

AUDIO VISUAL EDUCATION

Module II

Non Projected Visual Aids

Unit 1

Graphic Design
-----Instructional Objectives:

1. State three important aspects which assist in producing effective graphic materials.
2. Name the six principles of visual design.
3. Identify the features of each one of the visual design principles.
4. List five visual tools used in graphic design.
5. Relate each of the given visual tools with atleast one function of their application.
6. Apply the principles of visual design for making visuals such as posters, charts and other non projected training aids, later on when completing other units of the module-2.

GRAPHIC DESIGN:

I N T R O D U C T I O N

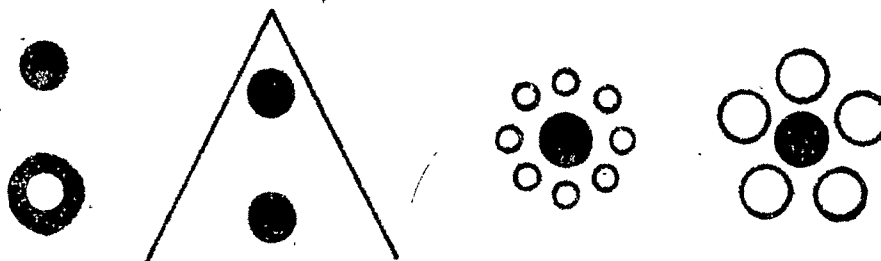
The success of any visual material can be attributed in large measures to the quality and effectiveness of the art work and related graphic materials. These are achieved through organising preliminary thoughts, careful planning, and applying techniques of visual design. One of the first problem faced by an instructor is how to strengthen the attention and interest of the learner. We always want to instruct efficiently and effectively. We would like the learner to learn pleasantly. But this is not always easy. Our aim is to make a learner concentrate upon a new idea or fact or principle that we want him to learn. Visuals help us see. For away things, strange materials, hidden parts and any unapproachable place can be brought near us through visuals. Everyone can see them and get meaning from them. A picture is worth thousand words. You dont have the language when the picture is clear. You learn through eyes. To be effective graphics, charts, diagrams, posters and other visual materials must be properly designed with appropriate layout and verbal explanations are added whenever necessary. These decide the effectiveness of learning through the visual aids.

A PICTURE IS WORTH THOUSAND WORDS



DESIGN PRINCIPLES

A design is a plan for doing something. By planning carefully, you can influence people. Any display material used for instructional purposes must be designed after careful planning. It is therefore necessary for instructors to be aware of certain basic principles of visual design and design tools. Now you imagine a circle 25 mm diameter drawn on a piece of milk white paper. Can you compare this circle with other circles drawn here and say with confidence all the circles are alike and same. Think for a moment.



The background against which the circle is presented to us also has quite a lot to do with our seeing it as plain abstract circle looks different when it is compared to smaller or larger circles, when it is near to, or far from contracting lines when it is lighter or darker, brighter or duller than its background. As you looked at these 'optical illusions,' you were influenced by the

relationship between the circle and its surroundings. This will not be the same, like your looking at circular plates on a lunch table or a circle drawn on your blackboard. Your mind and eyes were seeing differences in the actual shape and size of the circle.

These examples show the truth of the statement "Things are not always what they seem to be". The reverse of this statement is true too, and is very important to you: things can be made to appear what they are not. Herein lies your power of designing visuals. You can guide the eyes of your trainees and persuade their minds to believe what they see.

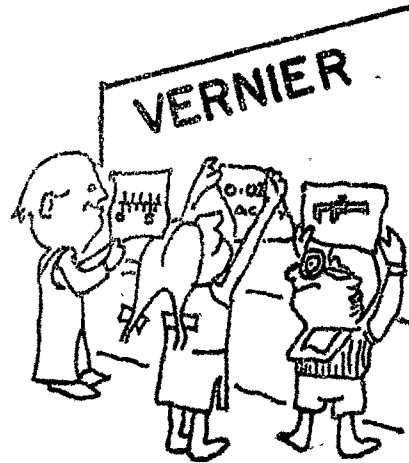
Visual design has two major functions:

1. The viewer can be helped to see a similarity between one thing and another, so that, he may more easily follow through the pattern of the display and grasp the meanings of the ideas presented in their logical order.
2. The viewer can be helped to see differences among the elements used, so that, he will be able more easily to separate and remember the ideas.

Your trainee needs to see how things are related and alike, and also how they are separate and different. Here we should understand a few terms of the design principles used by the visualisers and artists. Dominance, Simplicity, Harmony or Unity, Pattern, Balance and Variation are the terms, which we describe as six principles of design.

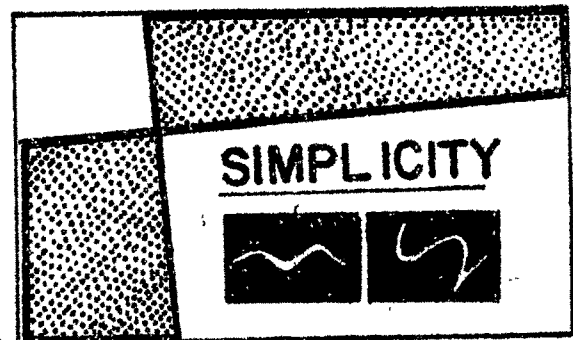
1. DOMINANCE

The key idea in a visual should stand out from the subordinate elements. Show difference between the key idea and the rest of the elements. Main idea should be bold and preferably with heavy lines.



2. SIMPLICITY

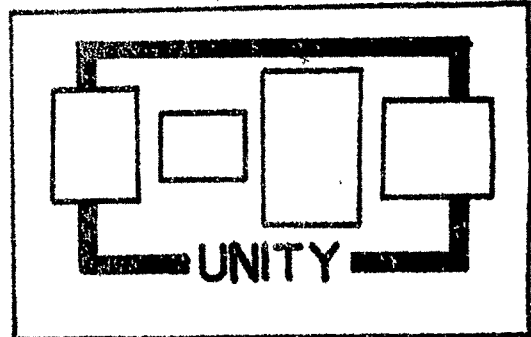
The elements of a visual should be simple and not complex. Your visual should have one idea at a time. In general, the fewer the elements the more pleasing it is to the eye. You should limit the verbal content. Sub-divide or redesign complex data into a series of easy to understand visuals. Use minimum of different lettering styles in the same visual.



3. HARMONY OR UNITY

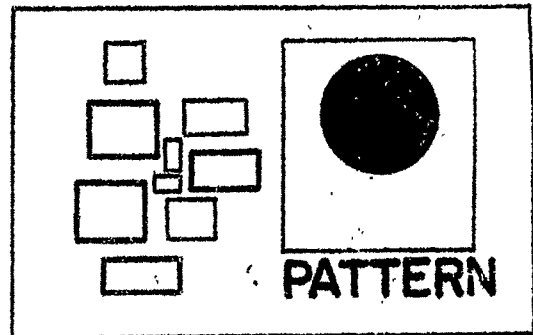
The elements of a visual should fit together to create a harmonious effect. Unity is the relationship

that exists among the various elements of a visual when they all function together. Use of same kinds of lines and the same groupings of shapes also helps unity. We can show similarity through unity. Avoid incongruous - disagreeing colours, tones and lettering.



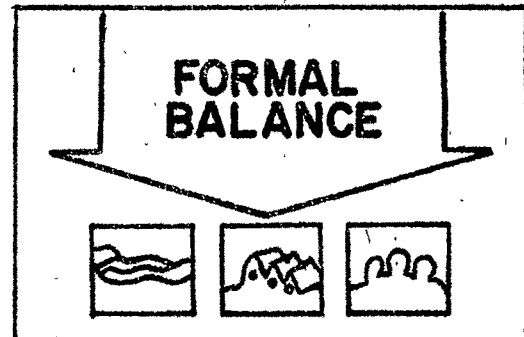
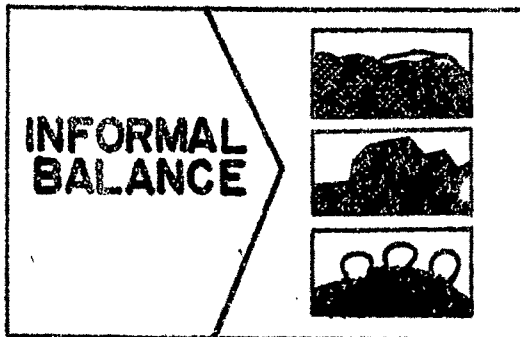
4. PATTERN

The elements of a visual should be arranged in an appropriate pattern. Adopt basic design patterns. You should watch a number of visuals and you can understand the patterns followed by them. If you are planning a series of visuals different patterns will play an important role in avoiding monotony. Show differences through patterns.



5. BALANCE

The elements of a visual should have balance in relation to each other. There are two kinds of balance - the formal and informal balance.



Formal balance is identified by an imaginary axis running through the centre of the visual dividing the design so that one half will be the mirror reflection of the other half. Such formal balance is always static. Formal balance show similarity of arrangement of visuals. Our eyes can see it quickly and easily; formal balance seems orderly and strong.

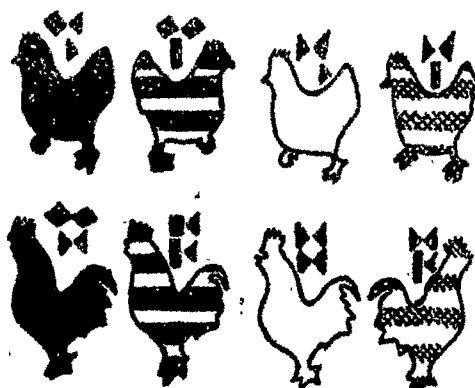
Informal balance is asymmetrical; the elements create an equilibrium without being static. It is dynamic and more attention getting arrangement. It requires more imagination and daring action by the designer. Show similarity through formal balance, differences through informal balance. Keeping the ideas and the presentation simple is always the best practice, but if a complicated presentation is unavoidable, you ought to help your audience by using formal balance.

6. VARIATION

The elements of a visual should have sufficient variation between themselves and their surroundings to be interesting.

A variety of ideas may be used to make your visual stand out and eye catching.

You may show differences through variation. Through the use of size, relationships, perspective, and such visual tools as colour or space, emphasis and variation can be given to the most important elements. Any idea you want to display as a visual must be different from the rest of the visual. Try various arrangements before finally deciding on any arrangements you would like to make for design of any visual.



It is not necessary that instructors or accomplished artists to acquire skills in planning layouts, in making appropriate lettering, and in selecting effective colour schemes. Everyone can learn to use the principles of visual design. By working from instructional objectives and proceeding through an orderly plan to a finished display, students and instructors can evolve ways and means of making the learning environment dynamic and colourful.

Learner activities

1. Go through the following pages of this unit and link the examples given with the theory given here.
2. You may recall the six principles of the design given and find out, from the various visuals available in the visual aids workshop, how far the six principles have been followed. Organise a discussion amongst yourselves.
3. Collect a set of materials for use on a displayboard which will help you to develop understanding of one or more important concepts.
4. Apply the principles of design later, when you prepare charts, posters, cutout, materials for flannelboard etc.

DOMINANCE

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The key idea in a visual should stand out from the subordinate elements.

SIMPLICITY

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HARMONY

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PATTERN

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The elements of a visual should be arranged in an appropriate pattern

BALANCE

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The elements of a visual should have balance in relation to each other.

VARIATION

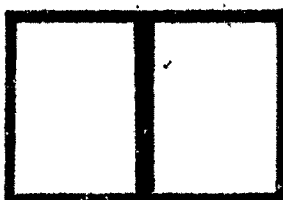
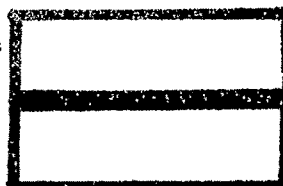
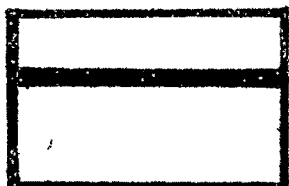
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The elements of a visual should have sufficient variation between themselves and their surroundings to be interesting.

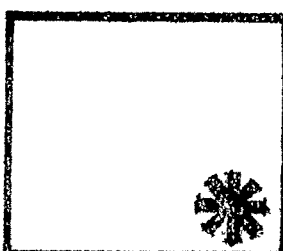
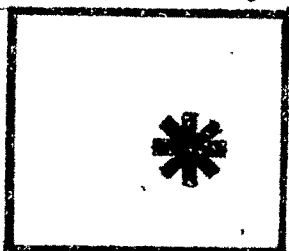
1. DOMINANCE

1. Put one idea or operation into a visual.
2. Place important elements so they receive maximum attention.

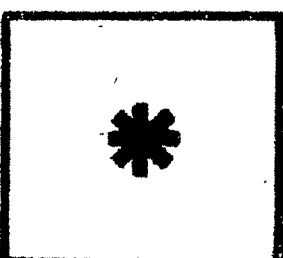
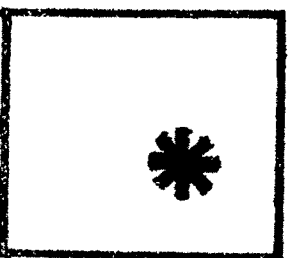
A. Divide the area into thirds, not halves or quarters.



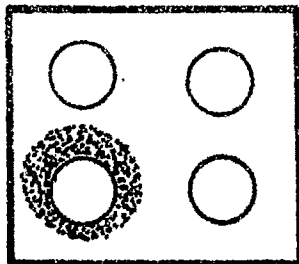
B. Avoid placing the dominant elements near the edge of the area.



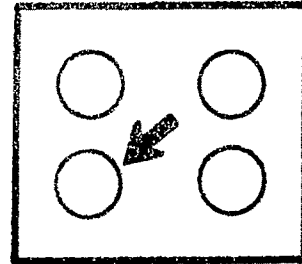
C. Avoid placing the dominant element near the center of the area.



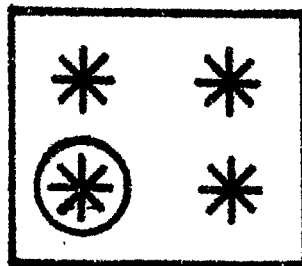
3. Use attention devices to point out the dominant element.



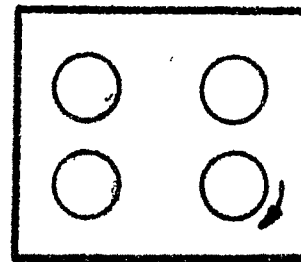
BACKGROUNDS



POINTERS

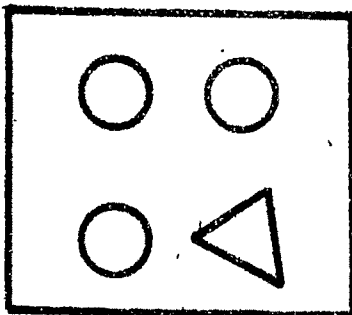


FRAMING

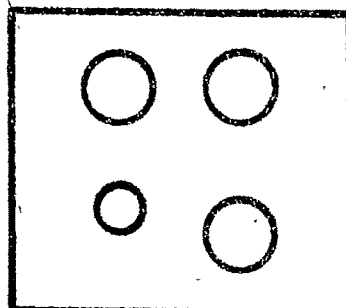


MOVEMENT

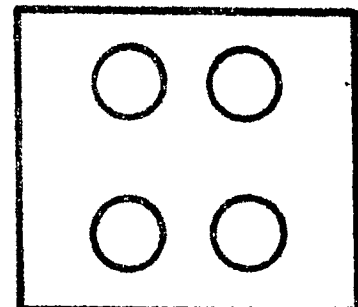
4. EMPHASIZE DOMINANT ELEMENT BY VARIATION.



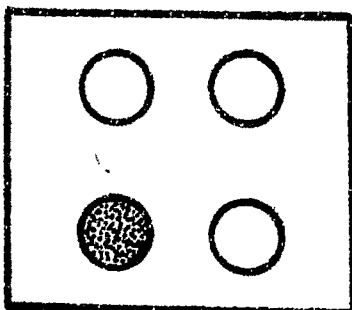
SHAPE



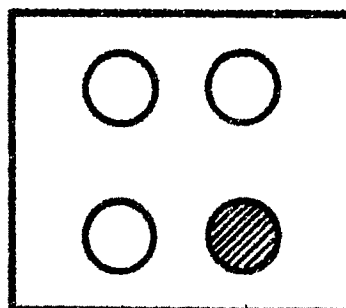
SIZE



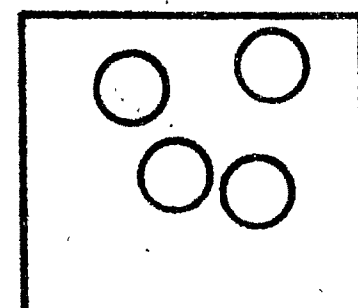
COLOR



TONE

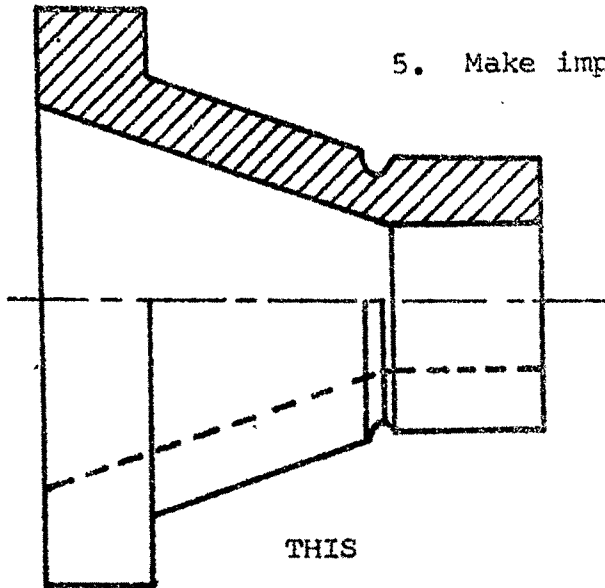


TEXTURE



POSITION

5. Make important elements sufficiently large.



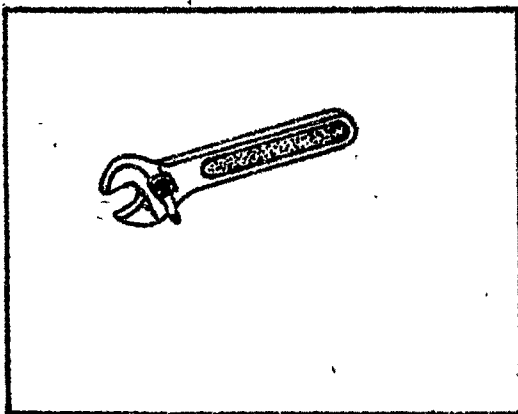
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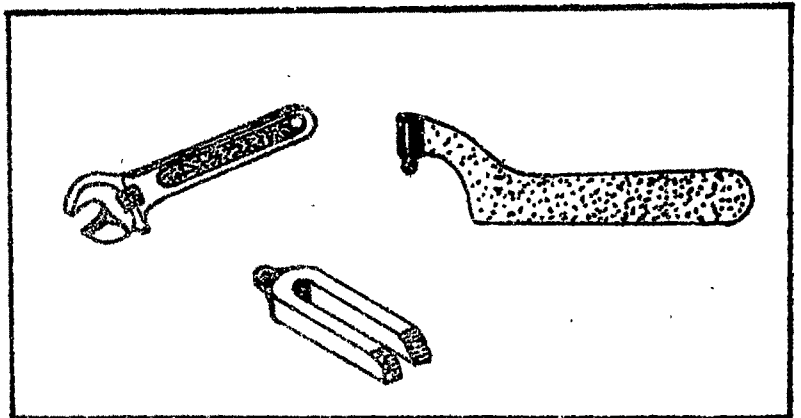
NOT THIS

2. SIMPLICITY.

1. Subdue unimportant elements.
2. Avoid unnecessary elements.

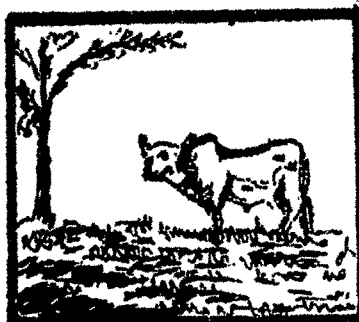


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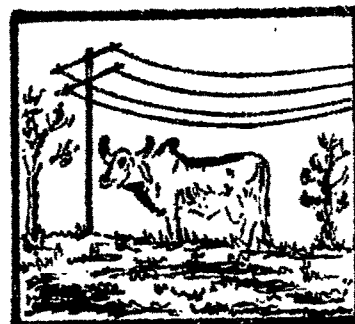


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3. Use simple backgrounds



THIS

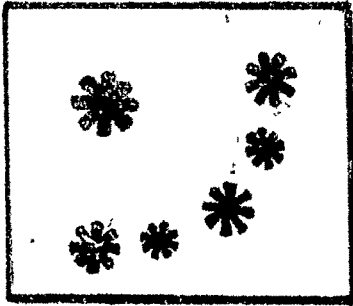


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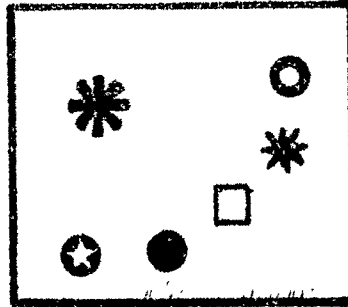
3. HARMONY

27

1. Use elements that are related.

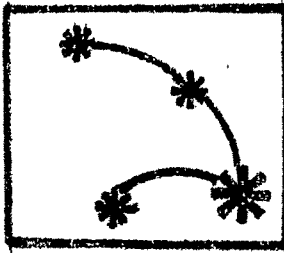


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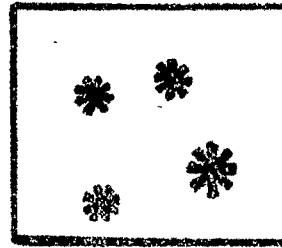


NOT THIS

2. Relate the elements you use

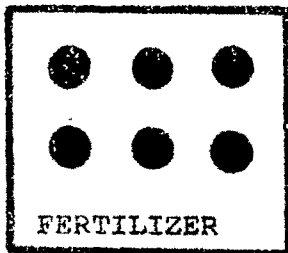


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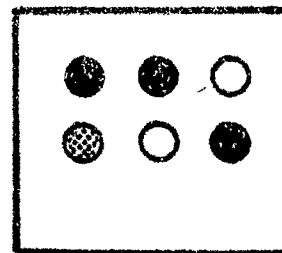


NOT THIS

3. Avoid incongruous colors, tones, and lettering.



THIS

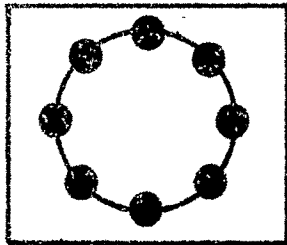


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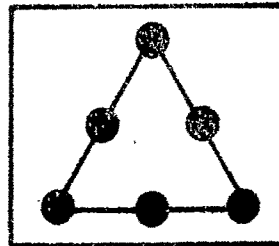
4. PATTERN

28

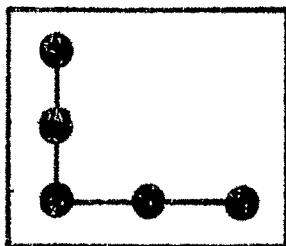
1. Use basic design patterns.



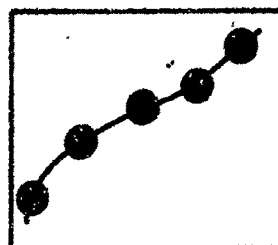
CIRCLE



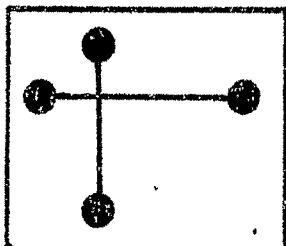
PYRAMID



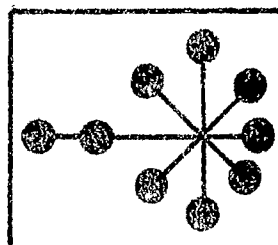
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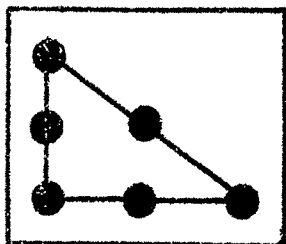
CURVE



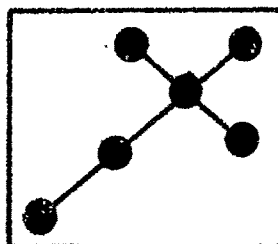
CROSS



RADIAL



TRIANGLE



X

2. Consider meaning of line.

29



DIAGONAL-MOVEMENT



CURVE-FLOW

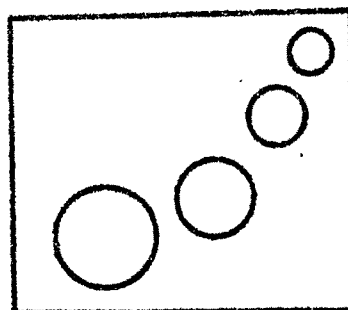
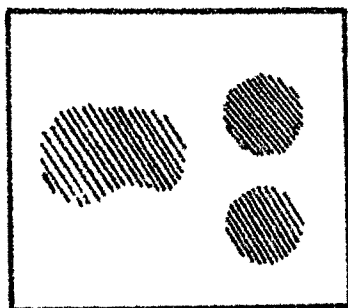


HORIZONTAL-PEACE

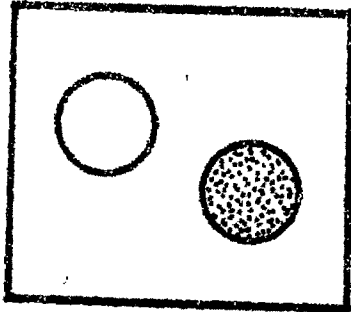


VERTICAL-STRENGTH

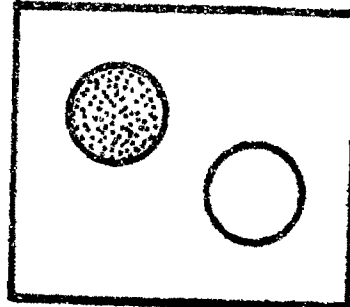
3. Repeat tones, colors, lines, shapes.



1. Place dark areas and large masses below the middle of the Picture.

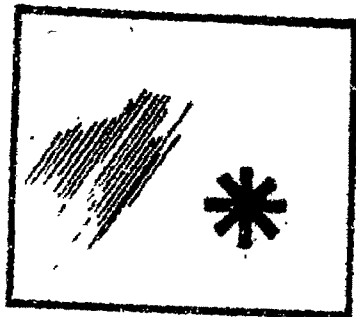


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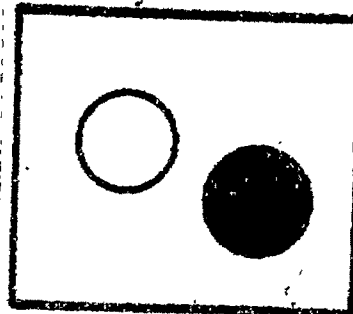


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2. Balance large light elements with small dark elements.

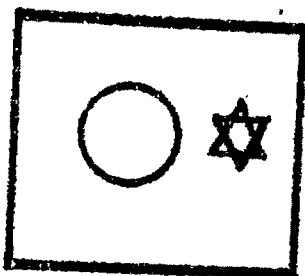


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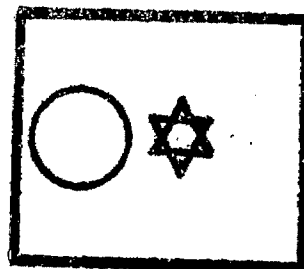


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3. Balance large elements near the center of the area with smaller elements near the edges of the area.



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6. VARIATION

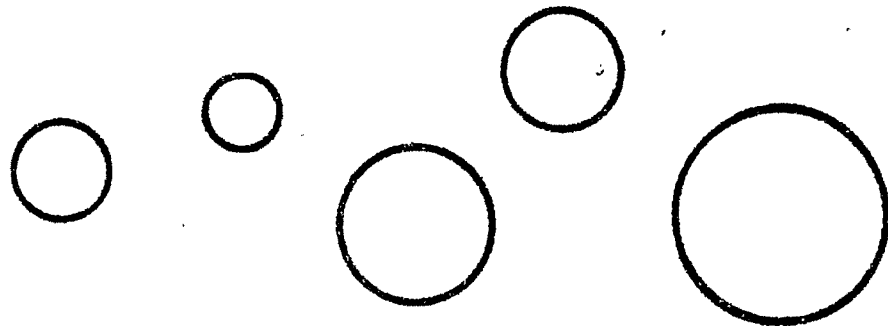
31

1. Use variety to make your visuals stand out. Take advantage of variety of :

SHAPE



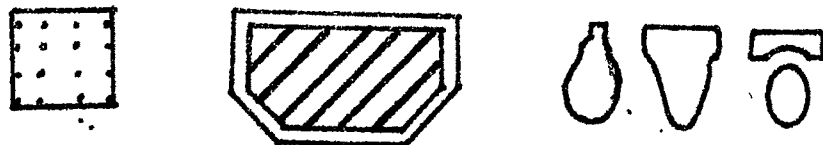
SIZE



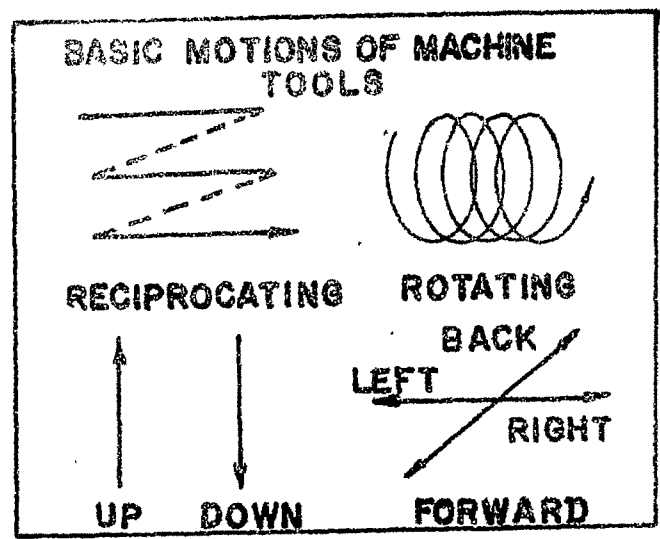
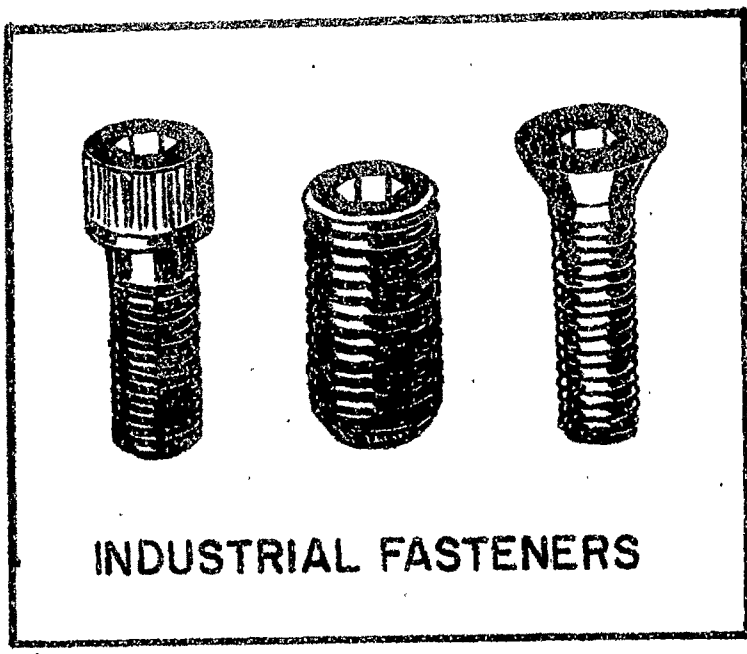
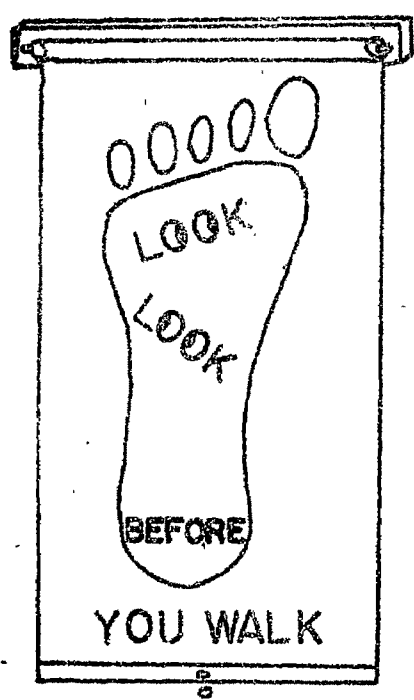
TEXTURE



COLOR



2. Use a variety of ideas to make your visuals eye catching.



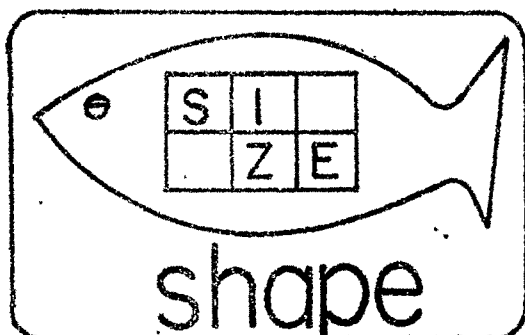
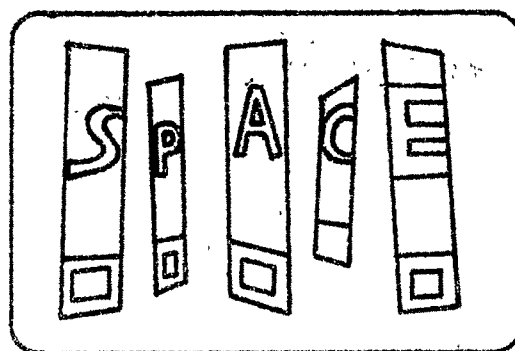
VISUAL TOOLS

We have so far been discussing about the six design principles namely dominance, simplicity, harmony or unity, pattern, formal & informal balance and variation. As we have been discussing the design principles, we noticed that certain things help us to guide the attention of the viewer. To the successful use of the above design principles, we must learn to use the tools of visual design namely space, size & shape, line, texture and colour. An understanding of visual tools is essential and necessary.

1. SPACE

Any object has little reality for you, unless it is in some relation to you and the space which holds you both. Only when space is used carefully can the elements of design become effective. A display space has definite limits, actual boundaries and limitations within which you must work.

Open space around visual elements and words will prevent a crowded feeling.



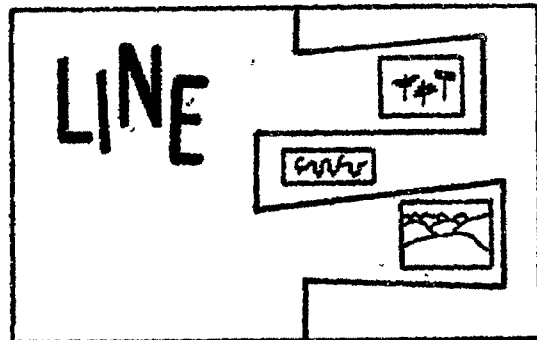
2. SIZE & SHAPE

Size and shape help you plan your visual. Unusual large or small objects demand special attention because they are out of ordinary. You may emphasise

through size the most important things. You don't have 34
to stick to reality. Everything in your visual can be
reduced or enlarged. You can even make one of the objects
stand out as big or small and catch the attention. You want
your shape to get attention or form part of the quiet back-
ground. Pick the right shape for the specific job you want.
You can omit the minute details keeping only the essentials.
Unusual shapes can motivate the viewers. With shape and size
you can add power into your design.

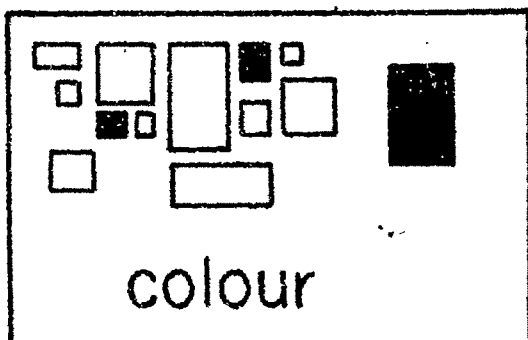
3. LINE

A line in a visual can connect elements together and will also direct the viewer to study the visual in a specific sequence. How can we use these different lines in making designs? If they are to have meaning, they are to go together. Lines tend to reinforce one another. It is also easy to see that contracting lines will attract more attention and stimulate a greater feeling of action.



4. COLOUR

Colour has the great power to attract the attention and interest of most people. It is an important feature to most visuals. Many studies have shown that colour seems to attract initial attention better than black and white and that people remember a thing better with colour pictures.

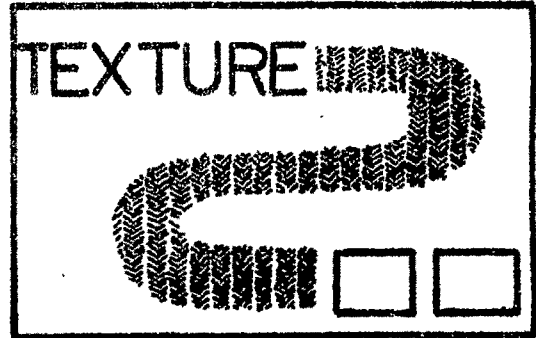


A colour repeated in different parts of a display tends to show a relationship among those parts. 35

5. TEXTURE

Texture is another of the tools that you can use to make your visuals more interesting. It is an element that may serve as a replacement for the sense of touch and can be used in much the same way as colour. It will give emphasis on separation, or to enhance harmony and unity.

Repetition of certain texture within the design can show that the two ideas are similar and are to be compared. Like repetition of shape or colour or line, use of the same texture here and there in a design tends to lead the eye from one spot to another.

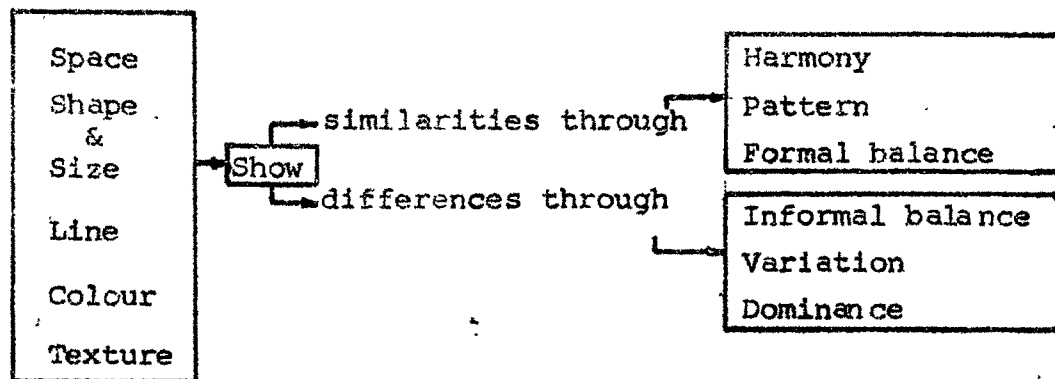


SUMMARY

The power of a planned design is very subtle. It influences viewers. Zebra crossings on roads have specific meanings. Yellow lines on the middle of the road has also similar meanings. These will have different meanings elsewhere, and done difficulty at the same place. Even without using top level concentration, these help you to act in a specific manner.

Each person uses visuals differently, because he has different set of interests and problems. Each one will read into it something different. Yet you can plan your visuals using the tools of space, size & shape, line, colour and texture, to make your designs as effective as possible, as efficient as possible, and to come to the conclusions that you have planned.

Here is a diagram representation of what we have been ³⁶ saying about the tools and the principles of design. You can use them to help your audience to learn from visuals.



Learning activities

1. You may recall the six tools for design that contribute to the successful use of the design principles and link it with the principles of design, in making visuals for practice teaching.
2. Plan activities for design of visuals to make charts, posters, bulletin board display etc. using the tools of visual design and the principles of design.
3. Think of the salient features of displayed in the visual aid workshop and discuss amongst yourselves how far the principles of design and the tools of design have been used.
4. Plan for the design of the visual display of the materials available in the visual aid workshop, using techniques taught through this unit.