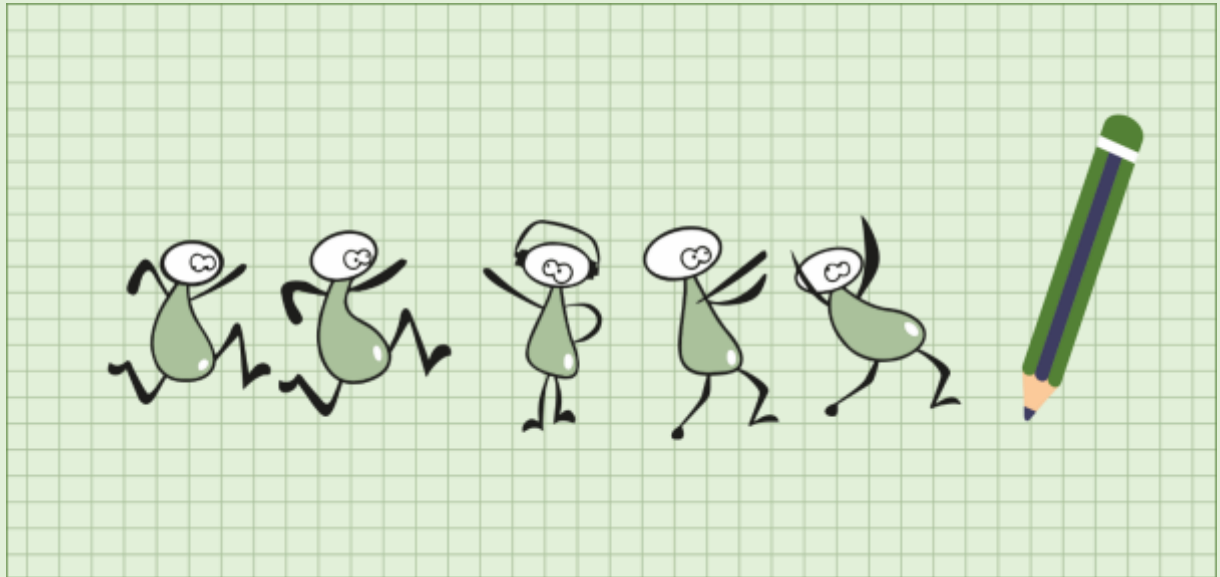


Draft Study Material



CHARACTER DESIGNER

(Qualification Pack: Ref. Id. MES/Q0502)

Sector: Media and Entertainment

(Grade XI)



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(a constituent unit of NCERT, under Ministry of Education, Government of India)
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Preface

Vocational Education is a dynamic and evolving field, and ensuring that every student has access to quality learning materials is of paramount importance. The journey of the PSS Central Institute of Vocational Education (PSSCIVE) toward producing comprehensive and inclusive study material is rigorous and time-consuming, requiring thorough research, expert consultation, and publication by the National Council of Educational Research and Training (NCERT). However, the absence of finalized study material should not impede the educational progress of our students. In response to this necessity, we present the draft study material, a provisional yet comprehensive guide, designed to bridge the gap between teaching and learning, until the official version of the study material is made available by the NCERT. The draft study material provides a structured and accessible set of materials for teachers and students to utilize in the interim period. The content is aligned with the prescribed curriculum to ensure that students remain on track with their learning objectives.

The contents of the modules are curated to provide continuity in education and maintain the momentum of teaching-learning in vocational education. It encompasses essential concepts and skills aligned with the curriculum and educational standards. We extend our gratitude to the academicians, vocational educators, subject matter experts, industry experts, academic consultants, and all other people who contributed their expertise and insights to the creation of the draft study material.

Teachers are encouraged to use the draft modules of the study material as a guide and supplement their teaching with additional resources and activities that cater to their students' unique learning styles and needs. Collaboration and feedback are vital; therefore, we welcome suggestions for improvement, especially by the teachers, in improving upon the content of the study material.

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Date: 1 November 2024

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Module 1

Introduction to Character Designing

Module Overview

The module on introduction to character designing provides a foundational understanding of the principles and processes involved in character creation.

Session 1 deals with the historical evolution of character design, highlighting its progression from traditional folklore to modern entertainment media.

Session 2 deals with the developmental stages of character designing, covering the initial concept sketches to the final model.

Session 3 introduces the different types of characters, such as protagonists, antagonists, and supporting roles in storytelling.

Session 4 outlines the role of a character designer, focusing on their responsibilities, skills, and contributions to the creative industry.

Learning Outcomes

After completing this module, you will be able to:

- Describe the history and evolution of character design, and explore how styles and techniques have changed over time across various media such as animation, video games, and film.
- Identify the developmental stages of character design.
- Demonstrate the knowledge various character types, including protagonists, antagonists, supporting characters, and background characters, understanding the roles they play in storytelling.
- Describe the role and responsibilities of a character designer.

Module Structure

Session 1: Evolution of Character Designing

Session 2: Developmental Stages of Character Designing

Session 3: Types of Characters

Session 4: Role and Functions of a Character Designer

Session 1: Evolution of Character Designing

Character design is the art and process of creating visually distinct characters that convey personality, emotion, and story. It is a key element in fields like animation, video games, comic books, and film, where characters often drive the narrative and engage the audience.

Character designers start with a concept—typically based on a character's role, traits, or background in the story—and develop it through visual elements such as shape, colour, clothing, and facial features. It involves the creation of visually appealing characters with distinct personalities.

The process begins with traditional sketches, where designers use pencil and paper to explore various forms, expressions, and personalities, capturing the essence of the character (**Figure 1.1**). Once a rough concept is established, designers transition to digital tools to refine and bring characters to life. Software for 2D designs or 3D modelling allows character designers to add intricate details, textures, and layers that enhance the character's visual depth and appeal. The quality of character design can determine the production's success, as well-crafted characters resonate with audiences and create a memorable narrative experience.

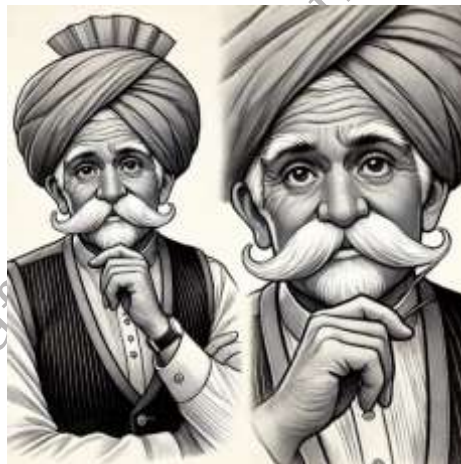


Figure 1.1: A sketch of a character

A story unfolds through its characters, whose visual and emotional essence is shaped by skilled character designers. Character design involves creating visually compelling figures that not only enrich the storyline but also reveal the inner workings of their personalities. In visual storytelling, especially in formats like screenplays, characters must engage audiences through their appearance and actions, enhancing the screenplay's sequence of events with expressive dialogue and physical presence.

The primary objective of character design is to craft memorable, visually stimulating characters that captivate viewers. The character creation process begins with strong foundational drawing skills, enabling designers to envision characters that resonate with the story's tone and themes. While tools may vary from pencil and paper to digital tablets, the essence of this stage lies in artistic skill, not technology.

History of Character Designing

The evolution of character design is intertwined with advancements in animation and artistic techniques, spanning over a century and crossing cultural boundaries. Each era, when seen chronologically, introduced new tools, methods, and styles that expanded the possibilities of character creation, contributing to the rich diversity of visual storytelling we see today.

India has a rich legacy of comic book characters that have captivated audiences over the years. Characters from the *Mahabharata* and *Ramayana* are widely adapted in children's books in India, where they are often depicted with simplified language, vibrant illustrations, and engaging storytelling. These timeless epics offer rich, relatable characters that convey moral values, bravery, and the complexities of good and evil. Children's books often portray Rama as an ideal hero, emphasizing his respect for his family, his bravery, and his determination to uphold dharma (righteousness) even in the face of hardship. Hanuman is a favorite in children's literature, often depicted as a playful yet courageous character. His adventures, like crossing the ocean to reach Lanka and setting it aflame, make for exciting and inspiring tales for young readers. Regional art forms, such as Madhubani, Warli, and Pattachitra were instrumental in visualizing characters from local folklore. Each of these styles had unique methods of representing human forms and emotions, creating visually distinctive characters that reflected local culture and beliefs.

Today, Indian character design also flourishes in graphic novels, web series, and independent comics.

Early Beginnings (1900s)

The history of character design started in the early 20th century with pioneers like J. Stuart Blackton, who produced *Humorous Phases of Funny Faces* in 1906. This silent film, often recognized as one of the first animated works, was composed of hand-drawn faces that moved and changed expressions, setting the stage for future animators. Blackton's work was followed by that of French animator Émile Cohl, who introduced the idea of characters interacting with their surroundings. In his 1908 short film *Fantasmagorie*, he animated 700 stick-figure characters, creating a surreal experience that played with motion and interaction. These early works laid the groundwork for character design by demonstrating how simple illustrations could communicate personality and emotion.

Walt Disney and the Golden Age of Animation (1920s-1940s)

The 1920s marked a turning point in character design with Walt Disney's iconic creation of Mickey Mouse in *Steamboat Willie* (1928). This character was revolutionary, embodying exaggerated expressions and fluid movements synchronized to sound, which was an innovative approach at the time. Disney's meticulous attention to the visual appeal and personality of characters set a high standard in animation. His creations, characterized by exaggerated body movements and distinct, expressive personalities, established a style that would define character animation for decades.

In the 1940s, Disney pushed character design further by incorporating multi-plane cameras and layered visuals. Films like *Pinocchio* (1940), *Fantasia* (1940), *Cinderella* (1950), and *Alice in Wonderland* (1951) showcased intricate character designs brought to life with lush, hand-painted backgrounds and sophisticated animation techniques. Disney's approach highlighted the emotional depth and appeal of animated characters, positioning the studio as a leader in animation and inspiring animators worldwide.

Anime and Japanese Influence (1950s-1970s)

Meanwhile, Japan's animation industry developed a unique style that emphasized distinct visual traits, including large, expressive eyes and vibrant colours. Characterized by its emotionally resonant storytelling, Japanese anime was widely popularized by series like *Astro Boy* (1963) and *Dragon Ball* (1986). These shows introduced a variety of characters designed to resonate with audiences across different age groups and genres, from action and adventure to romance and fantasy.

Japanese character design in anime relied on exaggerated features, particularly the eyes, to convey intense emotions and foster a connection with the audience. This style became foundational to anime, setting it apart from Western animation. Japanese creators used visual shorthand, which allowed animators to communicate complex emotions efficiently and effectively—a hallmark that continues to define anime character design today.

Warner Bros. and Non-Traditional Approaches (1950s-1970s)

In the United States, Warner Bros. introduced a lively and humorous approach to character design. Characters like Bugs Bunny, Daffy Duck, and the Road Runner were created to be funny, clever, and engaging, often breaking the fourth wall to interact directly with the audience. This style, characterized by exaggerated movements, witty dialogue, and slapstick humor, offered a stark contrast to Disney's more polished and sentimental approach. Warner Bros.'s characters were designed to be relatable, allowing them to capture the public's imagination and become timeless icons.

This period also saw experimental approaches to animation. European animators like the Quay Brothers explored dark themes and unconventional techniques, such as stop-motion and puppet-based animation, to create haunting and surreal characters. Meanwhile, Norman McLaren pioneered abstract, camera-less animation, painting directly onto film to create unique visuals and characters that defied traditional narrative conventions.

In India, *Amar Chitra Katha*, launched in 1967 by Anant Pai, revolutionized how Indian mythology, history, and culture were introduced to young readers. Initially conceived to bridge the gap between traditional Indian values and modern education, *Amar Chitra Katha* used the engaging format of comic books to narrate stories from India's vast cultural heritage. The series quickly became iconic for shaping how mythological and historical characters were visually represented, creating a shared cultural lexicon for generations of Indian readers.

Chacha Chaudhary, another famous character of comic book, was created by cartoonist Pran Kumar Sharma in 1971. *Chacha Chaudhary* is shown as a wise, elderly man with "a brain faster than a computer". It quickly became a beloved figure in Indian comics. Known for his wit, intellect, and sense of justice, *Chacha Chaudhary* uses his clever problem-solving skills to address local issues and outsmart villains. His loyal Sabu—a giant from the planet Jupiter—adds a humorous and heroic element to the stories, helping Chacha with his superhuman strength whenever needed. Over the decades, *Chacha Chaudhary* has become an enduring symbol of Indian values and common sense, resonating with generations of readers and solidifying his place as one of India's most iconic comic characters.

The Digital Revolution and Computer-generated Imagery (1980s-1990s)

The 1980s marked a technological leap in character design with the advent of computer animation. Digital techniques offered new possibilities for animators, enabling them to create characters and environments with unprecedented detail and realism. Early computer-generated imagery (CGI) offered shortcuts for complex animations and allowed creators to save both time and money while adding complexity to their characters.

Pixar's *Toy Story* (1995) was a milestone in CGI animation, becoming the first feature-length film entirely animated using CGI. The characters of *Toy Story* were lifelike and richly detailed, capturing the nuances of human expression in digital form. This opened up new possibilities for character design, allowing artists to create textured, three-dimensional characters that could evoke deep emotional responses from audiences.

The success of CGI in animation set a new industry standard and expanded the character design toolkit, leading to rapid advancements in digital animation technology.

Blending Traditional and Digital Techniques (2000s-2010s)

As digital tools became more sophisticated, character designers began blending traditional hand-drawn techniques with digital animation. This hybrid approach allowed animators to combine the expressiveness and fluidity of hand-drawn animation with the precision and versatility of digital techniques. For example, films like *The Princess and the Frog* (2009) combined traditional animation with digital backgrounds, offering a modern take on classic character design.

The 2000s brought advancements in digital technology, enabling a new wave of character design in Indian animation, gaming, and cinema. Animated series like *Chhota Bheem* and films such as *Hanuman* and *Roadside Romeo* reflected a more contemporary approach to character design, often integrating 3D modelling and digital animation. Video games developed by Indian studios also started featuring local heroes and mythological figures, appealing to younger audiences with modernized, stylized character designs.

This period also saw the rise of transmedia storytelling, where characters were designed to be adaptable across various media, including video games, graphic novels, and web series. Characters had to be versatile enough to resonate with audiences in different formats, allowing for deeper audience engagement and expanding the narratives beyond a single medium. Character designers began to focus on creating designs with recognizable features and iconic looks that could translate seamlessly from one platform to another.

Contemporary Character Design (2010s-Present)

Today, character design continues to evolve, blending 3D modelling, motion capture, and artificial intelligence to create characters with heightened realism and interactivity. The rise of virtual and augmented reality has added another layer to character design, with characters now able to interact with audiences in immersive, real-time experiences. Video games and interactive media have expanded the scope of character design, allowing artists to craft detailed worlds and narratives that enhance character depth. Moreover, character design now often incorporates diversity and cultural representation, reflecting a broader range of identities and experiences. This shift has led to more inclusive and relatable characters, resonating with audiences across cultures and backgrounds. The influence of global storytelling styles has also enriched character design, with creators drawing inspiration from different cultural aesthetics and narrative traditions.

Today, Indian character designers have embraced digital platforms and global influences while maintaining a distinctly Indian aesthetic. They are creating diverse characters for film, television, gaming, and web series, blending modern techniques with a deep respect for cultural heritage. With international collaborations, Indian studios have achieved global recognition, with characters that represent the rich tapestry of Indian storytelling and visual style.

Let us take a brief look at the evolution of character design and how it has transformed over the years.

1900s

During 1900s animated faces that change expressions were introduced setting the stage for future character design.

1920s-1940s

Characters showcased exaggerated body movements and synchronized sound, redefining character design and establishing rich character design and storytelling that appeals to a broad audience.

1950s-1970s

Japanese animators begin developing a distinct style with emotionally expressive characters, often featuring large eyes and exaggerated expressions. This style emphasizes emotion and personality, appealing to both young and adult audiences. Experimental animators explored darker themes and unique animation styles, including stop-motion and puppet animation. Camera-less animation, painting directly on film to create unique, and abstract characters were introduced.

1980s-1990s

Computers begin playing a role in animation, allowing for special effects and digital techniques that make character animation faster and more cost-effective. Pixar releases *Toy Story*, the first feature-length CGI-animated film, featuring characters rendered entirely in digital form. This film marks a significant milestone, showcasing the potential for lifelike, expressive digital characters and propelling CGI into mainstream animation.

2000s-2010s

Character designers start blending hand-drawn and digital techniques, allowing for more layered, textured characters. With the rise of transmedia storytelling, characters are designed to adapt across multiple platforms, including films, video games, web series, and graphic novels. This approach allows characters to reach broader audiences and creates richer, interconnected narratives.

2010s-Present

Animation technologies such as motion capture, 3D modelling, and artificial intelligence contribute to creating more realistic and interactive characters. Characters are increasingly designed with diversity in mind, representing a wider range of cultural backgrounds, body types, and personalities. This inclusivity enhances relatability and connects with diverse global audiences. The development

of virtual and augmented reality brings characters into immersive environments, where they can interact with users in real time, adding a new dimension to character engagement.

Activities

Activity 1: Explore the history and evolution of character design through a visual timeline, identifying key milestones, events, and innovations.

Materials Needed:

- Paper or poster boards
- Markers or coloured pencils
- Access to research materials (books, internet, etc.)

Procedure:

Step 1. Begin by gathering information about the history of character design. Key areas to research include important inventions (like the development of animation techniques), the creation of iconic characters, and the impact of different artistic movements.

Step 2. Once you have collected your research, organize the key events chronologically. Think about which milestones had a significant influence on character design and development.

Step 3. On your paper or poster board, draw a horizontal or vertical line to represent time. Add key dates along this line, and at each point, write a brief description of the event or character and its significance.

Step 4. Include drawings or visual references to iconic characters or key inventions to make your timeline more creative. These visuals should help to highlight how character design styles have changed over time and reflect different artistic eras.

Step 5. After completing your timeline, present it to the class. As you present, explain the importance of each milestone, discussing how it influenced or changed the art of character design.

Activity 2: Explore and compare character designs from different periods, cultures, and mediums, understanding how aesthetics, technology, and cultural influences shape character creation.

Materials Needed:

- Screens for displaying images (projector, computer, or tablet)
- Access to character design examples from books, movies, video games, and other media
- Paper or digital tools for creating presentations or essays

Procedure:

Step 1. Begin by gathering examples of character designs from a variety of periods and mediums. You might include:

- Classic animation characters from early Disney films.
- Anime characters from different decades.
- Modern video game characters (e.g., those created using CGI).
- Iconic characters from comic books or graphic novels.
- Traditional folk or mythological characters from different cultures.

Step 2. Use a screen to project or display the selected character designs. As each design is shown, make sure you can see the visuals clearly for comparison.

Step 3. Look closely at the designs and consider the following points of comparison:

- **Aesthetics:** How do the characters differ visually? Look at aspects such as shape, colour, proportions, and detail.
- **Cultural Influence:** How do the characters reflect the cultures they come from? For example, compare Western comic book heroes to Japanese anime protagonists.
- **Technological Advancements:** How have changes in animation, gaming, or digital tools influenced the complexity and realism of the characters? Compare hand-drawn characters to those created using 3D software.

Step 4. You can prepare a visual presentation where you analyze and compare specific characters. you should highlight your observations on how the characters are influenced by their time period, technology, and culture.

Check Your Progress**A. Multiple Choice Questions**

1. What is the primary objective of character design?
 - a. To create complex plot structures
 - b. To design memorable, visually appealing characters
 - c. To focus on realistic environments
 - d. To eliminate the need for visual elements

2. What is typically the first step in the character design process?
 - a. Adding intricate digital textures
 - b. Creating a detailed backstory
 - c. Sketching ideas with pencil and paper
 - d. Applying colours and costumes digitally
3. Which of the following is a distinctive feature of Japanese anime character design?
 - a. Large expressive eyes and vibrant colours
 - b. Highly realistic backgrounds
 - c. Monochrome colouring
 - d. Heavy reliance on abstract shapes
4. Who is credited with creating the character of *Chacha Chaudhary*?
 - a. Anant Pai
 - b. Walt Disney
 - c. Pran Kumar Sharma
 - d. J. Stuart Blackton
5. Which technological development allowed for greater detail and realism in character design during the 1980s and 1990s?
 - a. Motion capture
 - b. Digital and computer-generated imagery (CGI)
 - c. Stop-motion animation
 - d. Hand-painting on film
6. How did Pixar's *Toy Story* influence character design?
 - a. By using traditional hand-drawn techniques
 - b. By combining animation with live-action
 - c. By being the first fully CGI-animated feature film, showcasing lifelike digital characters
 - d. By using experimental techniques, such as puppet animation
7. Which of the following describes the main focus of character design in the 2010s and beyond?
 - a. Emphasis on simple, abstract characters
 - b. Blending traditional and digital techniques
 - c. Incorporating diversity and interactivity through modern technology
 - d. Focus on monochromatic colour schemes

8. What was the significant contribution of the *Amar Chitra Katha* series in Indian character design?
 - a. Introducing 3D modelling in character design
 - b. Creating a shared visual language of mythological and historical Indian characters
 - c. Focusing on futuristic and digital character design
 - d. Blending Japanese anime techniques with traditional Indian art
9. Which of the following animation studios introduced exaggerated character movements and humorous, fourth-wall-breaking character design?
 - a. Warner Bros.
 - b. Disney
 - c. Pixar
 - d. Amar Chitra Katha
10. What role does diversity play in modern character design?
 - a. It creates uniform character designs across all cultures.
 - b. It focuses on traditional and historical characters only.
 - c. It enhances relatability and connects with global audiences by representing various cultural backgrounds and body types.
 - d. It limits the use of digital techniques in character design.

B. Subjective Questions

1. Explain the significance of character design in the media and entertainment industry. How do characters help in driving the narrative forward?
2. Discuss how early character design, such as Mickey Mouse and Felix the Cat, reflected the limitations of traditional animation techniques. How did studios like Disney and Pixar revolutionize character design?
3. What role does drawing skill play in the character design process, and why is it considered the first and most important step?
4. How has the introduction of Computer-Generated Imagery (CGI) transformed the field of character design? Provide examples from the history of character design.
5. Describe the influence of different cultures and animation styles, such as anime, on character design. How do these styles cater to diverse genres and demographics?

Session 2: Developmental Stages of Character Designing

The developmental stages of character design represent a structured approach that guides artists through the journey from the initial idea to the final design. These stages ensure that each character is well-rounded, memorable, and resonates with the intended audience. The typical stages include Idea, Research, and Conceptualization (**Figure 1.2**).

Let us look at each stage in detail:

1. Idea: The idea stage is where character creation begins. It involves conceptualizing the character's purpose, personality, and story background. A character designer must be highly creative and resourceful, able to transform an initial spark of inspiration into a visual personality. The main goal at this stage is to establish the core personality and context of the character, setting the foundation for its physical design and role in the narrative.

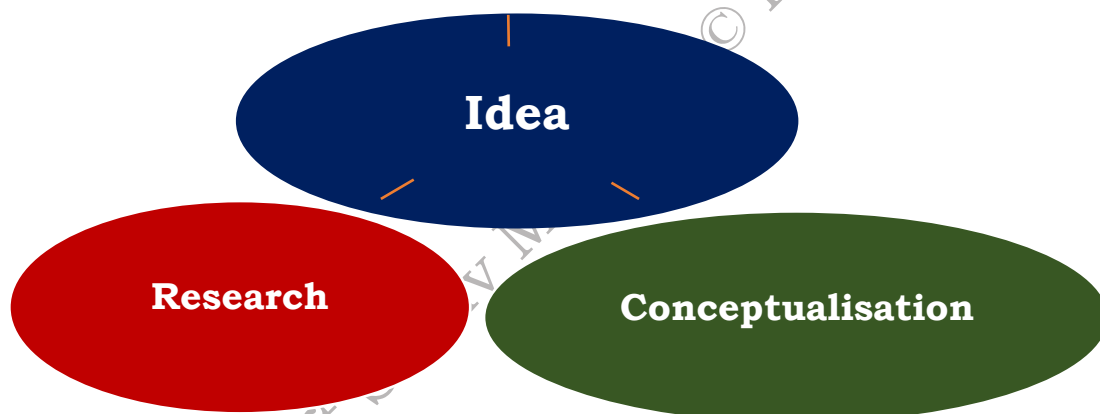


Figure 1.2: Development stages in character designing

Ideas can come from diverse sources like novels, comic books, fairy tales, cartoons, movies, or even jokes. For instance, creating a character inspired by cowboys, superheroes, or even a humorous scenario can lead to unique personalities. To keep the idea alive and evolving, designers often make rough notes, outlining character traits, possible storylines, and features.

2. Research: Research is essential to grounding a character in relatable and accurate details. This stage involves gathering information and studying different sources to shape and refine the character's design.

Research helps align the character with cultural, historical, and contextual elements that make it authentic and appealing. The goal at this stage is to enhance the

character's believability and relevance by ensuring it reflects essential design principles, resonates with the audience, and incorporates an understanding of genre and cultural nuances.

Designers can draw from various resources, including television shows, literature, past character projects, and advertisements. Researching involves exploring colour theory, storytelling techniques, cultural context, and more to understand what makes specific characters succeed or fail.

3. Conceptualization: In conceptualization, designers develop the theoretical framework that gives the character its distinctive look and feel. This includes defining the character's role, appearance, personality, and mannerisms.

Conceptualization helps lay down a foundation that guides the entire design process, from physical traits to expressive behaviors. The goal is to create a clear and distinct direction for the character, focusing on developing an original and memorable personality that stands out and fits within the larger story context. This stage often involves detailed sketches and preliminary designs, which serve as a roadmap for the final design.

Activities

Activity 1: Learn how to effectively research for character design by gathering visual references, cultural influences, and narrative elements that enhance the depth and originality of characters.

Materials Needed:

- Sketchbooks or notebooks
- Access to research materials (books, online resources, documentaries, movies)
- Drawing tools (pencils, markers, or digital drawing tools)

Procedure:

Step 1: Before beginning your research, define the core elements of your character:

- Who is your character? (Their role in the story, personality, background)
- What setting or world do they live in? (Is it fantasy, historical, modern, or futuristic?)
- What are the character's key traits or abilities? (Are they a warrior, magician, or ordinary person with unique skills?)

Step 2: Start your research by gathering visual references that match your character's background and setting. Use sources such as:

- Study clothing from different eras, cultures, and environments to inspire how your character dresses and presents themselves.
- Research how nature or animals can inspire unique traits or accessories for your character, especially if they are fantastical or anthropomorphic.
- Explore historical periods relevant to your character's role, whether it's armor design for a knight, or futuristic technology for a sci-fi character.

Step 3: Consider how cultural elements can influence your character's design. Research specific cultures or traditions that might be relevant to your character's background, appearance, or story.

- Explore symbols, rituals, or clothing styles from different cultures to give your character depth and uniqueness.
- Look into mythology or folklore to inspire a magical or supernatural character design.

Step 4: Research different personality types and psychological traits to help shape your character's actions, motivations, and development:

- Study personality traits, emotional responses, and human motivations to add layers to your character's behavior.
- Learn about common character archetypes (hero, mentor, villain, etc.) and how you can draw from or subvert these ideas to make your character unique.

Step 5: Once you have gathered a variety of resources, begin synthesizing this information into your character design.

- **Appearance:** How do clothing, facial features, or accessories reflect their role or background?
- **Personality:** How does their psychological research inform their behavior, interactions, or decisions?
- **World:** How does the setting or cultural background influence their design and actions?

Check Your Progress

A. Multiple Choice Questions

1. What is the foremost element of character designing?
 - a. Idea
 - b. Concept
 - c. Research

- d. All of the above
2. In concept step, defining purpose of character is important because
- It control brainstorming
 - It stays in oldest design
 - It gives perfect direction for design
 - To avoid unwanted time for design
3. What is the key objective of conducting research in designing?
- Accomplish knowledge of character designing
 - Understand the audience mind-set
 - Understanding of fundamentals elements
 - All of the above
4. _____ is responsible for theoretical framework and comprehensive understanding of structure.
- Idea
 - Sketches
 - Concept
 - Research
5. What is the meaning of 'visual language' in design?
- Communication through ideas and visual element
 - Strictly separation from human communication
 - Showing characters through sketches
 - Representation of character dramatically

B. Subjective Questions

- How did the Amul girl's character design evolve over time to reflect cultural references and become a timeless symbol of the brand?
- Explain the importance of the 'idea' stage in character design. How does creativity and resourcefulness contribute to bringing characters to life?
- Discuss the role of the 'concept' stage in character design. Why is it essential to define the character's purpose and ensure its acceptance by viewers before starting the design process?
- What is the significance of research in character designing? How does it help align a character with the mindset of the target audience?

5. How does understanding structure, anatomy, and colour theory contribute to the concept phase of character design? Provide examples of how these elements shape a memorable character.

Session 3: Types of Characters

Character designing encompasses a wide range of character types, each serving different roles and functions within a story or visual project.

Characters are design for several platforms in entertainment segment. These characters are liked, un-liked or admired by the user. Such characters are categorized by their nature, appearance and looks. Character types can be combined or reimagined in various ways to create diverse and engaging casts for different storytelling purposes.

Human Characters

Creating a human character, in the field of character designing, is a challenging task. Designers face many challenges and consider many principles and measurements while designing a human character. It is important to understand the accurate human anatomy and precise facial judgment in the phase of presenting a realistic human character. Remarkable characteristics, ranging from facial features like eyes, nose, and mouth to distinctive elements such as body art, scars, marks, and unconventional habits, contribute to shaping a character's identity and enriching their narrative **(Figure 1.3)**.



Figure 1.3: Artistic representation of a character, focusing on facial symmetry

In the creation of a historical human character, it becomes crucial to delve into various aspects such as their attire, historical context (including their origin and time period), as well as their personality traits and distinctive qualities.

The character's background and demeanor not only influence their outward appearance but also guide their actions. Sometimes, exaggeration of proportion of physical feature and appearance makes it more stylized in the context of designing. Some other factors like tattoo, logo, costume, props (ring, watch, goggles etc.) and other visual elements delivers the deeper understanding in the stylizing. Some of stylized human characters are He-man, *Shaktiman* and Ben-10.

Science Fiction Characters

Science fiction characters often embody imaginative and futuristic concepts that explore the possibilities of technology, space exploration, and alternate realities.

Science fiction is a fascinating type of characters. It is an ironic category where many varieties of characters come along with their diverse personality and futuristic connections. It shows the advanced technology and explodes newly-fangled and extraordinary character with creativity.

We can list the example as Yoda, Spock, Optimus Prime, and Captain Kara. Aliens, Robots and Cyborgs are the iconic examples of science fiction characters. Science fiction characters have unique features and appearance surrounded by the advanced technology (**Figure 1.4 a, b and c**).



Figure 1.4 (a): Alien character



Figure 1.4 (b): Robot character



Figure 1.4 (c): Cyborg character

This technology in the means of communication devices, futuristic ordnance, cyberpunk surroundings and many more is fascinating the audiences.

Alien characters are much distinctive with imagination and biological aspect. They influence the audience by their appearance, behavior, activity and culture.

Animal and Creature Characters

Animal characters are the common choices. While designing an animal character, it is important to select the correct species and show their uniqueness in the form of appearance, behavior and personality (**Figure 1.5**).

Animal characters like *Bagheera*, *Sherkhan*, Peppa Pig, Mickey Mouse, Donald Duck,

Pluto and many more are portrayed with their requirements.



Figure 1.5: Creative sketches of distinct animal personalities

Anthropomorphic and zoomorphic characters are mostly used in the field of character designing. In this segment, designer needs to understand the extent where an anthropomorphic character can be anthropomorphized with the simplest form of animal and also necessary to recognize the accurate stability between the characteristics of animal and human. An anthropomorphic character possesses two legs and moves in a manner similar to a human. Additionally, they exhibit human-like traits such as speaking and donning costumes (**Figure 1.6**).



Figure 1.6: Anthropomorphic and Zoomorphic characters

In Zoomorphic, animal act like a human. Example of anthropomorphic and zoomorphic characters is *Garuda*, *Winnie-the-Pooh*, *Gummy Bears*, *Unicorn*, and *Little Mermaid*. Furthermore, it is essential to develop animal character with the

accordance to their nature. For example, lion should be displayed as a powerful character because of its dominancy in jungle.

Fantasy Characters

Fantasy characters are essential to imaginative worlds filled with magic, mystery, and boundless adventure. These characters are crafted for media like video games, comics, and films, where fantastical elements are brought to life through vivid settings, striking landscapes, and layered backgrounds.

Creating fantasy characters is a truly creative and exhilarating process, allowing designers to blend the impossible with the visually extraordinary. Unlike typical characters, fantasy characters embody unique, often supernatural features and motivational qualities that resonate with audiences, making them memorable and inspiring. These characters not only enrich stories but often define them, providing critical insights into the imaginary worlds they inhabit. Each fantasy character contributes to an intricate web of interactions and conflicts, propelling the storyline with the distinct personalities, powers, and moral complexities.

Fantasy characters, thus, become the heart of the imaginative worlds, crafting experiences that transcend ordinary storytelling and transporting audiences into places where imagination knows no bounds. Examples of such characters include iconic figures like the Golem, a mystical creature born of clay and ancient spells; Oni, a fearsome demon from Japanese folklore; Tinker Bell, a mischievous yet lovable fairy with magical powers; the Cyclops, a towering, one-eyed giant from Greek mythology; and Dragons, majestic, fire-breathing beings who rule the skies (Figure 1.7 - a, b and c).



Figure 1.7 (a): Fantasy characters



Figure 1.7 (b): Dwarves characters



Figure 1.7 (c): Magical being characters

To design a perfect fantasy character, it is essential to pick a suitable species or races for the designing. Over and over again, fantasy characters are consuming an emotional attachment or keeping big secret or tragic past within themselves. Such properties are responsible to help character for its motivation and action.

Superheroes and Villains

Superheroes and villains are the fundamental characters of the story and often having diverse traits and extraordinary powers which categories them as antagonist and protagonist. While designing a superhero or villain character, it is important to understand the dressing style, physical appearance (height and other measurements) and voice need to be fit in the story (**Figure 1.8 - a and b**). Generally, costumes of superheroes reflect the power and personality and work as a catalyst of representation. *Chacha Chaudhary, Nagraj, Chintu, Mogali, Avengers* (Marvel series superheroes), *Thanos, Skeletor (He-man), Kalakeya*, etc. are the example of superheroes and villains.



**Figure 1.8 (a):
Superhero character**



**Figure 1.8 (b): Villain
character**

Sometimes, costumes are incorporated with logo (showing power from it) and exclusive accessories like watch, ring or goggle. This logo and accessories represents the character's personality and ability. For example, Batman incorporated with the symbol of bat and Superman as 'S' in their costume.

Everyday People

Everyday people characters look like semi realistic characters. These characters have unusual body proportion and usually formed in colour comics. Moreover, pencil and other tools are resources to draw lines and colouring in the initial stages. Through uniform lines, we can make flat characters while different line strength help designer to draw a comic character. Meanwhile, a character designer becomes an expert only after endless efforts.

Characters like Homer Simpson, Johnny Bravo, Charlie Chaplin, and Mr. Bean, as well as those in Bajaj Allianz ads, easily resonate with everyday people. Their personalities, quirks, and relatable traits reflect common human behaviors, making them feel familiar and instantly recognizable.

Professional characters are crafted with careful attention to precise shapes, movements, and poses. For children's and teen characters, exaggeration often includes features like large eyes, a big mouth, and a small nose, among other distinctive elements (**Figure 1.9**).



Figure 1.9: Everyday characters

Elderly Characters

Elderly characters are having relatively different appearance, action, personality and behavior. They are accumulated with aging effect which is visible on their faces, body language, voice and other activities. In addition, elderly characters have more wrinkles on face especially around eyes and mouth, white, grey or no hairs on head, physically supported with a hand stick, walker or wheelchair (**Figure 1.10**). For example Abe Simpson, *Chacha Chaudhary*, *Tau Ji*, Miss Marple comes under this category.

Generally, such characters are subjected with a little bend posture with the action and they are doing slow activity as compare to young individuals. The morale and ethical values of elderly characters are merely high so that they appeared more authentic, respectful and believable.



Figure 1.9: Everyday characters

Historical and mythological figures have long served as rich sources of inspiration for storytelling, character design, and artistic expression. The inception of designing historical, renowned, or divine figures begins with thorough research. This initial step delves into the historical and physical background of the chosen character, laying the foundation for accurate representation.

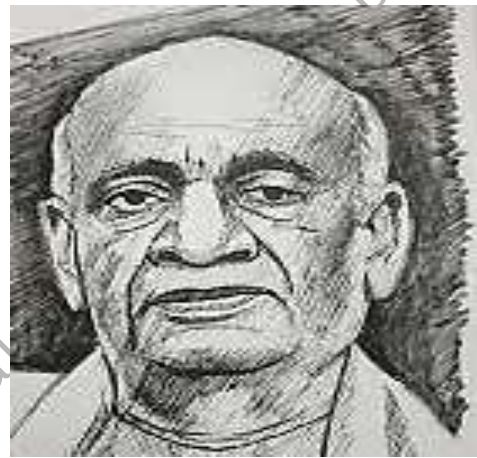


Figure 1.11: Historical character

Crafting iconic individuals, deities, or famous personality's demands meticulous attention and precision which stems from detailed research (**Figure 1.11**). In the realm of designing, achieving perfection hinges on careful consideration and precise measurements.

Research serves as a crucial guide, unveiling the intricate details of a character's historical and physical context. For the designer, understanding the nuances of body language, facial features, and overall physical appearance is paramount when crafting a famous persona.

To bring a well-known figure to life, the designer must navigate various characteristics, including hair, facial hair, wrinkle patterns, accessories, and more. Each element requires careful consideration to ensure an accurate and faithful representation of the chosen character. Examples of such figures span historical and mythological realms, including *Bal Ganesha*, *Tarzan*, *Little Krishna*, *Hanuman*, and others (**Figure 1.12**).



Figure 1.12: Mythological character

Inanimate Objects or Characters with Abstract Concepts

Inanimate objects can be transformed into intriguing characters in storytelling and character design, providing unique perspectives and creative possibilities. By personifying these objects, creators can explore themes of identity, purpose, and relationships imaginatively. For example, think of what happens if trees have eyes and mouths and are talking to each other or kitchen appliances like spoons, plates, cup, and knife are walking in the kitchen in the form of character. The category of inanimate objects is quite expressive and relative as shown below (**Figure 1.13 -a, b, and c**).

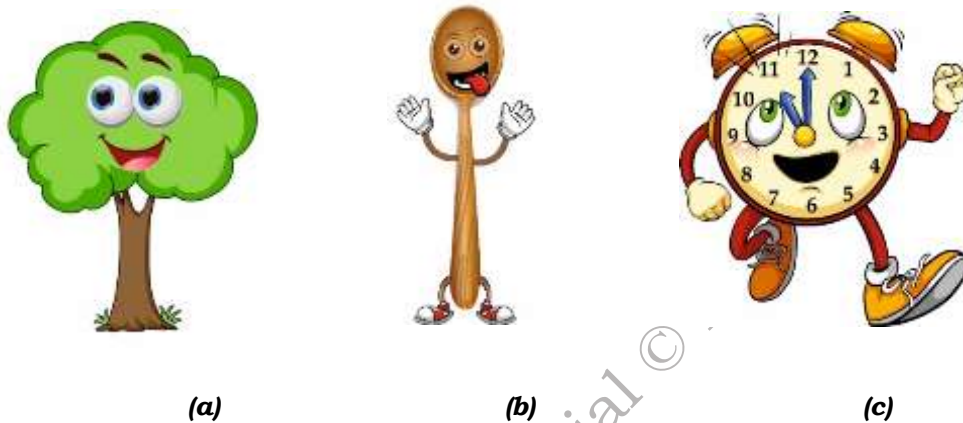


Figure 1.13: Inanimate objects as character

It is essential to convey the meaning and concept of inanimate objects while designing a character. An object like watch shows their property of punctuality and timeliness. Similarly, for the purpose of storytelling, objects as characters needs to be engaging and relatable to the users. Inanimate objects reflect the artistic and creative property in designing. It is quite fun to make and update objects' look that looks like a human and shows human features. Examples are Sponge boy, Groot, Talking mirror, etc.

Mechanical Characters

Mechanical characters (**Figure 1.14**) possess a distinctive blend of both mechanical and human-like attributes, resulting in a unique and fascinating persona. One of the best examples of such characters is came from the movie Cars (2006) where cars are categorized as diverse characters and associated with human features. While making such character, it is important to keep in the mind that the character should have uniform joint so that they can move and perform the activity and reflect poses and expression.



Figure 1.14: Mechanical and vehicle characters

Such characters are usually design where a car, bike, plane or other vehicles perform their activity with human features. The movie Transformer (2007) reflects the excessive physical and aesthetic sense with the mechanical and vehicle character.

Activities

Activity 1: Draw animal or human characters by developing visual representations of these characters, focusing on physical appearance, attire, and personality.

Materials Needed:

- Paper
- Markers
- Access to research materials (books, internet)
- Drawing tools (optional for creating sketches or mood boards)

Procedure:

Step 1: Divide yourself into a group, and receiving a specific animal, historical or fiction figure.

Step 2: Begin by researching your figure. Focus on gathering information about:

- Physical Appearance: What did the person look like? (Hair, face, body type, etc.)
- Attire: What kind of clothing did they wear? How does it reflect their time period or profession?
- Traits and Characteristics: What are the key traits or habits that define them? What are their strengths, weaknesses, and motivations?

Step 3: Once the research is complete, you will create a visual representation of your character. This could include:

- Sketches: Illustrations of the animal person or profession, showing physical appearance and attire.
- Mood Boards: A collection of images and elements representing the personality, style, and traits of the character.
- Notes: Key points about the character's history, traits, and significance.



Step 4: You will present your findings to the class. The presentation should include:

- A brief summary of the character's background or profession.

- Visual representations such as sketches or mood boards to demonstrate their appearance and traits.

Activity 2: Develop creativity and imagination by designing original science fiction characters based on key themes of the genre, such as space exploration, futuristic technology, and alien civilizations.

Materials Needed:

- Drawing supplies (paper, pencils, markers, etc.)
- Reference materials (optional): Books, movies, or images related to science fiction

Procedure:

Step 1: Choose one or combine a few to inspire your creation:

- Space Exploration: Imagine characters from an intergalactic mission or crew members of a spaceship.
- Futuristic Technology: Design characters who use advanced tech like cybernetic enhancements or AI companions.
- Alien Civilizations: Create characters from distant planets, with unique physical traits and cultures.

Step 2: Begin by brainstorming ideas for your character based on the selected prompts. Think about:

- Physical Appearance: How does the character look? Do they have human traits, or are they otherworldly?
- Attire and Gear: What kind of clothing, armor, or technology do they use? Does it suit their environment or job in a futuristic or alien world?
- Personality and Backstory: What motivates your character? Are they explorers, scientists, warriors, or leaders of their civilization?

Step 3: Use your brainstorming ideas to create an initial sketch of your character. As you draw, consider:

- How the science fiction elements influence their physical traits (e.g., glowing eyes, mechanical limbs, or advanced space suits).
- Adding distinctive details to highlight their role or setting (e.g., alien biology, robotic features, or futuristic weapons).

Step 4: As you refine your character, incorporate unique and imaginative elements inspired by science fiction concepts.

- **Unique Species or Forms:** If your character is an alien, think about how their body might differ from humans. Do they have extra limbs or unusual skin colour?

Step 5: Presentation and Reflection: Once your sketch is complete, share your character design with the class. Explain:

- The concept and theme that inspired your character.
- The unique features you incorporated, and how they relate to science fiction themes.
- The backstory or role of the character in their world.



Check Your Progress

A. Multiple Choice Questions

1. What is the common characteristic of superheroes that attract audience?
 - a. Simplicity
 - b. Familiarity
 - c. Poorness
 - d. Uniqueness
2. _____ character who serves as a central figure in the story?
 - a. Antagonist
 - b. Protagonist
 - c. Secondary Character
 - d. Background Character
3. Anthropomorphic and zoomorphic characters are the combination of _____ and _____.
 - a. Human and Gods
 - b. Human and vehicle
 - c. Superhero and villain
 - d. Animal and Human
4. Why fantasy characters are different from other characters?
 - a. Smplicity
 - b. Mediocrity
 - c. Naturalism
 - d. Unconventional elements

5. Human characters with cultural and ethnic diversity reflect _____ in the design.
- Restriction of historical contextual
 - Limited diversity
 - Real world diversity
 - Zero character appeal

Session 4: Role and Functions of a Character Designer

Character designer's responsibilities encompass a wide range of tasks throughout the character design process. It is important to keep in mind that there are no "tip and tricks" or shortcuts to become a good character designer.

A character designer (**Figure 1.15**) is an artist who creates new and original characters (OCs) for own creativity. It can be a character of a script or story to process in comic books, children books, comic strips, web animation or even a toy design.



Figure 1.15: A character designer

There are varied knowledge bases and talents involved in animation, for example, there is a layout concept artist that only makes the style backgrounds (or "world").

The character designer focuses on the character only, and so on. A good character designer never keeps the end goal in his mind. This way it helps them in making the best character design and attributes required by the story at hand.

The roles and responsibilities of a Character Designer include the following:

1. Conceptualizing and Ideation

- **Brainstorming and Researching:** The designer starts by gathering ideas and references to understand the character's background, role, and personality (**Figure 1.15**).
- **Visual Ideation:** They sketch different ideas and variations to capture the core traits and defining characteristics of the character, often using mood boards or quick concept sketches.

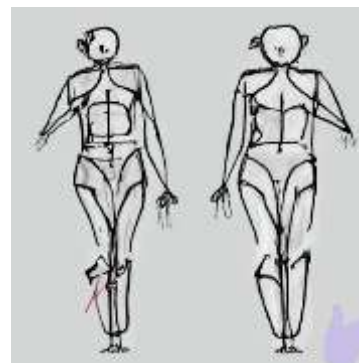


Figure 1.16: Character conceptualisation

2. Design and Visual Development

- **Creating Initial Sketches and Roughs:** The designer develops initial sketches focusing on key visual elements, like posture, facial expressions, and unique characteristics.
- **Refining Visual Details:** They work with the Story Board Artist to make the character visually appealing and consistent with the style of the project, refining shapes, proportions, clothing, and other details (**Figure 1.16**). After understanding the full story or script, responsibility of a character designer is to design overall personality in the name of anatomy, poses, activity, costume and theatrical references required by the project.



Figure 1.17: A storyboard

- **Exploring Exaggeration for Effect:** For children's or teen characters, for example, exaggerating features such as large eyes or specific gestures can make the character more relatable and expressive.

3. Bringing Personality to Life

- **Developing Expressions and Poses:** The designer crafts various facial expressions, gestures, and poses to convey the character's emotions and personality traits, ensuring the character feels real and relatable.
- **Creating a Character Sheet:** They produce a detailed sheet or "turnaround" with multiple views, poses, and expressions, which serves as a guide for animators or modellers. In large productions, character designers often create previz (pre-visualization) sheets that showcase the character in a variety of poses and emotions for reference. For computer animation, orthographic model sheets are essential; they provide the modeller with precise views needed to accurately build the character in 3D. In major studios, once a character design is finalized, the designer produces a detailed model sheet that typically includes orthographic views: side, front, $\frac{3}{4}$ front, and back (**Figure 1.18**). These views ensure consistency across all character representations. An orthographic model sheet is used for both computer and traditional animation. For computer-generated characters, it aids in building accurate models, while in traditional animation, it serves as a guide for design teams to maintain character consistency as they animate movement in any direction.

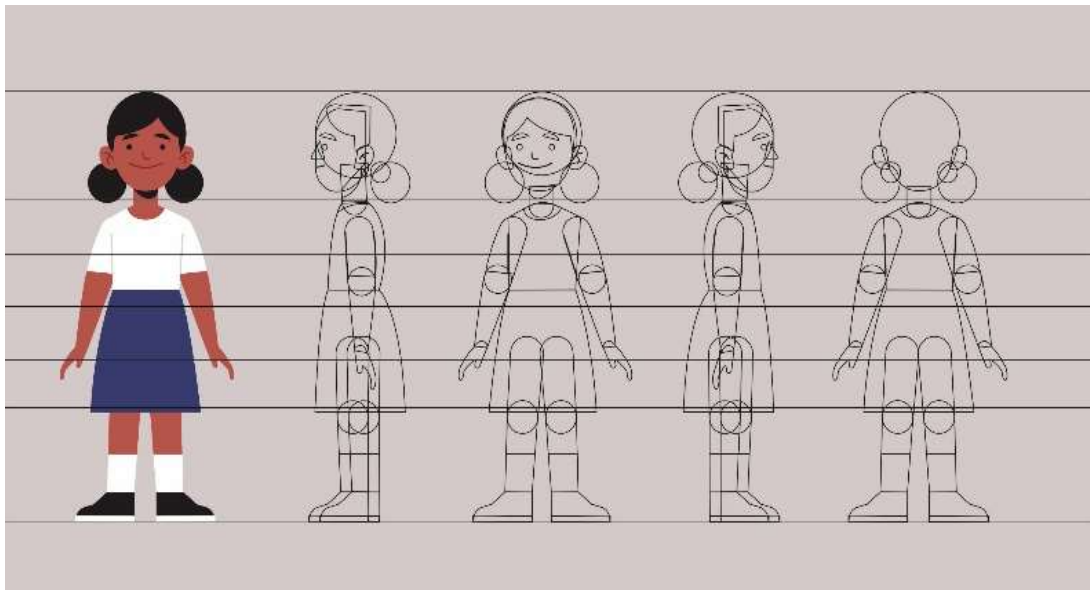


Figure 1.18: Orthographic model sheets

4. Collaborating with the Creative Team

- **Working with Writers and Directors:** Character designers often collaborate with writers and directors to ensure that their designs align with the story and bring the character's role to life effectively.
- **Adapting to Feedback:** Based on team feedback, designers revise and refine the character's design, ensuring it meets the creative vision and technical requirements.

5. Finalizing and Handing Over Design

- **Creating Final Character Art:** Once approved, designers finalize the character's art, focusing on clean lines, colors, and textures.
- **Preparing Files for Production:** The designer ensures that character files and specifications are ready for the production team, whether for animation, modelling, or game development.

6. Supporting Character Evolution

- **Adjusting for Story Changes:** As the narrative progresses, character designers may adapt the design to reflect growth, costume changes, or new emotional states.
- **Ensuring Consistency:** They ensure that the character remains visually consistent across various scenes and media adaptations.

A character designer will be responsible for deciding the look and feel of character. Meanwhile, game designers and animators possess technical care of all the characters but there are particular characters that need to be emphasized technically based on their roles in the game. Character designer needs to make these special characters noteworthy. Technically, character designers use camera work,

computer code and three-dimensional modelling programs to be able to come back up with characters that build a control within the minds of game players and user.

Activities

Activity 1: Learn about the responsibilities of a character designer in various media and gain hands-on experience by creating a unique character design from concept to visual representation.

Materials Needed:

- Paper, pencils, pens, and markers (or digital drawing tools if available)
- Reference materials (optional): Examples of character designs from animation, video games, comics

Procedure:

Step 1: To begin, brainstorm ideas for an original character. Think about:

- **Background:** What is this character's story? Where do they come from? What motivates them?
- **Personality:** Are they kind, mischievous, serious, or heroic? How do their personality traits influence their appearance?
- **Role:** What is the character's function within their world or story? Are they a protagonist, antagonist, or side character?

Step 2: Start sketching the basic design of your character, keeping in mind the concept you've developed. Focus on:

- **Physical Appearance:** Explore how their background and personality shape their physical traits (e.g., body type, hairstyle, facial features).
- **Costume Design:** Think about the character's attire. Does it reflect their profession, cultural background, or environment?
- **Expression and Poses:** Experiment with different facial expressions and body poses to bring out the character's personality.

Step 3: Once you have the basic design, begin refining your sketches. Consider the following:

- **Details:** Add specific features like accessories, unique markings, or items that represent the character's story.
- **Character Evolution:** Imagine how the character may change over time. Could they have alternate outfits or different looks for different situations?
- **Colour Palette:** Consider colours that reflect the character's personality, role, or setting. You may want to experiment with different colour schemes.

Step 4: Present your character design to the class. During the presentation, explain:

- The concept behind your character (background, personality, and role).
- The design choices you made (physical appearance, costume, poses, etc.).
- The creative process you followed, from conceptualization to the final visual representation.

Check Your Progress

A. Multiple Choice Questions

1. What a character designer does?
 - a. Draws a variety of styles of characters
 - b. Develops creative and innovative ideas
 - c. Develops model sheet
 - d. All of the above
2. What is not the function of a character designer?
 - a. Creating texture's UV maps
 - b. Developing several versions of a character
 - c. Creation of look, expression, and poses
 - d. Adding personality and expressions to the character
3. Model sheet of character usually designed by _____
 - a. Texture artist
 - b. Character designer
 - c. 3D Modeller
 - d. Lighting artist
4. What is the key function of a character designer to make?
 - a. Anatomy and body language
 - b. Poses and expression
 - c. Both a and b
 - d. Neither a nor b
5. Important part of the job of _____ is making the storyboards.
 - a. Character designer
 - b. Project editor
 - c. Project writer
 - d. Graphic designer

B. Subjective Questions

1. What is the importance of the conceptualization stage in character design?
2. Explain why character development is essential in a story.
3. What technical skills should a character designer possess? How do these skills contribute to making a character more engaging in animation or games?

Module 2**Elements of Character Designing****Module Overview**

The module on elements of character design focuses on the fundamental components that contribute to creating compelling and visually engaging characters.

In Session 1, you will explore the essential fundamental components of character design, including anatomy, proportion, and expression, establishing a solid foundation for character development.

Session 2 deals with the importance of using different shapes in character drawing, teaching how basic geometric forms can create distinctive silhouettes and personality traits.

In Session 3, you will learn various sketching techniques that enhance your ability to capture movement, emotion, and character nuances effectively.

Session 4 covers the significance of character poses, focusing on how poses convey personality and mood, along with demonstrating the model turnaround technique to showcase a character from multiple angles.

Session 5 introduces the concept of colour theory and its application in character design, emphasizing how colour choices can influence a character's identity, mood, and overall impact.

Learning Outcomes

After completing this module, you will be able to:

- Explain the significance of character design as a fundamental element of storytelling across diverse visual media, including animation, comics, and video games.
- Identify the importance of creating characters with unique personalities and defining traits that shape their behavior, dialogue, and interactions within a story.
- Describe how facial expressions, body language, posture, and gestures are essential tools for conveying emotions, intentions, and the depth of character relationships.

Module Structure

Session 1: Fundamental Components of Character Designing

Session 2: Drawing Characters using Different Shapes

Session 3: Sketching Techniques

Session 4: Role of Character Posing in Designing

Session 5: Colour Theory and Its Purpose in Character Designing

Session 1: Fundamental Components of Character Designing

Fundamental components of character design are the components that contribute to the development of a character. A character designer should have a curious attitude about their design. They should explore and pose questions to themselves, delving into aspects such as personality and aesthetic choices. Why isn't the face more rounded? Should the eyes be exaggerated, or perhaps not? What hairstyle would best complement the character's overall image? And many more such type of considerations that drive their creative process.

A character designer should keep in mind that even the smallest adjustments in design component can significantly impact how a character is perceived. For example, a mere change in eye colour has the power to transform an anime character from appearing loving to expressing anger (**Figure 2.1**). Following fundamental components are given below.



Figure 2.1: Anime character and their eyes colours

Personality

The personality of a character refers to the combination of traits, behaviors, emotions, and attitudes that define how a character thinks, feels, and interacts with others in a story. The portrayal of a character's personality is effectively conveyed through the way they are visually depicted in drawings and animations. It also becomes evident through their reactions in animations and comic strips.

While a striking appearance may initially grab attention, a character's appeal goes

beyond looks; their personality holds significant importance. The actions portrayed by different characters are a reflection of their distinctive personalities, as illustrated (**Figure 2.2**). Even if a character's personality isn't always pleasant, it must align with the story's context.



Figure 2.2: Character personality performing activity

Physical Appearance

Physical appearance is a vital component of character design that significantly impacts storytelling and audience perception. Characters' physical attributes serve as a catalyst to aid in their visual representation during the character design process. Physical elements help to show significance of the personality that deliver distinct expression and emotions in a story. A silhouette with different outlines provides physical and solid shape recognition. It is black in colour, and the character on the base is instantly recognizable to the viewer (**Figure 2.3**).



Figure 2.3: Silhouettes of characters

Exaggerating the characterizing highlights of your character configuration will enable it to seem overwhelming (**Figure 2.4**). Overstated highlights will likewise help

viewers to distinguish the character's key qualities. Misrepresentation is the key in exaggerations and underlines certain identity characteristics.

Backstory

Backstory refers to the history and background of a character that shapes their personality, motivations, and actions in the present narrative. If your character is to be used in a comic or animation, then developing its back story is important. Understanding the origin, emergence, and key life events of your character can significantly enhance the design process, contributing to a compelling and impactful character portrayal. Sometimes narrating the back story of character can be more interesting than the character's present adventures.



Figure 2.4: Exaggeration of characters

Clothing and Accessories

When you give your character things to wear and interface with, it comes to life and becomes more dynamic. Garments and Props can accentuate character's personality and foundation (**Figure 2.5**).



Figure 2.5: Character with clothing and accessories

For example, ratty garments can be utilized for poor characters and heaps of precious stones and bling for rich ones. Embellishments can likewise be more precise extensions of your character's identity which can be similar to slimy parasite in a demon's skull or a parrot on a privateer's shoulder.

Visual Style

Visual style refers to the distinct aesthetic elements and overall artistic approach used in the design of characters, settings, and visuals within a story or medium. Visual style plays a vital role in character designing (**Figure 2.6**). Here are some popular visual styles used in character design:

Mythological and Traditional Art Styles: In this visual style characters have large expressive eyes, stylized clothing, and the aesthetic leans heavily on themes from Hindu epics. It is generally inspired by ancient Indian art forms like Madhubani, Warli, and Pattachitra, and the cartoons often feature intricate patterns, vivid

colours, and a flat perspective. Shows like *Chhota Bheem* and *Little Krishna* often incorporate traditional Indian motifs in their character designs and backgrounds.

Realistic Style: It emulates life-like details with accurate anatomy, realistic proportions, and textures. It is often used in games and movies that aim for high visual fidelity and immersion.



Figure 2.6: Different visual styles

Cartoon/Toon Style: This style emphasizes exaggerated features like large heads, expressive eyes, and simplified shapes. Details are minimal, focusing on clear emotions and personality. It is common in animated TV shows, children's movies, and web comics. *Ravana* and *13 Mussoorie* (animated adaptations) draw on comic book elements, mixing realism with a stylized noir aesthetic.

Anime/Manga Style: Originating from Japanese animation and comics, this style has distinct features like large, expressive eyes, minimal facial features, and exaggerated expressions. It is widely used in anime series, manga comics, and games. Series like *Karmachakra* have tapped into this anime-inspired aesthetic, creating characters with more expressive and elaborate designs.

Pixel Art Style: Characters are designed with pixelated, low-resolution aesthetics, creating a retro feel. It is popular in indie games and nostalgic visual media.

Minimalistic Style: This style strips away detail, focusing on simple shapes and lines. Often uses flat colors or a very limited color palette. It is common in mobile games, corporate illustrations, and modern animations.

3D Style: These characters are modeled in 3D, giving them volume, depth, and lighting effects. It can range from highly realistic to stylized. These are seen in modern animated movies, video games, and CGI films. Shows like *Bal Ganesh* and

Hanuman use 3D models with realistic textures while maintaining a vibrant color palette and stylized facial expressions.

Fantasy or Mythical Style: In this style, magical or otherworldly elements like mystical armor, exaggerated proportions, and ethereal features are added and these are often used in fantasy RPGs, story-driven games, and fantasy illustrations.

Gothic or Dark Style: This style focuses on darker themes with moody colours, sharp edges, and sometimes unsettling proportions. It is seen in horror games, dark fantasy series, and gothic artwork.

Retro Style: It emulates the aesthetics of earlier decades, like the '80s or '90s, with bold colors, pixel art, or vintage attire. It is popular in nostalgic media, indie games, and themed animations.

Abstract or Surreal Style: This style breaks away from typical forms, using shapes, patterns, and designs that may not represent reality. It is common in experimental animation, artistic projects, and modern art games.

Functionality

Functionality of a character refers to the role that a character plays within a narrative (**Figure 2.7**), including their contributions to the plot, themes, and interactions with other characters. In character designing, functionality element serves as the feature of context and background. It acts as a world and medium where a character exists. Likewise, designer create history for your character, you need to also create an environment for it to make viewer believe to your creation. For example, character of a doctor wearing apparel might have stethoscope around the neck and operating patient in theatre room or a soldier wearing an army uniform carry weapons in the hands.

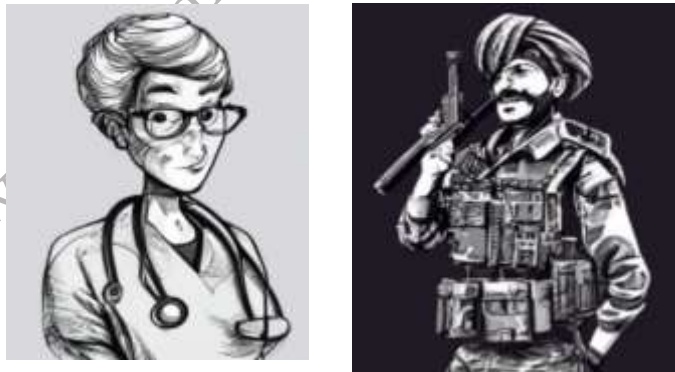


Figure 2.7: Functionality of character

Cultural and Historical Influences

Cultural and historical influence is the crucial element of character designing. The appearance, background and personality depend upon such elements. These elements enhance depth, abundance, richness and genuineness of the character. Furthermore, costume and attire reflect the cultural and historical time-period (**Figure 2.8**). Accessories like jewellery, crowns, hand girdles and footwear represent the identity of a particular culture with the time zone. Moreover, **Figure 2.8: Character with cultural influence** language and communication



style of a character convey the idea of culture and historical influence as well as help to viewers to identify the background.

Appeal

Is your character appealing enough to mount up audiences for visual engagement? Appeal component of design basically deals with the audiences as well as success of the story, film or games. Appealing character such as 'Groot' (a character in Marvel Comics) (**Figure 2.9**) worked as a mesmerizer which influence viewer's mind and leave impression or emotion for a long time.

Likewise visual attraction, costume, shape, and expressions of characters leave impact on viewer's mind. Keep in mind that who is your target audiences and then plan and create your character accordingly.



Figure 2.9: Groot

Activities

Activity 1: Exploring key elements of character design through collaboration and creative exploration.

Materials Needed:

- Character Examples: Images or descriptions of characters from various media (movies, video games, comics, etc.)
- Drawing Supplies: Paper, pencils, markers, or digital drawing tools (tablets, computers with drawing software)

Procedure:

Step 1: Your task is to analyze these characters based on the following:

- Physical appearance: What stands out about how the character looks?
- Personality: How do you think the character's personality is shown through design?
- Appeal: What makes the character attractive or engaging?
- Visual style: Is the character more realistic, cartoonish, or somewhere in between? How does the style affect the design?

Step 2: After analyzing the characters, you will present your observations to the class. Pick one or two characters and discuss the key design elements you focused on, such as how the character's appearance supports their personality or how the visual style adds to their appeal.

Step 3: Now it is time to create your own character! As a individual, brainstorm ideas for a new, original character. Consider the following as you design:

- What kind of story or world does the character belong to?
- What are their key physical traits?
- How does their personality influence their appearance?
- What makes the character unique and appealing?

Once you have an idea, begin sketching your character using the drawing supplies provided or digital tools. Make sure to explore different aspects like poses, facial expressions, and clothing designs.

Step 4: After designing, you will present your new character to the class. During your presentation:

- Explain how you came up with the concept.
- Highlight the character's physical appearance, personality, appeal, and visual style.
- Discuss why you made certain design decisions and how they support your character's role or story.

Step 5: After your presentation, there will be a brief Q&A session where other students will ask questions or provide feedback. This helps in gaining new insights and refining your design approach.

Check Your Progress

A. Multiple Choice Questions

1. _____ is the outline of the character which represents dark shape usually in black colour.
 - a. Model
 - b. Sculpture

- c. Shadow
 - d. Silhouette
2. Which element is more responsible for character's actions and movement?
- a. Personality
 - b. Cultural and historic influences
 - c. Clothing and accessories
 - d. Story arc
3. What drives aesthetic sense in the terms of appearance, look and feel?
- a. Personality
 - b. Visual style
 - c. Backstory
 - d. Functionality
4. Which term used to explain character's past before the main story episode?
- a. Flashback
 - b. Backstory
 - c. Memory recall
 - d. Life story
5. _____ worked as a mesmerizer which influence viewer's mind and leave impression or emotion for a long time.
- a. Appealing character
 - b. Personality
 - c. Visual style
 - d. Functionality

Session 2: Drawing Characters using Different Shapes

Drawing characters using different shapes is a fundamental technique in character design that helps artists simplify forms and create unique, recognizable designs. By using basic geometric shapes as the foundation, artists can establish character proportions, convey personality traits, and achieve a distinctive visual style.

Every person in the physical world is having different shapes of body. It is important to understand that how your character should appear with a different shape.

A triangular character can look very different from circular shape. Physical shape is significantly important for designing. Triangle, Rectangle, Oval, Circular and many more shapes are responsible for the personality of the character. Thus, it is also called shape language of character. Following shapes of character are given below

Triangle Based Characters

A triangle is useful to make a face of a character and types of triangles are to make larger shape of body. Triangle based characters gives the perspective of evil, villains, bad guys and other antagonist characters (Figure 2.10).



Figure 2.10: Triangle shaped characters

Such shape of characters is having sharp and edgy look incorporated with circular shapes of eyes and slight curved mouth. Different angles are showing unique postures and expressions.

Rectangle Based Characters

A rectangular shape provides strength and power to the character. Further, it reflects the most structured and strong appearance of a character in designing. Different proportion of rectangles involves in different part of the body. Comparatively, a head portion is carrying small proportion of rectangular block than the rest of the body structure (Figure 2.11).

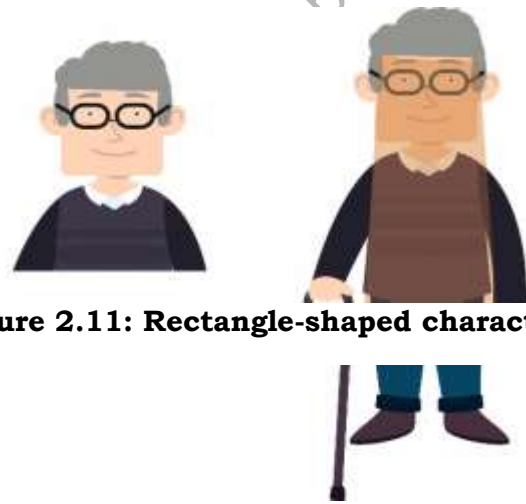


Figure 2.11: Rectangle-shaped characters

For the facial proportion, nose is formed in rectangular shape while mouth in straight line and eyes in circular form. To enhance the character's personality, we can add accessories like goggles with rectangular shapes.

Square Based Characters

Square based characters is provides a view of more geometrical appearance of the character. Somewhere, such character's properties are quite similar with the rectangular shaped characters. You can choose eyes, mouth and nose to deploy them in a square shape character (Figure 2.12).

Interestingly, variation in length and thickness in square shape reflects the viewpoint of different expression and emotions. This design is also called box shaped design. For



Figure 2.12: Square shaped characters

example, robots are formed through this shape.

Circle Based Characters

Circle shapes are responsible for the look of soft, charming, and chubby figures throughout the character design process. Head, mouth, eyes and nose can be made in a circular shape. In addition, legs and hands can be made by elongated ovals or circular shapes (**Figure 2.13**).



Fig 2.13: Circle-shaped characters

Circular shape gives the appearance of chubby and charming character. For the accessories point of view, we can use goggle, rings, buttons, earrings, hats and many more to enhance character's characteristics.

Oval Based Characters

Oval shape is an exaggeration of circle shapes. While designing an oval based character, it is important to understand that the head might be larger or smaller in proportion compare to the body. Legs and hands are also formed with oval shapes with different proportions (**Figure 2.14**).

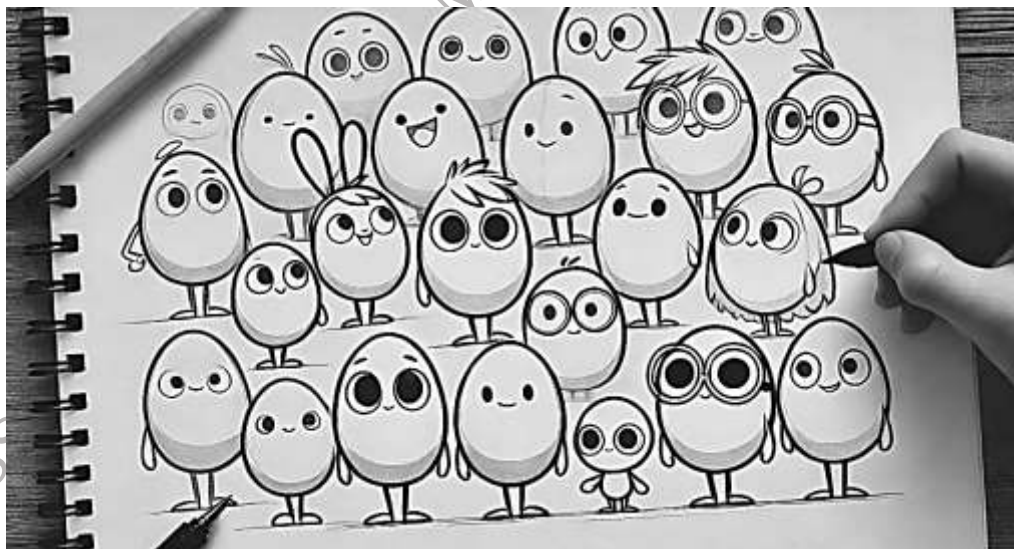


Figure 2.14: Oval shaped characters

Drawing Expressions of Characters

Expressions are important to show emotions and depicting ups and downs which enhance your character. Based on the personality of particular character, emotions can be muted, explosive, sardonic, or wildly exaggerated and expression might be

neutral, happy, sad and angry. Following expressions of character are given below.

Neutral Expression

Neutral expression is the establishment of all the expressions as well as provides foundation to other. Neutral expression is a default, resting and relaxing expression. This facial expression is characterized by symmetry, with the eyes and eyebrows aligned at a standard position, and the mouth featuring closed lips forming a straight line (**Figure 2.15**).



Figure 2.15: Neutral expressions

Happy Expression

Happy expression shows positivity that reflects enjoyment, delight, happiness and enthusiasm through character's personality. Prominent factors like big smile, lifted cheeks and relaxed eyebrows built a happy expression (**Figure 2.16**). Bright and wide eyes with sparkle serve as a catalyst in happy expression.



Figure 2.16: Happy expression

Sad Expression

Sad expression reflects the idea of distress, disappointment and low emotion in character designing. Furthermore, lowering the mouth line, eyes, eyebrows and eyelids as well as the shape of dropping of teardrops in eyes corner shows the sad expression very well (**Figure 2.17**).



Figure 2.17: Sad expression

Angry Expression

Tightness of teeth or clenching of jaw with open mouth demonstrates the angry expression in a character. Some other properties like 'V' or 'A' shape followed by tilted eyebrows, narrow or closed eyes; vertical wrinkle lines between eyes shows the intense expression of anger (Figure 2.18). Specifically, aggressive posture, red eyes and intense colours are used to convey the personality of anger.



Figure 2.18: Angry expression

Activities

Activity 1: Exploring basic shapes in character design.

Materials Needed:

- Paper or sketchbooks
- Pencils, erasers
- Pens or markers
- Reference images of characters for inspiration

Procedure:

Step 1: Begin by exploring the significance of basic shapes in character design. Many professional character designers use simple geometric shapes as the foundation for their work. These shapes help you to convey different emotions, attitudes, and styles.

Step 2: You can practice sketching a variety of basic shapes—circles, squares, triangles, rectangles, ovals, and polygons—before combining them to form the basis of a character. Experiment with different combinations to see how different shapes influence the overall look and feel of the character.

Step 3: Explore the characteristics and emotional associations of each shape. For instance, a character designed with mostly rounded features may seem friendlier and more innocent, while one based on angular shapes like triangles might appear more intense or threatening. Look at reference images of characters from various media and analyze how designers use basic shapes to build their characters.

Step 4: Based on your understanding of shapes, brainstorm ideas for a character. Consider how the shapes you use will influence the character's personality. Will your character be friendly, brave, mischievous, or intimidating? Use the characteristics of the shapes to help guide your concept.

Step 5: Once you have a character idea, begin sketching your design. Start with basic shapes to define the character's overall form, then gradually refine the design by adding details like facial features, clothing, or accessories. Focus on how the proportions of the shapes affect the design and how the shapes interact with each other to form a cohesive character.

Step 6: After completing the initial sketch, take time to fine-tune the details. Adjust proportions, clean up lines, and ensure that the character's design matches the intended personality and style. Add small details like textures, shadows, and expressions to bring the character to life.

Check Your Progress

A. Multiple Choice Questions

1. What is the reason of drawing a character with different basic shapes?
 - a. To makes complex shape simple
 - b. To control creativity
 - c. To effect audience emotions
 - d. To offers more confusing drawing
2. Which of the following statement is true about triangular based shape character designing?
 - a. Triangular shapes shows dynamism and aggression
 - b. Triangular shapes reduce visual interest
 - c. Triangular shapes represent joy and happy character
 - d. Triangular shapes are not used in characters designing
3. Which type of shape is commonly used to draw soft and friendly character?
 - a. Triangle
 - b. Rectangular
 - c. Square
 - d. Circle
4. Which expression is known as the foundation of all expressions?
 - a. Happy
 - b. Sad
 - c. Angry
 - d. Neutral

5. In character's expression, _____ is the facial feature that carries crucial emotions.
- Eyes
 - Nose
 - Ears
 - Mouth

Session 3: Sketching Techniques

A character designer can use a variety of ways to simplify a design. Creating sketch is the foremost techniques where a designer begins to add their ideas onto a physical sheet. Sketching process is basically a visual representation of a character that designer create with help of tools.

Initially, a novice artist engages in sketching, utilizing design templates and sheets to craft the fundamental shapes of a character. This step provides the space where a designer experiment and form rough and loose sketches to understand the perfection of ideal designing. Some techniques of sketching are listed below.

Hatching and Crosshatching

Hatching and crosshatching are basic technique of sketching used by a designer in character designing. By using such techniques, a designer can deploy detailed texturing and shading in design by the help of monochromatic media (single colour media). Hatching technique is a kind of shading method in which straight or curved parallel lines are drawn by the help of pen or pencil to make a darker spot (**Figure 2.19**). These lines are closely organized to reach different features.

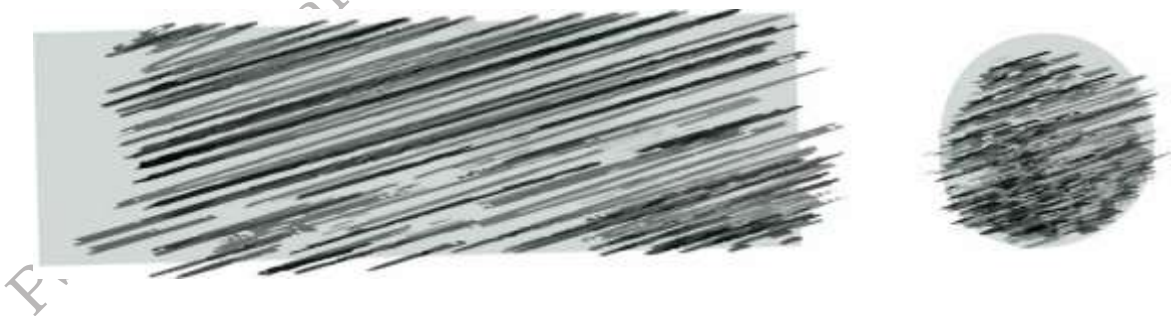


Figure 2.19: Hatching technique

Crosshatching is an intersection of hatching lines drawn at different angles to obtain more textured aspect (**Figure 2.20**). Lighter and darker aspects are drawn by the means of thinner and thicker lines respectively.

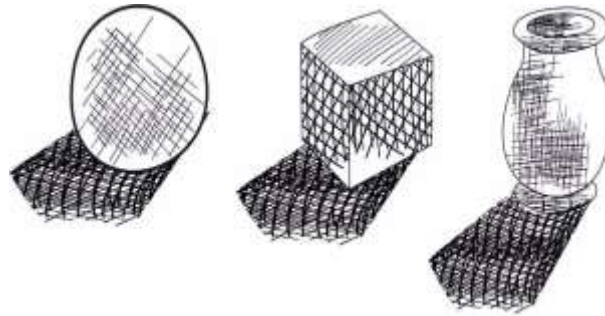


Figure 2.20: Cross-hatching technique

Stippling

Stippling technique deals with the shading through tiny dots that create image of the character. In this technique, tiny dots are used in the place of lines or strokes (**Figure 2.21**).



Figure 2.21: Stippling technique

Stippling takes more effort to generate intricate results but adds depth to the design. While designing, designer begins with light sketch of the subject and outlined it by the help of pencil which create fundamental framework of design.

Dots drawn closer together have a higher density, and dots drawn further apart have a lower density. Interestingly, using a pen, pencil or glass marker with smaller nib (0.1mm to 0.5 mm) delivers a good result.

Scribbling

In character formation, scribbling technique is used to get spontaneous and valuable results in abstract and expressive design. By scribbling method, we can explore the idea, expression and shapes of the character quickly. It is a process which creates a character more quickly by drawing random overlapped chaotic marks by pen, pencil, charcoal ink or marker on paper (**Figure 2.22**).



Figure 2.22: Scribbling technique

The method of quick exploration of poses of character is called gesture drawing which is used in scribbling technique. It is beneficial when scribbling layers are overlapping each other and create overlapping shape. Through overlapping shapes, designer can make dynamic and action oriented pose to convey movement to the character. A basic or loose scribble helps to draw the outline and proportion of the posture.

Circling

Circling method is used to create visually strong and unique characters in character designing. It can be achieved by drawing of circular, curved and arcs shape (Figure 2.23). Furthermore, experimentation and exaggeration with circular or oval shape, through circling technique, provides different features and characteristics of character.



Figure 2.23: Circling technique

Smooth Shading and Blending

Smooth shading is a technique by which a designer can put depth in the particular part of the object by darkening the area (Figure 2.24). It is a rendering technique that helps to make curved surface more smooth and realistic. Such shading technique can be achieved by flat and gouraud method of smooth shading.

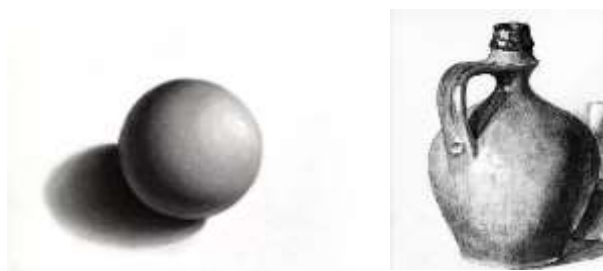


Figure 2.24: Smooth shading technique

Blending process is the mixing of textures, material or colours on a given surface. Thus, the method is called as texture, material and colour blending (**Figure 2.25**). It is very effective for character creation when used with skin, outfits, and accessories.

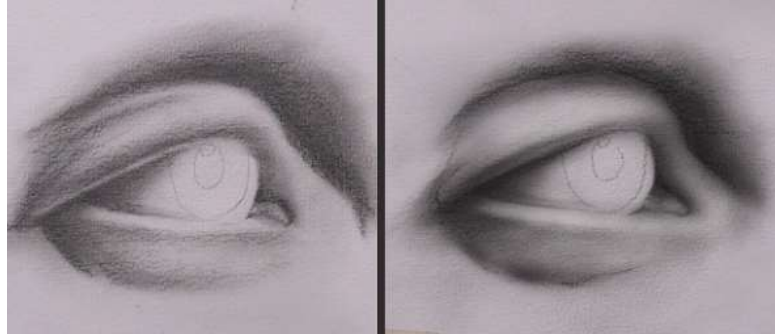


Figure 2.25: Blending technique

Both techniques are used in 3D modelling with the purpose to enhance visual and realistic appeal in the character. Such techniques are built with a gradual transition between colour, tint, and shades.

Creating Highlights

Creating highlights is a unique technique of sketching. In this technique, an area is highlighted by drawing the selected area with less dark pencil and other with more dark pencils or left the selected area and draw rest of the area through more dark pencils (**Figure 2.26**).

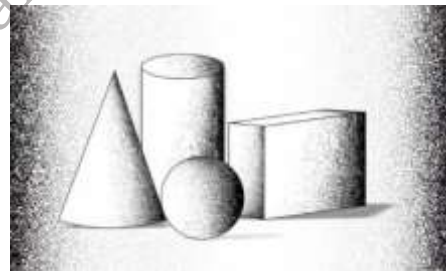


Figure 2.26: Creating highlights technique

The levels of darkness and softness in highlighted area can be achieved by different pencils and their effective series from hard (H) to soft (B). Also, highlights can also be created by kneaded eraser and blending stumps. Creating highlight technique works upon the direction as well as intensity of light source in the scene. As a result, you know exactly which areas of the character should be highlighted.

Activities

Activity 1: Sketching characters and exploring design elements for creativity and storytelling.

Materials Needed:

- Paper or sketchbooks
- Pencils, erasers
- Pens or Mmarkers

- Optional: Digital drawing tools (tablets, drawing software)

Procedure:

Step 1: Begin by brainstorming your character idea. Consider what kind of personality or story you want the character to have. Is the character a hero, a villain, a sidekick, or a mysterious figure? Use the key design elements to guide your sketch. Think about the silhouette and proportions first—this will form the base of your character. Then, gradually add details like facial expressions, costumes, and accessories that reflect the character’s story and traits.

Step 2: Draw multiple sketches of your character, experimenting with different design elements to see how they change the character's look and feel. Try out different facial expressions, hairstyles, clothing styles, and accessories. Consider how these changes affect the character's personality and how they might be perceived by an audience. For example:

- Changing the size and shape of the eyes can make the character appear more innocent or more intense.
- A slouching pose might suggest a relaxed or tired personality, while a straight posture might show confidence or pride.

Step 3: As you refine your character sketches, think about how the design elements you’ve chosen reflect the character’s backstory and role in the story. Does the costume hint at their profession or world? Do the accessories reveal something about their past?

Sketch different poses or situations that show your character in action—this will help you think about how their personality and story come to life through movement and expressions.

Step 4: After you have explored different elements and settled on a final design, add the finishing touches.

Clean up your lines, refine the proportions, and add any necessary details that enhance the character’s personality or story. You can also experiment with shading, colours, and textures to make your character stand out.

Step 5: you have completed your character sketch, share your design with the class or group. Explain your design choices and how you used different elements to communicate your character’s story.

Reflect on the creative process—what design elements worked well, and what was challenging? Discuss how the design could be further developed to fit into a broader narrative.

Check Your Progress**A. Multiple Choice Questions**

1. What is the main purpose of sketching?
 - a. To finalized the character
 - b. To create shading and texture
 - c. To make it colourful
 - d. To discover ideas and concept
2. What is the main reason to sketch multiple form of a character during design?
 - a. It refines the character and explores more ideas
 - b. It helpful to finalize the work of design
 - c. It helps to understand the colour structure in character
 - d. It provide outline of a character
3. Which style is used to make dynamic or action pose of characters?
 - a. Hatching
 - b. Cross- hatching
 - c. Overlapping shape
 - d. Creating Highlights
4. What does the term 'hatching technique' refers in sketching?
 - a. Straight or curved parallel lines are drawn for shadow and depth
 - b. Intersections of lines which creating different angles
 - c. Shading through tiny dots that create image
 - d. Mixing of textures, material or colours in designing
5. _____ technique is useful for discovering the poses of character quickly.
 - a. Cross-Hatching
 - b. Gesture drawing
 - c. Stippling
 - d. Smooth shading

Session 4: Role of Character Posing in Designing

Character poses play a crucial role in visual storytelling and character design, as they convey emotions, personality traits, and actions. In animation, characters have unique characteristics with visual appeal. Poses are the element that is responsible for offering uniqueness in characters. Poses are crucial and accountable for personality, background, story and emotions. Several poses in a character deploys wide series of emotions and adding depth to the character. Every single poses is having different meaning which helps character to communicate meaning within the boundaries.

Types of Poses

In character design, poses play a crucial role in conveying personality, emotion, and movement. Following are some common types of poses used in character design:

Ideal Pose

Ideal pose is defined as a fundamental pose that provides the knowledge of starting point of basic proportion and anatomy of characters. Ideal pose is basically a standard and relaxed sitting or standing pose with a neutral emotion where a character is not contributing towards activity, emotions and expressions but exhibiting body language, personality and posture with basic physical characteristics. Therefore, it's also called neutral, default or resting pose. Purposely, designers start drawing a character's anatomy and appearance through this pose and it's fairly easy for the designer to use costume, accessories and other feature while character is in ideal pose. For example, ideal pose of Superman's character looks like a young, strong and muscular character incorporated with flying feature and specific costume, expressing the confidence and activeness for the action (**Figure 2.27**).



Figure 2.27: Ideal pose

T-pose

The T-pose frequently use in 3D animation industry. T-pose is a specific pose where a character is standing straight in a symmetric position, forming T-shape with their horizontally outspread arms. In this pose, outreached arms are extended horizontally as well as parallel to the ground and feet are typically together as well as perpendicular to the ground (**Figure 2.28**).

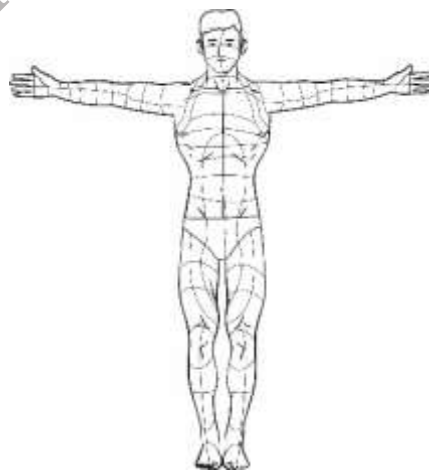


Figure 2.28: T-pose

Significantly, T-pose serves as a starting or neutral position for the method of rigging,

texture mapping and preliminary testing of proportion and deformation in 3D animation. By the view of starting point, T-pose conveyed an idea of standardization and consistency to the character designer for the character modelling in designing. Various team members like riggers, modeller, animators and many more are collaborating towards T-pose to simplify the design.

Today, various forms of media like video games, feature films and character art are creating T-pose to achieve more consistency and efficiency in the character. In 3D film industry, T-pose allows designer to work on body proportions and costume of a character.

3/4th pose

The 3/4th pose is the specific pose angled between character's frontal view and side view. Moreover, its position is situated neither in frontal view nor in side view but lies in between their extremes (**Figure 2.29**). Generally, 3/4th poses are used in 2D animation to define the turn-around and side angle motion. The 3/4th pose is an illustration technique where characters are positioned at approximately three quarters or 135 degree angle lies between frontal and side view.

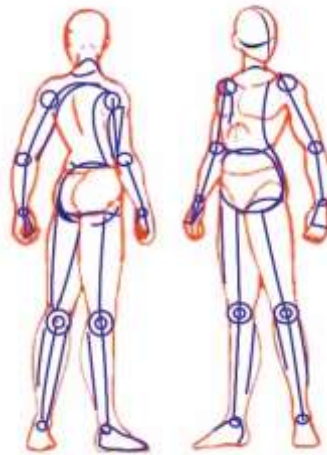


Figure 2.29 : 3/4th pose

Through this pose, a designer arranges a character from a dynamic and engaging angle that can enhance the visual attention. It provides depth and viewpoint that helps character to look more natural, realistic and three-dimensional. Significantly, designer can showcase character's body, features, face, clothing and accessories in detailed procedure which provide depth and proportion to the character. Purposely, designer can draw multiple angles in turnaround sheet by using 3/4th pose which can develop consistency and maintain dynamic composition. Designer uses 3/4th view illustrations to make character's portfolio more informative through multiple angles. 3/4th pose plays a crucial role in animation and comic books industry wherein turn around sheet and model sheet is created which demonstrate the character's action, expression and emotion more effectively.

Techniques to Enhance Dynamics Pose

It is crucial to enhance the dynamic poses while designing a character. Often, many techniques help to deliver movement, action and energy to the character that are responsible to create visual appeal as well as engaging the audience. Some techniques like use of line of action, arcs, balance and asymmetry that are used for the enhancement of dynamic pose in character designing are given below.

Use of Line of Action

The concept of line of action deals with the imaginary lines that run in the part of dynamic pose which resemble with activity and action. The main purpose is to draw the line of action to express the directional outline of the flow of the pose (**Figure 2.30**).

To maintain fluidity in action and motion, designer is to ensure that the complete body of character including head, limb and torso follow the line of action in every possible level.

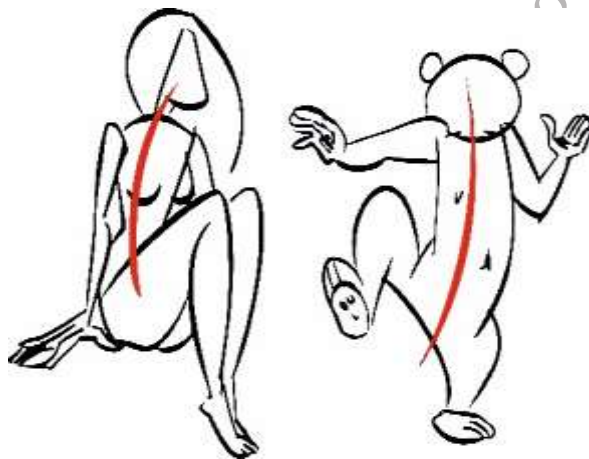


Figure 2.30: Use of line of action

Line of action is kind of main pillar of the pose which maintains character's movement flowing with the direction. It provides essence of oneness in the pose of character. For example, the line of action of a character in motion, adopting a forward running stance that propels them off a surface, originates from the head, travels along the spine, and extends down to the feet, possibly forming a diagonal curve (**Figure 2.31**).

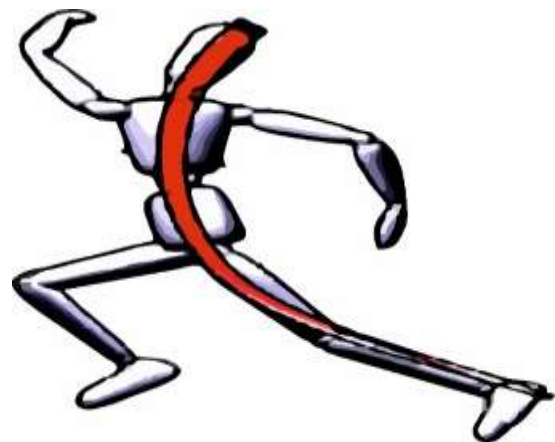


Figure 2.31: Use of line of action of a running character

Arcs

In dynamic state, a character is set to follow a path to achieve their destination. Somehow, this path is required arc to accelerate character from one point to another. Arc is a mathematical parameter where a characters move in their possible shape in a form of elliptical or circular profile rather in a straight line. The primary function of arc is to provide accelerator or decelerator to the character. By arcs, characters appear more real in scene and push the audience in their world. There are many of arcs are used for the dynamic pose (**Figure 2.32**).

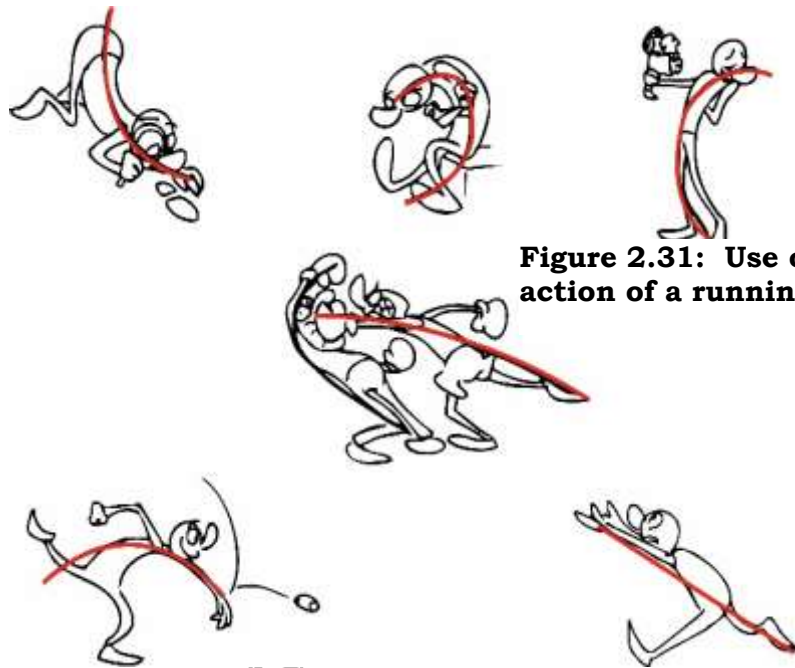


Figure 2.31: Use of line of action of a running character



Figure 2.32: Arcs of dynamic character

- **Circular arcs**- Circular arcs are following circular path with similar radius in every instance. Such arcs are used in circular, pendulum and spinning motion.
- **Elliptical arcs**- Elliptical arcs are following the path in oval shape, also forming quicker motion with asymmetric acceleration and deceleration with its centre.
- **Irregular arcs**- Irregular arcs are defined with the uneven shape and odd geometric parameters. Thus, it shows mostly real and natural action.

Balance

Balance shows the property of equilibrium of component in every dynamic pose. Designing a balanced character is critical in dynamic pose as compare to static pose. A character looks more realistic, appealing and stable by balance technique which eliminates uneven and awkward appearance in dynamic pose.

Consider when a character is climbing or jumping, where the whole weight is distributed? Or if weight is not distributed perfectly, how would it look like in a dynamic position?

A natural and relaxed distribution of weight in character's pose refers as *contrapposto*. A designer can make perfect running or jumping character by distributing the weight towards feet and sort of limb carrying support of center of gravity (**Figure 2.33**). For example, an athlete is running in a straightforward direction then we incorporate the design by balancing the body by the means of covering one leg or arm backward that shows perfect balance towards the pose (**Figure 2.34**).

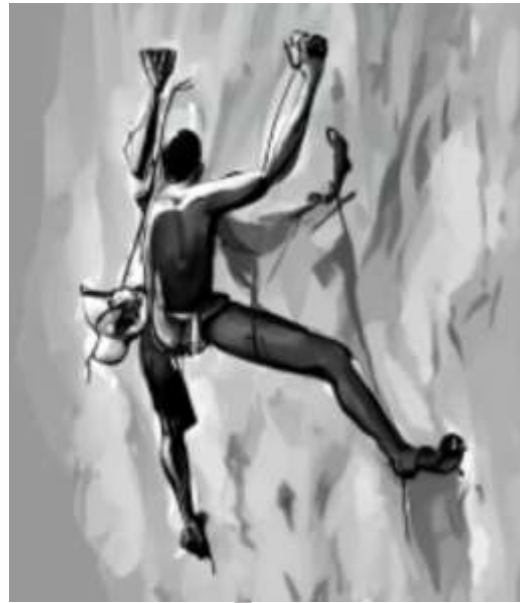


Figure 2.33: Balance during dynamic pose

This technique is called 'counterbalance', which is a type of balancing technique. Another technique is called strong base connection that shows balance between a character and base (where a character is standing).

To maintain balance effectively, a character needs to ground them firmly, whether it is by firmly planting their feet, leaning against a stable surface, or finding support like an old tree, thereby preventing any imbalance or disproportion.



Figure 2.34: Weight distribution of a runner

Asymmetry

Asymmetry occurs when dissimilarities appear in both sides. Asymmetry poses show energy, power, attitude and uniqueness to the character.

In an example below, pose of the right side character is showing tilting of hips and shoulder in the counter-side direction which makes it more interesting and exclusive (**Figure 2.35**).



Figure 2.35: Asymmetry in character's pose

Asymmetry in characters can also be reached through uneven weight distribution, loose gesture drawing, asymmetric line of action, counterbalance limbs, exaggerating features and many more. Uneven weight distribution can be achieved by providing the illusion of vibrant character where character's one foot is landed in the ground or character inclined towards one side while other foot is in the air space (**Figure 2.36**).

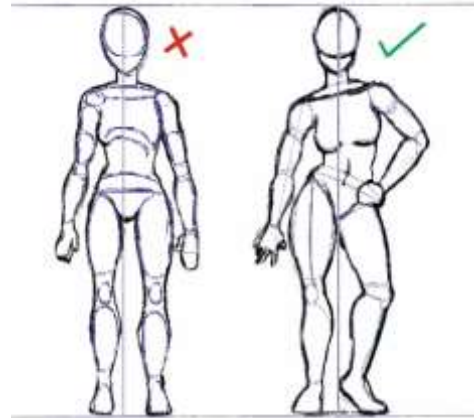


Figure 2.36: Asymmetry in weight distribution of character

On the other hand, asymmetry through loose gesture drawing can be derived by loose or flow line which are responsible for the moment of the character

Concept of Turn-around

The meaning of turn-around is simply related with various sets of reference sheet showing comprehensive view of a character from different angles. Turn-around provides Front, Side and Three-quarter view as key elements (**Figure 2.37**). This reference sheet contains detailed drawings on which a particular character is formed.

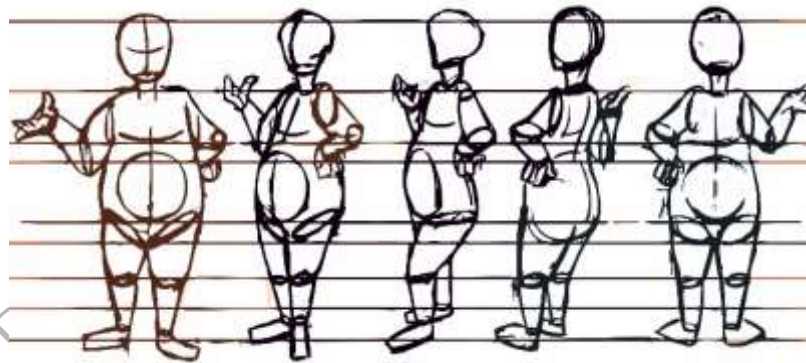


Figure 2.37: Concept of turn-around

Such step is popularly used in all kind of visual storytelling platforms. Turn-around helps designer to maintain consistency towards features and their proportion in several poses and scene.

Visualizing character's appearance for storytelling

In visualization of a character, detailed sets of drawing insure that the perspectives of a character should be similar and consistent during appearance as well as connected with storytelling so that audience can recognize it movie alike (**Figure 2.38**). Moreover, turn-around is a tool by which audience can understand the

physical attribute as well as proportion. Also, audience can believe and relate a character with the real world. Close-up view contributes towards facial expression and emotion with an aim that the audience easily visualizes the character.



Figure 2.38: Visualization of a character in storytelling

New turn-around provides the range of alteration of character as well as progressive journey throughout storytelling that shows the evolution of character and change in their appearance. Visual storytelling material like props, accessories and costumes signifies narrative meaning which are responsible for advancement of plot of the story (**Figure 2.39**).



Figure 2.39: Visual storytelling material like props, accessories and costumes signifies narrative meaning

Animation

Animation is a dynamic art form that involves creating the illusion of movement by displaying a series of individual frames or images in rapid succession. This technique can be applied to various mediums, including film, television, video games, and web content, and encompasses a wide range of styles and techniques. It is crucial for animators to maintain consistency in each frame throughout the animation process, just as character designers ensure uniformity in their designs. Turn-around provide a vision of side and back view which helps animators to display character's behavior and movement in three dimensional space. Likewise, sets of reference sheets with various action and movement support animator to understand the visualization of action sequences and movement of dynamic poses of character. Perhaps, it is quite

critical to show correct expressions and emotion in animated character. For such challenges, animators use character's close-up view of turn-around to show all facial expressions precisely.

Three-Dimensional Graphics

Three-dimensional (3D) graphics refer to the creation of images or animations that possess depth, width, and height, simulating a three-dimensional environment. Turn-around performs a pivotal role in three-dimensional graphics. It serves a connection between two-dimensional perception artwork and three-dimensional modelling which helps over maintaining efficiency in production process. Turn-around is used as modelling reference in three-dimensional graphics. Modellers relate two-dimensional work reference as guide to perform in three-dimensional space. Meanwhile, modellers apply two-dimensional drawings reference incorporated with various angles like front, back and side, which helps them to articulate it onto three-dimensional model (**Figure 2.40**).



Figure 2.40: Conversion from 2D to 3D

Visual Communication

Visual communication is the use of visual elements to convey information, ideas, or messages. Turn-around is invaluable and works as a promoter to improve visual communication in character designing. The course of reference sheets with different angles helps to communicate character's appearance, identity and personality over the progression of story. A well-crafted turn-around may emphasize the viewer and creates visual appeal towards its own.

Activities

Activity 1: Observing and sketching people for character design inspiration.

Materials Needed:

- Sketchbook or paper
- Pencils, erasers
- Optional: Digital drawing tools (tablet, drawing software)
- Observation environment: Cafes, parks, classrooms, libraries, or other public spaces

Procedure:

Step 1: Find a comfortable place where you can observe people naturally—this could be a public park, a cafe, or even a school hallway. The goal is to watch how people move, interact, and express themselves in everyday situations. Try to choose an environment where people are engaged in different activities—sitting, walking, and talking so you get a variety of poses and expressions.

Step 2: As you observe, take note of the different ways people position their bodies. Pay attention to:

- Posture: How people sit, stand, or lean, and what this says about their mood or personality.
- Gestures: Hand movements, head tilts, or other expressive gestures people make while talking or interacting.
- Walking Styles: Notice how different people walk—some might move quickly and confidently, while others are more relaxed or hesitant.

Step 3: Watch closely for facial expressions and how they change in response to different interactions or emotions. Observe subtle movements of the eyebrows, eyes, and mouth, and how these affect the overall expression. People's expressions can reveal their thoughts or feelings, which can be a valuable reference for designing expressive characters.

Step 4: Start by creating quick gesture sketches of people as they move or interact with others. These are rough, fast sketches that capture the essence of a pose or movement, rather than detailed drawings. Focus on:

- The flow of movement (how the body moves as a whole).
- The weight distribution (how a person stands or leans, which leg they put more weight on, etc.).
- The overall gesture (how arms, legs, and posture work together to convey action or emotion).

These sketches don't need to be perfect—just a quick way to capture dynamic poses and natural body language.

Step 5: After warming up with gesture sketches, spend more time on detailed sketches. Select interesting poses or expressions you have observed, and take your time to refine the details. Focus on:

- Proportions: Ensure the body parts are in proportion, but feel free to exaggerate certain features if it helps convey personality.
- Facial Features: Add detail to the eyes, mouth, and other facial features, keeping in mind the emotions you observed.
- Clothing and Accessories: Pay attention to how clothing moves with the body

and how accessories (like bags or hats) contribute to a person's overall character.

Step 6: After gathering your sketches, reflect on which poses or expressions stood out to you. Use these observations as inspiration to develop new characters. Think about how natural gestures and expressions can be applied to enhance the storytelling aspect of your characters. You could combine different traits from various people you observed to create a more complex and dynamic character.

Step 7: Take your observational sketches and refine them into more polished character designs. Focus on:

- **Pose:** How does the character's posture or movement reflect their personality?
- **Expression:** What emotion do you want the character to convey? Adjust the facial features accordingly.
- **Character Details:** Add additional design elements like clothing, accessories, or hairstyles to further define the character's role or personality.

Activity 2: Pick a character you love or create your own.

Draw them facing forward, then from the side, and finally from the back. This is a mini-turn-around! Notice how some parts look different when you change the angle, but you keep important details the same.

Check Your Progress

A. Multiple Choice Questions

1. What does the term "dynamic pose" refers in character designing?
 - a. A neutral and standard pose
 - b. A pose which related with activity and action
 - c. A symmetric and balance pose
 - d. A pose angled between character's frontal and side view only
2. What is the main purpose of "T-pose" in character designing?
 - a. Provide a clear idea for standardization of character
 - b. Standing straight and symmetrically, forming T shape with their horizontally outspread arms
 - c. Starting or neutral position for rigging method
 - d. All of the above
3. What term is used for natural and relaxed weight distribution in pose?
 - a. Heroic pose
 - b. Power pose

- c. Contrapposto pose
 - d. Foreshortened pose
4. Which of the following define turn around in designing?
 - a. Adding colours in different poses
 - b. Various sets of reference sheet showing view of a character from different angles
 - c. Personality of character can rotate in space
 - d. To exhibit the character's profile
 5. Which angles uses in turn-around for comprehensive view of a character?
 - a. Low, high and eye level view
 - b. Only front and back view
 - c. Front, side and three-quarter view
 - d. Only front and side view

B. Subjective Questions

1. How poses in character design contribute to a character's personality, background, and emotional expression?
2. Compare and contrast the Ideal Pose and T-Pose in character design.
3. Explain the role of the 3/4th pose in character design. How does it enhance visual storytelling.
4. What is the concept of turn-around in character design?

Session 5: Colour Theory and Its Purpose in Character Designing

Light is made up of electromagnetic waves and each of these waves' wavelength is a particular colour. Visible light waves consist of different wavelengths. These wavelengths range from 700 nm (nanometre) at the red end of the spectrum to 400 nm at the violet end.

White light is the combination of many different frequencies of visible light from all parts of the visible spectrum. The colour of an object or material is determined by the wavelengths it absorbs and those it reflects.

An object has the colour of the wavelengths it reflects. Thus, the colour that we see is a result of the wavelengths that are reflected back to our eyes. The primary colours of light are red, green and blue. Mixing these colours in different proportions can make all the colours of the light that we see in designing. There are basically three

categories of colours based on the colour wheel as primary, secondary and tertiary colours.

Principles of Colour Theory

In character designing, colour theory is a term used to describe the rules and guidelines regarding the use of colour by a designer to interact with viewers through appealing colours techniques.

Colour theory focuses on colour mixing and visual effects of a specific colour combination (**Figure 2.41**).



Figure 2.41 Colour combination

Combining colours is both an art, as well as, a science. You might be aware that there are primary colours, secondary colours, and tertiary colours.

Primary colours are a set of colours that can be combined to make a useful range of colours. Red, blue and yellow are the primary colours and form the base of every other colour. Primary colours can be mixed together to produce secondary colours.

There are many theories for harmony. However, there are three basic principles of colour theory that are logical and useful in visual communication. The basic three key principles of colour theory is colour wheel, colour harmony and the context of how colours are used.

Colour harmony provides a visual interest and a sense of order in character designing.

Colour Wheel - The colour wheel can be used to help remember primary, secondary and tertiary colours. Mixing of primary colour i.e., red, yellow and blue provide secondary colours and combination of primary and secondary colours provide tertiary colours.

Colour Harmony - Colour harmony refers to the property which is created through aesthetically pleasing colour combinations. Colour harmony like analogue, complementary, monochromatic and triadic provides different visual effects and moods.

Colour Context - The relationship of values, saturations and the warmth or coolness of hues should be understood by the character designer as these create differences in perception of colour. The use of these colour elements contributes to an understanding of how colours are employed in design. However, hue shows the actual and pure colour, saturation shows the intensity of colour and value shows

the lightness as well as darkness in the colour (**Figure 2.42**).

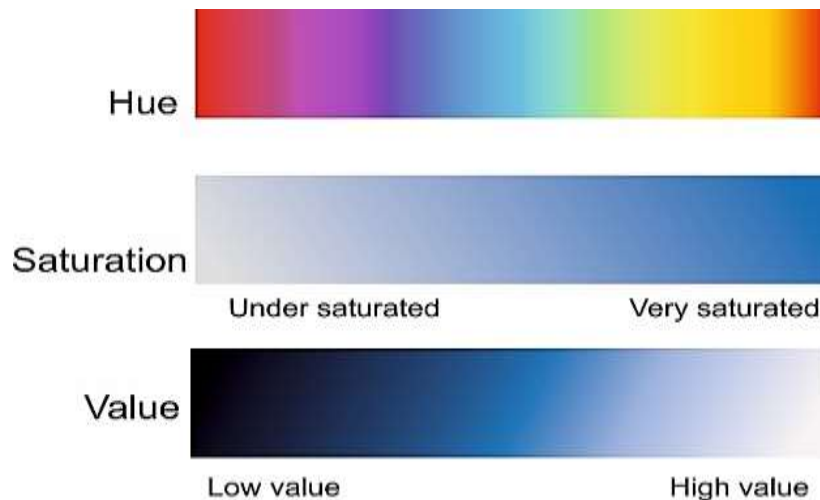


Figure 2.42: A view of hue, saturation and value

Concept of Colour Theory (Primary, Secondary and Tertiary Colours)

The colour wheel is made up of three types of colours — primary, secondary and tertiary. Let us now try to understand the three types of colours and their formation.

Primary Colours- Primary colours are the basic colours on the colour wheel. These are called so because no two colours can be mixed to create a 'primary colour'. All other colours found on the colour wheel can be created by mixing the primary colours.

The three primary colours of artistic colour wheel are Red, Yellow and Blue (RYB) (**Figure 2.43**).

Secondary Colours- Secondary colours are created by mixing equal parts of any two primary colours. The secondary colours are orange, green and purple.

Red + Yellow = Orange

Yellow + Blue = Green

Blue + Red = Violet (purple)

Tertiary Colours- A tertiary colour is made by mixing one primary colour and the adjacent secondary colour. Such colours are created by mixing equal parts of a primary and secondary colour.

There are six tertiary colours, namely red-purple, red-orange, blue-green, yellow-green, blue-purple and yellow-orange.



Figure 2.43: Primary colours

In the realm of character design, artists craft characters for visual storytelling

mediums, whether it be through 2-D or 3-D art. These creations may come to life through software overlays or traditional paper drawings, resulting in lifelike 3D characters. A key aspect of this process involves the intricate world of colour theory, where designers must grasp how colours interact with each other and shapes.

Colour Wheel

A colour wheel or colour circle is an abstract illustrative organization of colour hues around a circle that shows the relationship between primary, secondary and complementary colours. Colour wheel in character designing suggests artist, illustrator, and designer to create more harmonious character with visual appeal. If you follow the colour wheel, you will find the same order of the colour spectrum — red, orange, yellow, green, blue, indigo (blue-violet) and violet. Most colour wheels are based on three primary colours, three secondary colours and the six intermediates known as tertiary colours. According to the colour theory, harmonious colour combinations use any two colours, which are opposite to each other on the colour wheel. Any three colours are equally spaced around this colour wheel forming a triangle.

Types of Colour Wheel

Depending on different mediums of using colour, colour wheel can be categorized into the following two types.

Artist Colour Wheel- The Artist colour wheel is the chart which is generally used for mixing colours for painting and artwork (**Figure 2.44**).



Fig 2.44: Artist colour wheel

Technical Colour Wheel- Technical colour wheel is used to work with any technical device like electronic display and printers. It can be categorized into the following two types:

a) Digital Colour Wheel- Mixing colours digitally is not the same as mixing them physically, therefore, it is important to understand digital colour mixing. Screens use an additive colour model (the additive primary colours are Red, Green, and Blue i.e., RGB) rather than the reflective colour model (**Figure 2.45**).

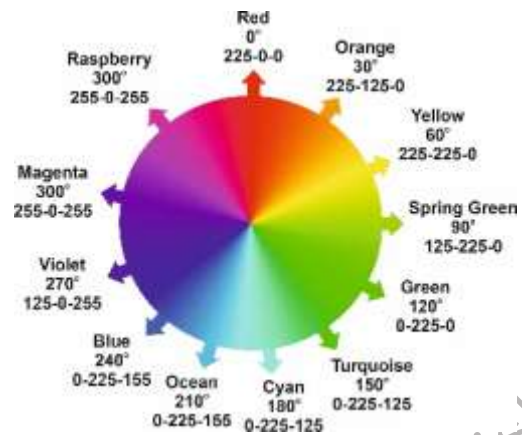


Figure 2.45: RGB colour wheel

Television, cameras, scanners and computer monitors are based on the additive system of colour, where red, green and blue light projected together yield white colour. To digitally store an image, it is necessary to divide it into a grid composed of small pixels.

b) Print Media Colour Wheel- Print media creates colour by subtracting or absorbing certain wavelengths of colour while reflecting other wavelengths back to the viewer. This phenomenon is called subtractive colour model. It employs Cyan, Magenta, and Yellow (CMY) pigments or dyes to selectively absorb segments of white light that illuminate an object, resulting in the creation of various colours. Traditionally, the primary colours used in subtractive process were red, yellow and blue, as these were the colours that painters used to mix to get all the other hues. The subtractive colour system involves colour ants and reflected light. Colour paintings, colour photography and colour printing processes use the subtractive process to reproduce colour.

Colour Harmony

Colour harmony is related with the selection and combination of colours that worked in a composite form by which designer creates an appealing and pleasant aesthetic character in design. Colour Harmony is a tool which provides knowledge of relationships of colours. The blending of various colours results in the creation of diverse visual effects. Colour harmony depicts overall mood and sense of the character. Through the utilization of a colour scheme, various types of colour combinations can be crafted.

The following are some examples of these schemes.

Complementary Colours Scheme

The complementary colour scheme consists of two colours that are opposite to each other on the colour wheel. For example, red and green are complementary colours, blue and orange is another example of complementary colours.

This scheme looks best when you place a warm colour (yellow, orange and red) against a cool colour (green, blue and purple). This scheme is intrinsically high-contrast. When using the complementary scheme, it is important to choose a dominant colour and use its complementary colour for accents. By using one colour for the background and its complementary colour (**Figure 2.46**) to highlight the important elements, you will get colour dominance combined with sharp colour contrast.

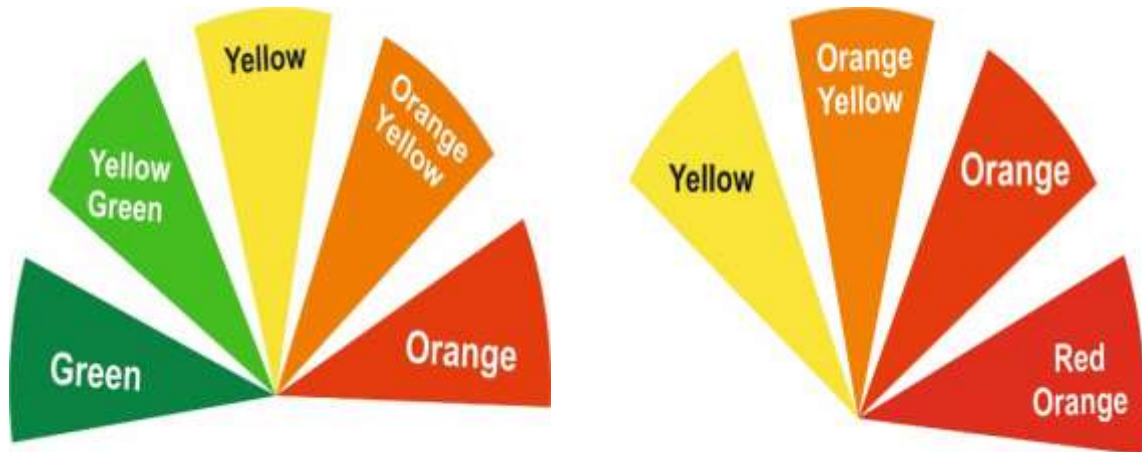


Figure 2.46: Complementary colour scheme

The complementary colour scheme offers stronger contrast than any other colour scheme and draws maximum attention. This scheme is harder to balance than monochromatic and analogous schemes, especially when de-saturated (less pure) warm colours are used.

Analogous Colours Scheme

The analogous colour scheme use colours that are adjacent to each other on the colour wheel (**Figure 2.47**). One colour is used as a dominant colour, while others are used to enrich the scheme.

The analogous colour scheme is similar to monochromatic colour scheme (Monochromatic' means one (mono) colour (chroma), a monochromatic colour scheme is made up of hues or shades of one colour), but offers more tones. It is advisable to avoid using too many hues in the analogous scheme as this may ruin the harmony.

Avoid combining warm and cool colours in this scheme as they can destroy the present analogous situation. Examples: Blue, Blue-Green, Green, Yellow-Green, Red, Red-Purple, Purple, and Blue-Purple.

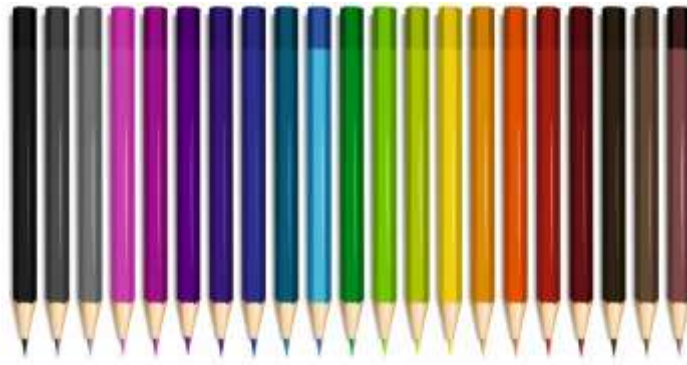


Figure 2.47: Analogous colour scheme

Monochromatic Colour Scheme

‘Monochromatic’ means one (mono) colour (chroma). Hence, a monochromatic colour scheme is made up of hues or shades of one colour. The monochromatic colour scheme uses variations in lightness and saturation of a single colour. This scheme looks clean and elegant. Monochromatic colours go well together, producing a soothing effect. It is easy on the eyes, especially blue or green hues. You can use it to establish an overall mood (**Figure 2.48**). The primary colours can be integrated with neutral colours, such as black, white or grey.



Figure 2.48: A view of monochromatic colour scheme

Warm Colours and Cool Colours Scheme- - Warm colours are made of a combination of red, yellow and orange. As the name indicates, they tend to make you think of sunlight and heat. Warm colours are vivid and energetic and tend to advance in space (**Fig. 2.49**).

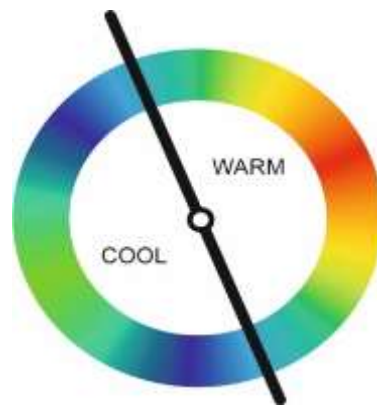


Figure 2.49: Warm and cool colours

Examples are Red, Yellow and Orange. Cool colours are associated with cool things and give a calm and soothing feeling. Cool colours remind us of water and sky. Examples are Blue, Purple and Green. White, Black and Grey are considered to be neutral colours.

Shades, Tints and Tones

Shade, tint and tones are defining variation in a particular colour. They are commonly used in design, interior decorating and art (**Figure 2.50**).

Tint- Tint can be achieved by adding white to any colour. It helps to lighten the colour and make it more bright, soft and pastel. However, tints aid to show highlights.

Tone- Tone can be achieved by adding black and white or simply grey to any colour. This tool allows us to achieve a de-saturated colour palette, resulting in tones that are less vibrant and softer in appearance. Tones are used to get more natural look through its variations.

Shade- Shade can be achieved by adding black to any colour. By the help of it we can get darker, deeper and hushed colours. Shades are used to create shadow and contrasting.

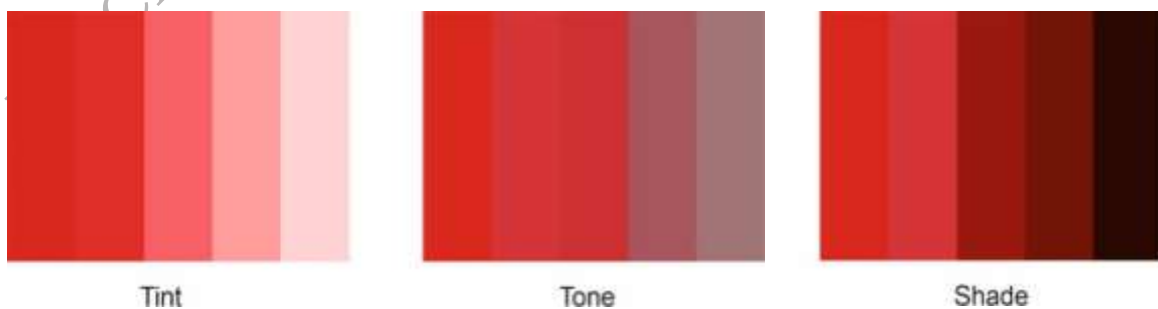


Figure 2.50: Colour palette of Adobe Photoshop showing tint, tone and shade by adding white, grey and black respectively

Activities

Activity 1: Exploring colour theory through colour mixing.

Materials Needed:

- Paints or coloured pencils (primary colours: red, blue, yellow)
- Paintbrushes or blending tools (if using paints)
- Mixing palette or paper (for blending)
- Paper or sketchbook for creating your colour mixes

Procedure:

Step 1: Start by understanding the three primary colours: red, blue, and yellow. These colours cannot be created by mixing other colours together, and they are the foundation for all other colours.

Step 2: Now, explore how mixing these primary colours generates secondary colours. Try the following combinations:

- Red + Blue = Purple
- Blue + Yellow = Green
- Red + Yellow = Orange

Use paints or coloured pencils to blend these primary colours and observe how the new colours are created. Make sure to experiment with different amounts of each colour to see how the mixture changes (e.g., more blue than red will create a different shade of purple than if equal amounts are used).

Step 3: After creating the secondary colours, experiment with adding more or less of each primary colour to create a range of hues:

- Light Green: More yellow than blue
- Deep Purple: More red than blue
- Burnt Orange: More red than yellow

Understanding these variations will help you create richer and more dynamic colours in your future artwork.

Step 4: Learn about complementary colours, which are opposite each other on the colour wheel (e.g., red and green, blue and orange, yellow and purple). When placed next to each other, complementary colours create a strong contrast and can make your designs stand out. Experiment by placing complementary colours side by side and see how they enhance each other.

Step 5: Introduce the concepts of tints (adding white to a colour to make it lighter) and shades (adding black to make it darker). Practice creating tints and shades with the colours you've mixed. For example:

- Light blue (blue + white)
- Dark green (green + black)

This will help you understand how to create depth and dimension in your character designs by using light and shadow.

Step 6: Now that you've experimented with mixing colours, create your own colour wheel. Start with the primary colours and add the secondary colours you mixed. You can also include tints and shades around the edges to show the full range of hues you can create.

Step 7: Think about how you can apply your new knowledge of colour mixing and colour theory to character design.

Check Your Progress

A. Multiple Choice Questions

1. Colour _____ shows the breakdown of a colour theory.
 - a. Wheel
 - b. Harmony
 - c. Context
 - d. All of the above
2. Tints are obtained by adding _____ to a pure hue.
 - a. White
 - b. Black
 - c. black and white or grey
 - d. (a) and (b) both
3. A colour scheme, which consists of two colours that are opposite to each other on the colour wheel, is known as _____ colour scheme.
 - a. Analogous
 - b. Monochromatic
 - c. Complementary
 - d. Warm and cool

4. Mixing red and yellow gives _____.
- Green
 - Violet
 - Orange
 - Blue
5. When colours are made with orange, red, yellow and a combination of them, these colours are called _____ colours.
- Cool
 - Warm
 - Complementary
 - None of the above

B. Subjective Questions

1. Explain the relationship between the wavelength of light and the perception of colour. How does this relationship affect the colours we see in everyday objects?
2. Describe the three basic principles of colour theory: colour wheel, colour harmony, and colour context. How do these principles contribute to effective visual communication in design?

DID YOU KNOW?

- Abhishek Singh, a graduate of the National Institute of Design, Ahmedabad, is an artist, graphic novelist, and animation film designer. He believes that illustration is fundamentally about storytelling and storytellers; for him, the character is the essence of the plot, and the plot is embodied in the character.
- Aditya Chari, an illustrator, character designer, and concept artist, graduated with a Bachelor of Fine Arts from Sir J. J. School of Art. He has contributed to character design for numerous films and produced a wide range of artwork, from Photoshop portraits and demo sketches to nudes and rapid drawings. He is also the author of two art books: Portrait Techniques Made Easy and Figure Study Made Easy.
- Mira Malhotra, a designer, visual artist, and illustrator, is an alumna of the National Institute of Design, Ahmedabad. She founded her boutique studio, Kohl, in 2013, which celebrates Indian culture and heritage in every piece. Embracing the "Glocal" approach, she combines local elements with a global style, making the design distinctly Indian while giving it a contemporary edge.

Module 3**Introduction to 2D and 3D Character Designing****Module Overview**

The module on process of 2D and 3D character designing provides a comprehensive exploration of the methodologies involved in creating characters using both two-dimensional and three-dimensional software.

In Session 1, you will learn about the fundamentals of character design in 2D and 3D environments, gaining an understanding of the core principles that guide character creation across both dimensions.

Session 2 deals with the use of visual reference tools, emphasizing the importance of gathering and utilizing reference images and resources to inspire and inform the design process. In Session 3, you will learn about the various techniques of 3D modelling, creating a detailed character model, applying textures, and incorporating rigging for animation.

Learning Outcomes

After completing this module, you will be able to:

- Describe the sequential stages in the creation of 2D characters, including ideation, conceptualization, visualization, sketching, designing, colouring, refinement, and finalization.
- Identify the distinct stages in 3D character creation, encompassing modelling, texturing, lighting, rigging, animation, rendering, post-processing, and final output.
- Describe the various software tools employed at each stage of both 2D and 3D character design processes, and highlight their role in workflow and design quality.

Module Structure

Session 1: Fundamentals of Character Design in 2D and 3D Software

Session 2: Visual Reference Tools

Session 3: Techniques of 3D Modelling

Session 1: Fundamentals of Character Design in 2D and 3D Software

Character design is a crucial aspect of visual storytelling, whether in 2D or 3D formats. The main factor that differentiates 2D and 3D character design is its dimensions. When characters are designed with the help of two different dimensions then they will be referred to as 2D characters. Similarly, three different dimensions are referred to as 3D characters. A designer cannot imagine character designing without the use of software. Software is an important tool to create a final digital illustration. Moreover, the primary function of the software is to convert the sketch (drawn on a physical sheet) to a digital procedure and provides the final work.

Software is classified as 2D and 3D as per their functions and applications. Currently, many 2D and 3D software are available in the market of character designing like for 2D character designing - Adobe creative cloud products (Photoshop, Illustrator, Animate CC, After Effect etc.), Toon-Boom, etc. (**Figure 3.1 - a**), and for 3D character designing - Autodesk 3Ds Max, Autodesk Maya, ZBrush, Blender, Houdini, Cinema 4D and many more (**Figure 3.1 - b**). Following are the some process of character designing through softwares.



Figure 3.1 (a): 2D software



Figure 3.1 (b): 3D software

Conceptualization (Traditional Paper Sketching and Digital Sketching by Utilizing 2D and 3D Software)

Conceptualization is the crucial process in character designing that aids in manifesting design. However, conceptualization provides a path where designs are expected accordingly. It is crucial to acknowledge the type of design you're creating and consider whether it aligns with the preferences of the audience. Also, what kind of personality, backstory, and other characteristics will be added to the character?

Designers draw their ideas on paper to explore ideas roughly in the beginning. Sketching is the impactful tool that aids to draw characters in 2D and 3D software. Such sketches helps designer to understand the facial expression and emotions of a character in prior manner **(Figure 3.2)**.



Figure 3.2: Digital sketching

Designers now go for digital sketching through 2D and 3D software to enhance their idea and design. Here, designer starts to draw some quick thumbnails to understand the basic knowledge of expressions and emotions.

In digital design, software like Procreate, Adobe Photoshop, Adobe Illustrator, Blender and so on are useful to create digital sketches. They use 2D sketches to enhance in 3D software by the help of digital tools **(Figure 3.3)**.



Figure 3.3: Converting images from 2D to 3D

Rigging (Also known as rig) is a construction of a skeleton for animation work for 2D and 3D model. This construction provides an idea of character's internal structure and

constructive bone series in skeleton (**Figure 3.4**). 3D software helps to create facial features, costumes, visual elements and accessories of the character.

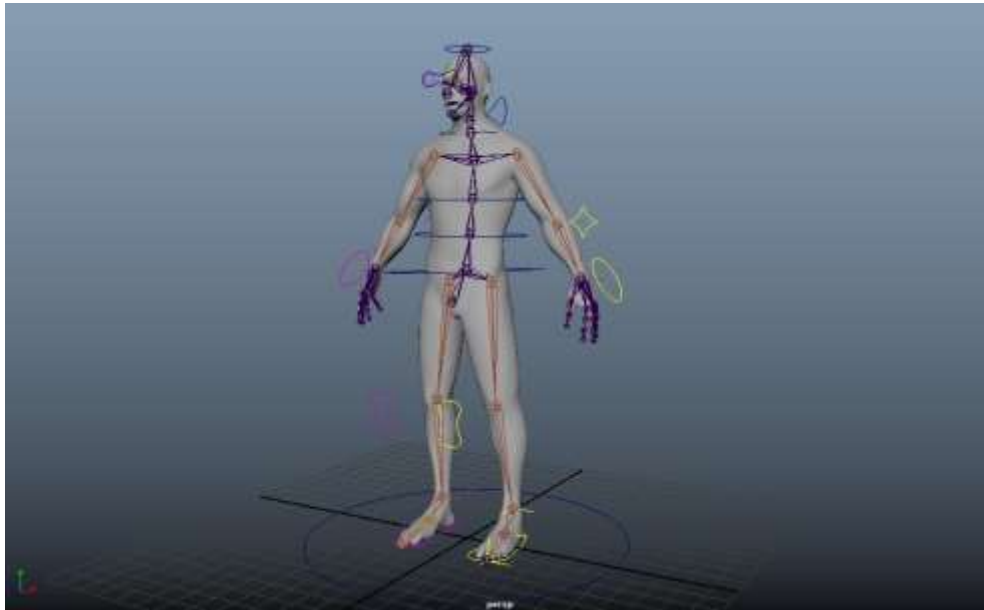


Figure 3.4: Rigging technique

Detailed Drawing (Line Art using Pen Tablets and Colouring)

Refinement process is used to improve the sketching and concept according with the storyline. After the concept and sketching process, refining is the next step where a designer can improve design through more detailing, precise colouring and suitable line-art. This detailing, colour exploration and line art offers real time character's experience to the viewers (**Figure 3.5**). Refinement is a usual concern in character designing. This process doesn't mean adding of colours, aesthetic or other attributes but instead clarifying and enhancing it.



Figure 3.5: Detailed drawing (line art using digital pen tools and colouring)

Digital drawings replace pen and pencil art and functioned over graphic software. To create such drawings, designers use computer, laptops and pen tablets and other tool.

Firstly, outline of the character can be refined by the tool like digital pen or brush tool which provide details by cleaning up the uneven boundaries and adding depth to the parts of the character. After that, we can create new refined lines and fill it with colour. This process is called Inking (**Figure 3.6**).



Figure 3.6: Inking process

Secondly, by providing smooth outline, by fresh lines, offers different detailed texture and pattern to the character. This step creates separation between body parts, costume and accessories and offers easy editing over sections. This piece of work comes under layer organization.

Lastly, adding colour to the base of the character and making outline show parts of the character separated from each other. Generally, a solid colour is used to show various sections of character. Sometimes, shading and highlights are also used to create shadow to display more realistic appearance of the character. Shading provide more depth and dimension to the character whereas highlights emphasis a selected area.

DID YOU KNOW?

In the 1980s, early 3D modelling software like AutoCAD and 3D Studio began to emerge, marking the first steps toward creating characters in three dimensions. Although these early models were basic and limited in detail, they set the foundation for 3D character design. As computer graphics technology progressed, animators started experimenting with converting 2D characters into 3D forms. This period also saw the development of advanced software like Maya and 3D Studio Max, which significantly enhanced the modelling and animation of 3D characters, enabling more complex and lifelike creations.

Activities

Activity 1: Understanding digital character design using software.

Materials Needed:

- A computer or tablet with character design software installed (e.g., Adobe Photoshop, Procreate, Clip Studio Paint, etc.)
- A graphics tablet or stylus (optional, but useful for better control)
- Access to tutorials or guides for the software you're using (if needed)
- Reference images of characters (optional for inspiration)

Procedure:

Step 1: Start by exploring the basic tools and interface of the software you are using. If you are new to digital drawing, spend some time understanding essential features like:

- Brush tools: Adjust size, opacity, and texture.
- Layers: Learn how to work with multiple layers to separate different parts of your design (e.g., one layer for sketching, another for colouring).
- Eraser and undo: Understand how to correct mistakes efficiently.
- Colour palette: Experiment with selecting and mixing colours.

Step 2: Begin by creating a rough sketch of your character. This is the brainstorming and concept stage. You can:

- Draw simple shapes to outline the head, body, arms, and legs.
- Experiment with different proportions (e.g., exaggerated heads, long limbs) to give your character a unique look.
- Consider their pose and expression to reflect their personality.

Step 3: Once you're happy with your rough sketch, create a new layer to refine it. Clean up the lines, add more detail, and start defining key features such as:

- Facial details: Eyes, nose, mouth, and any unique facial features.
- Clothing and accessories: Define what your character is wearing and think about how it complements their personality.
- Hair and style: Play with different hairstyles to give your character more individuality.

Step 4: After finalizing your sketch, move on to colouring your character. Use the software's tools to:

- Fill in base colours: Start with solid colours for skin, clothing, and other

elements.

- Add shading and highlights: Use brushes with different opacities to create shadows and highlights, giving your character depth and a three-dimensional feel.
- Experiment with blending modes: If your software allows it, experiment with different blending modes to create interesting colour effects.

Step 5: Finish your character by adding small details that bring them to life. You can:

- Add textures to clothing or objects.
- Refine shading to give a more realistic or stylized look.
- Adjust proportions or colours as needed to balance the design.

Step 6: Once you are satisfied with your character design, save your work. Most software allows you to save in different formats (e.g., JPEG, PNG, or PSD). You might also want to save a high-resolution version of your character for printing or future editing.

Check Your Progress

A. Multiple Choice Questions

1. Which of the following factor shows the difference between 2D and 3D character designing?
 - a. Layer method
 - b. Dimension
 - c. Colour application
 - d. Software compatibility
2. Which one is not 3D software used in character designing?
 - a. Autodesk Maya
 - b. Adobe Illustrator
 - c. Blender
 - d. ZBrush
3. In which phase of character designing, designer explain character's personality, backstory and other characteristics.
 - a. Rigging
 - b. Modelling
 - c. Sketching
 - d. Conceptualization
4. What is the meaning of 'rigging' in designing?
 - a. Adjustment of texture
 - b. Adjustment of colour
 - c. Adjustment of character's silhouettes

- d. Construction of internal structure and bone series in skeleton
5. What is the main purpose of refining process in character designing?
- Enhance design and add more details
 - Improve colour and texture
 - Providing smooth outline to the character
 - All of the above

B. Subjective Questions

- Explain the role of software in the character design process.
- How does the transition from traditional sketching to digital sketching enhance a designer's ability to conceptualize characters?
- Describe the importance of conceptualization in character design. How can a designer ensure that their character aligns with the audience's preferences and narrative requirements?
- How does rigging contribute to the animation and overall functionality of a character model?

Session 2: Visual Reference Tools

Visual reference tools are the elements that contribute life to the character. The use of visual reference tools, along with their unique characteristics, empowers designers to create a comprehensive 360-degree approach when developing a character. This involves providing a well-rounded and distinctive style to the design, ensuring it is surrounded by a holistic representation. Physical references, digital camera, sketch-book, movie reference and many other types of tools are responsible for inspiring the designer to create more creative and convincing character. Following are some common types of visual reference tools used in character design:

Physical Reference

In order to bring authenticity to character design, it is important to collect and understand physical world objects for the reference. Various items such as props, clothing, fabric samples, and everyday objects can serve as valuable physical references. These physical objects, with their precise proportion, facilitate a seamless connection between the physical world and the designer's imaginative world.

Through the use of physical references, designers gain a tactile understanding of textures and surfaces in the real world, allowing them to physically touch and explore these elements. This hands-on approach enhances their understanding of how light interacts with various textures and surfaces. When experimenting, the insights gained

from physical references contribute valuable details to achieve realism and infuse the designer's personal touch into the character or design.

Digital Camera

Digital camera is a powerful tool to record action, emotions and environment as well as gather information from real world. A photograph, resulting from the camera's functionality, provides details and depth of a real object in a particular scenario captured in a moment of time. We can use digital camera as a visual reference tool in following ways:

- To capture the dynamic poses, body language and expression in different course of time, which aids to create more natural character in character designing.
- To portrayed specific mood and feeling, by taking close-up shot of faces to present choice of facial emotions and expressions.
- To understand the clothing colour combination, by clicking numbers of photograph and enabling the detailing of colours and patterns in character's costume.
- To enhance exploration of colours, by focusing on specific lighting techniques. This approach allows us to create a more realistic portrayal of lighting, adding depth and dimension to character design.

Sketchbook

Sketchbook is a character designer's personal space where they explore character's style through certain experiments and countless sketching (**Figure 3.7**). However, it's a rough place where a designer can play with certain ideas and develop an exceptional style. Sketchbook provide a platform for brainstorming and experimentation of sketches where sketches doesn't need to be up to the mark but shows an effortful combination of idea. Initially, designers make a thumbnail sketch for the plan layout for the characters. By the help of it, they can allow their self to create various facial expression and emotions with different poses. Making of different poses



in sketchbook is called pose exploration. Pose exploration provide foundation for the character building. Later, various visual elements, costume, props and accessories would be added to the character.

Reference from Movies and Web Series

Getting inspired through a movie and web series is a common phenomenon for character designer. Movies and web series are the sources of motivation from which a

designer can inspire their own spirit towards the arrangement of character's body language, screenplay, shot, lighting, costume, texture and many more settings. We can pause the screen and can take screen shot for future reference to understand character's expressions, scene composition and lighting techniques and other visual design elements. By the help of such reference, we can observe the cultural and historical precision. We can select make-up and special effect idea from movies as well as from web series. In a nutshell, character designer explores various movies and web series to gather inspiration which help them to plan and execute visual elements in the design.

Activities

Activity 1: Developing character design skills using visual reference tools.

Materials Needed:

- Paper and pencils (or digital drawing tools such as tablets and software)
- Visual reference tools such as:
- Photographs of people, animals, or objects
- Screenshots from movies, video games, or comics
- Artwork or illustrations from various sources
- Colouring materials (markers, coloured pencils, or digital colouring tools)

Procedure:

Step 1: Begin by gathering a variety of visual reference materials. These could include images of:

- People of different body types, facial features, and clothing styles.
- Animals, plants, or other elements from nature.
- Objects that might inspire character accessories, outfits, or tools. You can use photographs, images from the internet, or even scenes from movies or comics as references.

Step 2: Carefully analyze the visual references you have gathered. Pay attention to key elements that stand out, such as:

- Shapes: How different body parts or accessories are structured.
- Textures: The surface details of clothing, skin, or objects.
- Colours: What colour palettes are used and how they contribute to the character's personality.

Step 3: Before you start sketching, brainstorm a character concept inspired by your visual references. Consider:

- Personality: What kind of personality does your character have? Are they heroic,

mischievous, mysterious, or playful?

- Role or Occupation: What is their role in the world they live in? Are they a warrior, a scientist, an adventurer, or a villain?
- Unique Traits: What unique characteristics will make your character stand out? This could include unusual physical features, a specific style, or interesting accessories.

Step 4: Use the visual reference tools as inspiration to start sketching your character. Focus on:

- Proportions and Shapes: Translate the basic shapes and forms from your references into the structure of your character.
- Details: Add details like facial features, clothing, and accessories, drawing inspiration from the textures and patterns you observed.
- Pose and Expression: Choose a pose or facial expression that matches the personality of your character.

Step 5: Once you have completed the rough sketch, refine the details:

- Clean up the lines and adjust proportions if necessary.
- Add more complexity to the costume or accessories based on your reference tools.
- Consider how the colours, textures, and materials will be represented in your final design.

Step 6: Apply colour to your character using your chosen materials. If you are using digital tools, experiment with different brush types and textures to add depth to the design. Focus on:

- Colour Palette: Choose a colour scheme that reflects the character's personality and role.
- Shading and Highlights: Add shadows and highlights to make the character more dynamic and three-dimensional.

Check Your Progress

A. Multiple Choice Questions

1. What is the main objective to use visual reference tools in character designing?
 - a. To copy an old character
 - b. To restrict creativity
 - c. To avoid research
 - d. To create more creative and convincing character
2. What is the primary purpose of using physical reference?
 - a. To create connections to real world
 - b. To create background scenery only

- c. To copying element exactly
 - d. All of the above
3. What is the key function of digital camera as reference tool?
 - a. To capture dynamic poses, body language and expression
 - b. To capture facial emotions and expressions through close-up shots
 - c. To understand colour, texture and lighting combination
 - d. All of the above
 4. What is the primary purpose of using movie and web series reference?
 - a. To copying the character of movie
 - b. To understand character's expressions and scene composition
 - c. To restrict experimentation
 - d. Movie reference is not beneficial for designer
 5. Why is it essential for a designer to carry sketchbook for character designing?
 - a. To showcase character to the client
 - b. To finalize the character
 - c. To play with certain ideas and develop an exceptional style
 - d. To perform drawing skills

B. Subjective Questions

1. How do visual reference tools contribute to the authenticity and depth of character development?
2. In what ways do tactile experiences with real-world objects enhance a designer's ability to create realistic characters?
3. How can capturing dynamic poses and emotions influence the overall design and personality of a character?

Session 3: Techniques of 3D Modelling

3D Character modelling is a CG technology, multi-stage process performing by various 3D artists through different software and tools to form a character in film, video games and other media. The main objective of 3D modelling is to provide life to the character in a 3D space. As per the requirements, several modelling techniques are used to create various models. Some fundamental techniques are described below.

Polygonal Modelling

Polygon is a fundamental technique consisting of several shapes likes triangle quadrilateral, pentagon, hexagonal and octagon where designers used them to create a

3D character (**Figure 3.8**) . These polygons are flat, 2 dimensional and having 3 or additional sides. The main purpose of technique is to create large-scaled 3D character by the help of interconnected polygons which may be classified triangle (tris) or quadrilateral (quads). These polygons are undergone through extrusion, cutting, combined, merging, manipulating and well shaping process to create a required shape of the character.

In this technique, computer generated shapes are formed. One can create a polygon mesh using vertices (individual and pairs of points generally represented by X, Y and Z), edges (straight line connecting vertices), and faces (smallest polygonal unit) and make a particular 3D character. It's like a broad puzzle of building blocks playing in a 3D graphics. However, accuracy and detailing of the model depends upon number of polygons that are used to make an individual character. Polygonal modelling technique is for multipurpose used in several visual media like films, gaming and animation.

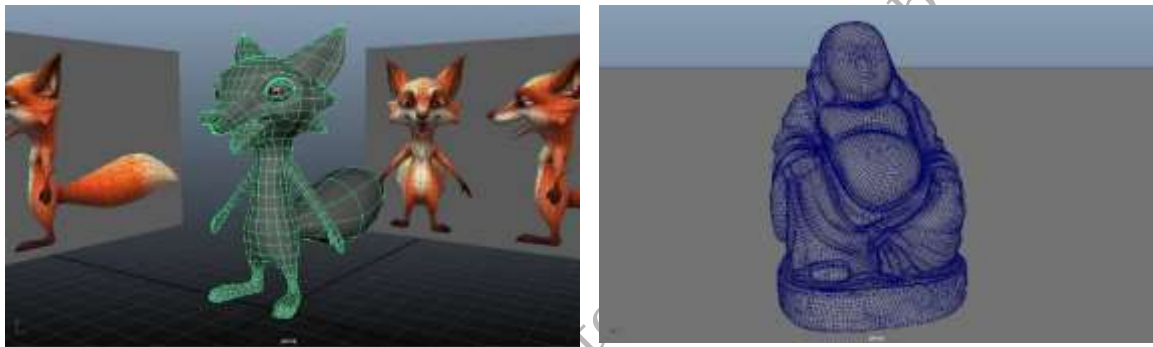


Figure 3.8 : Polygonal modelling

Following are the some advantages and disadvantages of polygon modelling discussed below.

Advantages

- Polygonal modelling techniques character offers a more natural look and shows rich accuracy and detailing due for the reason of topology.
- Many polygons are responsible for the individual character. Thus, such different polygons can be extracted for the polishing, cutting and shaping purposes and put again into design after the work has been done.
- Due to more flexibility in design work, this technique is versatile to make animals, human, objects in the video games, animation and films. Due to efficient toolbars, this technique is widely used for game engine design.

Disadvantages

- Adding fine details, cutting, editing and shaping of individual polygon takes more time. Thus, the technique is more time consuming as compared to others.
- Achieving perfect smoothness and sharpness in the curves is quite challenging through polygon technique.

- More detailing and high number of polygon possess high memory file to store which effect storage limitations.

Spline Modelling (NURBS Modelling)

Spline modelling technique, is also called NURBS (Non-Uniform Rational B-Splines) modelling, is applicable for 3D designing. It explains 3D geometry by the help of mathematical representation of smooth curves and surfaces which is also called NURBS curves and NURBS surfaces (Figure 3.9).

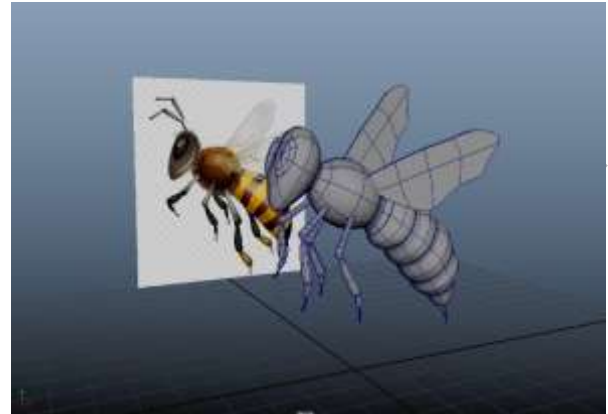


Figure 3.9: Spline modelling (NURBS Modelling)

Spline modelling requires the knowledge of curves, surfaces and their mathematical proportions. It regulates a high level of smoothness in curves and surface by which characters appear more solid and organic in the terms of natural flow. A character designer uses spline modelling techniques to achieve smooth learning curves.

NURBS modelling is a kind of spline working process to form a specific shape. Spline modelling basically works between at least two points. Thus technically, it states as B-Spline. For example, if we need to draw a cube in a 3D space, then we must acknowledge the correct distance between the points and faces and connect points with line. In such modelling, surfaces are separated from the curves for better controlling during the complete process.

NURBS technique is a sub divisional part of surface modelling technique where designer practice over 3D space. Let's focus on various advantages and disadvantages of spline modelling to understand their applications.

Advantages

- It provides sharp curves and smooth surface in model. Thus, such techniques are useful to display engineering works, industrial and engineering objects.
- Surfaces created by NURBS modelling can be converted to polygon modelling, if required.

Disadvantages

- NURBS always gives several individual parts to edit and add over into it which affect the finishing structure of the model.
- Achieving fine detailing is the challenge in NURBS modelling.

Activities

Activity 1: Explore polygon modelling techniques for 3D character creation.

Materials Needed:

- Computers or laptops with 3D design software installed (e.g., Blender, Autodesk Maya, or ZBrush)
- Graphics tablets (optional for better control)
- Reference images of characters for inspiration
- Notebooks for sketching and taking notes

Procedure:

Step 1: Explore overview of the design software. Highlight the user interface, essential tools for polygon modelling, and navigation controls.

Understand basic operations, such as creating a new project, using the mesh tools, and manipulating polygons.

Step 2: Before jumping into 3D modelling, you should create a concept sketch of their character. Encourage yourself to consider:

- Style: What is the overall style of the character (realistic, cartoonish, fantasy)?
- Features: What are the defining features of the character (facial characteristics, body type, clothing)?
- Accessories: Any additional elements that will enhance the character design.

Step 3: Once sketches are complete, you should set up your workspace in the design software. This includes adjusting viewports, grid settings, and importing reference images if needed.

Step 4: you will start by creating a basic shape for their character (e.g., a cube or sphere). You will then use polygon modelling techniques to refine the shape:

- Extrusion: To add limbs or features.
- Beveling: To soften edges or add detail to the model.
- Smoothing: To create more organic shapes.

Step 1: Understand how to add finer details to their models. This may include:

- Facial Features: Creating eyes, nose, and mouth using smaller polygons.
- Clothing: Modelling garments by adding separate mesh pieces.
- Accessories: Adding items like hats, weapons, or tools.

Step 5: Understand basic texturing techniques to apply colours and textures to the character. Discuss:

- **UV Mapping:** How to unwrap the model for texturing.
- **Materials:** Assigning different materials to various parts of the model.

Step 6: Once your character is fully modeled and textured, teach others how to set up a simple scene for rendering.

Check Your Progress

A. Multiple Choice Questions

1. What is the purpose of 3D modelling?
 - a. To provide life to the character in 3D space
 - b. To provide movements to the character
 - c. To create different poses of a character
 - d. To maintain unevenness of personality
2. What is the full form of NURBS?
 - a. Numeric Uniform Rendering B-Splines
 - b. Numeric Uniform Rational B-Surface
 - c. Non-Uniform Rendering B-Surface
 - d. Non-Uniform Rational B-Splines
3. Which statement is correct about spline modelling?
 - a. It offer mathematical representation of smooth curves and surfaces
 - b. It provides highly smooth curves and surface by which characters appear more organic
 - c. It is useful to display engineering works, industrial and engineering objects
 - d. Both (a) and (b)
4. Which term used for primary points of polygonal modelling?
 - a. Surface
 - b. Mesh
 - c. Vertex
 - d. Spline
5. What is the advantage to make games characters by polygonal modelling?
 - a. It takes less time to design a game character
 - b. It limits the level of accuracy and detailing in the character
 - c. It provide more flexibility and optimized performance to the character
 - d. All of the above

B. Subjective Questions

1. Explain the primary objective of 3D character modelling and describe the multi-stage process involved in creating a character.
2. What is polygonal modelling in 3D character design?
3. What is spline modelling, and how does it differ from polygonal modelling?
4. Identify and explain the challenges faced in polygonal modelling and spline modelling in terms of detailing, smoothness, and memory usage.
5. In what ways can NURBS modelling be converted to polygonal modelling?

Answer Key**MODULE 1: INTRODUCTION TO CHARACTER DESIGNING****Session 1: Meaning and Purpose of Character Designing****A. Multiple Choice Questions**

1. b.
2. c.
3. a.
4. c.
5. b.
6. c.
7. c.
8. b.
9. a.
10. c.

Session 2: Developmental Stages of Character Designing**A. Multiple Choice Questions**

1. d
2. c
3. d
4. c
5. a

Session 3: Types of Characters**A. Multiple Choice Questions**

1. d
2. b
3. d
4. d
5. c

Session 4: Role and Functions of a Character Designer**A. Multiple Choice Questions**

1. d
2. a
3. b
4. b
5. a

MODULE 2: ELEMENTS OF CHARACTER DESIGNING**Session 1: Fundamental Components of Character Designing****A. Multiple Choice Questions**

1. d
2. a
3. b
4. b
5. a

Session 2: Drawing Characters using Different Shapes**A. Multiple Choice Questions**

1. a
2. a
3. d
4. d
5. a

Session 3: Sketching Techniques**A. Multiple Choice Questions**

1. d
2. a
3. c
4. a
5. b

Session 4: Role of Character Posing in Designing**A. Multiple Choice Questions**

1. b
2. d
3. c
4. b
5. c

Session 5: Concept of Colour Theory and Its Purpose in Character Designing**A. Multiple Choice Questions**

1. d
2. a
3. c
4. c
5. b

MODULE 3: PROCESS OF 2D AND 3D CHARACTER**Session 1: Fundamentals of Character Design in 2D and 3D Software****A. Multiple Choice Questions**

1. b

2. b
3. d
4. d
5. d

Session 2: Visual Reference Tools

A. Multiple Choice Questions

1. d
2. a
3. d
4. b
5. c

Session 3: Techniques of 3D Modelling

A. Multiple Choice Questions

1. a
2. d
3. d
4. c
5. c

Glossary

Animation: The process of creating a progressively altering image that gives the appearance of continuous motion.

Antagonist: An antagonist is a character or force in a narrative that opposes or conflicts with the protagonist, creating tension and driving the plot forward. Antagonists can be individuals, groups, or abstract concepts that serve as obstacles or adversaries to the protagonist's goals.

Blending: Mixing of two (or more) textures into one final texture that is displayed in rendering.

Character: A character is a fictional or representational entity in a narrative, such as a story, film, game, or artwork. Characters can be humans, animals, creatures, or even inanimate objects, and they often have distinct personalities, traits, and roles within the narrative.

Compositing: The process of combining multiple elements shot separately (still images, movie clips) into a final image or sequence to give an impression that they were all shot at the same time.

Concept Art: Concept art refers to visual artwork created to convey an idea, concept, or design for a project, such as a film, video game, or product. It often serves as the

initial visual representation of characters, environments, props, and other elements in the project's development process.

Contrapposto Pose: Contrapposto pose refers to artworks or designs that depict figures in a relaxed, asymmetrical pose, with the body's weight shifted onto one leg and the shoulders and hips tilted in opposite directions. This pose is commonly associated with classical sculpture and Renaissance art, conveying a sense of naturalism and dynamic movement.

Dimension: A measure of spatial extent, especially width, height or length.

Frame: A frame in photography is a static image, which when followed by other static images sequentially gives the illusion of motion.

Graphic Designer: A graphic designer is a visual communicator who creates visual concepts, layouts, and designs for various media, such as print, digital, or multimedia platforms.

Hue: The position of a colour in the spectrum that describes the tone or tint of a colour, such as red, yellow, or blue.

Hybrid Character: A hybrid character is a fictional character that combines traits, features, or elements from different species, genres, or categories. This can include hybrids of different animals, mythical creatures, or even combinations of human and non-human characteristics.

Lateral Thinking: Lateral thinking is a problem-solving approach that involves thinking creatively and laterally to find unconventional solutions to challenges or puzzles. It encourages exploring different perspectives, making unexpected connections, and breaking away from traditional or linear thinking patterns.

Model sheets: These are also used for reference in 3D modelling. It is, usually, used as reference material so as to allow proper proportions in 3D modelling.

Modelling: Modelling is the process of creating 3D digital objects or characters using specialized software. It involves shaping and manipulating geometric primitives, such as vertices, edges, and faces, to form the desired shape or structure.

Monochromatic Media: Monochromatic media refers to artworks or designs created using a single colour or a limited range of shades or tints of a single colour. It can evoke a sense of simplicity, unity, and emphasis on form, texture, or composition.

Polygon: A geometric shape in one or many planes. Polygonal modelling consists of using many faces to create the shape.

Previz Sheet: A previz sheet, short for pre-visualization sheet, is a visual reference document used in film, animation, and video game production to plan and organize scenes, shots, and camera movements. It typically includes sketches, notes, and technical details to guide the filming or animation process.

Primary colours: There are three primary colours of light —red, green and blue (RGB).

Protagonist: A protagonist is the central character or hero of a narrative, around whom the story revolves. Protagonists typically drive the plot forward through their actions, decisions, and conflicts, and they are often portrayed as sympathetic or relatable figures.

Rendering: Rendering is the process of generating a final, photorealistic or stylized image or animation from a 3D scene or model using rendering software. It involves calculating lighting, shading, textures, and other visual effects to produce a visually appealing and realistic result.

RGB colour model: It is an additive colour model in which red, green, and blue light are added together in various ways to reproduce a broad array of colours.

Rigging: Rigging is the process of creating a skeletal structure or rig for 3D models to enable animation and movement. It involves attaching virtual bones, joints, and control mechanisms to the model, allowing animators to manipulate and pose the character or object realistically.

Storyboard: A storyboard is a visual planning tool used in film, animation, and other visual storytelling mediums to outline the sequence of shots, scenes, and events in a narrative. It consists of a series of illustrated panels or sketches accompanied by brief descriptions or dialogue, serving as a blueprint for the final production.

Storytelling: Storytelling is the art of conveying narratives or stories through various mediums, such as literature, film, theater, or visual arts. It involves the crafting and presentation of characters, plots, themes, and emotions to engage and captivate an audience.

Texturing Artist: A texturing artist is a creative professional responsible for applying textures, colours, and surface properties to 3D models in visual effects, animation, and video game production. They use specialized software to create realistic or stylized textures that enhance the visual appeal of digital assets.

Texturing Rigging: Texturing rigging refers to the process of adding textures and materials to 3D models and setting up the rigging or skeletal system to enable animation and movement. It combines the tasks of applying surface properties and creating a rig for the model, ensuring

Turn-around: In character design and animation, a turnaround refers to a set of drawings or images that depict a character from multiple angles, typically 360 degrees around its axis. Turnaround drawings are used as reference guides for maintaining consistency in character proportions and details during the production process.

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