

**Contemporary Architecture and Design**  
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**Lecture - 39**  
**Evolution of Typography in Contemporary Era**

Welcome students to the online NPTEL course Contemporary Architecture and Design. In today's class we will discuss about the different topic which is typography and because it is quite important to understand to have a basic knowledge about typography while we discuss about architecture as well as the design.

So, in design we talk about the style and what is the different features which was coming around and in architecture also what kind of construction technique materials and the visual vocabulary was getting evolved in architecture. But today without and the typography becomes integral part of the both the cases in architecture as well as the design in for example, if we select the signage or the later for the signages in the in the built environment or in the interior spaces, what kind of typefaces will go with is quite important for to know with the sense of architectural visual style.

And similarly for the in the cases of design many of the cases we need to select the typefaces and so this is quite important to have a basic understanding what is the style of typefaces and what are the different eras, and how it evolved throughout the history and contemporary movements.

So, few of the typefaces were just few were mentioned like Bauhaus typefaces and what are the similar typefaces which was with which can go with an art nouveau style which was discussed when we were discussing the movement, but mostly we did not and but do we did not goes through the typefaces movement. And specially if you working on the graphic design and the visual communication design typography becomes a very integral part.

Today, we will not give you a detailed detail description of typography because there is complete subject altogether. We will just give you a basic idea and just broad history and a very basic concept of typography. We will not go it was the morphology of typefaces because you are not going to design the type typeface you can, but this is the not under

the scope of the study area in this syllabus. So, the kerning excite what will be the spacing between typefaces we are not discussing that what should be the length of a the excite versus the total drop ascenders and descenders and kerning we are not discussing it is it is part of the pure typography course.

We will just discuss how to select typefaces and the basic basic of typography movement. And we will not we will not also talk about the different typefaces we will just give a basic idea of how if the typeface looks like this what can be the time frame when it was designed and it will help you to select typeface and for your design. So, we will also not give you a very vast list of typefaces which you have to select and how to understand what is the good typeface versus poorly designed typeface. So, we will also not discuss that we will just give you the basic idea of how what are the different segments of typography, what are the different classifications.

So, evolution of typography it started with the basic the ancient era where people started scribbling on adobe tiles or they started etching on something or they started writing on papyrus or they stated chiseling the marble in classical Greek and Roman architecture.

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**Evolution of Typography**

The instrument creating form and often the material in which the form is created are of crucial importance in determining the pattern of writing.

Written form always points to the instrument used:

- calligraphy using pen,
- Letters carved in stone with the chisel,
- cut forms using stylus,
- copperplate letters by engraver...

Source: Typographi, Emil Ruder

The slide features two images of ancient inscriptions. The top image shows Latin text carved into stone, and the bottom image shows a similar inscription in a different script, possibly Sanskrit or another ancient language. A red diagram with arrows and the word 'serif' is overlaid on the text, illustrating the concept of a serif.

So, the first typefaces which got evolved in during the classical era is a is called sans serif typefaces because they had to chisel out from the from a stone. So, they had the tools to chisel out and then the hammer. So, they had a particular inclination and one side becomes thin because of the inclination of the tool the chisels head was something like

this. So, when they when it goes like this becomes thick and when it goes like this side this becomes when it goes in this direction this becomes thin and when it goes in this direction this becomes thick.

So, that is why this difference in thickness started coming and this was quite difficult to use this tool to end a sharp edge that is why they created this kind of edge specially in the end. So, A will look like this and because the end chiseling the end was quite different it will end like this now for this part they had to use the different tool and chisel it out. So, that is why this kind of typefaces got evolved from the roman typefaces which is called as serif typefaces. So, these are the serif ends.

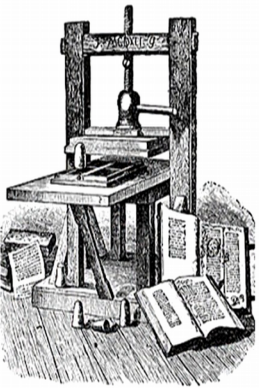
Now, we also have a type we have a type a category which is which does not have this serif ends which is called sans serif. So, it might just look like this and there will not be any serif ends. So, those type categories called sans serif and if it has a serif end. So, this will be a serif typefaces. So, generally in our conception because serif typefaces were evolved first serif typefaces has a much older look than sans serif. So, if you want a very new sleek modern look you should go for a sans serif typefaces, and if you want a want to connect your design with a classical and more ornament style ornamentation heavy style then you should go for a serif typeface in general perception.

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### Evolution of Typography

Most contemporary typefaces ultimately take a digital form, but many are rooted in calligraphic tradition and originate in handwritten sketches and prototypes.

Movable type, invented by Johannes Gutenberg in Germany in the early fifteenth century. Movable type had been employed earlier in China, but proven less useful there as the Chinese writing system contains tens of thousands of distinct characters making it ill-suited to mechanization.



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Now, later we all know that German inventor Johannes Gutenberg first invented the printing press during the renaissance period which is which happened in Germany which

is around 14th century to a 17th century. During that time it before that they used to handwrite and copy the different text like bibles and other manuscripts, but after that after invention of Bible they started printing. So, this after invention of the printing press they started printing and the first printed book was Bible.

And then, so from there printed text started coming before that it was calligraphy and before that it was chiseled, it was chiseled from stone on writer on papyrus or scratch, scratch on adobe clay tiles this was a different paradigms. Now, after invention of the printing press there was a need for homogeneous typefaces. So, that started evolving.

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**Evolution of Typography**

l	a	o	.	a	l
a	.	o	.	l	l
A	a	l	l	o	l
A	A	A	A	A	A
A	A	A	A	A	A

The genesis of Gutenberg's printing types were from the visual style of hand written (calligraphy) scripts of that era.

*Gedruckt in der Kayserlichen  
Stat. Augustina Durch  
den Herrn Hanssen  
Schönsperger  
im Jar Lau-  
fene fünfzig  
drey und im  
Pruentze  
henden.*

*et locavit ea agricol  
fedus est. Cum aut  
appropinquasset: n  
ad agricolas ut acc  
Et agricole apprehen  
um ceciderunt. Alii oc  
lapidaverunt. Item n  
plures prioribus: r  
ter. Aquissime aute  
lum suū dicens: vtr  
Agricole aut videri*

Gutenberg's Bible

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On the first one of the first style was lettera antica and other typefaces which has a very classical or the medieval look and which got evolved from calligraphy. So, these are not calligraphy typefaces. So, this is Guttenbergs bibles one of the page, but if you look at this. So, this looks like a calligraphy. So, these ends were like that. So, if you have if you have a calligraphic pen. So, this kind of change of line thickness will be there. Because the before that the bibles is to look like because it was hand written and people used to copy the manuscript to make another copy of the Bible or the other books. So, it used to look something like the handwritten calligraphy theme. So, that got inspired and the first kind of typefaces which was used in the printing press has a directing inspiration from the calligraphic style.

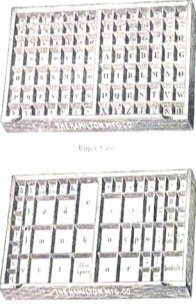
So, these kind of letters if you see this a quite pre industrial revolution, it has a look of pre industrial revolution. So, these are not modern style styles. So, this will go with the renaissance and those Baroque, Rococo style of design.

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**Evolution of Typography**

In fifteenth-century Italy, humanist writers and scholars rejected gothic scripts in favor of the lettera antica, a classical mode of handwriting with wider, more open forms.

Nicolas Jenson, a French man who had learned to print in Germany, established a printing firm in Venice around 1469. His typefaces merged the gothic traditions he had known in France and Germany with the Italian taste for rounder, lighter forms. They are considered among the first and finest roman typefaces.



Source: Thinking with types, Ellen Lupton

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Now, next, this is the evolution in the 15th century Italy. So, lettera antica which we see thus this kind of old style fonts are started generating. So, this is a this is a design Nicolas Jenson who designed this kind of he established this printing form in Venice around 1469, and he used this kind of typefaces lettera antica and his typefaces merge the gothic traditional style into French and German that time of renaissance style. So, that was the style which was there.

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**Evolution of Typography**

Many fonts we use today, including Garamond, Bembo, Palatino, and Jenson, are named after printers who worked in the fifteenth and sixteenth centuries. These typefaces are generally known as "humanist."

Contemporary revivals of historical fonts are designed to conform with modern technologies and current demands for sharpness and uniformity. Each revival responds to or reacts against the production methods, printing styles, and artistic habits of its own time.

Source: Thinking with types, Ellen Lupton

The slide features a background image of a historical typesetting page with a large, ornate calligraphic letter 'G' in red. The page contains Latin text in a Gothic script, with some words highlighted in red. The slide also includes logos for IIT ROORKEE and NPTEL ONLINE CERTIFICATION COURSE at the bottom.

So, in the later phases after lettera antica so which was the pre industrial revolution which can go with the style from renaissance to industrial revolution because that is the time after renaissance Guttenberg made the Bible and this time this lettera antica and the similar fonts was there which was inspired from the hand paint painted calligraphic style.

Now, after industrial revolution there was few fonts which evolved and took inspiration from lettera antica, but drastically changed the style of design and it is much more modern because it is modern font which includes Garamond. So, the font which we used today few of the fonts like Garamond, Bembo, Palatino and Jenson which are named after the printers who walked in the 15th to 16th century which is renaissance time.

So, these fonts are not renaissance fonts it is a modern font, but this has a link with the renaissance. So, we all know that in the beginning of the modern style. So, there was a few architecture and design movement which went in against the machine movement and then they established the hand the craftsmanship. So, for example, art nouveau, and also later art deco and Chicago style we have this in the in the Chicago style also it is a in few cases Louis Sullivan's work art nouveau was blended with Chicago style. And other styles were this is not like internationalist movement. So, in internationalism Bauhaus we cannot use, but in the other cases, we can use these kind of fonts which has a connection with the handwritten calligraphic style which is known in together it is known as a humanist font which evolved in the modern era.

So, if you look at the Garamond font which is one of the humanist font of old which connects the old style if you look at the g of any typefaces of the Garamond font the spacing between these two lines the end lines will not be equal. So, it will look like somebody have used the paint brush and painted each and every letter. So, if you use these part of the of a letter in your poster composition you will see all these lines have a tilted lines none of these are straight line, and if you expand it and zoom in the each and every letter you will see that it looks like a paint a painted font. So, if you look at the Garamond's font. So, as the other fonts which was which comes under humanist. So, it does not look like a machine made font. So, this is kind of against the machine fonts which you can use in your design.

So, contemporary revival of historical fonts are designed to conform the, conform with the modern technologies is against the modern technology and against the modern technology, but it also has the inspiration of the modern technologies. So, it is not exactly something like lettera antica. So, it is not coming from the calligraphic style it is it looks minimal, but still it has that humanist touch. So, it also fulfills the demand of sharpness and uniformity, but still it is not as uniform as totally machine made font.

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**Evolution of Typography**

*Italic* letters, also introduced in fifteenth-century Italy (as their name suggests), were modeled on a more casual style of handwriting.

The upright humanist scripts appeared in prestigious, expensively produced books, but the cursive form was used by the cheaper writing shops, where it could be written more rapidly than the carefully formed *lettera antica*.

The cursive font saved money because it saved space.

Source: Thinking with types, Ellen Lupton

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Now, another we all know that there is a two difference in Italics and then Roman which is upright which is Roman and Italics which we right now have in our system in digital fonts. So, it came from it has a background story which started from again lettera antica

which has a Italic version first was the roman version and then they made the Italic version.

So, what happened is in the italic style it was it become a little less expensive because the cursive font saved money because it saves spaces when you are writing like this. So, that started saving spaces because, and the next font has a similar space. So, it does not end like this and the next font starts after this. So, this is a this is space saving happening because of the slant. So, in the smaller space you can write more text. So, that is why this is a this becomes cheaper and from there the italic version of the typefaces came and which is also available right now in the digital version.

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**Evolution of Typography**

In the sixteenth century, printers began integrating roman and italic forms into type families with matching weights and x-heights (the height of the main body of the lower face letters)

Today, the italic style in most fonts is not simply a slanted version of the roman; it incorporates the curves, angles, and narrower proportions associated with cursive forms.

*S* ed ne forte tuo atrea  
*N*ic timor est ipſi  
*N*on adeo leuiter noſt  
*V*e meos oblitio pulſa  
*I* lic philantes non  
*N*on potui ecor im  
*S* ed ex ipſius filſi atti  
*X*reſtilis antiquam  
*I* lic quicquid ero ſi  
*T*rahit ex ſiſi litto  
*I* lic ſiquoſe mentes  
*Q*uas delit argui  
*Q*uam nulla tua ſi  
*G*rahor, ex tellus h  
*Q*uamuis te longe rei  
*C*ara tamen la hry

FRANCESCO  
GILFIO  
Roman and Italic  
types designed for  
Alde Manuceus,  
c. 1500. They are  
considered as two  
separate typefaces.

Source: Thinking with types, Ellen Lupton

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In the 16th century printers began integrating roman and italic form into the same family right now we have a similar excite and in one type of type family has italics, bold, ultra thin and all these variations are there in today's one type family.




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**Classification of Type Faces**

A basic system for classifying typefaces was devised in 19<sup>th</sup> Century when printers sought to identify a heritage for their own craft analogous to that of art history.

**Humanist or Old Style** letter forms are closely connected to calligraphy and the movement of the hand. The roman typefaces of the 15<sup>th</sup> and 16<sup>th</sup> century emulated classical calligraphy.

**Sabon** was designed by Jan Tsachichold in 1966 based on 16<sup>th</sup> century typefaces of **Claude Garamond**



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So, Sabon is one of the a typefaces which is designed by Jan Tsachichold in 1966 which is of kind of mid modern which is based on 26th 16th century typefaces of Claude Garamond and Garamond was one of the that kind of typefaces which is named after Garamond, Claude Garamond. And if you look at Sabon, Sabon also has a similar kind of thing. So, it is you can see this is changing and has this sans serif style. So, this is a humanist or old style later which is which has a depiction of the roman typefaces of 15th and 16th century and it is a kind of revival of the similar typefaces, but this was designed in 19th century when the in 19th century which is modernist movement.


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**Classification of Type Faces**

A basic system for classifying typefaces was devised in 19<sup>th</sup> Century when printers sought to identify a heritage for their own craft analogous to that of art history.

**Transitional** typefaces are more abstract and less organic than humanist but more organic than Modern. These typefaces have sharper sheriffs and a more vertical axis than humanist letters.

When the fonts of **John Baskerville** were introduced in the mid 18<sup>th</sup> Century, their sharp form and high contrast were considered shocking.



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Then this, the next face which is a transitional which comes after that. So, the Sabon and Garamond was the has a older version after that this is transitional. Transitional is one of the typefaces is John Baskerville which is designed in the transitional face which is 18th century the mid 18th century which is which has a sharp sharper pen. So, if you look at a these kind of curves which looks like a like a painted font with a paint brush and this is lot of change of the lines were minimized in transitional style and this is more little bit more homogeneous and this is a straight line going and its has a more towards inclined towards the machine. So, it is more abstract and less organic than the humanist style which is John Baskerville the Baskerville font is one of these.

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**Classification of Type Faces**

Historians and critics of typography have since proposed more finely grained schemes that attempt to better capture the diversity of letter forms. Designers in the twentieth and twenty first centuries have continued to create new typefaces based on historic characteristics.

These three main groups correspond roughly to the Renaissance, Baroque, and Enlightenment periods in art and literature.

The typefaces designed by Gianbattista Bodoni in the late 18<sup>th</sup> and early 19<sup>th</sup> Centuries are radically abstract with thin, straight serifs, vertical axis and sharp contrast from thick to thin stroke.

**Aa**

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Now, next is the another style which is the it started changing. So, these this style is called this is this is a Bodoni font, where you can see the curves of these serif ends got minimized and this has a more machine made aesthetics than the previous one. So, it went towards a little further and so these are the fonts where this is there are still serif ends which is ornate and has a connection of the previous the pre industrial revolution style.

So, these kind of these three, these three font can go with the renaissance baroque and enlightenment period as well as the rococo as well as the art nouveau and those periods which is which has which is going against the machine.

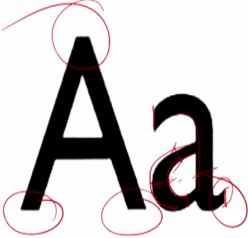
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**Classification of Type Faces**

A basic system for classifying typefaces was devised in 19<sup>th</sup> Century when printers sought to identify a heritage for their own craft analogous to that of art history.

✓ **Humanist Sans serif** typefaces became common in twentieth century.

**Gill Sans** designed by Eric Gill in 1928 has humanist characteristics which has small tilting contour in the letter 'a' and the calligraphic variation in linewidth.



**Aa**

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Now, another kind of style is this is we are right now coming in the sans serif. So, this looks more modern and more contemporary. So, there is no serif ends at the end. So, this is the humanist sans serif. So, it is not is has a humanist touch in the sans serif. So, it is not exactly. So, if you go detail in the typefaces. So, you will see that the sans serif also has a different version. So, the Gill Sans has a little humanist version.

So, you can see there is a change in the length and also this letter a has a calligraphic variation in the line width. If you zoom in, so if you see a little variation in the line width here. And the small letters and the other letters if you look at, there will be a variation and in the later faces when we will go in the in the next other typographic other typefaces. So, these kind of variations will also be minimized. So, this is the Humanist Sans serif which is Gill Sans.


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**Classification of Type Faces**

A basic system for classifying typefaces was devised in 19<sup>th</sup> Century when printers sought to identify a heritage for their own craft analogous to that of art history.

**Transitional Sans serif (Grotesque and Neo Grotesque)** These are also referred to as anonymous sans serif. International Typographic style of Swiss style.

**Helvetica** designed by Max Miedinger in 1957 is one of the world's most used typefaces. It's uniform, upright character makes it similar to transitional serif letters.



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Now, it is a transitional sans serif which is going in the next face. So, here this variation there is a slight variation because when it is getting joined if it is thick then it will give a black patch. So, this kind of deviation is still there, but you can see the deviation is quiet less from the humanist sans serif which is a transitional sans serif or the grotesque or neo grotesque is under this style this is a Helvetica. Helvetica is one of the very well designed and looks good and if you are selecting a sans serif font. So, Helvetica is a very well designed font which comes under which looks and which goes with many design if you are going for a sleek and minimalist look.


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**Classification of Type Faces**

A basic system for classifying typefaces was devised in 19<sup>th</sup> Century when printers sought to identify a heritage for their own craft analogous to that of art history.

**Geometric Sans serif** These sans serif types have more geometric form.

In **Futura**, designed by Paul Renner in 1927, the 'O's are perfect circles, and the peaks of the 'A' and 'M' are sharp triangles.



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Now, there is a geometric sans serif which is more geometric in nature which is also designed in the modern era which is 1927, it was been designed by Paul Renner. So, here we can see a lot of geometry and this is a is a complete circular a. So, here this curved a and to the more traditional look of the a is minimized by more geometric one and this kind of angular angularity is added in the typefaces. So, if you if you are using Futura it gives a very contemporary very modern sleek minimalist look and it can go with the modern sleek design.

And if you look at the logo of the metal band Linkin Park they are designed of the letters were a distorted version of Futura. And it also goes with the type of songs the genre of the song which they play. So, this kind of angularity gives a very sharpness in the design.

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**Classification of Type Faces**

A basic system for classifying typefaces was devised in 19<sup>th</sup> Century when printers sought to identify a heritage for their own craft analogous to that of art history.

✓ **Egyptian or Slab serif** ✓ has numerous bold and decorative typefaces were introduced in the 19<sup>th</sup> century for use in advertising. Egyptian fonts have heavy slab like serifs.

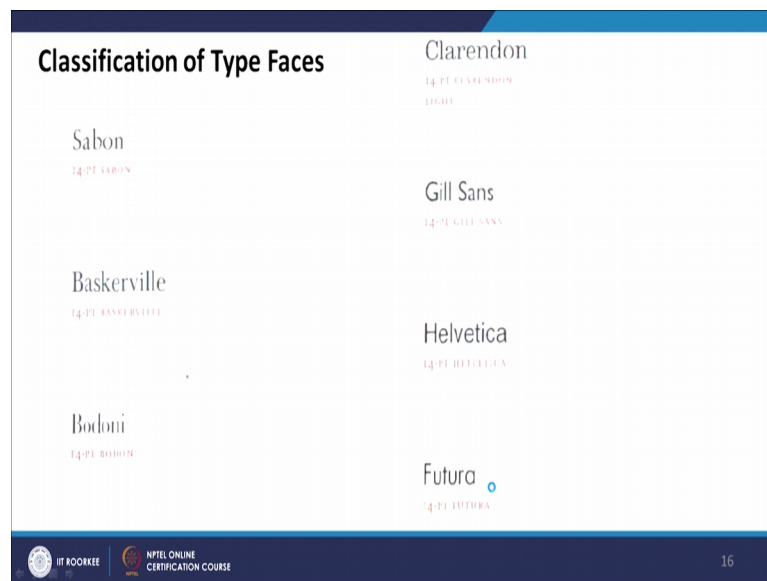
Example Clarendon

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Now, another style is Egyptian or slab serif which is Clarendon this style which is again has a serif end, but it is not modern it is more associated with the post modern typefaces, where post modernism we know it has again more ornamentation and it again went back to history. So, they started ornamenting the font. So, these kind of fonts you see on the posters and placards or the billboards in post modern era and here this is called slab serif. So, in the type typefaces these serifs were the ornamentations and it also has a functional attribute in visual ergonomics when this serif ends are there. So, this if you minimize the font size because of the serif ends this becomes very legible, but in it Egyptian slab serif this serifs worked as a ornamentation not just a functional thing.

So, here in this slab serif. So, these serifs looks like a slab. So, these are very thick the ornamentations are becoming much more pronounced and much more exaggerated. So, here if you look the a is, tail is the end part is exaggerated and it is it its going up and the thickness of this serif as and the main the part of this text is quite different in terms of the morphology and it is quite ornamental. So, this is quite it will go with the pop and the post modern style.

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So, these are the few fonts which we have discussed. So, it goes from the previous. So, it is mostly chronologically it goes. So, its first it is Sabon, then Baskerville its more modern, then Bodoni is more modern, then which then we go back to go to more later phases which is Humanist Sans serif where there was a little difference, but its san serif it is not serif, next it goes to the transitional where the change between these line width difference between the line widths was minimalized then it becomes very geometric. So, this angular lines and all these. If you look at the other typefaces of this fonts letters of this typefaces then you will see the geometries maintained in different letters as well.

Now, it went to the more post modern style of this design which is Egyptian or slab serif where there is lot of line width is added and lot of ornamentation is added into the design. And then there are other fonts like universe which is a type family which is done by Adrian designed by Adrian Frutiger. Frutiger is also a very well designed typefaces you can explore that, and explore more with the typefaces and mix and match with the

your design. And there is no hard and fast rule that it has to go with the particular typefaces you can change and break the norms and play with and explore different typefaces, but this is the brief overview of what are the typefaces which can go with the different timeline.

Thank you.