



Odisha State Open University



Commonwealth of Learning

2D ANIMATION

Broadcast Design (Practical)



Diploma in
Multimedia and Animation (DMA)

DMA-03
BLOCK-4

2D Animation

Block – IV: Broadcast Design (Practical)



ଓଡ଼ିଶା ରାଜ୍ୟ ମୁକ୍ତ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ସମ୍ବଲପୁର
ODISHA STATE OPEN UNIVERSITY, SAMBALPUR

2D Animation

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Course Overview

Welcome to Broadcast Design (Practical)

In this block, you are going to study about the Design of Broadcast Design. Before setting your hands into the practical, you have to learn about the theoretical aspects of Visual Images. There are some common ingredients of a successful broadcast design. Storyboarding, title/credit making, and stop motion animation are the vital elements for a successful broadcast design.

Working with Visual Images

This course is intended for people who want play with visual Images. A novelist can express his or her thought using language. A page designer also expresses his thought or a certain intention with elements of design and does it effectively along with the design principles. If a designer wants to say something through the creativity of design, then he/she must use the elements (line, color, etc) as a communication tool.

Dr Story Boarding

This course is intended for people who want to create a perfect drawing. A good storyboard allows you to explain your crew about what are you planning to achieve. It saves you from trying to convey what you want with wordy explanations and frustrated hand gestures.




Titles & Credit making

This course is intended for people who want to do Title & Credit Making. The textual content in films are generally includes film title, tagline, credit block, and names of leading characters. Title design plays an important role in suggesting the theme of the film. Due to advancement in the technology and other influential factors, title design has seen gradual changes in terms of form, style, texture, colour, composition, perspective and typeface.

Stop Motion Animation

This course is intended for people who want to become an Animator. Stop Motion Animation is a technique used in animation to look at static object as a moving animation on a screen. This is done by moving the object in increments while filming a frame per increment. When all the frames are played in sequence it shows movement. Clay figures, puppets and miniatures are often used in stop motion animation as they can be handled and repositioned easily.

This video will provide a brief overview of this course.

Topic	YouTube link	QR Code
Video 1-Character LIP SYNCHRONIZATION	https://youtu.be/FTbIhatcqVY	



Course outcomes



Outcomes

Upon completion of preproduction you will be able to:

- Learn about various design elements
- Balance all the design principles
- Work interactively, co-operatively and collaboratively to plan and create a storyboard
- Analyse the adaptation and evolution of the title making
- Understand the use of fonts, image resolution, colour in titles making
- Learn about the basics of Stop motion animation

Timeframe



How long?

This course will be completed within “4” classes.

This course is of “1” credit.

8 hours of study time is required for this unit.

Study skills



This is a combination of theory and practical.

Hence, you should have access to a personal computer or personal laptop for better understanding of this unit.

Each and every option is explained step by step in the course material.

Apart from this course material, the learner needs to adopt the tendency of learning from multiple sources i.e.;

Internet tutorials

Video tutorials on YouTube



Collaboration with people working in the industry etc.

Only classroom study will not make you a professional. You have to be active to grab the opportunity of learning wherever you get a chance.

Need help?



Help

In case you need any help, you can browse the internet sites such as youtube.com for video tutorials about the subject.

Assignments



Assignments

There will be some assignments at the end of each unit.

These assignments are mostly practical based and should be submitted in CDs or DVDs. Theoretical assignments are to be submitted written on A4-size sheets.

All assignments will be submitted to respective study centres of the Odisha State Open University or as directed by the co-ordinator.

All assignments should be unit wise on separate CD/DVDs clearly mentioning course title and unit on the top. Theoretical assignment will be neatly filed or spiral bind with cover mentioning necessary information of course, student detail on top.

Assessments



Assessments

There will be "1" assessment for each unit.

All practical assessments will be submitted to the OSOU.

Assessment will take place once at the end of each unit.

Learner will be allowed to complete the assessment within stipulated time frame given by the university.



Video Resources



This study material comes with additional online resources in the form of videos. As videos puts in human element to e-learning at the same time demonstrating the concepts visually also improves the overall learning experience.

















You can download any QR code reader from Google Play to view the videos embedded in the course or type the URL on a web browser.

Getting around this course material

Margin icons

While working through this course material, you will notice the frequent use of margin icons. These icons serve to “signpost” a particular piece of text, a new task or change in activity; they have been included to help you find your way around this course material.

A complete icon set is shown below. We suggest that you familiarize yourself with the icons and their meaning before starting your study.

			
Activity	Assessment	Assignment	Case study
			
Discussion	Group activity	Help	Note it!
			
Outcomes	Reading	Reflection	Study skills
			
Summary	Terminology	Time	Tip



Unit-1

Working with Visual Images

Introduction

The design elements and principles described here can be an analyzing frame for a design. They can inform us where to begin, what to probe and how to analyze.

This information can also give an expressing tool to the designer. A novelist can express his or her thought using language. A page designer also expresses his thought or a certain intention with elements of design and does it effectively along with the design principles. If a designer wants to say something through the creativity of design, then he/she must use the elements (line, color, etc) as a communication tool. So it is very important to know the kinds and meanings of the design elements and principles.

Outcomes



Outcomes

Upon completion of this unit you will be able to:

- Understand the importance of design while working with image design
 - Learn about various design elements
 - Balance all the design principles
 - Know the designs basics
- Understand the importance of visuals



Terminology



Terminology

Movement:	Movement is a visual image occurs when objects seem to be moving in a visual image.
Rhythm:	Rhythm is the repetition of visual movement of the elements-colours, shapes, lines, values, forms, spaces and textures.
Variety:	Variety consists of the differences in objects that add interest to a visual image.
Shape:	A shape is formed when a line encloses an area.
Values:	Value is the relative degree of lightness and darkness in a design element.

Design Elements

The elements are components or parts which can be isolated and defined in any visual design or work of art. They are the structure of the work and can carry a wide variety of messages. The details may be differentiated by researchers, but we will study 'point or mark', 'line', 'shape', 'forms', 'space', 'color', and 'texture' in this section.

Point or Mark

A point or mark is the smallest and most basic element. Often it is the personal 'handwriting' of the artist that can be natural or learned. It can vary in size, value, regularity or irregularity and can be used alone or as a unit in a group which forms a line or shape in the image. Marks can be used to form a value or pattern (placed close together forms a darker value, further apart forms a lighter value) or to delineate space (larger means closer, etc.). A good example of the use of marks is the ink drawings of Van Gogh. The Impressionist painters used what could be called Patches and the Pointillists, such as Seurat used the dot.



Even though there is only one point or mark on a white blank page, it can catch our sight. If there are two points, we will make a connection and see a line. If there are three points, it is unavoidable to interpret them as a triangle as the mind explains the connections. These are called as Grouping or Gestalt. Gestalt is the fundamental tool, a designer or artist uses to build a coherent composition.

Line

A line is a form with width and length, but no depth. Artists use lines to create edges, the outlines of objects. A line is created by the movement of the artist's pen.

The direction of a line can convey mood. Horizontal lines are calm and quiet, vertical lines suggest more of a potential for movement, while diagonal lines strongly suggests movement and give more of a vitality feeling to a picture.

Shape

Shape is an area that is contained within implied line or is seen and identified because of change in colour or value. Shapes have two dimensions that are length and width. It can be geometric or free-form. Design in painting is basically the planned arrangement of shapes in a work of art. In a picture, the shapes that the artist has placed are considered to be the positive shapes. The spaces around the shapes are the negative spaces. It is just as important to consider the negative space in a picture as the positive shapes.

Forms

Form describes volume and mass or three dimensional aspect of objects that take up space. (Shape is two-dimensional). Forms can be viewed from any angles and we should observe it from different angles in order to analyse its actual structure. When you hold a baseball, shoe or small sculpture, you are aware of their curves, angles, indentations, extensions and edges - their forms.

Space

Actual space is three-dimensional volume that can be empty or filled with objects. It has width, height and depth. Space that appears three-dimensional in a two-dimensional painting is an illusion that creates a feeling of actual depth. Various techniques can be used to show such visual depth or space



Colour

Colour has three properties. The first is hue, which is the name of the colours. The primary hues are yellow, red and blue. Secondary colours are made by mixing two primaries. Intermediate colours are mixtures of a primary and adjacent secondary colour.

The second property of colour is value, which refers to the lightness or darkness of hue. The third property of colour is intensity, which refers to the purity of the hue (also called "Chroma").

Texture

Texture refers to the surface quality, both simulated and actual artwork. Techniques used in painting serve to show texture, i.e. the dry brush technique produces a rough simulated quality and heavy application of pigment with brush or other implement produces a rough actual quality.

Design Principles

Balance

Balance is a psychological sense of equilibrium. As a design principle, balance places the parts of a visual in an aesthetically pleasing arrangement. In visual images, balance is formal when both sides are symmetrical in terms of arrangement. Balance is informal when sides are not exactly symmetrical, but the resulting image is still balanced. Informal balance is more dynamic than formal balance and normally keeps the learner's attention focused on the visual message.



Title- Balance

Source- pixabay.com

Link-<https://www.pexels.com/photo/balance-macro-ocean-pebbles-235990/>



There are three main types of balance,

- Horizontal balance,
- Vertical balance,
- Radial balance.

Proportion

Proportion refers to the relative size and scale of the various elements in a design. The issue is the relationship between objects or parts of a whole. This means that, it is necessary to discuss proportion in terms of the context or standard used to determine proportions.

Perspective

Perspective is created through the arrangement of objects in two-dimensional space to look like they appear in real life. Perspective is a learned meaning of the relationship between different objects seen in space. Is the dark rectangle in front of a circle or beside a semi-circle?



Title- Perspective

Source- pixabay.com

Link-<https://www.pexels.com/photo/bridge-clouds-cloudy-dark-clouds-556416/>

Perspective adds realism to a visual image. The size of a rectangle will be considered small until another reference object's size is compared such as the size of a desk or the size of a building. Perspective can be used to draw the audience into a visual. Perception can be achieved through the use of relative sizes of objects, overlapping objects and blurring or sharpening objects.

Emphasis

Emphasis is used by artists to create dominance and focus in their work. Artists can emphasize colour, value, shapes or other art elements to achieve dominance. Various kinds of contrast can be used to emphasize a centre of interest. Emphasis can also be achieved by isolation and / or placement.

Movement

The way the artist leads the eye in, around and through a composition. The path the eye follows. Motion or movement in a visual image occurs when objects seem to be moving in a visual image. Movement in a visual image comes from the kinds of shapes, forms, lines and curves that are used. Diagonal lines tend to create the illusion of movement or motion. Similar shapes connected with each other or overlapping each other can imply movement or restlessness.

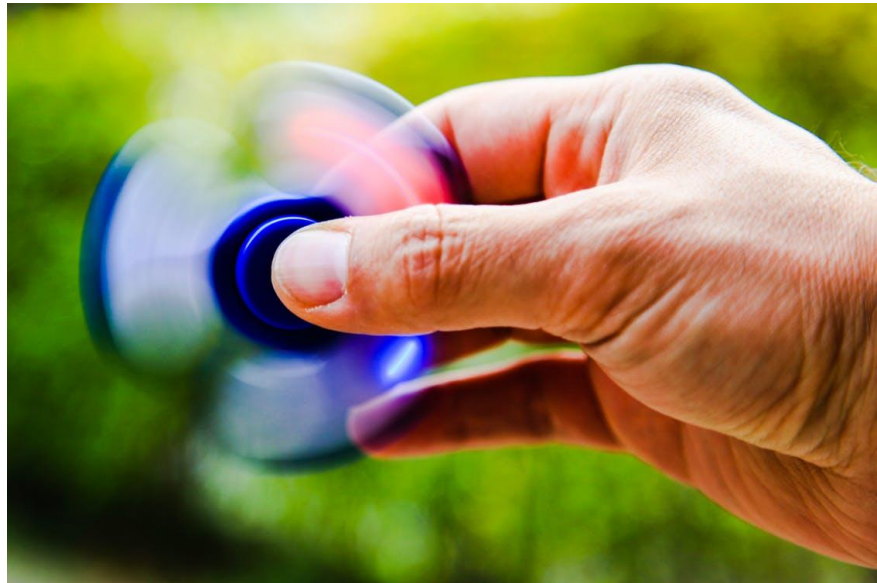


Title- Movement

Attribution- Scott Webb

Source- pixabay.com

Link-<https://www.pexels.com/photo/bench-light-city-road-136739/>



Title- Movement

Attribution- Tanino

Link-<https://www.pexels.com/photo/blur-color-exercise-fidget-spinner-448539/>

Pattern

Pattern uses the art elements in planned or random repetition to enhance surfaces, paintings or sculptures. Patterns often occur in nature, and artists use similar repeated motifs to create pattern in their work. Pattern increases visual excitement by enriching surface interest.

Repetition

Repetition works with pattern to make the artwork seem active. The repetition of elements of design creates unity within the artwork.

Rhythm

Rhythm is the repetition of visual movement of the elements- colours, shapes, lines, values, forms, spaces and textures. Variety is essential to keep rhythms exciting, active and to avoid monotony. Movement and rhythm work together to create the visual equivalent of a musical beat.



Variety

Variety provides contrast to harmony and unity. Variety consists of the differences in objects that add interest to a visual image. Variety can be achieved by using opposites or strong contrasts. Changing the size, point of view and angle of a single object, it can add variety and interest to a visual image. Breaking a repeating pattern can enliven a visual image.

Harmony

Harmony in visual design means all parts of the visual image relate to and complement each other. Harmony pulls the pieces of a visual image together. Harmony can be achieved through repetition and rhythm. Repetition reemphasizes visual units, connecting parts and creating an area of attention. Rhythm is the flow depicted in a visual. Rhythm helps direct eye movement. Patterns or shapes can help achieve harmony. By repeating patterns in an interesting arrangement, the overall visual image comes together.

Unity

Unity means the harmony of the whole composition. The parts of a composition made to work together as a total visual theme. Unity is the relationship among the elements of a visual, which helps all the elements function together. Unity helps in organizing a visual image, facilitating interpretation and understanding. Unity gives a sense of oneness to a visual image. We can also explain that, the words and the images work together to create a meaning.

Unity can be achieved through

- Use of similar shapes.
- Use of a common pattern.
- Use of space.

Summary

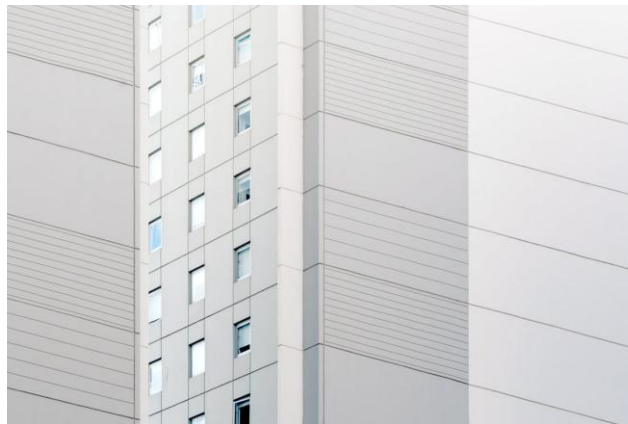
Elements of design described here are point, line, shape, form, space, colour and texture. Design principles include the balance, proportion, perspective, emphasis, movement, pattern, repetition, rhythm, variety, harmony and unity. These elements and



principles can be the basic knowledge and analytical framework for a designer.

Examples of design

Design Elements



Line

Title-Line

Attribution- ben neale

Link-<https://www.pexels.com/photo/apartment-architecture-building-contemporary-380330/>

Horizontal lines are calm and quiet



Title-VerticalLine

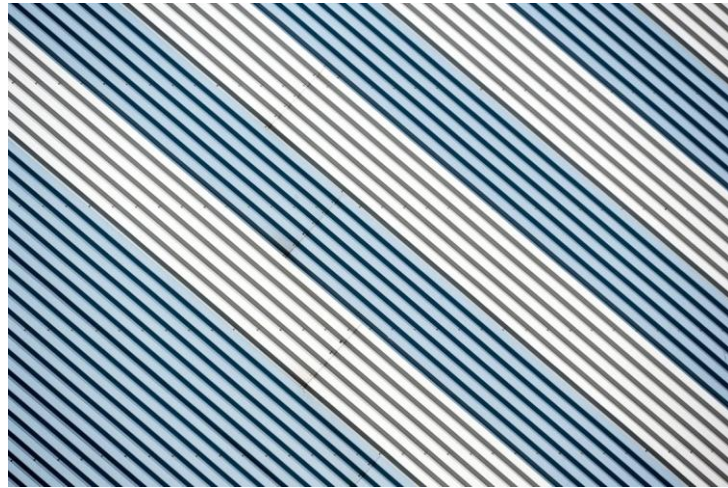
Source-pixabay.com

Link-<https://www.pexels.com/photo/background-board-carpentry-construction-207253/>



Vertical lines suggest more of a potential for movement.

Diagonal lines strongly suggest movement and give more of a feeling of vitality to a picture.



Title-DiagonalLine

Source-pixabay.com

Link-<https://www.pexels.com/photo/abstract-art-design-diagonal-416430/>

Shape



Title-Shape

Source-pixabay.com

Link-<https://www.pexels.com/photo/close-up-high-angle-view-of-blue-objects-256485/>

A shape is defined as an area that stands out from the space next to or around it due to a defined or implied boundary, or because of differences of value, colour, or texture.

A shape is formed when a line encloses an area. Shapes can vary endlessly and can suggest physical form and direct eye movement. Simple shapes are remembered and understood more easily than complex shapes.



Simple shape



Title-SimpleShape

Attribution- [User:Amada44](#)

Source-[Similar-geometric-shapes.png](#)

Link-<https://commons.wikimedia.org/wiki/File:Similar-geometric-shapes.svg>



Title-ComplexShape

Attribution- [Tabitha](#) Mort

Source-

Link-<https://www.pexels.com/photo/photo-of-blue-pink-and-green-led-light-775907/>

Space

Size & vertical location

Detail (aerial or atmospheric perspectives)

Values

Value is the relative degree of lightness and darkness in a design element.

Line, colour, texture and shape all need value contrast in order to be seen. Value is used to describe objects, shapes, and space.

Dark areas tend to denote: gloom, mystery, drama, and menace



Title-Dark area

Attribution-

Source-pixabay.com

Link-<https://www.pexels.com/photo/background-board-carpentry-construction-301378/>

Texture



Title-Texture

Source-pixabay.com

Link-<https://www.pexels.com/photo/background-board-carpentry-construction-301378/>



Why use visuals?

Powerpoint slides and overhead transparencies (OHTs) are useful in visual aids for all sizes of classes, provided they are well designed and appropriately used. They are cost-effective and quick to produce, and most of the classrooms are generally equipped with the means to display them.

Visual aids can be used to:

- Organize your lesson or presentation
- Provide interest and motivation for your students
- Increase retention of information and learning
- Save instructional time and preparation time because they can be reused
- Aid communication
- Explain the relationships of parts to the whole
- Clarify something difficult, complicated or very large
- Stress important points

If you are using Powerpoint slides or other presentation software to design your visuals, you can automatically print the outline view and print 2, 3, or 6 frames per page. This makes an excellent note-taking guide.

Key principles

Apply the following six principles to the design of your visuals.

Chunk information—having similar materials together in manageable and sensible chunks. If information must be split over a number of slides or screens, consider reducing the size of the chunks you have.

Organize the content—use basic principles such as simple to complex, known to unknown and knowledge to application. Position any image as close to the relevant content as possible.

Relevance— be sure that the information or visual that you are using is relevant to the topic. Be able to give a rational reason for something to be in the visual. Over-use of bulleted slides is a common student complaint.



Importance— places the most important information early in your slides or visuals. Call attention to it in some way. Be sure it really is an important idea to include.

Appropriateness— considers the audience receiving the information and the material being presented.

Visual effectiveness— keeps your visuals simple so that they have the most impact.

- Use key phrases rather than long sentences.
- Use no more than 6 words per line
- Not more than 6 short lines per slide.
- Ensure that all type is visible from the back of the room (all lettering should be at least 1/4" high or 24 pts).
- Leave plenty of white space around images.
- Use a graphic rather than text
- If you have more than 36 words of content, break them up into a series of slides beginning with an overview slide.

The Influential Factors and Elements of Motion Graphics in Communication

Motion graphics' area of activity is an area in which audience attraction is the first priority, while this matter is the second priority for the field of brochures, posters, and other printed media. It is not easily possible to estimate the amount of likeness of the audience and the effects of the poster on the audience when they see a poster. Continuous presence and effect, getting used to it, and waiting for it, the element of time, are of the important characteristic of motion graphics. As a result, it seems that motion graphics has a notable characteristic.

Motion in Motion Graphics

Naturally, every substance is in motion and struggle in the nature. Motion in picture may be created by dot and line and presented in different shapes. The type of movement might be helical, circular, zigzag or direct. The direction of motion can also be upward, leftward, rightward, etc. Each visual element or each shape more or less might have the energy for movement. According to the influence of the energy, the dominance of which side to be selected is judged. It will move toward the side which has more



length. The concept of motion can be understood via other forms, for example, by the repetition of a visual element in motion which is possible through the repetition of many elements. For instance, the repetitive motion of a circle in the screen which forms a type of rhythm as well can be named (Nave, 2005).

Sound in Motion Graphics

Although flawless, visual effects and graphic environments will not be effective, if they are not accompanied by appropriate sounds. Sounds and their masterful combination will not be successful unless they involve the audience and they are listened to, through the right technology. Actually, 70% of the influence of a motion graphic work which is usually shown in the format of a commercial advertisement or the same formats is made by the sound. Music and appropriate sound can help the transfer of influence. Music helps feelings be well expressed; it really enlivens a dead work. Image and sound are related to the main sensations of human which are vision and hearing. A graphic motion designer tries to make people move by presenting an attractive program and utilizing these two principal elements. How much they will be able to attract the audiences' vision and hearing senses will depend on their art and expertise. In other words, in a motion graphic work, in which image is more attractive, the audience will focus on the image; and, in a motion graphic work, in which sound is more attractive, the audience will focus on the sound (Woolman, 2004).

Alphabetical Characters in Motion Graphics

In the realm of motion graphics, alphabetical characters are considered as images. These characters are more watchable than readable. For instance, a Japanese graphic expert who does know about Persian can comment on a sample of Persian handwriting about its graphical psychology expression by looking at Persian alphabetical characters. For example, Nastaliq calligraphy has such characteristics as gentleness and passionate impressive tranquillity which are the characteristics of curves in graphics. Representation and readability aspects are considered to be the secondary priority, while aesthetic aspects are considered as the primary priority. Nastaliq calligraphy is magical and its curves are strong while flexible, that is why it cannot be used for describing a tragic event or an accident; it cannot be used for news, either. On the



other hand, Naskh calligraphy is exciting and venturesome. It is like a vigorous voice which orders and has a predicative statement (Woolman, 2004).

Color in Motion Graphics

In the context of motion graphics, colour and paying attention to colour are important. When focusing on the nature of human mind, the importance of the matter becomes clear. In the procedures related to vision, the stimulators enter into sensing memory and are saved there for about one second. The capacity of this storage space is about 16 objects. In this condition, the objects and stuff enter the sensing memory and immediately disappear (Kaufman, et al., 2001).

Visual Elements of Motion Graphics

Graphics, pictures, and the collection of images, which are present in each motion graphic, can help improve the quality of the works and increase its popularity to the audience, or vice versa, decrease its worth. The more comfortably the audience deals with the work and the more quickly they find a relationship with the work, the sooner the designer will reach to their goal. These images and visual attractions must be designed in accordance with audiences' ideas, desires, and criteria so that they will be able to convey the visual messages in the best manner. Many designers are not aware of these important factors and their influence on the attraction of the audience, so they do not consider images, graphics, and their visual messages as they should while designing a motion graphic work.

The important points which can be called main points in visual language grammar and be used in motion graphics are listed below:

1. The primary visual elements (dot, line, shape, colour, direction, etc.)
2. Composition
3. The methods of creating visual language (simulation, code, abstraction, etc.)
4. Visual techniques and recognition of different styles (Dadgaran, 1384).



Dot in motion graphics

Wherever it is, the dot seriously attracts eye's attention. As a result, the dot can be used as a strong visual element in motion graphics for showing the concept of emphasis. By the repetition of dots in different and numerous combinations, it is possible to identify the concept of rhythm. By the concentration and disunion of dots in a new combination, the concepts of expansion and contraction can be presented. This phenomenon, that is the combination of dots, simulates the vision system in human (Dadgaran, 1382).

Line in motion graphics

Line has active and mobile energy. Lines in a motion image can appear as broken, arc, flat, ragged, wavy, wide, thick, etc.; each of them has their own visual inspirations and meanings. The vision sensation in human being is sensitive to the psychological impacts and artistic values of lines in a frame. That is why gaining knowledge over the characteristics of lines is essential in order to appropriately use them. It might also be said that lines are the most influential and the mostly used elements in motion graphics which are used in different forms and with different meanings (Braha, 2011).

Surfaces in Motion Graphics

It is the third visual element which has length and width. Different geometric figures are surfaces; a 2D space which is created due to the movement of line on screen. Among flat geometric figures, triangle, circle, and foursquare are mostly used in motion graphics. Other geometric figures are somehow derived from these three figures or a combination of them. Each of these figures in different positions and circumstances find a new visual expression (Dadgaran, 1382).

Lighting in Motion Graphics

Light is certainly a determinative element in human life. Beside applied uses, light has always had symbolic values as well. Light is a part of the essence of life and in many cultures, light or sun is



considered as a divine element and is eulogized. Using different lighting tricks for reinforcing imagination has also become usual (Fransis, 1391). In motion design, innovative and influential phenomena are created, using special forms and appropriate lighting.

Space in Motion Graphics

Space defines the position and circumstance of each objective or any other phenomenon. The space defines the existence of any object in relation with other objects and makes internal, external, and intermediate space understandable. There are different concepts defined for the space such as hollow space, free space, green space, live or dead space, etc. The space is not definable by itself; however, by positioning a 3D mass in the space, the location of the mass is specified and space defines its existence (Dadgaran, 1382).



Unit Summary



Summary

In this unit you have learned the importance of design while working with image design. You also learned about various design elements like point, mark, line, shape, colour, texture. Know all the design principles like Balance, Proportion, Perspective, Emphasis, and Movement. Know the various designs basics with the help of extensive examples.

Motion graphics as a method of expression and communication with the audience has unique themes and domains in utilizing innovation, imagination and graphic effects. In fact, motion graphics is a context for displaying where performance and image are considered as expression elements in the creation of the work. Visual communication plays an influential role in taking advantage of informative concepts for people.

Assessments



Assessment

Briefly explain the design principles-

- Balance
- Proportion
- Perspective
- Emphasis
- Movement

Resources



Reading

- <https://link.springer.com/book/10.1007%2F978-81-322-2232-3>
- <https://www.intofilm.org/clubs>
- www.svnfilm.com
- www.videomaker.com
- www.junctiongoogle.co.uk



Unit 2

Story Boarding

Introduction

When you are set out to make a movie, the more planning you can do beforehand, and the chances of success becomes better. Figuring out exactly what you'll be doing during a shoot saves your crew time and labour and saves the producer and director, from cost overruns and production headaches. A storyboard is one method of planning ahead. By visualizing your shots ahead of time with a storyboard, you can see how your shots fit together before you've shot a single footage of film or frame of video. This will prevent you from wasting both time and footage. A good storyboard allows you to explain your crew about what are you planning to achieve. It saves you from trying to convey what you want with wordy explanations and frustrated hand gestures. When you show the boards to your director of photography and cameraperson, they will immediately understand what type of shot you need and how to frame the subjects.

During your learning process about filmmaking, paying your dues as a production assistant or other crew member or even just searching around the internet, you may have seen elaborately detailed storyboards by professional artists. Boards like this are nice, but you don't need to be a talented artist to storyboard effectively. Even simple stick figures can give people a good idea of what your shot sequence will look like.

In other words, rudimentary art skills are perfectly fine. What you need to know is how you are going to frame the subjects of your film. A basic knowledge of camera shots, paired with few simple perspective tricks, will enable you to map out your scene in easy-to-read visual shorthand.



Outcomes



Outcomes

Upon completion of this unit you will be able to:

- Explain the importance of storyboarding and storytelling in relation to your stop-motion animation project
- Use various media and technology to convey messages and meaning
- Work interactively, co-operatively and collaboratively to plan and create a storyboard
- Engage in critical reflective thinking as part of the decision-making and problem-solving process
- Invent and incorporate unique visual symbols and movement to create personal meaning in art
- Appreciate the diversity of individuals, as reflected in their artwork

Terminology



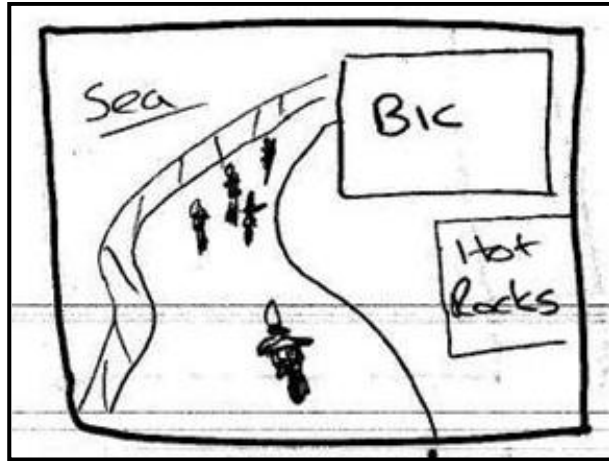
Terminology

Long shot:	A long will include the entire body of the subject or subjects.
Mid short :	A mid shot or medium shot will usually depict your subject anywhere from above the knees and up to just above the waist and up.
ECS:	Extreme close shot. Extreme Close-Ups (ECU) add drama.
Master shot:	This refers to a shot that runs for the length of a scene and shows all of the characters in view.

Different types of shots

Let's begin with a quick rundown of basic shots and what they look like.

Long Shot



Title-Long shot

Link-<https://mooc.employid.eu/storyboarding-tutorial/>

Generally speaking, a long shot will include the entire body of the subject or subjects.

Medium Shot



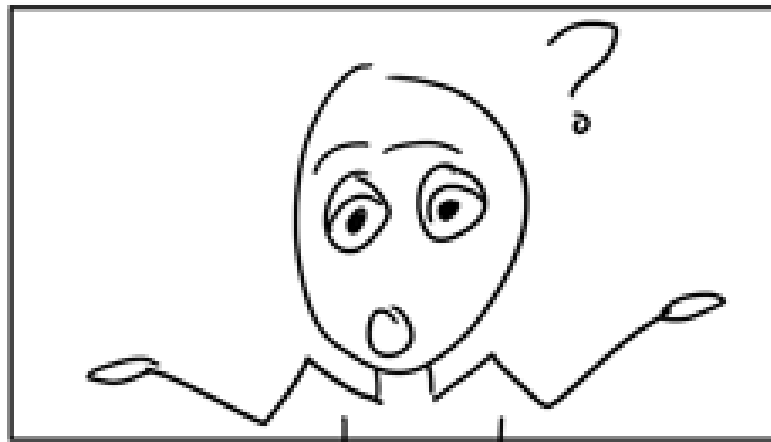
Title-Mid shot

Link-<https://mooc.employid.eu/storyboarding-tutorial/>

A medium shot will usually depict your subject anywhere from above the knees and up to just above the waist and up. Remember not to cut off your subjects' right at the knees, or any other juncture of the body. It looks awkward and poorly composed. Try to frame them just above or below the joint in question.



Closeup

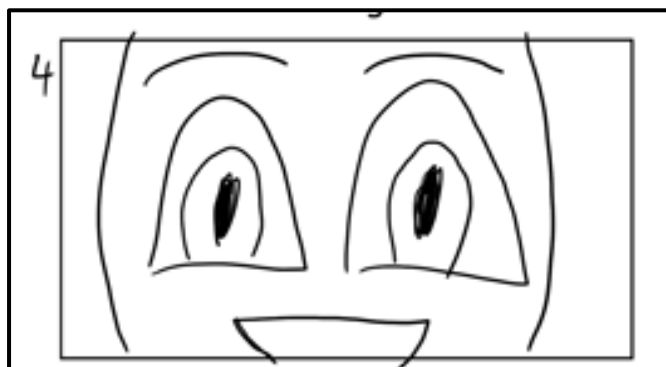


Title-Close-up shot

Link-<https://mooc.employid.eu/storyboarding-tutorial/>

Close-ups are where we most often see the emotional content of a scene. They allow us to see the character's faces up close and thus their state of mind. Close ups are usually framed from the chest up. Occasionally, however, they can be framed from forehead to chin or will even involve just the subject's eyes. We call this an Extreme Close-Up:

Extreme Closeup



Title-Extreme closeup

Link-<https://mooc.employid.eu/storyboarding-tutorial/>

Extreme Close-Ups (ECU) add drama. For the most part, they're used sparingly, but a single ECU can add a real punch to a scene.



Master Shot

This refers to a shot that runs for the length of a scene and shows all of the characters in view. It's the most conservative way of staging a scene. Think of a master shot which is like watching a play from somewhere out in the audience. You see the entire set and where the characters are in relation to each other on the stage. In older films and multiple-camera productions like sitcoms, scenes often begin with a master shot in order to orient the audience and all of the rest of the shots in the scene, relate back to this shot. Most single-camera productions don't rely so heavily on the master shot. However, keeping the master shot in mind can help you plan out the rest of your shot list. For example, in a scene depicting a conversation between two people, you may decide to cut to close ups of each person talking, plus an insert shot of an item that they're talking about and then cut back to the master shot after each one. This is a very basic way of editing a scene.

There are also some special shots you might want to use in your storyboard. Here are a couple of examples.

POV

POV or the point-of-view shot allows the audience to see what's going on through a character's eyes. The easiest way to indicate this is to show a character looking at something, and then move to, what they're looking at from an angle, that makes it look as if the camera is in that character's place.

POV shots tend to be used sparingly, although there have been some films with entire sequence shot from a character's point of view. In fact, the 1947 film 'Noir Lady in the Lake' was shot entirely from the POV of the main character.

Depicting Camera Movement

Now that we've talked about some basic shots, let's go over some important camera movements and the ways to depict them on the page.

PAN

Panning involves a sideways or up/down rotation of the camera on the tripod. It's one way to put the camera on another subject



without cutting to a different shot. It can also be used to follow a character or characters when they're moving within the frame.

A panning shot can be depicted by first placing a couple of frames in order to show where the camera will start and where it will end up and then adding arrows to describe the camera's movement. In the illustration below, we see a panning shot for a simple dialogue scene.

TRACK

A tracking shot is another way to follow a subject or subjects. This type of shot involves moving the entire camera from one place to another, instead of merely rotating the camera body on a fixed point. Tracking can involve moving the camera with tracks, on a dolly or it can be done hand-held.

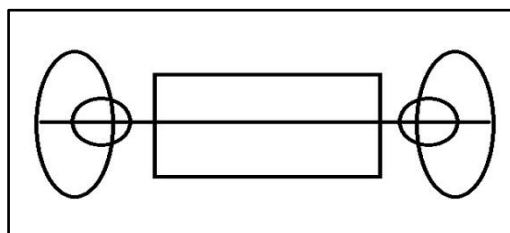
ZOOM

Zooming is a movement of the camera lens as opposed to a movement of the camera itself. Zooming In means adjusting the lens to the frame, closer on the subject. While Zooming Out, it means the opposite i.e. adjusting the lens to take in more of the scene.

What if you don't need the camera itself to move, but want to show characters moving into, out of, or through the frame during a shot? An easy way to do this is by drawing arrows. Arrows can also depict smaller movements within the frame, such as a head turning.

180 Degree Rule

Now that we've covered the basics, here are a couple of other things to keep in mind when setting up your shots. Firstly, you may have heard people talk about "not crossing the line" when they're setting up a scene. They're using a slang term for the 180 degree rule, which is a very important thumb rule for filmmaking.



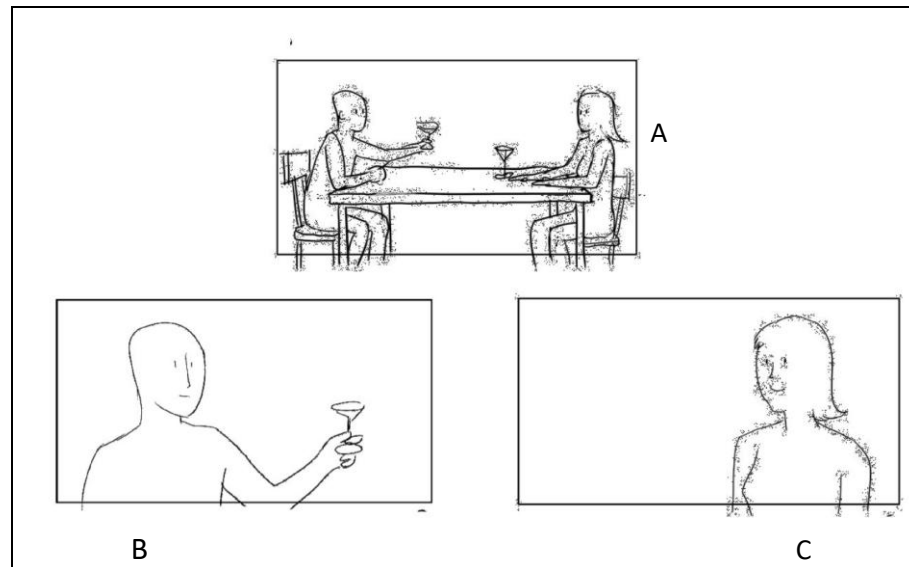
Drawn by Author



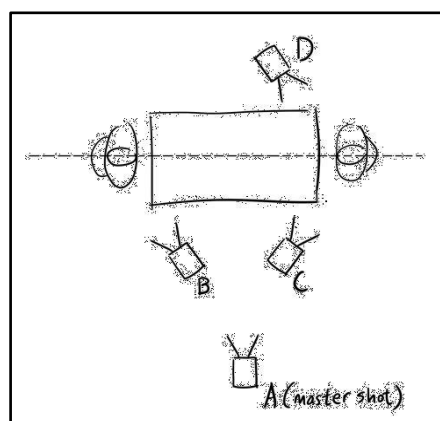
Keeping your camera on the same side of this line—aka the 180 degree line-- will assure visual continuity and prevent your viewers from becoming disoriented

Here is a similar diagram with a few possible camera placements. Notice that shots A, B and C are on the same side of the line.

Let's put shots A, B, and C into a storyboard. It will end up looking like this:



Drawn by Author



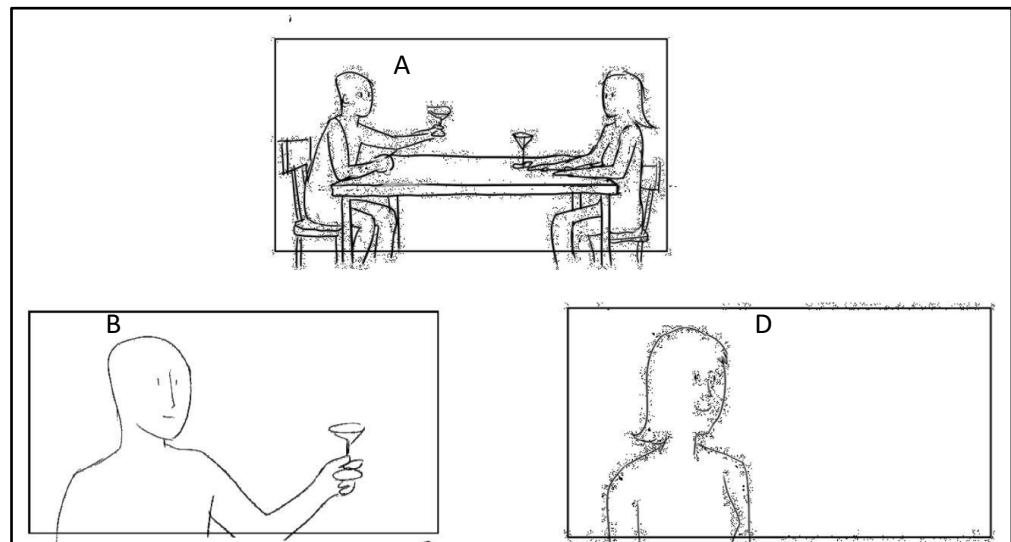
Drawn by Author

This shot sequence adheres to the 180 degree rule. Bill and Carol are having a conversation. First we have a master shot of the two of them, showing the audience where they are in the scene and where they are in relationship to each other (shot A). Next is a



close up of Bill (shot B), and then one of Carol (shot C). When the individual shots are edited together, Bill and Carol appear to be facing each other, just as they are in the master shot.

Now let's try putting together shots A, B, and D from the diagram. The storyboard will look like this:



Drawn by Author

Creating Story Boarding

Creating well-drawn, motivated figures that kinetically move in an interesting way through the 3D space of the film is one of the primary jobs of the storyboard artist. A finished storyboard covering all the basic shots tells the story and is an invaluable aid to the entire preproduction team. Vivid images from a strong director and a storyboard illustrating their robust style complements, the intensity of the action and the raw emotions of the characters. The shots from important films in this chapter demonstrate how dynamic are the placement of figures within the continuity of the storyboard frames; however it has to be rendered simply yet effectively. Indications of sets constructed or actual buildings and locations used must be illustrated in the storyboard artist's renderings, remembering that sets are background for the action. The use of special effects, computer graphics (CG) and the compositing of different images enhance the



continuing action of the storyline and the VFX must be indicated and illustrated in the storyboard. Superman Returns (2006), directed by Bryan Singer, is a super send off of the previous versions and is considered to be the best so far. It has a strong back-story and an interesting new story line, with strong performances from all the leads, plus spectacular new VFX. Nominated for an Oscar for Best Achievement in Visual Effects, this film would make one agree with the ads for the film. Talk about action! Talk about adventure! Talk about superb visuals!

Superman Returns is a terrific contemporary showcase for the very latest digital/CGI/green screen technology. For showcasing, make sketches of some key scenes very quickly.



Unit Summary



Summary

In this unit you have learned the importance of storyboarding and storytelling in stop motion animation projects and how to work interactively, co-operatively to plan and create story board. Use various media and technology to convey messages and meaning. Also we have learned different types of shots and camera movements. We also discussed the art of storyboarding with real examples of movies.

Assessment



Assessment

1. What are the different types of shots?
2. What is the uniqueness of POV shot?
3. What is 180 degree rule?
4. What are some important camera movements?
5. Why is storyboarding important?

Resources



Reading

- <https://link.springer.com/book/10.1007%2F978-81-322-2232-3>
- <https://www.intofilm.org/clubs>
- www.svnfilm.com
- www.videomaker.com
- www.junctiongoogle.co.uk



Unit 3

Titles & Credit Making

Introduction

Indian cinema, produced across India, has cinematic culture of different states. It shows a very diverse pattern of visual culture. This could be because of its multilingual and multicultural nature. Bollywood is one of the dominating Indian film industries based in Mumbai.

In the history of film production in India, different mediums have been implemented for film advertisement. During early period of the cinema, the mode of publicity has been dominated by print media in the form of newspaper advertisements, handbills, lobby cards, publicity booklets, posters and hoardings.

Throughout the timeline, film posters have been one of the important medium for film publicity. Like other advertising material, film poster too responds to its environment. From time to time it gets influenced by different art movements and socio-cultural changes. Bollywood film posters also perceived as a public urban icon which offers a visual experience of changing social and emotional standards to its audience.

Film posters being the most significant form of publicity is a symbolic visual representation of film in two dimensions where it condenses all the value and theme of a film in a single static plane. It features images and text to create first-hand visual experience to its audience. Keeping the mass audience in mind, the use of textual content is very strategic. Because of the regional language problem and low literacy levels in majority of the audiences, posters show minimum textual content to cater all. The textual content generally includes film title, tagline, credit block, and names of leading characters. Title design plays an important role in suggesting the theme of the film. Due to advancement in the technology and other influential factors, title design has seen gradual changes in terms of form, style, texture, colour, composition, perspective and typeface.



The Film posters in India also reflect the diversity of its audiences in terms of culture, religion, class and language. Though the films titles are mostly remains in Hindi across the timeline, one can observe the changes in film title from trilingual script i.e. Latin, Devanagari and Urdu to mainly Latin due to multiplex paradigm. Also the changes in literacy rate can be observed through the changes from decorative lettering to more sophisticated and modern typography.

Let's discuss the role and development of title design in Bollywood film posters by using semiotic framework. Through this analysis the relation of title with respect to layout of the poster, letterform, film genre, treatments and poster production techniques will be discussed.

Outcomes



Outcomes

Upon completion of this unit you will be able to:

- Have understanding about title design of film posters in Indian film industry i.e Bollywood
- Analyse the adaptation and evolution of the title making
- Understand the use of fonts, image resolution, colour in titles making
- Understand credit making

Terminology



Terminology

2K:	2048 pixels
Gestalt Theory:	Gestalt theory is an attempt to state the laws of visual reconstruction.
Semantic Analysis:	Semantics is a study of meaning. It deals with the generation of meaning from any sign. This section enquires the relationship of title to the theme or story of the film.
Pragmatic Analysis:	This section enquires about the title design in relation with the context.



Basic Design Issues

Choice of font

The film title is meant to establish the context and set the tone of the movie, where typefaces could be a powerful assistant towards this goal due to their second-level communication abilities and special expressive qualities. Type contains impassioned rhetoric; the magic is hidden under the appearance of each typeface. Thus choosing a suitable font is the primary task, a designer needs to accomplish when assessing a project. However, typography has about a five hundred year history in the West, which has left a forest of typefaces. Computer techniques have created even more of them. How to get to know each typeface's individual identity? A typeface classification could be a shortcut. There have been various classification systems to use. Each of them could be an essential tool to help a designer in selecting appropriate typefaces that enhance the expressive message in typography. It is always recommended for designers to spend some time taking a look at certain kinds of classification before actually working on the design.

Image resolution

When film frames are stored digitally, the resolution of the image is measured in thousands of pixels across the frame or K. A horizontal resolution of 1K means 1024 pixels; 2K is 2048 and so forth. 1K resolution is the lowest, yielding a result that is similar to video. 2K resolution is the most common because of reduced file size and less taxing throughout requirements (data flow). 3K and 4K are also common and they are the most aesthetically desirable because the threshold of human vision is about 2500 x 2500 pixels when viewing an average movie theatre screen (if the picture were square). Pixel height varies depending on the aspect ratio. In Table 1, we can see the rule of correspondence between image resolution and mass storage size request.

Understanding the image resolution is especially important when we are digitalizing images for eventual film output. We can calculate what the appropriate scanning resolution should be, by dividing the film resolution that will be used by the horizontal



dimensions of our image in inches. For example, if the output resolution will be 2K and our image measures 10 inches horizontally, we would scan it at 200 dpi.

RESOLUTION	MASS STORAGE SIZE REQUEST				
	1 frame [MB]	1 sec. [MB]	1 meter [GB]	1 min. [GB]	1 hour [TB]
2K	9	216	0,5	13	0,8
4K	36	864	1,9	52	3,1
6K	122	3 000	6,4	176	10,5
16K	864	21 000	40,8	1 242	74,5

Table-1

Drawn by Author

Colour

The printing world operates on inks and full colour (CMYK) mode. Traditional typographers deal with Cyan, Magenta and Yellow inks, which are known as “Subtractive Colours.” If subtractive colours are printed overlapped in the same proportion on white paper, they absorb the light shining on the page and we perceive pure black. The world of on-screen publication is built upon lights rather than inks. Designers uses “additive colors” namely Red, Green and Blue light. If all the three coloured lights are put together on the screen, we get white light, not “black.” Black can only be reached if there is no light involved. RGB principles are those behind computer and TV monitors as well as the movie screen.

Designing Over Space

A designer needs to consider many fundamental elements in designing the title sequences. The following section will briefly introduce some of the most basic concepts and then explain how these principles will affect the title sequence design.

Visual perceptions

Designers always wish for desired responses from audiences through the visual expressions. Before talking about how to



position visual elements within a frame (the concept of frame will be explained later in the section on “frame and aspect ratio”), let us take a look at how human beings perceive visual objects and environments. Since seeing is not just an optical process but also a process of our thinking, the early researches on the laws of visual perceptions were pioneered by physiologists whose concerns were human mind and brain.

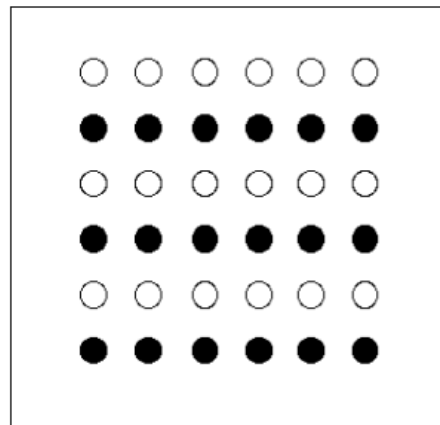
Gestalt Theory

Gestalt theory is an attempt to state the laws of visual reconstruction. Although computer-based design follows several new disciplines, it has not yet fully exploited the Gestalt theory results. This section briefly reviews the basics of Gestalt theory and explains how it can be used to render desired perceptions. As a theory of mind and brain, Gestalt theory proposes that the operational principle of the brain is holistic, parallel and analog with self-organizing tendencies or that the whole is different from the sum of its parts. Some of the key principles of Gestalt systems include

- 1) The law of figure and ground
- 2) The law of similarity or proximity
- 3) The law of closure

The law of figure and ground captures the idea that the visual field is normally divided into two parts, figure and ground. Some elements are contrasted with other elements to give the impression of a whole.

The law of similarity dictates that the mind, groups similar elements into collective entities of totalities. Such similarity might depend on relationships of form, colour, size or brightness. In the figure, the filled circles give the impression of three horizontal lines.

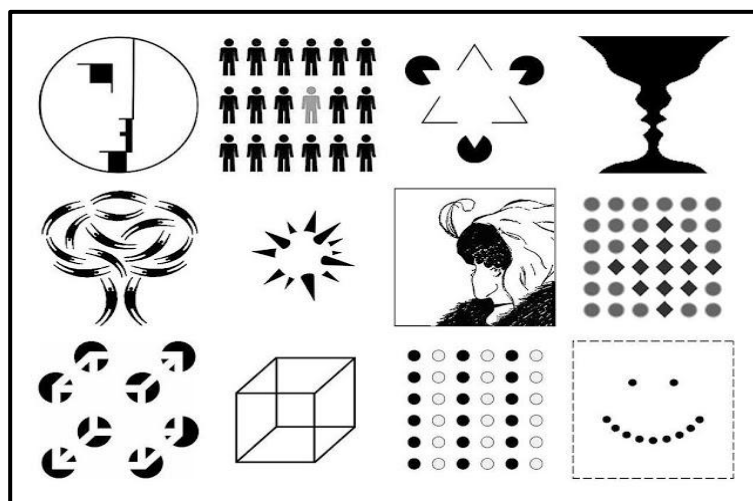
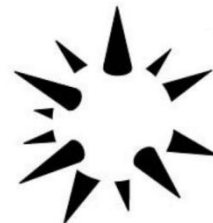


Title-Gestalt principle composition

Attribution- Impronta

https://commons.wikimedia.org/wiki/File:Gestalt_Principles_Composition.jpg

The law of closure applies when people see complete figures even when part of the information is not provided. In the following figure, a complete three-dimensional sphere is seen, where in fact no such thing is drawn



Title-Gestalt principle composition

Attribution- Impronta

Link-

https://commons.wikimedia.org/wiki/File:Gestalt_Principles_Composition.jpg



Methodology

Human beings always try to interpret things as per their understanding and background knowledge. We can't take reality for granted and define it objectively. Semiotics teaches us that reality is a system of signs. Studying semiotics can help us to be more aware of reality as a construction and of the roles played by everyone in constructing it. Semiotics is a study of signs and according to Saussure a model; the sign is the whole that results from the association of signifier and the signified. This relationship is called as 'Signification' and the value confirmed by a sign depends on its relationship with other signs within the system. The meaning making and persuasion of Bollywood film posters depends on the relationship generated by different components of the film posters. Title designs in these posters are analysed separately by syntactic, semantic and pragmatic approaches.

Syntactic is a study of the relationship among signs in formal structure. It is useful to understand the structural relationship among the parts of a sign. This section utilizes the syntactic principle to see the relationship of title design with respect to poster layout, letterform structure and kind of treatment.

Semantics is a study of meaning created by signs in a system, where they interact with other signs. This approach helps in analysing title design to see how effective is the film title in overall meaning in relation to the film story and genre wise type classification.

Pragmatics is a study of the relationship between signs and sign-using agents. Here context contributes to the meaning and interpretation of particular design. This approach helps to see the effect of poster production technique, display positions and display technology on title design in film posters.

Syntactic analysis

Poster layout, letterform structure and decorative elements play a key role in the overall title design and its expressiveness. In this section title design is examined based on its structural parameters like layout and typography.

Poster layout

Title has occupied different positions in poster layout. Figure-3.3 shows three possible position of title in film posters. Out of 129 posters taken for an analysis, 61% shows title at bottom whereas 28% at top and 11% in the middle. Positioning of title was also influenced by the visual hierarchy principles. In maximum cases central characters has been considered as a primary element of the poster. This put title at secondary position in term of importance. So in most of the cases central space is occupied by the leading character's visuals whereas title comes next to it. When it comes in centre of the poster, in 73% cases it is horizontal whereas 17% shows diagonal orientation.



Figure 3.3 Title position with respect to poster layout

Designed by Author

Letterform

In a title design, individual letters act as a building block where its structure and style contribute a lot in suggesting the film's theme. The denotation of individual letters is a straight forward task. Anyone who knows the written language can read and understand the literal meaning of the title but the constructive meaning can only be generated through the understanding of message hidden somewhere in the style and structure of the individual fonts. When we analyse the individual letters across the title, it gives an interesting statistics. Approximately, 63% posters show title in uppercase, whereas 23% in title case, 3% in lowercase and 11% with mix lettering.

Use of decorative elements

Posters are made to attract the viewer at first sight. They are also competing with the other visuals across the city wall to draw



attention. This competitive streetscape culture leads designer to give some ornamentation to title so that it can stand out as a poster. Titles in 96% posters show the use of decorative elements to make it more prominent and appealing. Out of 124 titles, 89 (72%) titles show decoration in terms of outline and shadow whereas 35 (28%) titles show decoration by manipulating text and image. Films like Anand (1970), Aradhana (1969), Upkar (1967), Ghulami (1985), DilwaleDulhania Le Jayenge (1995) are some example in second category. Contrast colours are prominent in title design throughout the timeline.

Semantic analysis

Semantics is a study of meaning. It deals with the generation of meaning from any sign. This section enquires the relationship of title to the theme or story of the film.

Title design based on meaning of title

Title design in posters in the early period of Bollywood cinema shows very minimal variations in letterforms irrespective of the meaning of the title. Letters have been designed randomly like in Bandhan (1940), Ram Rajya (1943) or Anmol Ghadi (1946) showing individual artistic skill and style. Some of the exceptions from this era were Barassat (1949), Aan (1952), Jewel Thief (1967) and Aradhana (1969). Barasaat in which artist has used rain strokes to give the feeling of rain whereas in Aan poster letterform is in bold, 3D perspective placed in the background in such a way that it reflects the meaning of 'Aan' or pride. But this kind of exploration was rare till 1960s, where only 13% title designs show relationship with the meaning of the title.

Beginning of 1970s saw a dramatic increase in the use of expressive typography in the title design. As shown in Figure 3.4, poster of films like Mera Nam Joker (1970), Bobby (1973), Andhi (1975), Sholay (1975), and ShatranjKeKhiladi (1977) are some example of this trend. In title Gadar, the letter has been designed in such a way that it reflects the literal meaning of the title whereas in MeraNaam Joker the form of letters has been designed to give a sense of comical and jovial mood. It is interesting to see the letterform in the title ShatranjKeKhiladi where each letter is designed to look like 'Mohra' (64 square pieces in chess), exactly

relating with the chess game. In similar way the fluffy form and colour of letters in Bobby, flowing strokes of letters in Aandhi and flame colour with cracks in Sholay reflect the meaning of the title in first sight



Figure 3.5 Film titles where letterforms directly relate with the meaning of the title.

This trend continued during 1980s and 1990s with some prominent example like Disco Dancer (1982), Coolie (1983), Razia Sultan (1983), Ghulami (1985), Tezaab(1988), Agneepath (1990), 1942 a Love Story (1994), Rangeela (1995) and Satya (1998). Like in Razia Sultan, the title and letterform are made in such a way that it looks like a fort in the background. This goes well with the heroic nature of Razia Sultan and reflects her power in the poster.

By the end of 1990s and beginning of 2000s design studios were taken hold of poster making in the Bollywood film industry. Advancement in technology and availability of different medium gave more opportunities in designing film's titles. Designers cleverly exploited text-image relationship to make title more attractive and meaningful. When it comes to the whole title composition and its meaning, in most of the cases it succeed in conveying the gist of the film. Looking at the poster of first full length Indian film Raja Harishchandra (1913), by DadasahebPhalke, the title itself is giving a sense that the film is all about the legend Raja Harishchandra, a story from Indian epic.

Title design based on film story

It is difficult to relate the letterform with the meaning of the story. Very few movies title has been designed according to the meaning of the story. To reflect the story, exploration was done mainly with letterform structure and colour. Khiladi (1992) is one example where letter 'A' is replaced by human figure holding gun in hand

to reflect the action in the film irrespective of the literal meaning of the title which is player.

Most of the Indian films are melodramatic with full of emotions, drama, action and more. This makes difficult for an artist to design a film poster which can represent all parameters of the film. So in most of the cases the letterforms depict only a part of the total theme of the film. As shown in Figure-3.5, letterforms in the title of Disco Dancer (1982) reflect the theme of the film which is musical and romantic. The use of led bulb to create the type, which gives a sense that this is a film revolving around a disco dancer but this is one part of the film. The other part is action, revenge and family drama.



Created by Author

Figure-3.5 Letterform going with central theme of the film

Title design with external semantic elements

Film posters are meant to invite the viewer to watch the film. Thus it is important that posters should show the highlights of the film into prominence. Till 1960s Bollywood film poster were less explored in terms of use of external type elements. In most of the cases title designs were plain and variations were limited to orientation, texture and forms of the letters and in some cases with perspective style. From mid 1970s, designers started using some external typo elements or "image as a type" for title design. A symbolic language was developed to communicate with illiterate people.

This style comes randomly in many posters throughout the timeline. Images were interestingly used as a type in many movies like TeesariManzil, MeraNaam Joker, Khiladi, Zanjeer, Coolie, Ghulami, DilwaleDulhania Le Jayenge, Border, LOC, Iqbal, Raja Hindustani, Rab Ne Bana Di Jodi and many more. This introduction of images as a type plays an important role in making posters



more persuasive and powerful in terms of conveying message of the film.

Letterforms with respect to genre of the film

Having the melodramatic nature, it is hard to categorise most of the Bollywood films into a specific genre. The basic genres in which most of the films fall under are social, romantic, comedy, action and thriller. The industry started with film based on epic story like Raja Harishchandra (1913), Alam Ara (1931) and later dominated by romantic and action films. The "Golden period" of Hindi cinema (1940s to 1960s) gives some of the most critically acclaimed films of all time featuring the social themes mainly dealing with working class urban life in India. Films like Awaara (1951), NayaDaur (1957), Shree 420 (1955), Pyaasa (1957) and Mother India (1957) are few of them. The print technology was limited and result of it. The main emphasis was given to keep titles plain and simple. Some exceptions like Mugha-e-Azam, where artist has used 3D perspective and shadow to create an illusion of fort suggesting a historical genre.

In the 1970s, India was going through social and economic changes and this influenced the Bollywood film making significantly. Industry came up with more of action and violent films in terms of commercial cinema. Films like Sholay (1975), Deewar (1975) and MuquaddarKaSikandar (1978) are prominent examples of this genre. In most of the cases letterforms have followed similar patterns, like use of outline, 3D perspective and shadow to create emphasis irrespective of genre of the film. Action films established the trend of using 3D style decorated with shadow and outline gel well with the film genre. This type of lettering dominated upto 1980s and became a trend throughout the decades independent of film genre.

Pragmatic analysis

This section enquires about the title design in relation with the context. It enquires how designing of the title in film poster has been influenced by the techniques of poster productions, display positions or platform and technology.



Poster making techniques

In the beginning of Bollywood film industry, only hand painting was in use for making posters and lithography was the only technology for mass production. These limitations in a way restricted the possibilities in terms of font exploration, whereas in other way gave freedom to use style and imagination of the artists. Because different hands were involved, no specific pattern has been followed till 1970s. Cut-paste technique was introduced in early 1970s, which has been overcome by computer in 1990s.

Display position

A display position is one of the deciding factors in terms of title design. What would be the distance of viewer from the poster, whether it will be used for day light display or night, kinds of viewer (rural or urban), whether it is alone or competing with surrounding environment full of other forms of advertisement, all these parameters are deciding factors in title design. These constrain makes designer to think about the size of fonts, visibility and contrast in the poster. Extensive use of bold, sans-serif and 63% uppercase letterform reflects the designers' concern. Letterforms in most of the cases are shadowed and decorated with outline in contrast colour so that it can stand out of the poster.

Till late 1960s, when there was no regulatory rule about the poster display platform, there were plenty of spaces in the society to use for the poster display. So posters are used everywhere, above eye level, bellow eye level, far from the viewer as hoardings or just side of the viewer on the sidewall of the street. This might be the reason behind random positioning of title in the film poster. Since late 1970s, when guidelines on outdoor advertisement were made by the Indian government, poster designs became more standardized and in majority of the cases titles started appearing in the bottom of the film posters.

Findings reveal that variation in the structural elements in title design has lot of syntactic, semantic and pragmatic influences. Syntactic influences in structural variations include stroke thickness, weight, texture, colour and letter-spacing. In most of the cases (96%), titles are decorated with outline and shadow to create more emphasis. Semantic influence has been adapted by



the use of decoration and external semantic elements. A symbolic meaning has been created by manipulating letters and use of colour. It evolved gradually and usage of external typo elements became evident in the later period as out of 35 titles showing image-text manipulation, 31 (89%) are from 1960s onwards. External typo elements like use of Coolie badges in the place of letter 'O' in film Coolie (1983,) enhances this ability by making it simpler for common viewer to read and understand the hidden meaning behind the title. Expressive typography maximizes persuading ability of film poster. There are also pragmatics aspects involved in the title design variation like positioning of title in the film poster and context of usage. Advancement of technology has its effect on the title characteristics across the timeline. The sample size used for this study is not statistically significant to generalize any arguments. But it definitely provides enough qualitative insights to predict few trends and various causes responsible for those trends. For future study it will be interesting to regenerate these patterns by considering more number of posters from each decade. Future study can also explore the relationship of film title with other elements in the film poster.

Frame and aspect ratio

A frame is a single still image, the smallest component of a sequence. In a movie, all actions take place within the borders of the screen or frame – much as if it is a room. Thus designers of kinetic type in a movie, need to make decisions about the compositional proximity of the text and objects to the edges of the screen/frame. The issue regarding the dimension of the screen/frame is termed “aspect ratio.” The aspect ratio of an image is its width divided by its height.

There are a number of aspect ratio standards used in movies and videos. Three of them, namely Academy Standard, Academy Flat and Cinemascope are the most influential or common ones in movies.

Academy Standard

The Academy Standard refers to the aspect ratio of 1.37:1, which was used almost universally in 35 mm full-screen sound film images or 16 mm standard professional formats between 1932 and 1953. This ratio means that the picture is 1.37 times as wide



as it is tall. (Note that 1.37:1 standard is referred to as 1.33: 1 by Krasner, 2004, p. 316.)

Recognized officially by the Academy of Motion Picture Arts and Sciences (AMPAS) in 1932, the 1.37: 1 aspect ratio eventually became known as “Academy Standard” or “Academy Ratio” for movies. Classic films such as *Gone With the Wind* (1939), *The Wizard of Oz* (1939) and *Singing in the Rain* (1952) appeared in this ratio according to the IMDb database. This standard is still occasionally used.

Academy Flat

The so-called “Academy Flat” aspect ratio was developed in the circumstances that film had to compete against the threat from television. One of the film industry’s weapons was “wide-screen pictures.” The development of wide-screen formats aimed to create a more visually breath-taking experience that would give viewers an incentive to attend the theatre rather than stay at home. An aspect ratio of 1.85:1 served this purpose. It was usually used for 35 mm US and UK widescreen theatrical films and was known as “Academy Flat.” In the US, 35 mm was usually projected at this wide-screen ratio by cutting off the top and bottom of the frame. Films shot in this ratio can also save on the cost of film stock.

Cinemascope

A less widely used wide-screen format is Cinemascope (also known as “letter-box” or “anamorphic”) with an aspect ratio of 2.35:1. The anamorphic standard has subtly changed since the 1970s. The anamorphic productions today are actually 2.39:1, which is commonly labelled 2.40:1, e.g., in the American Society of Cinematographers' American Cinematographer Manual, but often referred to as 2.35 anyway, due to old convention.

Design structure

Pictorial composition

Pictorial composition refers to how design elements are arranged in space within one single frame. It is important to recognize the distinction between pictorial composition and sequential composition. The latter is characterized by the continuity and



recurrence of elements between frames. Since the sequential composition is basically a time-related issue, it will be discussed in the later chapter of “designing over the time.”

Grid system

Designers of all types (print, web, animation, etc.) are constantly facing issues involving the structure of their designs or the pictorial order in a moving composition. All those designers can get assistance from the “grid system,” which is a structure made up of a series of intersecting vertical and horizontal lines used to divide the page into grid units or modules. The lines of the grid themselves are not necessarily visible (although in some designs they are).

Grids allow for the distribution of typographic elements in a clear, intelligible order. They work such that certain design elements occupy one unit or module, while others can deviate and intrude into other units or modules. Design elements can also align according to the grid. Once a general grid has been set up, the designer can always deviate from it.

It is said that grids can help refine the approach to spatial organization, establish consistency within the design, achieve balance, help organize complex information within a rectangular space and allow the information to be communicated clearly and effectively.

Should a designer decide to use a grid, it is best to sketch it out on paper first and then implement it in the application. Most animation programs provide guidelines that can be adjusted and locked to position elements into vertical or horizontal alignment.

Designing Over Time

Frames, shots, scenes and sequences

Any film is composed of frames, shots, scenes, and sequences. A frame is a single still image, the smallest component of a sequence. A shot is a combination of frames that contains a continuous action. Juxtaposition of groups of related shots composes a scene. Finally, scenes can be assembled in a specific order to create a sequence that expresses a narrative or a theme.



Computer animation

Animation with the aid of computer technique is called “computer animation.” The most basic computer animation tools assist the process of traditional animation by automatically generating some of the frames of animation. Traditionally, animators needed to hand-draw illustrations and photocopied frame-by-frame onto “cels” (transparent acetate sheets). The final art was photographed one-by-one onto motion picture film by a camera. Computer animation works in a totally different way. For 3D animations, objects are modelled and rendered with 3D and lighting software. Models are rigged with a virtual skeleton, which contains many “joints.” The animator can make the model “move” by dragging and controlling the skeleton and joints. For 2D figure animations, separate objects (illustrations, graphics) and separate transparent layers are used, with or without a virtual skeleton. To make the objects move, animators create the important frames of a sequence called “key frames,” then let the software calculate and generate the in-between frames (animations). Such technique is known as “tweening” or “morphing.”

Credit Making

Rolling credits is a technique used to give acknowledgement to those who have worked on your project. The main benefit to creating rolling credits (as opposed to having multiple names on a still frame) is that the movement helps keep the viewers interested. You can roll your credits on any background. Depending on your video you might choose to use a solid background, or use different pictures.

Rolling Credit Basics

To create your rolling credits, you'll need two clips and two layers in Timeline mode. One clip (bottom layer) will be the background where your credits will roll. The other clip (top layer) will be your text clip and will be where you'll write your credits



Unit Summary



Summary

Titles are important in creating first impression of a film. Titles along with opening credits play an important role in introducing the film and setting the mood. Making good title and credit line is also a serious art form. Titles can be made with syntactic, semantic and pragmatic approach. Fonts, use of semantic elements, display position etc pay an important role in making effective titles and credit lines.

Assessment



Assessment

1. What are the three components of design over time?
2. What are the components of design structure?
3. What is the difference between academy standard and academy flat?
4. What is Gestalt theory?
5. What are the components of design over space?

Resources



Reading

- <https://link.springer.com/book/10.1007%2F978-81-322-2232-3>
- <https://www.intofilm.org/clubs>
- www.svnfilm.com
- www.videomaker.com
- www.junctiongoogle.co.uk



Unit 4

Stop Motion Animation

Introduction

Stop Motion Animation is a technique used in animation to look at static object as a moving animation on a screen. This is done by moving the object in increments while filming a frame per increment. When all the frames are played in sequence it shows movement. Clay figures, puppets and miniatures are often used in stop motion animation as they can be handled and repositioned easily.

The basic process of animation involves taking photograph of your objects or characters, moving them slightly and taking another photograph. When you play back the images consecutively, the objects or characters appear to move on their own.

Animation creates the impression of movement through an optical illusion referred to as the “Persistence of Vision.” The eye retains an image for a split second after it has actually been shown. Animation works by presenting slightly different images in quick succession, with the persistence of vision filling in the gap between each image and allowing for the illusion of motion.

In the 19th century, this phenomenon was made use of in many children’s toys that some students may still be familiar with.

Outcomes



Outcomes

Upon completion of this unit you will be able to:

- Learn about the basics of Stop motion animation
- Understand the importance of story and subsequent character, sets and props
- Know the use of various equipments
- Learn how to use Powtoon open source free software to create stop motion animation



Terminology



Terminology

- Flick book :** A collection of slightly altered images bound at one end to allow the user to flick through the images by hand.
- Zoetrope:** It is a cylindrical drum with slits cut into the sides
- Powtoon:** This is Web-based animation software that allows users to create animated presentations by manipulating pre-created objects, imported images, provided music and user created voice-overs.
- Storyboard :** An outline of visual idea.

History

Thaumatrope

Made popular by John A. Paris in 1824, thaumatropes work by presenting two separate images on the front and back of a piece of card with string attached to each side. When the card is spun quickly using the string the two images are shown in quick succession, giving the illusion of one image.

Mutoscopes

Mutoscopes were manufactured between 1895 and 1909. To achieve the illusion of movement, a series of slightly altered images were mounted onto a circular core (a bit like a Filofax) and then turned quickly using a handle or crank. Mutoscopes were coin operated; the viewer would put in their money and then turn a crank to see the animation

Flick books

Flick books were invented in the latter half of the 19th century and it is thought that the first flick book was created by John Barnes Linnett in 1868. Flick books use the persistence of vision in a



similar way to mutoscopes to fool the eye into perceiving motion. Flick books are essentially a collection of slightly altered images bound at one end to allow the user to flick through the images by hand, viewing the images in quick succession and creating the illusion of movement.

Zoetropes



Title-Zoetropes

Attribution-Andrew Dunn

Link-<https://commons.wikimedia.org/wiki/File:Zoetrope.jpg>

Zoetropes were also invented in the 19th century and use the persistence of vision to fool the eye into perceiving motion. A Zoetrope is a cylindrical drum with slits cut into the sides. On the inside of the drum are a series of slightly different images so when the drum is rotated the viewer looks through the slits to see the animated movement. The invention of the Zoetrope is credited to William George Horner in 1884, although a variety of Zoetropes that uses a similar principle are thought to have been created in China at around 100 BC.

Story

Before you start any animation, you will need to come up with a story that you want to bring to life. This could be as simple as a character or two, coming into the frame and doing something visual like jumping in the air or simply two characters having a conversation.

Keep it simple

The more characters you have, the more time it takes to create your animation and the more complicated the story becomes, so



use not more than four characters to begin with. Remember, you also have to make sets and backgrounds for each scene in the film, so it is good to limit your story to four different scenes maximum if you only have a short amount of time. Get clear guidelines and set limits on what the film needs to include. By limiting them to four characters and four scenes, you are also asking them to think about how they can convey the story concisely and in a visual way.

Keep it familiar

Animations can take a long time to make (just like anything worth doing), so it is important that Animator do not spend all day deciding on the storyline. You could base the animation on something simple that you have been studying recently, or take your inspiration from a film you have recently seen. By having a starting point such as lyrics from a song, a topic, a prop to include or a suggested title you can focus the story, while still thinking creatively about the film and visual storytelling.

Pitch it

Share your ideas for the film. Select the best idea, based on consensus.

Split it into scenes

Once you have your basic narrative in place, it is required to break it up into different scenes. This helps to start visualising their film and gives you an opportunity to start listing the set, props and background models to be made for each scene. If you are working in team, you can split them among members, with each one being responsible for a different element of model making. For example, one member could design the main characters, while another team could make the buildings needed and the third team could craft the props, trees or outside spaces.

Character, Set and Props

The star of your animation could be anything from models made out of clay/dough, paper cut-outs, to toys, food and cutlery or real people. All you need to do is adjust their position between frames to create the illusion that they are moving. Have thorough understanding about how you are going to film the models, so that you can visualise the best way to make them. If you are going



to be filming with the camera resting on the table, then the characters are required to be able to stand up unaided or be stuck against a wall. If you film using a tripod with the camera pointed downwards, then the characters will need to be flat onto the surface. Also, it is a good idea to decide the scale for your animation early on. You can make your models as large or small as you like, but characters, props and backgrounds need to be to, of the same scale. It is a good idea to know the areas you will be animating first, and then you can decide the scale required for the models.

Modelling clay

A quick tip for creating modelling clay characters is to keep them strong and simple – you do not want pieces falling off, as you are adjusting their limbs. You may try to shape the characters flat onto the table - this is fine for light weight paper cut-outs but will make clay characters too flimsy. Start them off with blocks or round balls rather than thin strips and encourage them to build models with a flat round base. Thin legs can be a weak area that might see your characters topples over.

Example film: Binn Bunny Goes Green

Paper cut-outs

You could also create characters out of paper or card. Paper figures might be easily broken, so try to use thin card or reinforce coloured paper with card. Draw the characters with long arms and legs, then these can be cut out and reattached at the joints with adhesive putty or split pins ready to animate. Remember when using adhesive putty less is more. You don't want to be able to see the putty past joints as you move your character, so be quite strict with the amount you give out. Unlike Claymation, anything you make using paper cut-outs will be in 2D. If you have time, you could make profile and front-on versions of the main characters and models to add depth to your animation. A good cheat is to put detail on both sides of your model, so that one model can be used for the front and back of a character. To give the illusion that a character is turning to the side, simply swap your front-facing character for the side profile.



Silhouettes



Title-Silhouettes

Source-Pixabay.com

Link-<https://www.pexels.com/photo/light-sky-sunset-people-40723/>

Using a lightbox can create a very dramatic and filmic aesthetic for your animation. Lightboxes can be bought cheaply. For a bold and eerie animation, use black card to create silhouetted characters, backgrounds and sets. Any details, character features and definition should be cut out so that the light can shine through the card. Cut out windows, cut around doors (leaving the hinge attached) and your characters can move through houses by moving them behind the card. Coloured acetate and thin tissue paper can also be used to add a little colour to your animation. Example film: Ominous Shadows

Mixed media

You can be creative and experiment with different mediums, colours and textures. Newspaper, corrugated cardboard, reflective paper, sandpaper and tissue paper can be used to create different textures and patterns. Crumpled, coloured tissue paper can be used for water and fire effects in particular. They could also experiment with different textures by adding sand to paint before painting the backgrounds.

Example film: High Above the Sky

Equipment

Cameras



Title-Camera

Attribution-Martin Foskett

Link-<https://www.pexels.com/photo/television-camera-broadcast-camera-67654/>

You can capture frames with a video camera, stills camera, tablet or mobile phone and then transfer the images onto a computer to edit. You could also try stop-motion software, capturing the frames directly into a timeline. The most important thing to remember is to keep the camera still and in the same position. A good idea is to sticky tack your camera down to the table so that it does not move, or alternatively you could mark its position with tape. When using sticky tack, be careful to ensure that the frame is straight, as this may affect the film when you put it all together.

Tripod



Title-Tripod

Attribution-Photo mix

Link-<https://www.pexels.com/photo/black-dslr-camera-mounted-on-black-tripod-212372/>



If you are using a tripod, mark where the legs are placed with duct or masking tape, so that if the tripod is knocked you can line it up to the original position. This is where using animation software such as iStopmotion can be really helpful as it keeps your last image up on the screen whilst also showing you the live feed image from your camera, allowing you to match up the images. This process is called 'Onion Skinning'. Tripods are particularly useful when using a light box to animate. Ensure your tripod can be tilted 180 degrees as this will allow you to shoot from above onto a flat surface.

The bare bones

A tripod and camera are not always necessary – for example, you could use the inbuilt camera on your laptop with free software like iMovie or Windows Movie Maker or you could simply take images with your phone or camera and feed them into the software with a USB lead. The most important thing is that you are able to get a clear, straight photograph of each movement of your set, work with what you already have. To begin with, the process of animating is more important than the equipment used.

Animating

Now that you have your set, props, characters and equipment in place it is time to start animating. At this stage it may be a good idea to split the class up into small groups of four or five with each group taking a turn to animate. This will make things easier to manage, will ensure everyone has the opportunity to animate and will prevent you from becoming restless with the process. It could also be an idea to split the sessions into Pre-production and Production days if you have the time to do so. If you have the space, equipment and staff available you can also set up multiple animating stations and animate scenes simultaneously.

On your marks

Put all models and scenery in place for the first scene to begin. It is a good idea to take four or five establishing frames at the beginning of every new scene; this will slow down the action and allow the viewer to take in the new surroundings.



Get set

To give an impression of movement, carefully adjust your props and characters positions by a tiny amount. Once everyone in the group is happy then take a photograph. Take care that the group do not change anything that is meant to stay still. It is worth taking two photographs every time you move your character or object as this will help to ensure the movements are smooth.

Go

A thumb rule is 12 adjustments, each one captured twice on camera which will add up, to about one second of film. Remember to make only small adjustments each time, the bigger the movements between the frames, the faster the action and jerkier the animation.

In the frame

A good tip to keep their fingers out of shot when capturing each frame is to mark a line of the floor with gaffer tape and ask everyone to stand behind this line while one member captures the frame. Ask the team to give a signal to the person taking the photo each time, this can be “Action” or simply “Ready”.

The person capturing the frame can then respond, letting the team know they are ready to put the new frame in place.

Software and Editing

There is an easy to use animation software package in which you can make your films. iStopmotion can be downloaded onto macs and iPads and allows you to import images directly on to a timeline and export the footage as a QuickTime file to edit in iMovie. These both come with easy to follow instructions. You might need to play back your animation and check that the movements you have made are smooth and not jerky.

Slow down and repeat it

Once you have exported your footage to your editing software, it is now possible to slow down the action, simply by adjusting the speed settings. It is likely that some parts of the animation will have to be slowed down but you may also think about looping and reusing some of the footage. For example, a short scene where two characters are talking to each other can be looped to fit a



longer conversation or reused with different voiceovers. Similarly, you can also reverse some of your footage to create a bigger impact, if you have footage of your character looking away from the camera, this can be copied then reversed so that the character looks away from and then back to the camera.

The process verses the product

Most computers, tablets and phones will have some kind of editing software that you can use, however if you don't have the time to make edits to your final film don't worry. The beauty of animation is that a lot of the editing is achieved 'in-camera'. It means that the way you set up the shots and the amount of movement between frames can often determine how smooth the finished film is. Animation is about teamwork, creativity and visual storytelling in which students will gain a lot in the process of making an animation, even if the finished product is not polished or edited to industry standard.

Adding sound

Adding voiceovers, sound effects and music will have a dramatic effect on your animation. Voiceovers can help to move the action along and reiterate the storyline for the audience. Adding atmospheric music and sound effects can help to punctuate the action, infer an emotion or feeling to the audience and add humour. If you are using iMovie to edit your films, this program comes with a bank of royalty-free music and sound effects that you can add to your film. If not, then there are many royalty-free music websites that you can use to download music and sound effects.

Some Software Links

Stick man: drawn animation

<http://www.stykz.net/>

Stop motion

animation <http://www.culturestreet.org.uk/activities/stopframeanimator/>

Stop frame animator

www.culturestreet.org.uk/activitiesstopframeanimator

Hand drawn cartoon animation



<http://www.pencil-animation.org>

Sound effects

www.freesound.org

Royalty free music

<http://www.freesfx.co.uk>

PowToon Basics

PowToon is Web-based animation software that allows users to create animated presentations by manipulating pre-created objects, imported images, provided music and user created voice-overs. Powtoon uses an Apache Flex engine to generate an XML file that can be played for Powtoon online viewer, exported to YouTube or downloaded as an MP4 file. PowToon is also available on the Google Chrome Store.

Through this tutorial you will learn to:

- Access PowToon and create a presentation
- Navigate the PowToon Interface
- Access and use the panels
- Apply the basic animation workflow
- Publish your project

Accessing PowToon

Step 1: Login

Login at <http://www.powtoon.com>

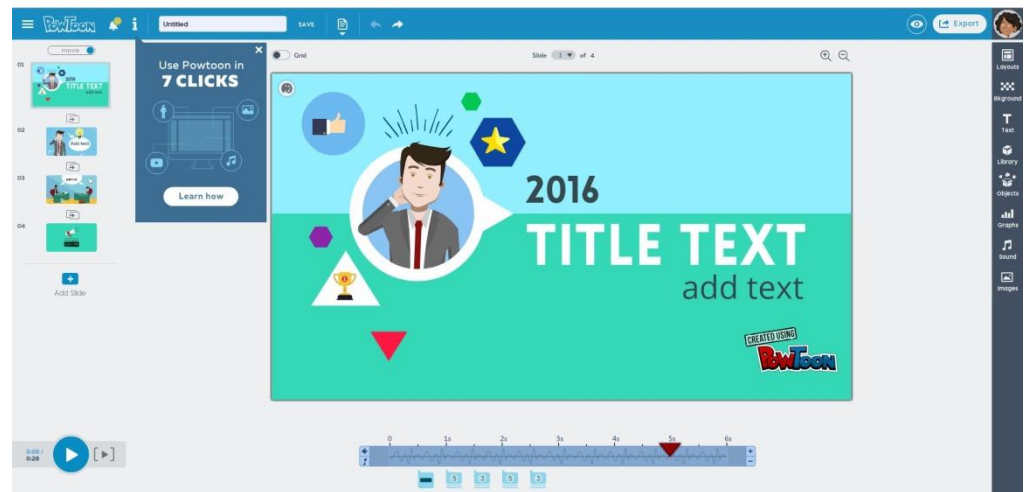
Step 2: Start a PowToon

You can create a PowToon from a readymade presentation and start from Scratch with or without a template. Start from scratch categories includes pre-arranged slides for Promotional Videos, Slideshows, Educational Clips, Info-graphic Videos and Social Clips. Select Edit for readymade presentations or go after selecting a Blank Project or template.

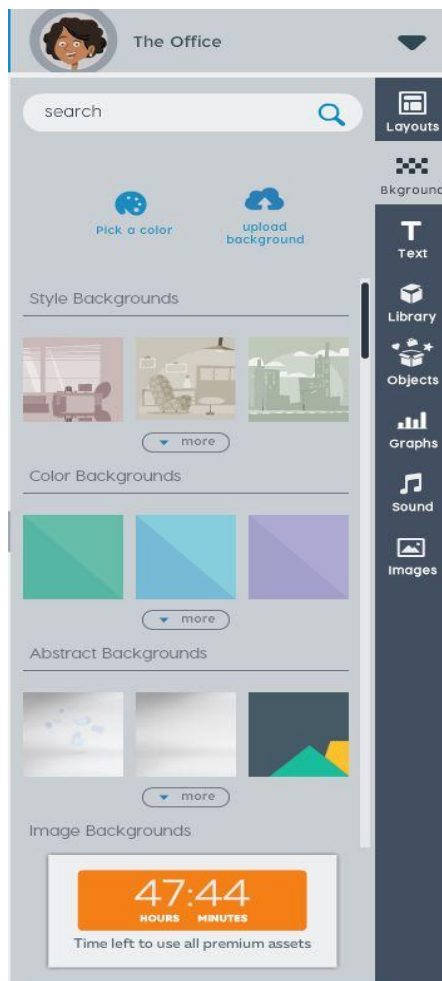
Note: Some readymade presentations and templates are only available to Premium users.



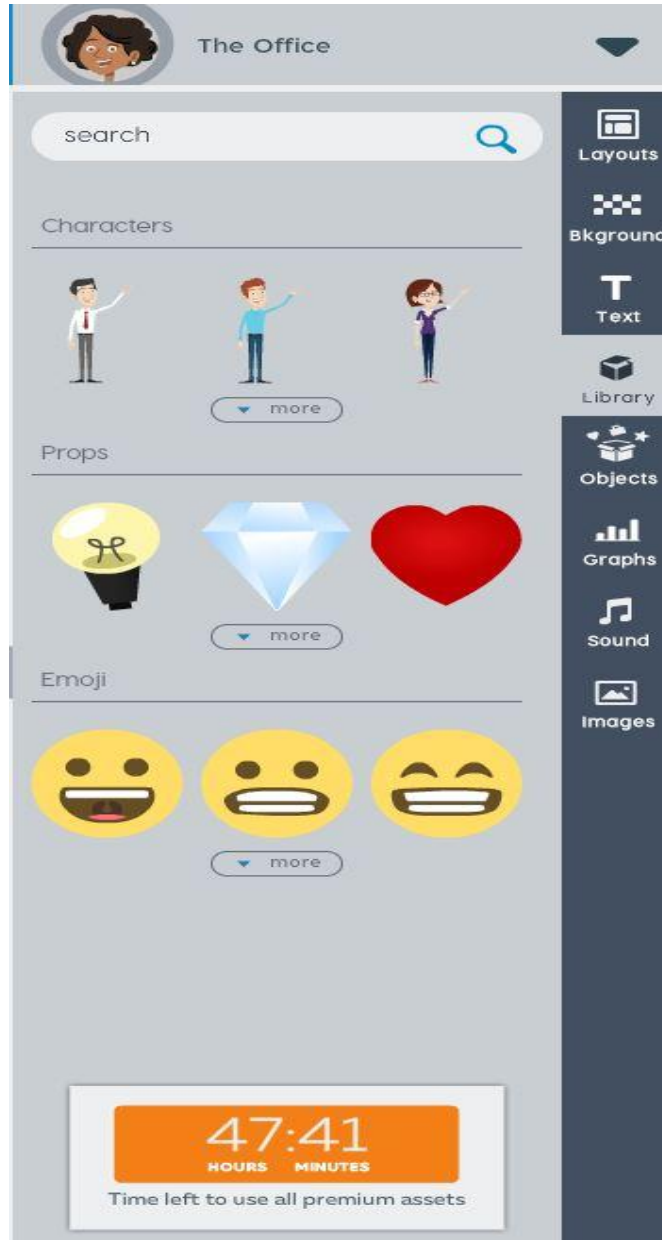
The Interface & Panels



The Library Panel



Screenshot

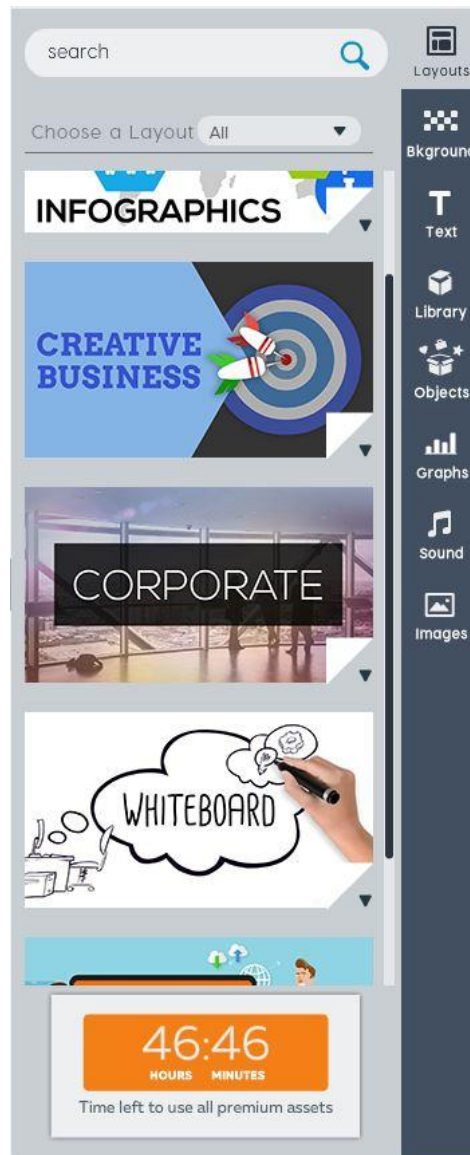


Screenshot

The PowToon Library is made up of different categories of text, objects (shapes, markers), props and characters that can be added to your presentation. You can even add your own images to the library by selecting an Image Holder (image frame) option



Using Items in the Library



Screenshot

To use the Library, select a Style from the top of the panel. To add objects, props and characters simply drag/drop to the slide.

Note: Some Items in the Library may be part of the premium Powtoon package (marked as “More”).

The Timeline

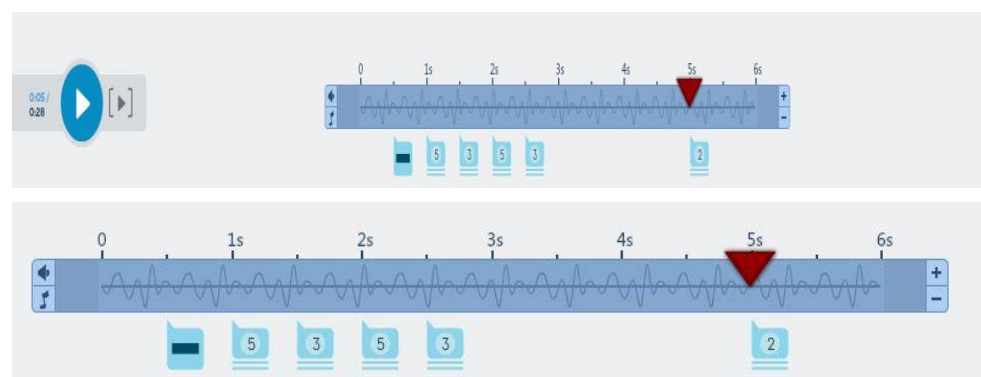
The Powtoon timeline is used to add animation timing to objects in your presentation.



1. **Playhead:** The playhead indicates at what second you are currently in your slide. You can slide the playhead throughout the timeline to preview the animation for each slide.
2. **Total Slide Time:** Each slide by default is assigned 10 seconds. This can be decreased or increased to up to 20 seconds maximum.
3. **Object Duration Bar:** Each object has an animation timing duration bar. To access this bar select the object on the stage and adjust the timing as desired.
4. **Object Thumbnails:** All objects in the slide will appear below the timeline. Click on an object to adjust the effect and duration of the object.
5. **Object Effects (Animation):** Objects can be set to Enter or Exit the stage using a variety of options including fades, directionality and even a hand function (where a human hand slides the object onto the presentation). Each object can be animated using these effects. Note: You can also Flip an object's orientation from this area.
6. **Playback Controls:** Helps you to preview your presentation animation as you go.

Note: There are four playback options - from left to right -

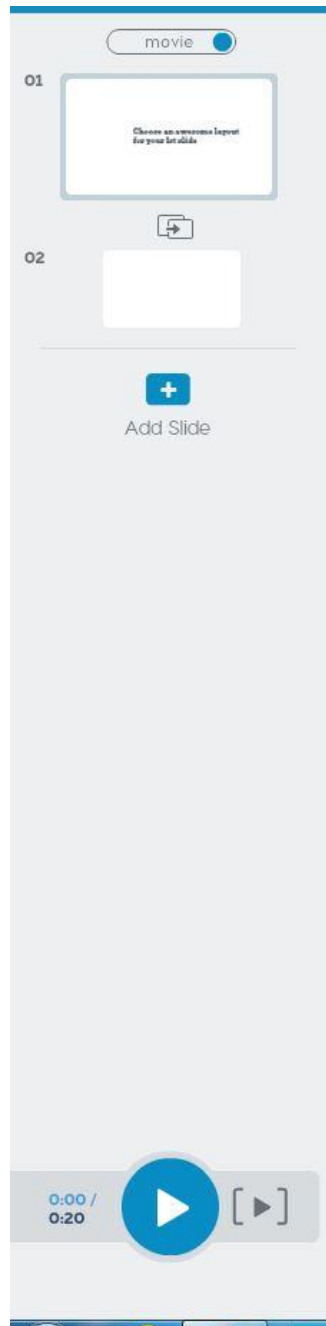
- (a) Play all slides from start
- (b) play current slide from start
- (c) play from play head then continue
- (d) Play current slide.



Screenshot



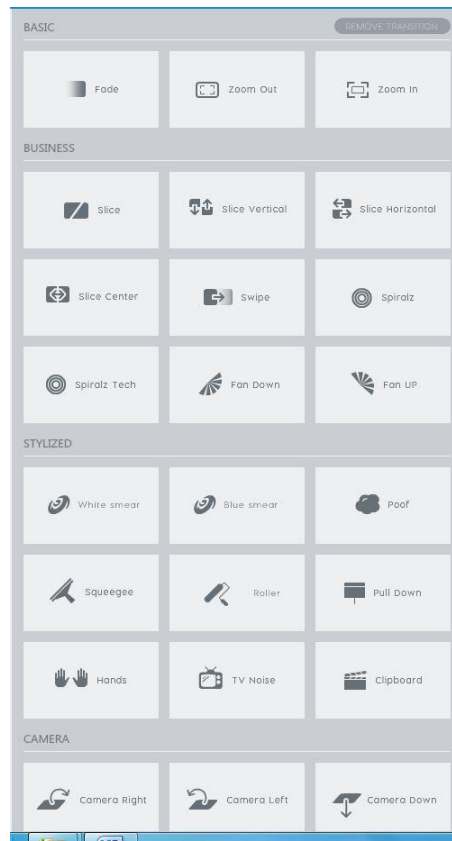
The Slide Panel



Screenshot



The Slide Panel contains your slides for your presentation.

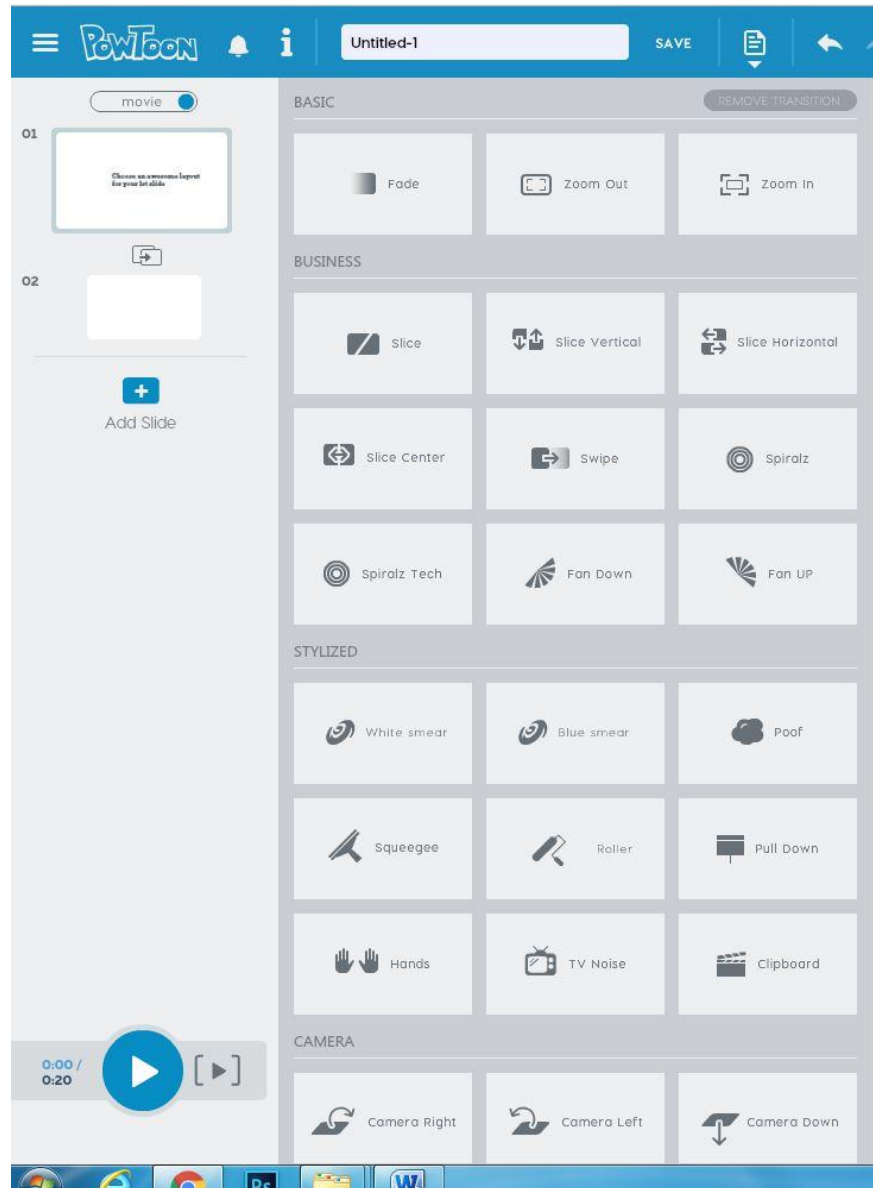


Screenshot

Slide Options: You can add/remove and duplicate slides (all objects and timing). Note: You can also clone slides, which duplicates the previous slide with the last frame (1 second) on it. This can help you make a smooth transition from slide to slide.

Presentation/Movie Mode: Toggle between the movie and presentation modes depending on how you want to show or explain your information. Note: Presentation mode allows you to create Hold Points for live presentation narration.

Transitions: Transitions between slides can be added by accessing the Transition Options from the Library Panel. To add a transition, select the slide and click on the desired transition effect. The transition will appear below the selected slide and the name of the transition effect will appear between the two slides. Note: Transitions are a standard length and cannot be edited. To remove a transition, select the slide and from Transition options from the Library Panel, select None.

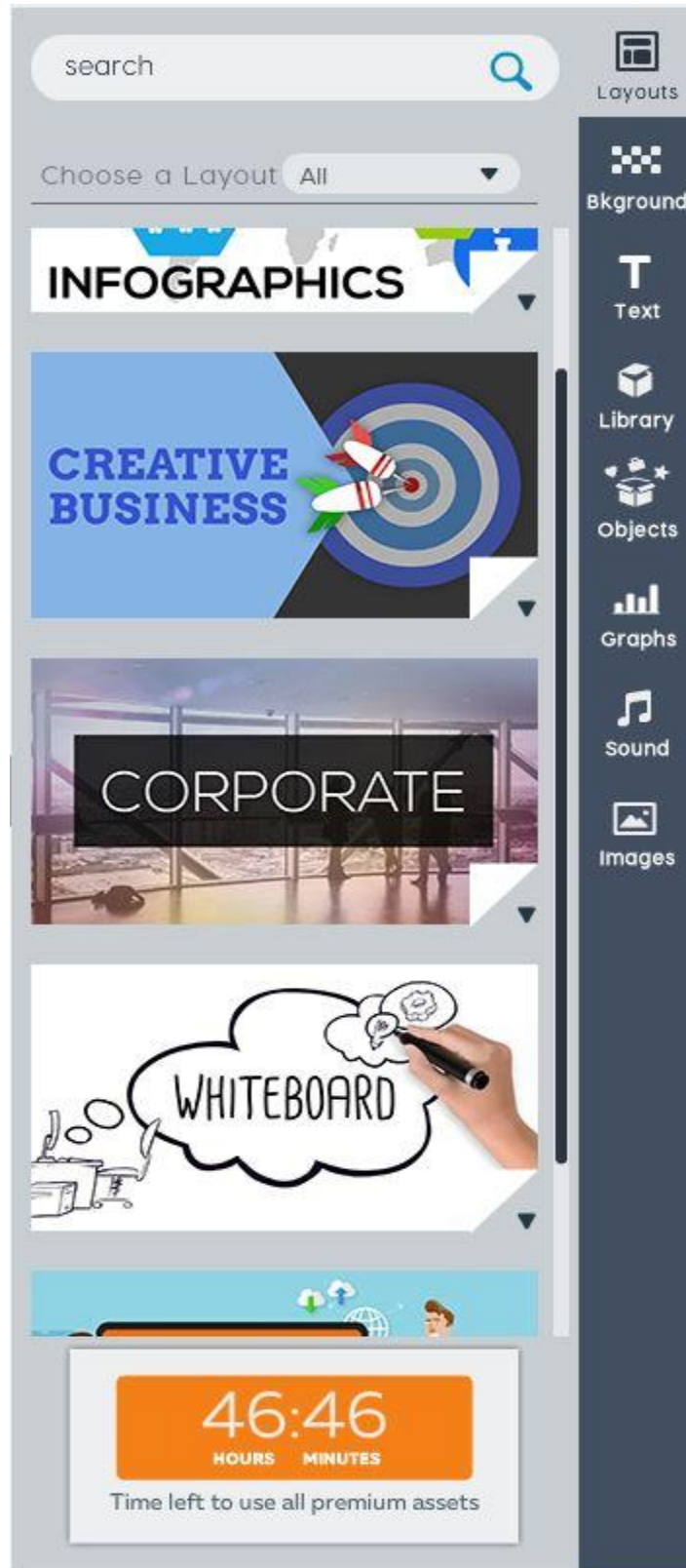


Screenshot

Layouts: Layouts for slides include animation placeholders and basic timings. Access the slide layout options by clicking on the slide and selecting the layout option's tab. A menu of layout will appear. Select a layout.

Edit the individual items on the slide and timings to adjust the effects.

Note: You can only apply a layout option to a slide once. To apply a new layout, simply add a new slide and select a new layout option.



Screenshot



The Menu Panel

The Menu Panel contains features common to many presentation tools.

1. **Save:** although PowToon will autosave every 5 minutes, it is important to save regularly.
2. **New:** to create a new PowToon.
3. **Cut, Copy, Paste:** cut, copy and paste slides and objects in your presentation.
4. **Sound:** add a sound file (import, record or use a track from the PowToon).
5. **Image:** Import image from computer or from the web.
6. **Text:** add text to a slide and format text options.
7. **Preview (Share/Link, Embed):** Select preview to review your PowToon and share via a URL link, social media site or embed into a web site.
8. **Exporting (YouTube):** directly share your PowToon to YouTube or export as a video file (paid option). Note: free accounts include PowToon branding.



Screenshot

Basic WorkFlow

Step 1: Storyboard

It is highly recommended that you plan your presentation using a storyboard that outlines your visual ideas and narration. It is the most effective approach for animation.

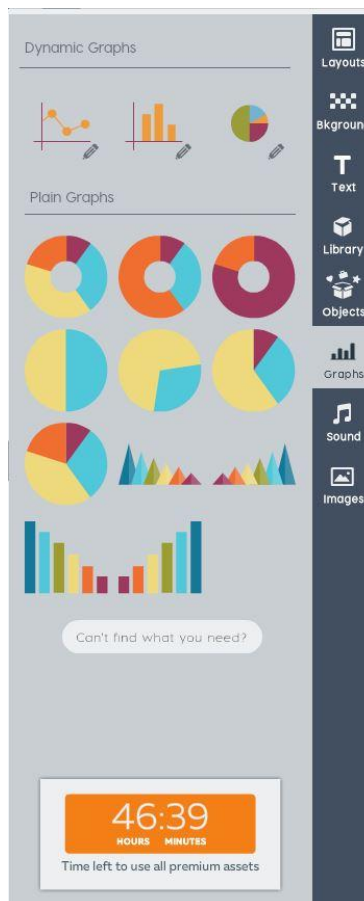
Step 2: Add the Voiceover/Music

It is much easier to add the voiceover first then add the animations. Why? It provides you with the timings, making it easier to add slides and animations.

STEP 3: Adding Sound

From the Menu Panel select Sound OR select the Audio Icon from the Timeline.

1. Import or Record Voiceover
2. Import or Add Music Track Note: Some music requires a paid account.
3. Adjust sound with controls
4. Preview / Play
5. Apply

STEP-4 Add Slides**Screenshot**

Using the Slide Panel add slides to your presentation based on your storyboard.

STEP-5 Add Objects

Drag and drop objects from the PowToon Library Panel onto your slides (including characters, text, objects and props).

Tip: You can layer objects on top of each other and use the animation timings to introduce objects strategically to create a sense of dynamic movement and cartoon interaction.

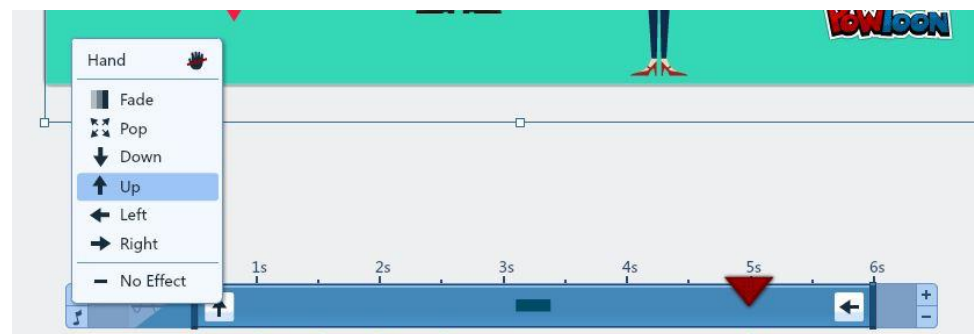
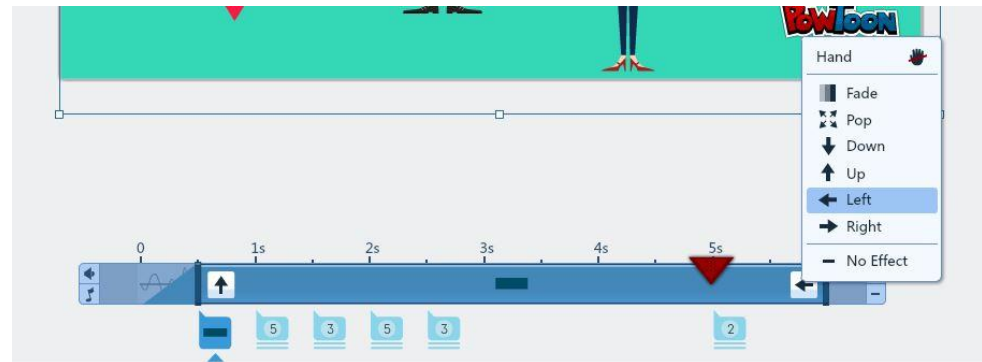
Managing Objects



Managing objects in PowToon is similar to MS PowerPoint.

- Left-click on the item to select, either hold and move on the stage with the mouse or use the arrow keys.
- Use the object handles to resize the object.
- Right-click for more object management options such as arrangement (back, front), orientation (flip), etc.

Step 6: Animate



Screenshot

Objects

From the Timeline use the Duration Bar to animate each object on the slide.

1. Select the object to animate.
2. Choose an effect style for the object entry/exit.
3. Use the sliders to adjust the duration of the object animation in the slide.
4. Add/Remove overall slide timing as needed (slides can be up to 20 seconds in length).



Step 7: Preview

Use the Playback Controls or select Preview from the Menu Panel to review your video.

NOTE: Don't forget to save throughout the process of creating your presentation. The save feature is located in the Menu Panel.

Step 8: Publish

To publish your PowToon select from the following:

Share via Link or Embed

1. Select Preview from the Menu Panel
2. Choose from one of the sharing options in the Preview dialog.

Export to YouTube/Other

1. Select Export from the Menu Panel

In the dialog select an output option and add a YouTube Account.

NOTE: In the FREE PowToon account you can only export up to 30 videos at medium resolution with branding. Video exports are also part of premium packages.



Unit summary



Summary

In this unit you have learned the basics of stop motion animation and how to make it. We have discussed about character, set and props for various different projects. Also we studied about various equipment used for stop motion animation and learned basics of open source software PowToon.

Assessment



Assessment

1. What is stop motion animation?
2. What is PowToon?
3. True or False
 - a. "My styles" in Powtoon is in left side of the screen
 - b. PowToon is an open sourced software

Resources



Reading

- <https://link.springer.com/book/10.1007%2F978-81-322-2232-3>
- <https://www.intofilm.org/clubs>
- www.svnfilm.com
- www.videomaker.com
- www.junctiongoogle.co.uk