

**User Interface Design**  
**Prof. Saptarshi Kolay**  
**Department of Architecture & Planning Engineering**  
**Indian Institute of Technology, Roorkee**

**Lecture - 15**  
**Usage of Typography in User Interface Design - II**

Welcome students to the online NPTEL course, User Interface Design. We started discussing about typography in the previous class. Today, we will discuss about the usage of typography in the design. So in the previous class we talked about the evolution of typography. We talked about the history how the different kind of typefaces evolved throughout the timeframe and then the morphology what are the different elements within the typography.

We talked about the particular element within particular typefaces and how 2 letters can be juxtaposed. We have discussed kerning. And then classification of typefaces based on their morphology and also we have connected the classification with the time frame as well which is the part of the evolution of the typography.

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Typography	
Introduction to Typography	Design ✓
<ul style="list-style-type: none"><li>• Evolution of Typography</li><li>• Morphology</li><li>• Classification of Typefaces</li></ul>	<ul style="list-style-type: none"><li>• Pictorial quality and Legibility of Typefaces</li><li>• Selection and Design of Typefaces</li><li>• Impact of Colour selection on Legibility</li><li>• Achieving Hierarchy</li></ul>

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So this part we have covered in the previous class and today we will discuss about the design and how we can use this typefaces and in what basis we have to select the particular typefaces into our design. So mostly we will not if we are talking about the GUI the graphic user interface or the designing the frontend of user interface design, so you will be selecting the typefaces and

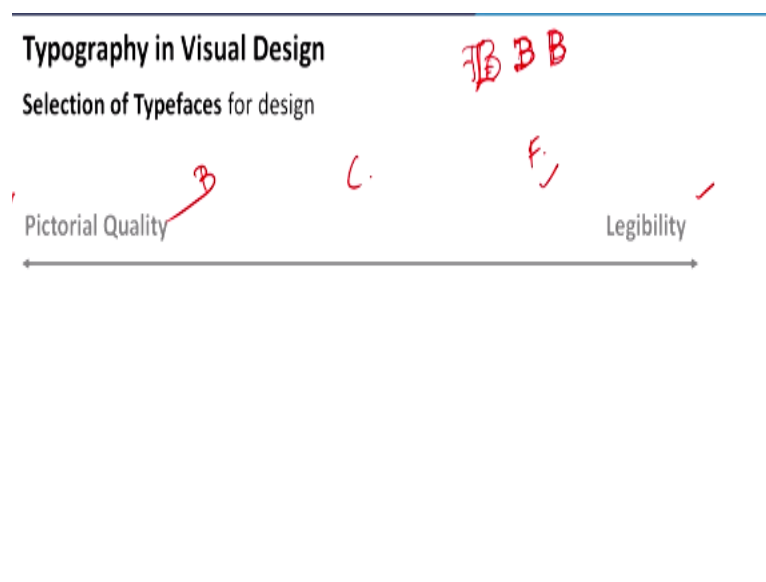
sometimes you need to select juxtaposed 2 different typefaces and you have to create the hierarchy of the design.

So you need to understand what kind of typefaces you have to select from a vast available digital typefaces which is there in the, which is available on the internet. So based on the pictorial quality and the legibility of the typefaces things can differ and how much pictorial quality and how much ornamentation you want to have in the typefaces versus what is the whether you want to go for a minimal style of typefaces where to balance it out and based on your design and are also based on the purpose of the design.

Then selection of digital typefaces based on these and what style of typefaces when there are ornamentation in the typefaces. So that also talks about some metaphorical connection of a particular style, particular connotation can also be there with the particular design style. So how to select that. Then the impact of color on legibility and impact of other elements on hierarchy.

So how to achieve the hierarchy which can also be the derivative of color, pictorial quality, and other elements for example Italics, bold or width of the typefaces and changing the other ornamentation positioning and creating, deciding upon the x heights. So we will discuss about the selection of typefaces for design.

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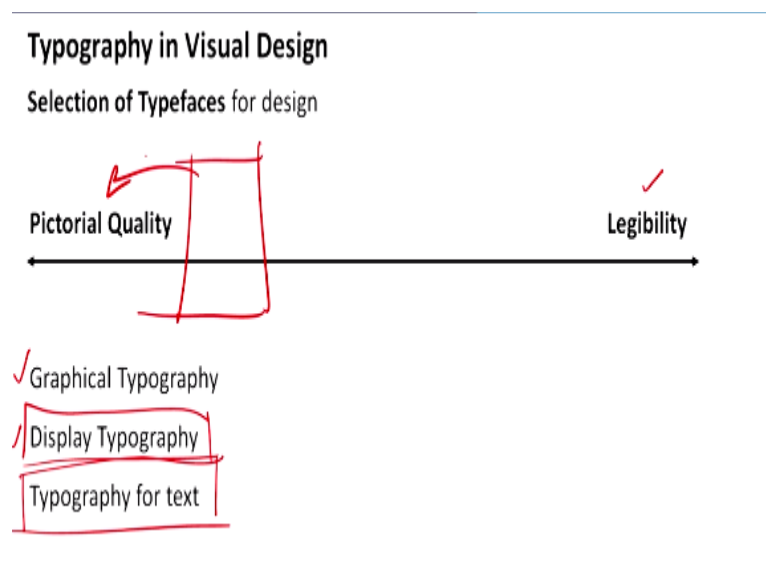


There we will talk about the pictorial quality and the legibility. So pictorial quality increases when we add ornamentation in the typefaces. So more the ornate, more it looks pictorial and we delete the ornamentation, it becomes more legible. For example if it is geometric Sans Serif it will be more legible for example if it is Futura is more legible than Clarendon which is a Slab Serif or Egyptian which has lot of ornamentation.

And if we select Black letter which is the Gothic style of font then it will be even more pictorial than Clarendon and which is difficult to read. So if you type a text in Clarendon, Black letter and Futura, Futura will come somewhere here. Clarendon will come here and Black letter will come somewhere here. So Black letter will have more pictorial quality. So if you see Black letters type B which has something like this.

And lot of different elements are there in the particular typefaces versus this Futura's B will be very simple semicircles and Clarendon will have some thick Slab Serif end.

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Now based on this we can categorize this typefaces into 3 broader categories. One is very graphical typography where the graphical quality is much more. Then a display typography. Display typography is the typography where we with these kind of typefaces we design the logo. So this logo or the display board of a particular shop front or the name of a particular building or the header of a particular graphic design this display typography has some ornamentation.

These ornamentations are required to grab user's attention. So there are 2 different things in design. One is attraction value, one is attention value. So these display typography has much more attraction value than the typefaces which is more legible. So for more legible typefaces for example Futura, Helvetica they do not have any ornamentation but they do not have attraction value.

So if you create some pattern into the typefaces, they will grab people's attention much quickly than a very simple minimalist typefaces. And also they have more memorability and that is why it will stay in the user's mind and it will create a higher impact in the mental model of the people. So they will remember the typefaces because they have a particular design, particular ornamentation in the typefaces. So they have the power to be a display typefaces.

But typography for the text does not have this. So they are just for quick and easy reading. So they have the most amount of legibility in the typography. So this is the graphical typography.

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### Typography in Visual Design

#### Selection of Typefaces for design

#### Graphical Typography ✓

- Higher Pictorial Quality ✓
- Less legibility ✓



This is really high on pictorial quality and legibility is really less. So you have to decipher it with longer time. You have to look at it for longer time to interpret it. For example if it is a graffiti work or very ornate abstract pattern, this becomes a graphical typography.

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## Typography in Visual Design

### Selection of Typefaces for design

#### Graphical Typography

- ✓ Higher Pictorial Quality
- ✓ Less legibility



Unknown language acts as a PATTERN; not as a TEXT

And again another thing is when you cannot read a particular language then it becomes just a graphical typography for you. So it has a higher pictorial quality and less legibility. So in the frame it will come somewhere here towards the pictorial quality and it will have less legibility. Here we have 2 example from a Kalamkari print which is from Andhra Pradesh and which is a vegetable print and here there is Telugu script written within the painting.

And this is the photograph of the front door of Taj Mahal and this is the Urdu script written here on top of the palace's entrance, the Taj Mahal's entrance, the tomb's entrance. So here if you look at the Urdu script and the Telugu script, Telugu script the curvilinearity and all this line quality kind of blends with the Kalamkari style's printing. Because the people who write this kind of letters conditioned in that way.

So when they paint they also create the similar kind of line and quality. So this kind of goes well with the style of design. Now if you replace this here, it will not go because the Urdu script and the Kashidas and the lines which we see over here goes with the style of the design of other ornamentation with this Saracenic style of the monument. So here for people who cannot read this language this becomes just a pattern of the graphical.

This appears as a graphical typefaces and that goes with the style of the design because we are conditioned in that way and we can also associate a particular style of design with the language

and the style of language and the scripture of that particular language. For example the Urdu style will go with Saracenic architecture and whereas the Telugu script will go with this Kalamkari print.

And if we have a for example if we have a Chinese restaurant's shop front design so we should go with the Chinese calligraphic style of design. We should not take design inspiration from other languages style for example Urdu or Telugu. So we will see how we can explore the graphical quality of typefaces when we create some design and create some new typefaces design. We will discuss this lecture in the next few part.

So unknown language acts as a pattern, not as a text and which becomes, which also falls under the graphical typography.

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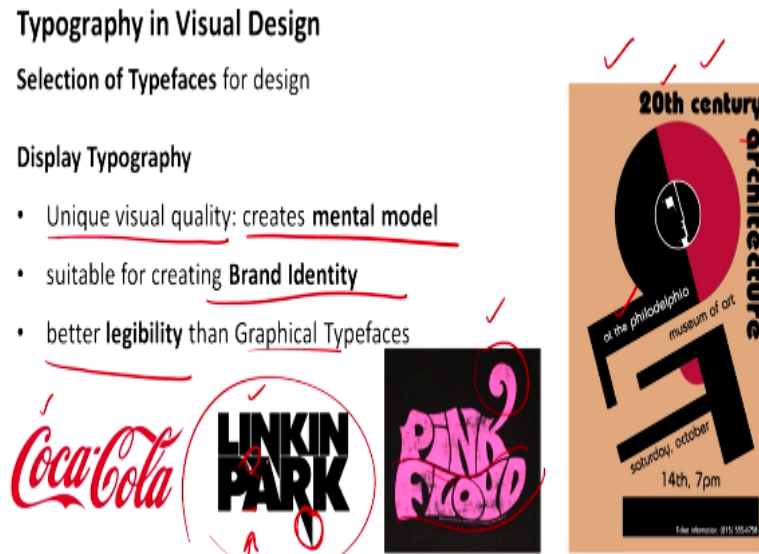
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### Typography in Visual Design

Selection of Typefaces for design

#### Display Typography

- Unique visual quality: creates mental model
- suitable for creating Brand Identity
- better legibility than Graphical Typefaces



The image shows four examples of display typography. On the left, the Coca-Cola logo is shown in its iconic script. Next to it is the Linkin Park logo, featuring the band's name in a bold, blocky font with a stylized 'P'. To the right of that is the Pink Floyd logo, which is a stylized, colorful representation of the band's name. On the far right is a Bauhaus poster, which is a vertical design with a large, stylized 'E' and the text '20th century architecture' and 'at the philadelphia museum of art'.

Now this is the display typography. In this typography it is something balanced between, it has some balance between the pictorial quality as well as the legibility. It takes more time to decipher than the body of the text, the most legible typefaces, the minimalist whether ornamentations are minimal but it takes lesser time to decipher to read than a very high graphical typefaces.

For example this Coco Cola logo, Linkin Park's logo, Pink Floyd's logo and the Bauhaus poster, this has a particular style of typefaces. There are ornamentation in the typefaces and that is why

it can stay, it has a particular visual quality and it creates a mental model if the typeface does not have any ornamentation it will not stay in people's mind and it will not create a mental model and it cannot create a brand identity if it does not have any pictorial quality.

But it is better legible than a graphical typefaces. So you have to read it but you have to take a little amount of time to read it so that people register the logo. So for example Coco Cola it talks about drinks and soft drinks. So there is lot of fluidity in the Coco Cola. It becomes a very iconic logo and Linkin Park's logo it talks about dead metal rock band. So Linkin Park's logo if you look at, so it is a bold Futura typefaces with minor iteration.

So if you see the Futura typefaces it is quite similar to that but there is a little iteration from Futura and these parts are added in the Futura to create more deconstructive or rugged grunge look into that and Pink Floyd is another band which talks about the transcendental fluidity. So what you see in the logo also that transcendental fluidity is achieved into the design. And another example is the Bauhaus posters.

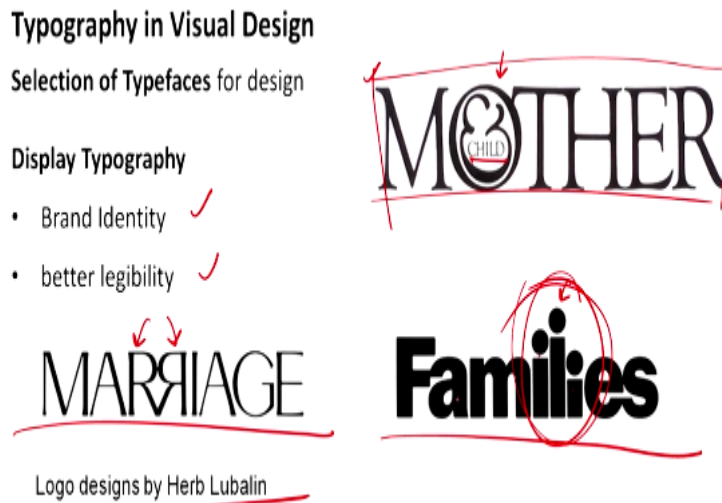
So if you look at Bauhaus posters by Bauhaus and their style design, so Bauhaus talks about the basic pure geometry which is square, rectangle and circle. So Bauhaus font also is a derivative of circle square and geometry but it is not like Futura. But Futura font is, it is a very less ornate but here you can see lot of ornamentation with this gaps and thickness. There are much more ornamentation than Futura.

So while Linkin Park logo has to change the Futura font one change is when you increase the boldness it becomes more pictorial. So it is not just normal Futura, it is extreme bold Futura and lot of things are added into the Futura to create it from a legible minimal typeface to a display typography. So you can change the typography to translate from a legible typefaces to a display typefaces with the addition of different design elements.

Now in the display typography there are brand identity and log you can create with this kind of typography. So these kind of typefaces there is a emotion and metaphorical connotation attached

with the typefaces. So this does not just read the word, so this also talks about the emotion of the particular brand or the letter.

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So for example, few of the examples of Herb Lubalin who is a famous logo designer, examples from the typography logos. So if you look at this logo it is mother and child which is the font size is changed, there is a drastic change in the font size. So that depicts the mother and the child is within the womb of the mother to create the concept.

And the marriage where the R is reversed to talk about the concept of the marriage or the family which creates different shapes of sizes of i and l is changed into something which looks like an i to create this metaphorical connotation of a family.

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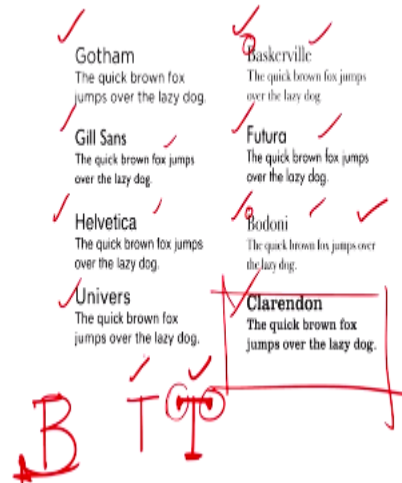


## Typography in Visual Design

### Selection of Typefaces for design

#### Typography for text

- ✓ regular text: Least cognitive load
- ✓ Used for running text/ books
- Most legible



Now selection of typefaces for design in visual design how we select the typefaces. So for regular text it should have a less cognitive load. So the minimalist typefaces or the typeface which has less pictorial quality will go with it and used for running text and books when we look at this typefaces the usage will be for that and so it will belong somewhere here in the line. So the typefaces of the body of the text will be, should be positioned over here.

So few of the examples of this typefaces are, also this has to be the most legible category of the typefaces. Few of the examples which we have already discussed in the previous class are this. But still Clarendon also you cannot use Clarendon in the very highly loaded text because it has lot of elements, lot of pictorial quality here. So mostly it will be lesser the elements better it is.

And even in the Sans Serif and Serif, Sans Serif works better in terms of digital typefaces because these Serif ends sometimes becomes pixilated in the digital display. So Sans Serif goes better in the legibility. But when you print then Serif becomes better because these Serif ends visually creates a end in the i so it gives our eye clue that this letter ends over here. So if you just write T and T with the end so this will create some prominent end of the T.

If you decrease the letter imprinted media, this will be more legible than our Sans Serif because of this ends which appears like a black dot and it creates more legibility. So in terms of display typefaces digital typefaces this becomes more legible because Serif ends sometimes becomes

pixilated and it hampers the clarity and for printed media this becomes more legible in a very generic terms.

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Now designing typefaces when you want to create and depict something a particular style into design. For example if we take example of a Chinese food restaurant and if you are designing a web page of the Chinese food restaurant and if you want to create the display typefaces which goes high on the hierarchy but we are not talking about the legible text of the typefaces, we are talking about the display typefaces which is somewhere in between the legibility and the pictorial quality.

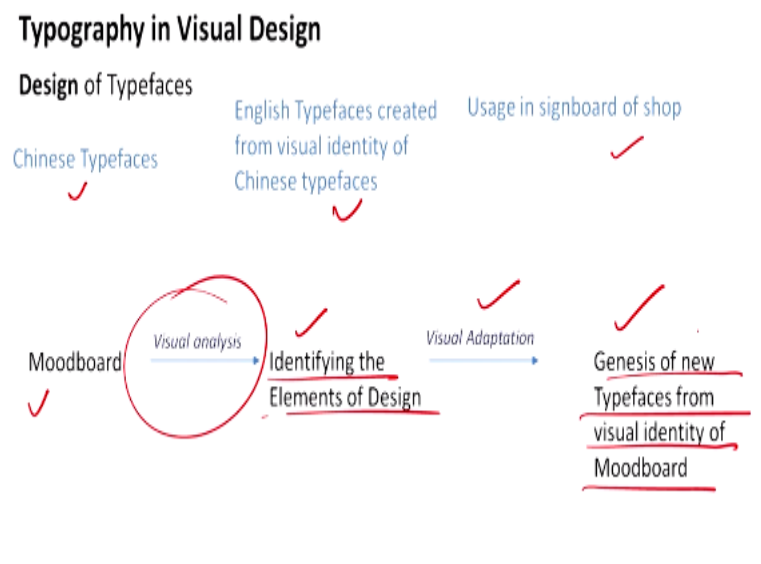
So there you might need to capture the essence of a Chinese style. So for example there you can take a mood board or your visual palette or from where you will take the inspiration, that is called mood board. In this mood board, Chinese or some oriental letters. Oriental typography with a calligraphic style can be in your mood board and from there you can create English typefaces because if you want to target the audience who cannot read Chinese and targeting international audience, then it has to be English.

And then you can create this English typefaces which has the characteristics of a Chinese oriental scripture. So for example this calligraphic ends and these styles are taken from all this elements. So you have to decipher and divide this elements of this calligraphic the main mood

board and take different elements to create an English letter. So these are the small elements of this letter which has a calligraphic style.

So from these elements if you want to create an English letter, so with this element you can create a letter which is English but has a style from the mood board. So first is the mood board. Then English typeface is created from the visual identity of the Chinese typefaces. Then the usage of this in the shop front.

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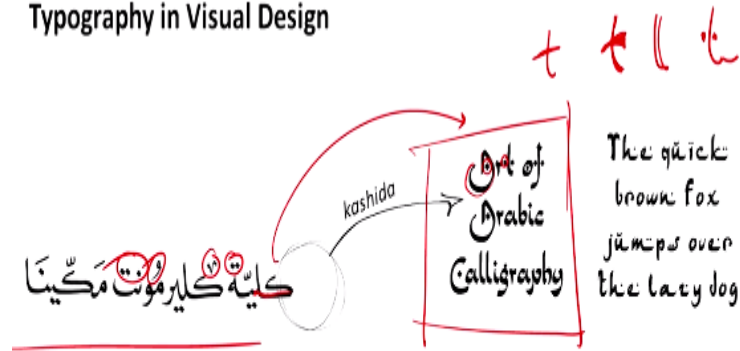


So this is the process in the Chinese typefaces then the English typeface is created and which is used in the shop front. First is creating the mood board where the Chinese typefaces of the basic of your inspiration, the origin of your inspiration will come and then you would do the visual analysis.

So you have to analyze what are the elements of design there in your mood board and take all these element, identify the main major elements, not all the elements which is the major element which is giving the style of the design, identify that and from there you do a visual adaptation, transfer this identified element into English font and the genesis of a new typefaces from a visual identity of mood board and the typefaces can be English or if you want to create a Devanagari typeface it can be Devanagari or other language.

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## Typography in Visual Design



Arabic Typefaces

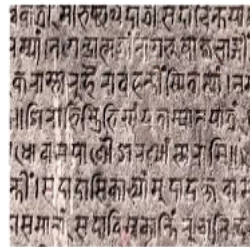
English Typefaces created from visual identity of Arabic typefaces

So another example, Arabic typefaces. Arabic typefaces main elements are not the calligraphic style which is the Kashidas which is the joining lines of one letter to the other and these dots and other elements. So these are the elements which has been translated into the English one. So A is translated into this to create the visual appearance of a Kashida and all this squarish dots are added over here in terms of t.

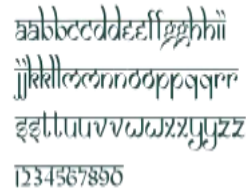
The Japanese style of t could have been like this and the Arabic one looks like this which can have a Kashida and the square dots. So it becomes more Arabic and this becomes more oriental in style. So you have to decipher what is the main style of the design and then you can change it. And all these things it comes in between something in between pictorial and legible. So you have to give a little bit more time than body of the text and also this is intentional because you can memorize this as a particular typefaces and it has a particular style. So that it registers in your mind.

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## Typography in Visual Design



Devanagari  
Typefaces



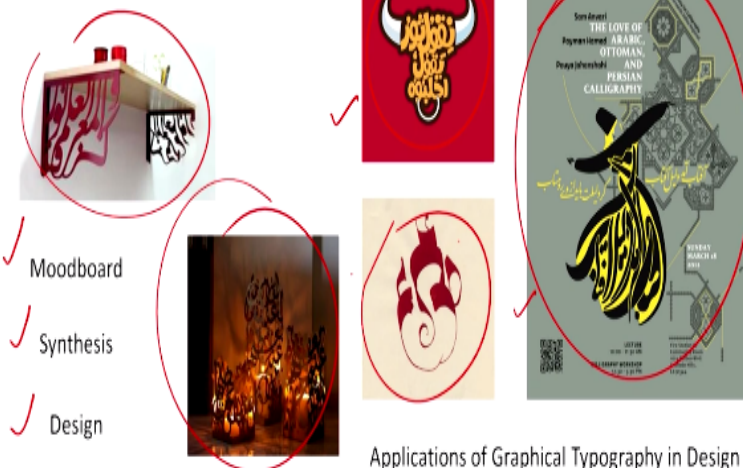
English Typefaces created from visual  
identity of Devanagari typefaces

Now few other examples, so this is from Devanagari. This is translated into English. So in Devanagari typefaces this top line is there and this letters hang from this top line. So to mimic that into design English typefaces so they have created this and these are the matras and other elements which you find in the Devanagari scripture which is added as a ascenders and descender. So it creates a visual look simile with the Devanagari font.

This is a typography project where to accustomed the English speaker with the Devanagari typefaces which is just superimposed and to create the simile between these two typefaces. But this is one of the example which has a similar process of designing.

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## Typography in Visual Design



Now few of the product design and the graphic design and poster design where it can be created the similar process is there. So create a mood board, synthesis, and then design visual adaptation. So application of graphic designs, it can be, this clearly gives a very Saracenic look. This also has a Saracenic and Urdu style and this has a connotation with Devanagari scripture.

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## Typography in Visual Design

### Achieving Hierarchy

A Typographic hierarchy expresses an organizational system for content, emphasizing some data and diminishing others.

A hierarchy helps readers scan a text, knowing where to enter and exit through a visual guideline and focal points.

✓ Each level of the hierarchy should be signaled by one or more cues, applied consistently across a body of text. A cue can be spatial (indent, line spacing, placement on page) or graphic (size, style, color of typeface). Infinite variations are possible.



Now achieving hierarchy with the typography is what you need to understand when you are designing the frontend of the website or web application or mobile application or designing the graphic user interface. All the informations will not have the same level of hierarchy. So you have to differentiate the hierarchy for a better communication with the user. So this creation of hierarchy is very important for the information.

So what information should go first in user's mind should have the highest level of hierarchy and the next level of information should have next level of hierarchy and so on so forth. So that you have to create with the typography with all other visual design element which we have discussed earlier. But typography plays a major role into this hierarchy as well. So typographic hierarchy expresses the organizational system of content emphasizing some data and diminishing others.

So you have to emphasize some data which is more important and which should be of a quick communication that has to be emphasized and you have to diminish the emphasize of other data which is of lesser importance. And this hierarchy helps the reader to scan the text when they just

want to scan it and take a quick decision and then enter to the next level of information. So each level of hierarchy should be signaled by one or more cues.

Each and every level of hierarchy should have some differences. Otherwise if it is all same then it will not communicate with the users properly. So this visual cues can be applications of the line spacing, color, size, style, placement and all these things. Placement also plays a very important role because we have discussed about the rule of third. We have discussed about the Gutenberg's diagram and the F pattern of Jacob Nelson's F pattern.

So where do you place the important information that also changes the hierarchy along with the other things with size, shape, different fonts and the colors and spacing. Spacing is also important when you write something here with a lot of white space. It eventually gets more importance. And if you have a same x-height and all the elements are same and if you write more information here with a similar amount of white space around it, this has lesser level of hierarchy than this.

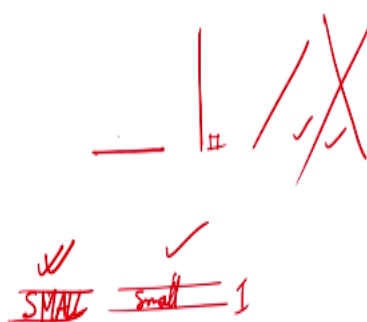
All the elements and x-height typefaces and everything can be same but still this has more emphasis than this system. So the amount of white space or this figure-ground relationship, the balance between this also helps in hierarchy.

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### Typography in Visual Design

Creating hierarchy within running text

- ✓ • *Italics*
- ✓ • **Boldface**
- Change in colour ✓
- SMALL CAPS ✓
- Variation in fonts ✓
- Serif and Sans-serif



Now what are the elements to create the hierarchy? One is Italic. If everything is in Roman, one particular thing is Italics. It will create more emphasis because Italics is more ornamental than Roman because it has a higher degree of inertia. Inertia is another principle of design. So the upright straight line has lesser inertia. The leaning line, the horizontal line has the least amount of inertia. This upright straight line which is 90 degree has next level of inertia.

And the slant lines has more inertia and it grabs more high attention. The bold face has more emphasis. If you change the color, everything is in achromatic. One color is getting highlighted, then it is definitely, it will augment in the hierarchy. Small caps, so within small letter if the small capital letters are more the easy to read and has much value in the hierarchy. So if you type the same height, the small letters are there and then the capital letters are there.

This will have more visual attention than this. So variation in font; if there are lot of variation in font, then it can create a hierarchy. So everything is in one font and in particular in one part you are changing the font so that will generally grab eye attention. Serif and Sans Serif this Sans Serif generally has a less attention and Serif creates more attention because Serif is generally more ornamental.

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## Typography in Visual Design

Creating hierarchy within running text

- *Italics*
- **Boldface**
- Change in colour
- SMALL CAPS
- Variation in fonts
- Serif and Sans-serif

Legibility comparison: Print media and Digital-display media

Serifs designed for Print media

Sans-serifs suitable for digital display

new  
alphabets

Emperor

Now legibility comparison in print media and digital media which we were talking about. Serif is designed for print media. We were talking about these ends is easy to perceive when we read on



the print media and Sans Serifs are more suitable for digital media because Serif ends sometimes becomes pixilated.

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## Typography in Visual Design

### Impact of Colour selection on Legibility

Legibility of text also depends on the text colour and the colour of the background.

Some colour has more legibility while associated with particular background colour.



Now impact of color selection in the legibility. So legibility of text also depends on the color contrast. Which color you are using on top of what in contrast with which background. Some color has more legibility while associated with a particular background of color. So it is not just color of the text it is the relationship between the color of the text as well as with respect to the background.

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## Typography in Visual Design

### Impact of Colour selection on Legibility

Paul Arthur and Romedi Passini, in 1992, have created a visibility chart based on contrast index of text and background colours.

HUE	L* (Y)	CONTRAST VALUE AND RELATIONSHIP															
RED	50	19	28	37	46	55	64	73	82	91	100	109	118	127	136	145	154
YELLOW	91	19	28	37	46	55	64	73	82	91	100	109	118	127	136	145	154
BLUE	29	19	28	37	46	55	64	73	82	91	100	109	118	127	136	145	154
ORANGE	54	19	28	37	46	55	64	73	82	91	100	109	118	127	136	145	154
GREEN	70	19	28	37	46	55	64	73	82	91	100	109	118	127	136	145	154
PURPLE	28	19	28	37	46	55	64	73	82	91	100	109	118	127	136	145	154
PINK	30	19	28	37	46	55	64	73	82	91	100	109	118	127	136	145	154
BROWN	37	19	28	37	46	55	64	73	82	91	100	109	118	127	136	145	154
BLACK	12	19	28	37	46	55	64	73	82	91	100	109	118	127	136	145	154
GREY	39	19	28	37	46	55	64	73	82	91	100	109	118	127	136	145	154
WHITE	95	19	28	37	46	55	64	73	82	91	100	109	118	127	136	145	154
BROWN	37	19	28	37	46	55	64	73	82	91	100	109	118	127	136	145	154

L\* = Light Reflectance of a particular colour

SCIENTIFIC CALCULATION	EXAMPLE
$\frac{R1 - R2}{R1} \times 100 = H$ <p>R1 = Highest color value R2 = Lowest color value H = Contrast value</p> <p>Contrast value must be at least a value of 70</p>	<p>1. TEXT</p> <p>2. TEXT</p> <p>Contrast value must be at least a value of 70</p>

The contrast Value (H) has to be at least 70 or more for effective legibility

Source: Wayfinding in Architecture, by Paul Arthur and Romedi Passini

So there is a legibility chart which is available and there is a book by Paul Arthur and Romedi Passini. The book is called Wayfinding Design and there are lot of other elements of Wayfinding Design is discussed but he have also discussed about the signages in Wayfinding design on navigation. In that part he discussed in detail about the typefaces, which typeface should be used on which background for better legibility in the signage design.

But that same theory can be applied here in the GUI or the graphic user interface design when you are designing the frontend with a visual communication element and applying the color and selecting the text. This theory will be very much valid. He have written this book in 1992 and have created a visibility chart based on the contrast index of the text and the background color. So this contrast index is the value different of two colors.

So this is the scientific formula which based on that he have created this chart. So  $K1 - K2 / K1$  where  $K1$  is the highest color value. Here the highest color value is white. White has a 85 and then red has 13. So here 85 is white minus 13 divided by 85 is this into 100 is what H is. So that is the indicator H. So H is the contrast value and for optimal contrast value it should be at least more than 70.

So if the H becomes more than 70 and here you can see if this difference is more, it will definitely become more because it is on the top size. So if the difference is huge, so you have to select the color whose value difference is more in a general way. So this is the hue and their relative value which is  $K1$  and  $K2$ . So from here you can select and see whether this is more than 70. And so this is a contrast value and their relationship in the chart.

And sometimes the few colors does not go with each other. For example if there is a colorblind people, they cannot read green on top of red. So irrespective of their value difference you should not use this. So few colors are not suitable for each other. And also the color will come from the brand identity and the holistic style of your design. So many other factors are also there and when you select this just check with the value difference.

And you can see the value difference also there in the Photoshop or illustrator or whatever software you are using and you can also interpret yourself whether this contrast is going well or not.

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Now in the typography in the poster design, this is James Montgomery's one of the famous poster design during the World War and you can see this color, this blue and red color goes with the U.S. colors, U.S. flag. So it connotes the U.S. national army and then also the dress colors and everything goes with this. And the red color has because this is warm color and it is written in the, and the U.S. army enlist now this main information is written in the warm color.

This is a Art Deco poster. This is designed by Cassandre. And you can see the hierarchy over here. And this contrast black and white gives a very, this emphasize the hierarchy and this is the name of the voyage which talks about the, this is the poster for the crews. And then the next level of informations are on the next level of hierarchy. Also the x-height is more over here. And here you can see underlined term, this is another way of emphasizing a font.

So if there is a underline with a very contrasting color, blue is getting underlined with a red, so that is within this sentence also this word is getting highlighted. So I want U in the U.S. army enlist now. So this poster is also emphasizing this word U and if you look at the poster the way the man is pointing at, so this is also emphasizing this word in the graphics.

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### Typography in Visual Design: Creating hierarchy



Now few other examples where there is a connection with the style of design. So this is the name of the movie. This is a movie by Satyajit Ray, Shatranj ke khilari. And if you look at the way it is designed, it has a connotation with the chess, this style of the chess and that is definitely having a higher hierarchy because it is designed and it has more pictorial quality than the other information. So it might not be, hierarchy might not start from here.

It can be anywhere in the position. It depends on where you want to put your most important information because this king is lying there and it has a connection with this. So this part of the poster has the main focal part and your eye travels from this generally eye grabs more attention in the photograph. So photograph has the highest level of highest power to attract eye and from there your eye will go to the poster which has a visual connection with the photograph because it has more pictorial quality and from there your eye will move up.

So it is not from top to bottom eye movement. Rather it is from the bottom to top eye movement and then from here you can again come to this information which is written in very small letter. So after reading this next you read about who is the director and then other information. So Satyajit Ray's name is on top of it. But it still does not have the highest level of hierarchy. Rather this part has the highest level of hierarchy.

Similarly this is another poster design by Satyajit Ray and then this part becomes the highest level in terms of typefaces but there is a graphical part and then there are elements on top and on the bottom. So it kind of visually balances the poster. Then here this is again the Satyajit Ray's poster. So on mostly warm background which is red and yellow, the blue has the highest level of attraction value because it is almost a contrasting color.

And it juxtaposed with contrasting color which is yellow, the complimentary color of blue is orange. But this is juxtaposed by yellow and red which is part of which compliment, you can say it is kind of a split complementary part of this orange. And only this part is blue and there is a little bit blue tint over here. So this has a highest level of hierarchy. Then few photographs are there. And even the photographs does not contain the blue color so to give emphasis on the text.

And then some other texts are there which has the next level of hierarchy. So I have used Bengali script so that you can concentrate just on the visual without reading the text. If you cannot read Bengali just to look at the graphic poster and understand which can have a highest amount of which can be on the higher level of hierarchy and which can be on the lower level of hierarchy. Now in the newspaper also we use this hierarchy.

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So this is somewhat similar to the Gothic font which has a very high pictorial quality. This is, there are New York Times main headline and this is two different day's Newspaper. One is for

normal everyday's newspaper and this is you can understand this is this just after 9/11 attack. So in the normal day's newspaper New York Times this newspaper will have the highest hierarchy.

Then the other newspaper's headlines which comes here and within that there are two subdivision of this heading. So within this FBI's some event. There are one report and the another report and the other report which comes in the next level of hierarchy. And if you want to go through the story, the news and then this is written in small font which is the body of the text. So the elements of the pictorial quality decreases.

This has the highest level of pictorial quality because this is somewhat similar to Gothic font which has lot of elements. So T and other letters has lot of design elements into it. Then they have used Italics to increase the emphasis. Now this font has more width than this. So this is the first news and then the second news and also you know that we start reading from this side to this side so this must be the important news and this must be the next level of important news.

So this is wide, written in wide, this is written in condensed and then there are other news which is relatively smaller and you do not see though it is Italics but you do not see this amount of x-height. And also within that there are lot of variation to create the difference in hierarchy and then there are advertisement which has the least amount of hierarchy. So we also know which also confirms to the Gutenberg's principle.

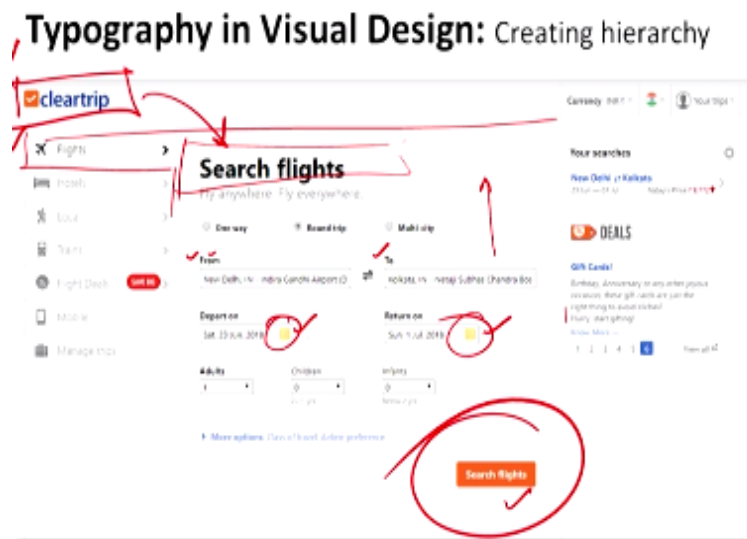
Now in this particular day, this is really very important day for U.S. history and you can see U.S. attacked and hijacked this jet and this all this information overpowers even the name of this paper. So it does not matter which paper is it. This information is so very important for the U.S. citizens so they have really created this hierarchy of this news overpowering the brand and the name of the newspaper itself.

Because they must have particular style and particular font assigned for the body of the text. So they could not change it to the particular more ornate font but still they have gone without changing the font and without changing it to a very, so without using a very pictorial font they

have used a very bold and they have increased the text height and created a very bold statement. And if they have increased pictorial quality, it would have taken more time to read the news.

That is why they have not gone for a increased pictorial quality rather then they have gone for a bold and larger text height. And after that then the other news diminish in the hierarchy and you can see the whole newspaper's front page has the same one news which talks about this and all the news falls under this.

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Now if we look at some examples of websites. So this is a Cleartrip website which helps us book flight and hotels and other travel related, do travel related tasks. So this is first the second page of Cleartrip where the flight is getting booked. So if you look at the information, search flight is a very important information but this does not overpower the logos and the brand's identity. So this contains the color of the Cleartrip's logo and the color.

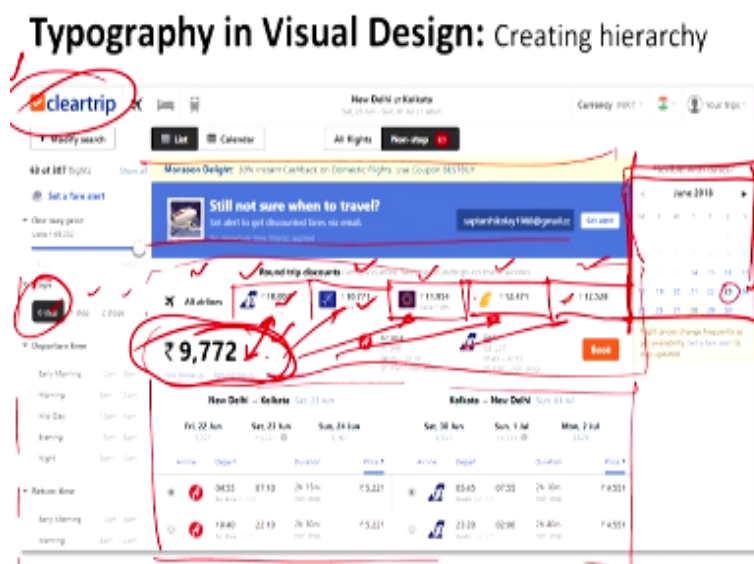
The next hierarchy is this. But still it is more important that is why it is the x-height is more and then it has a thickness in the information and which comes within the book flight information and other informations details which has ample amount of white space so that you do not miss any information. So it could have been cluttered and all this information could have been cramped. But then you miss lot of information. So when you create give lot of white space.

Generally the legibility increases. It might be small font but still the legibility is more. And then these parts are bold so that you know what is your destination, what is your origin and then dates and everything and to create there is a other clickable options. They have changed the color so that you click on this and because of the color this is getting highlighted and then search flight is a really very important information.

Because after you fill up all these things search flight will be the next step. So the next step is getting highlighted and also it follows the Gutenberg's principle. So this is on the last quadrant and from here you go to the next page. And also they wanted to promote the deals and other gift card. So that is why they have added colors.

And the deals is in bold and also the x-height is more so that you do not miss that and today's price, this is also an important information whether it is going up which is getting red or it goes down it will become green. So that is an important information.

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And they are depicting that with the color. Now if we go to the next level of next page, here the important information is not search flight or book. Here the important information is the money. Because people take decision based on the money of which flight they will select. So this informations is really very important and this remains constant because that is the logo of this website and also they wanted to promote something. So those ads are getting flashed.

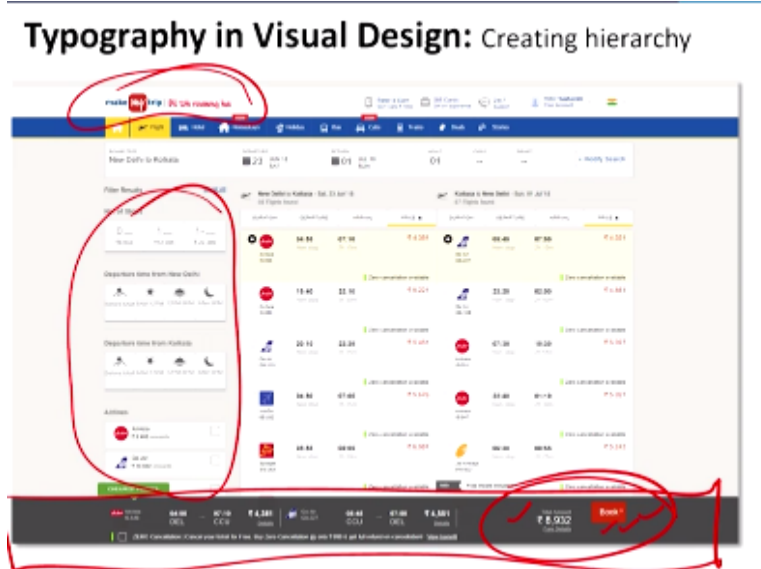


And after money, so this kind of information system is there which you scroll down and start seeing different flights. And also these informations they have created with the different color contrast. So 0 stop, 1 stop, 2 stop this is an important decision and other search criterias is on this side. And another important information is when people want to select a particular airlines. So they might have a frequent flier.

They might be a frequent flier or have some deal with the particular airlines. So that is why also this has quite a lot of information and this gives you the relative information for the price of the ticket and which is also going with the money. So this together talks about the price of the ticket along with the lowest price and relative price of different fliers, different carriers or the fliers.

So here in this page the money becomes a very important decision-making criteria and the next level of decision-making criteria is the date. If you are not happy with the money you can change the date. So here the calendar becomes really big. So you change the date and you decide on which date you want to fly and also here you change the carrier and you decide which carrier you want to fly.

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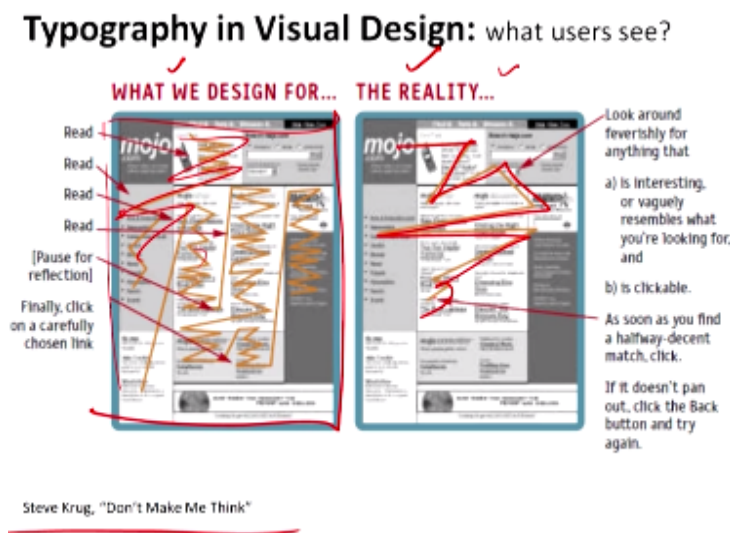


And the similar information similar page is also there in the MakeMy Trip here. They are also creating the similar hierarchy but in a different way. There are many ways to translate

information architecture into a visual design. So information architecture for them will be quite similar but based on the visual design they have changed their websites and also of course the information architecture from Cleartrip's perspective and MakeMy Trip's perspective might also have some differences that is why their position of this information also differs.

So here also you can see decision-making criterias are on that side. Their logo on top but here they have created this book and the information of the money on the bottom to follow the Gutenberg's principle which is coming on the fourth quadrant and it has again a higher contrast big x-height and the book flight is also there to create and also it goes with the different color which also matches with the MakeMy Trip's brand identity. And here also there are based on duration, arrival and other criteria, you can select the flight.

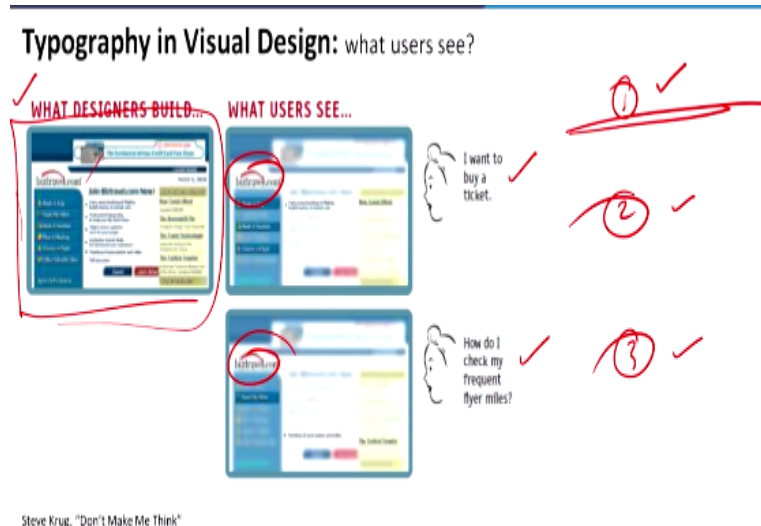
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So the basic theory of this is, this is taken from Steve Krug's Don't Make me Think. This is a page from that book. If you want to know more about the usability, you should read this book which is available online. So what is the difference between what we assume and when the reality is. When there are lot of clutter in the design we assume that user will read everything and scan everything but the reality is user only read which they want to read and which has the higher level of hierarchy and then they skip other information.

So if you cramp lot of information into one page you might lose your client or you might not be able to give the important information to the users. So the hierarchy becomes really important.

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And what designers build are, designers means naive designers who is not well trained designers. What do they build if there is a lot of clutter into the design? They create lot of information. But what users see? User only see the important informations whether they want to buy a ticket. So they will see few information. They will just scan through the page. How do I want to check my frequent fliers or miles when there are different task in their mind.

So user come with the website with some task in the mind and then they will just look for those words within the page. If they do not find that word within your page then they will just leave the page and they will go for the alternative website and they will not use the website. So when there is a task, it is very important for the designer to interpret what are the main task and how many users will come to the website with the particular task 1.

And how many users will come to the website with the particular task 2 and task 3 and so on so forth. So if there is a first most important task is to buy a ticket, flight ticket. The next might be the checking frequent flier. The next might be the hotel. So this should have the highest information regarding, booking a flight should have the highest hierarchy and the frequent flier might be on the next level, hotel might be on the next level. So these information has to be

designed according to that. And visual communication design, selection of typography is really helpful for that.

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### Typography in Visual Design: what users see?



Steve Krug, "Don't Make Me Think"

So here many information again he is talking about all this information might not be relevant for the users. Only provide the relevant informations and if they want to go deeper into that information then lead them step by step and design the information architecture and information architecture and visual design has to be intertwined and it should perform as holistically to give a better user experience for the users. Thank you.