pakistan

1939-1945
Second World War

1955-1975
Vietnam War

1991
Liberalization
Of The Indian
Economy

2003 - 2011
Iraq War
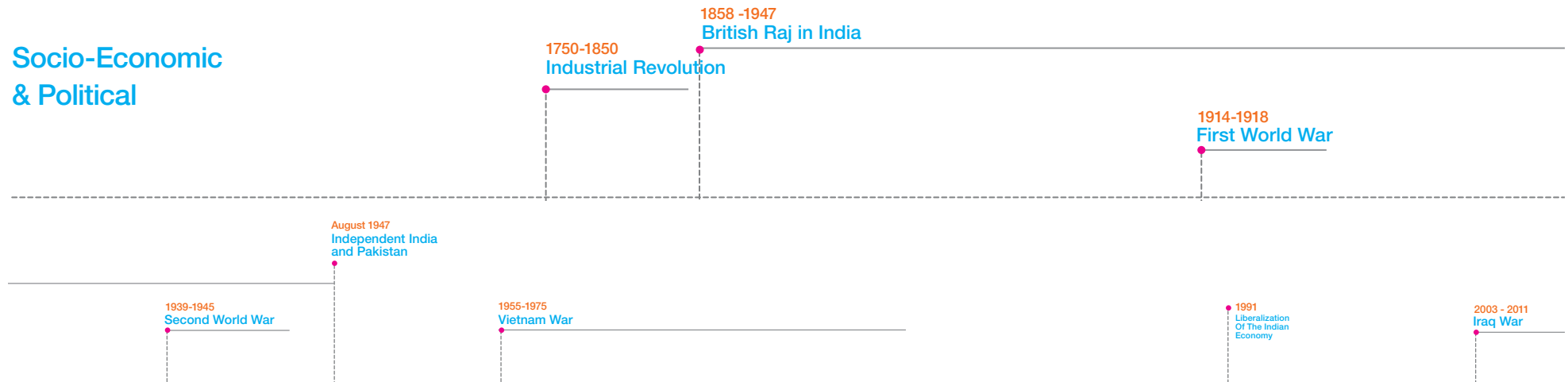
SCIENCE & TECHNOLOGY

DATE	EVENTS
1752	Invention of Electricity by Benjamin Franklin
1951	Colour Television
1957	First Computer Released
1969	First Computer Mouse - Douglas Engelbart
1984	First Macintosh Introduced
1995	Internet Introduced
2001	iPod introduced
2010	iPad introduced

1951
Colour
Television

1957
First Computer
Released

1969
First Computer
Mouse
Douglas Engelbart

THEORY

DATE   EVENTS

1915.....................................Lectures on General Linguistics
1920...................................Gestalt Theory of Visual Perception
1960...................................Structural Information Theory - Emanuel Leeuwenberg

1915
**Lectures on
General Linguistics**
Ferdinand de Saussure

signifier
signified
sign

1920
Gestalt Theory of Visual Perception
Johann Wolfgang von Goethe, Ernst Mach, Christian von
Ehrenfels, Max Wertheimer, Wolfgang Köhler, Kurt Koffka,
and Kurt Lewin ????

ART

DATE	EVENTS
1450	Johanes Gutenberg
1455	Bible Printing
1550-1800	Mughal Miniatures Period
1845	The Glasgow School of Art
1850-1914	Arts & Crafts Movement*
1857	Sir J.J. School of Arts
1880-1940	Modernism*
1880-1910	Art Nouveau*
1884	College of Arts, Kolkatta
1896	First Motion Picture
1913	Kala Bhavan
1919	Bauhaus*

*ABOUT ART MOVEMENTS

Each Art Movement had a definitive time period which is specified in the timeline. It also gives information about the countries in which it initiated or was observed, the key teachers of the movement, and key descriptive features specific to each art movement.

TYPOGRAPHIC TIMELINE

Important persons, books, events who has contributed in Typography has been majorly covered here.
Some of them were:

Otto Neurath ………………….
Isotype (International System of Typographic Picture Education)

Jan Tschichold……………….
Die neue Typographie Advocated Modernist Design

Paul Renner………………………….
Typeface designer FUTURA

……………& many more.

LEARNINGS &
FUTURE PLANS

- Construction of a Timeline
- About linear & comparitive Timeline
- Many important events in history of design

- The timeline needs to be more crisp
- Visually it should look more appealing; Colourcoding for each category or periodwise seperation many such things needs to be worked upon
- Typographic Timeline part can be extended
- Many more India related designs and institute information can be included

THANK YOU