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EVOLVING YOUR CREATIVE CRAFT

Shape Theory



EVOLVING YOUR CREATIVE CRAFT

Shape Theory

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Lecture Contents

- ① Shape Theory Overview
- ② Different Types of Shapes
- ③ Psychology of Shapes in Design
- ④ Shape in Character Design
- ⑤ Subverting Expectations with Shape Design



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Shape Theory

Shape Theory

Shape Theory Overview

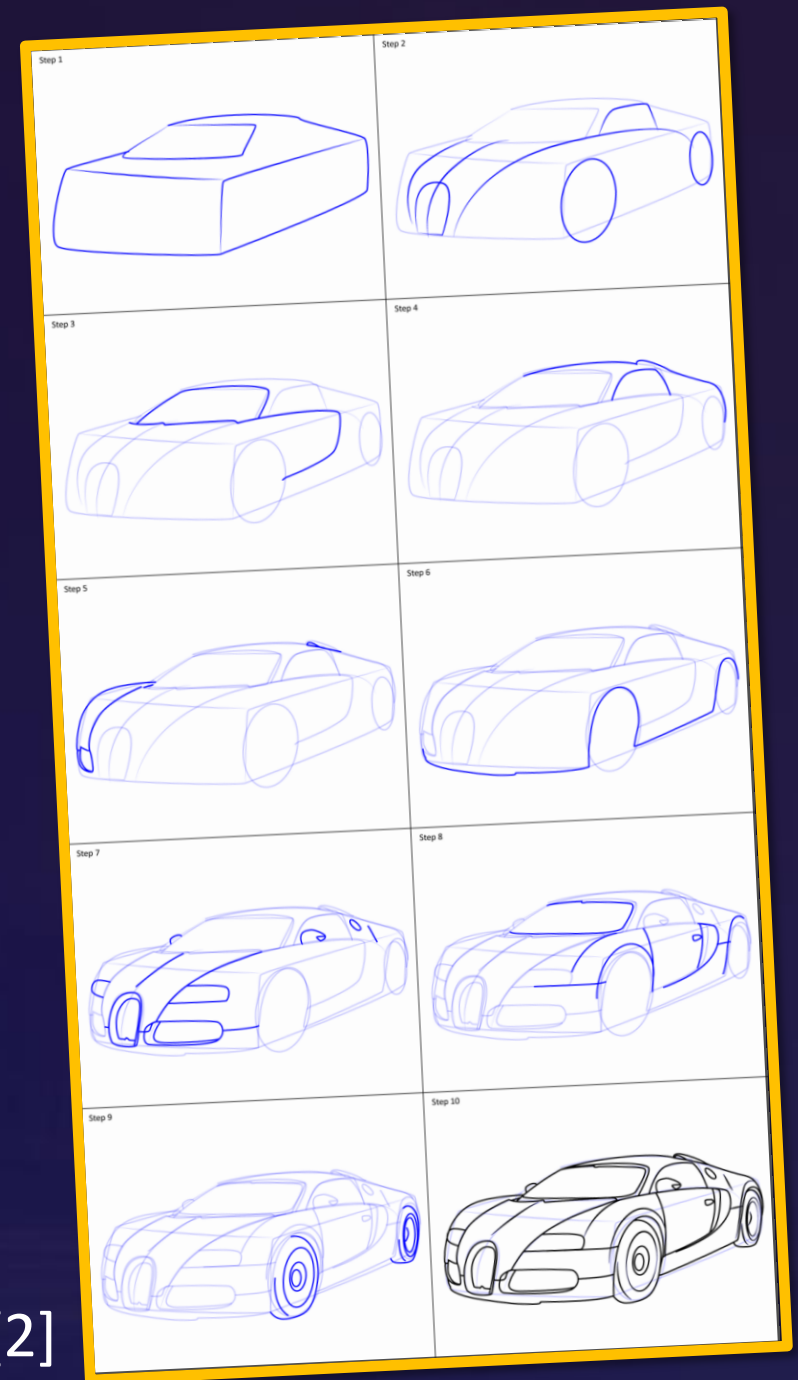


Shape Theory Overview

Shapes are the building blocks of everything we see, and the meaning of shapes speaks fundamentally to how we understand our world.

They are so universal most visual artists first learn how to draw through construction or breaking down images into **basic geometry**. [1]

[2]

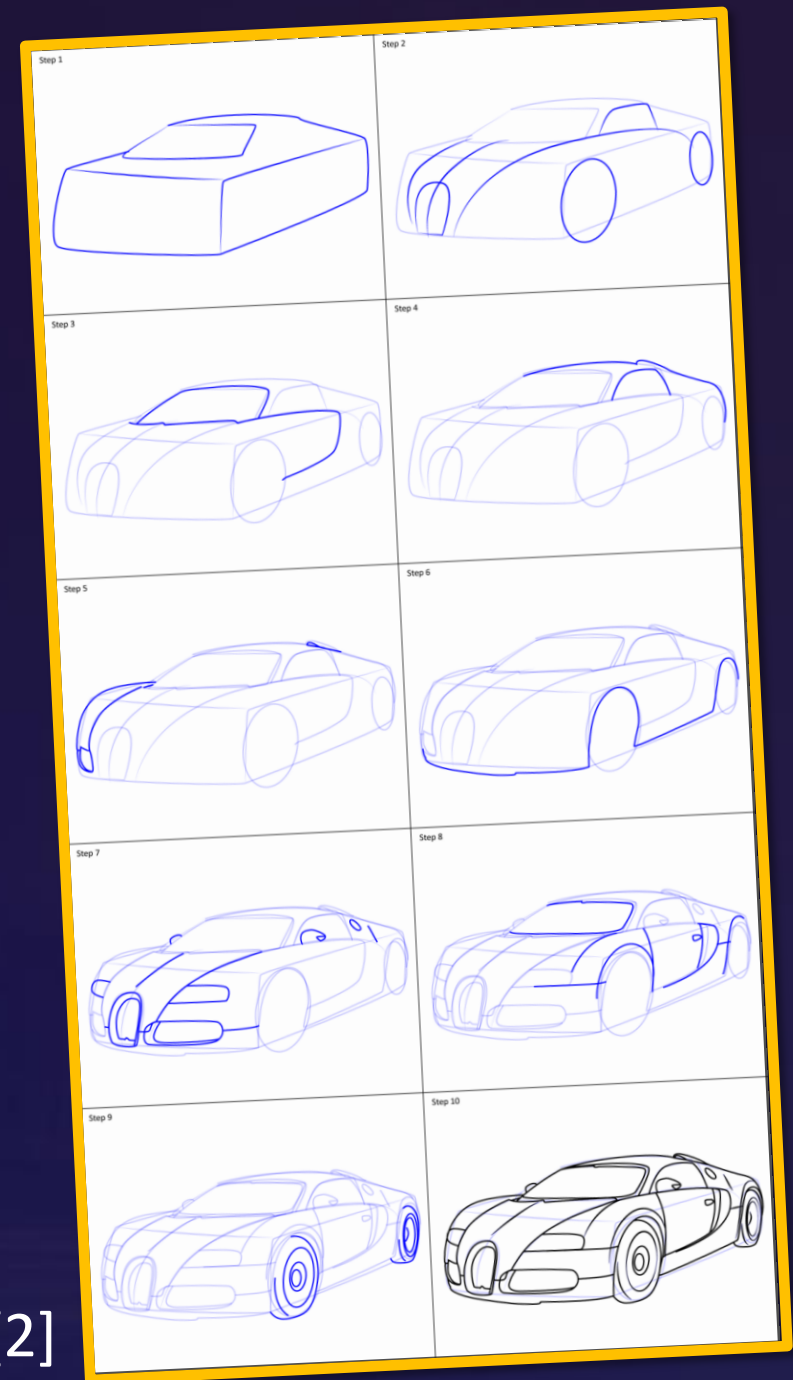




Shape Theory Overview

But shapes are more than just practical, constructive tools: their meanings are what allow designers to communicate **visually**. [1]

[2]



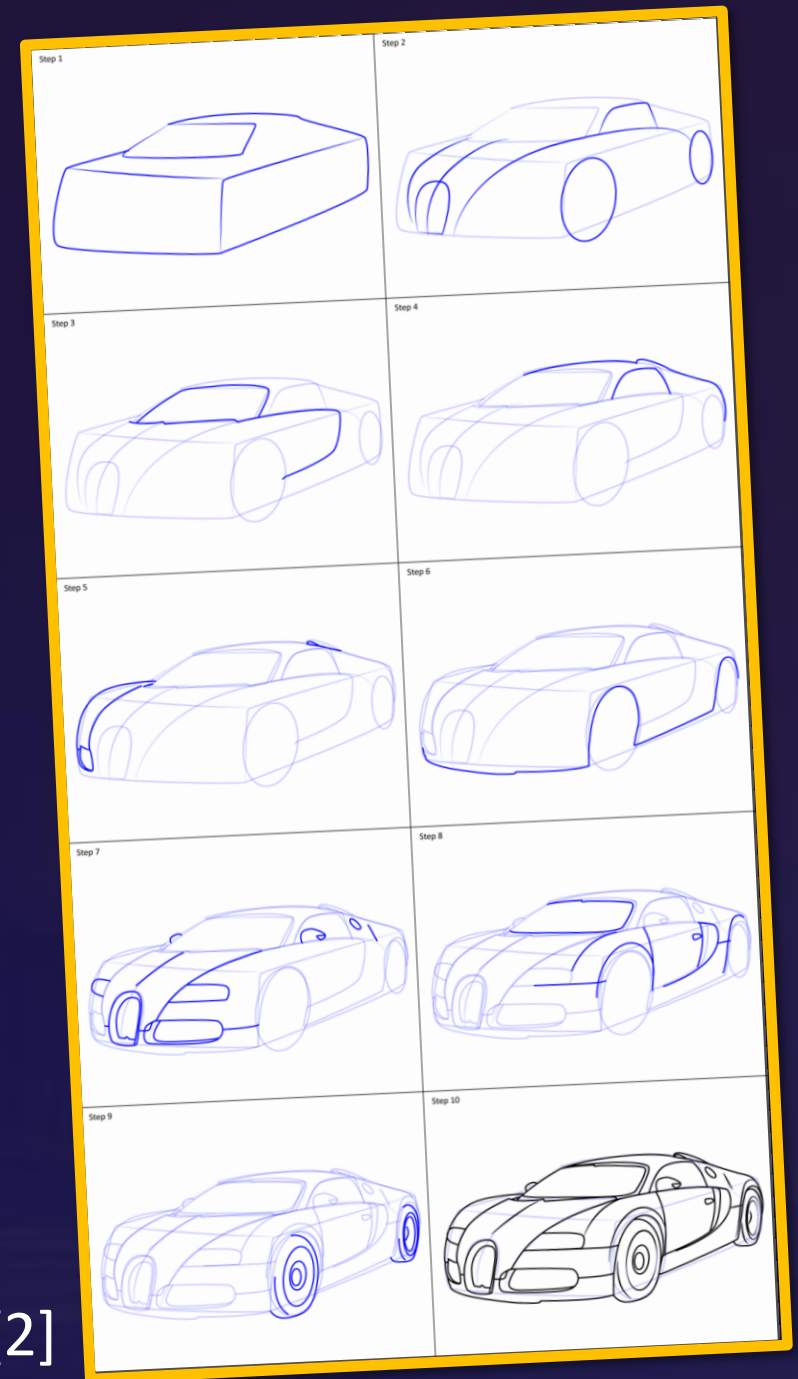


Shape Theory Overview

But shapes are more than just practical, constructive tools: their meanings are what allow designers to communicate **visually**. [1]

This is sometimes called **shape language**
or **shape psychology**.

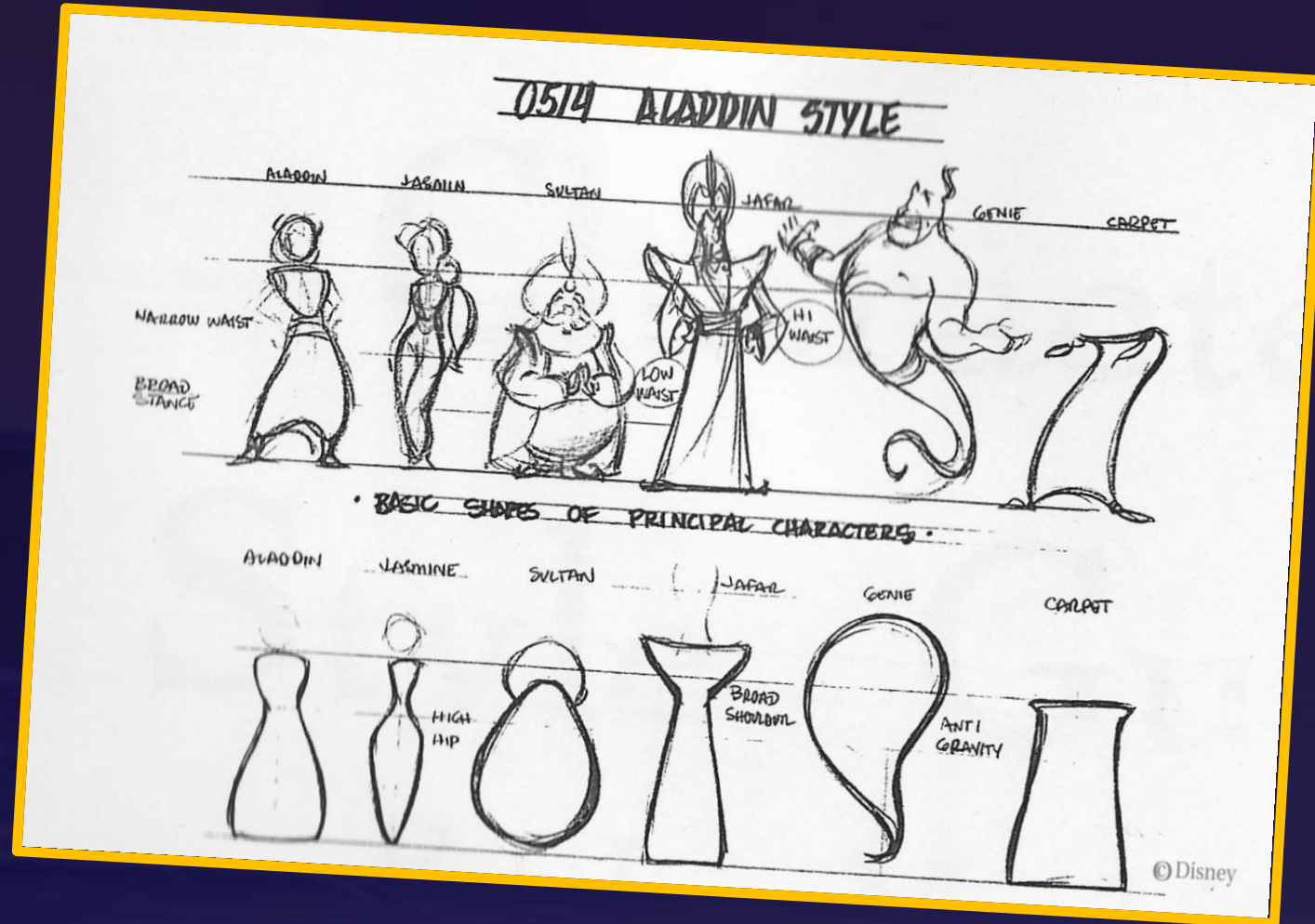
[2]





Shape Theory Overview

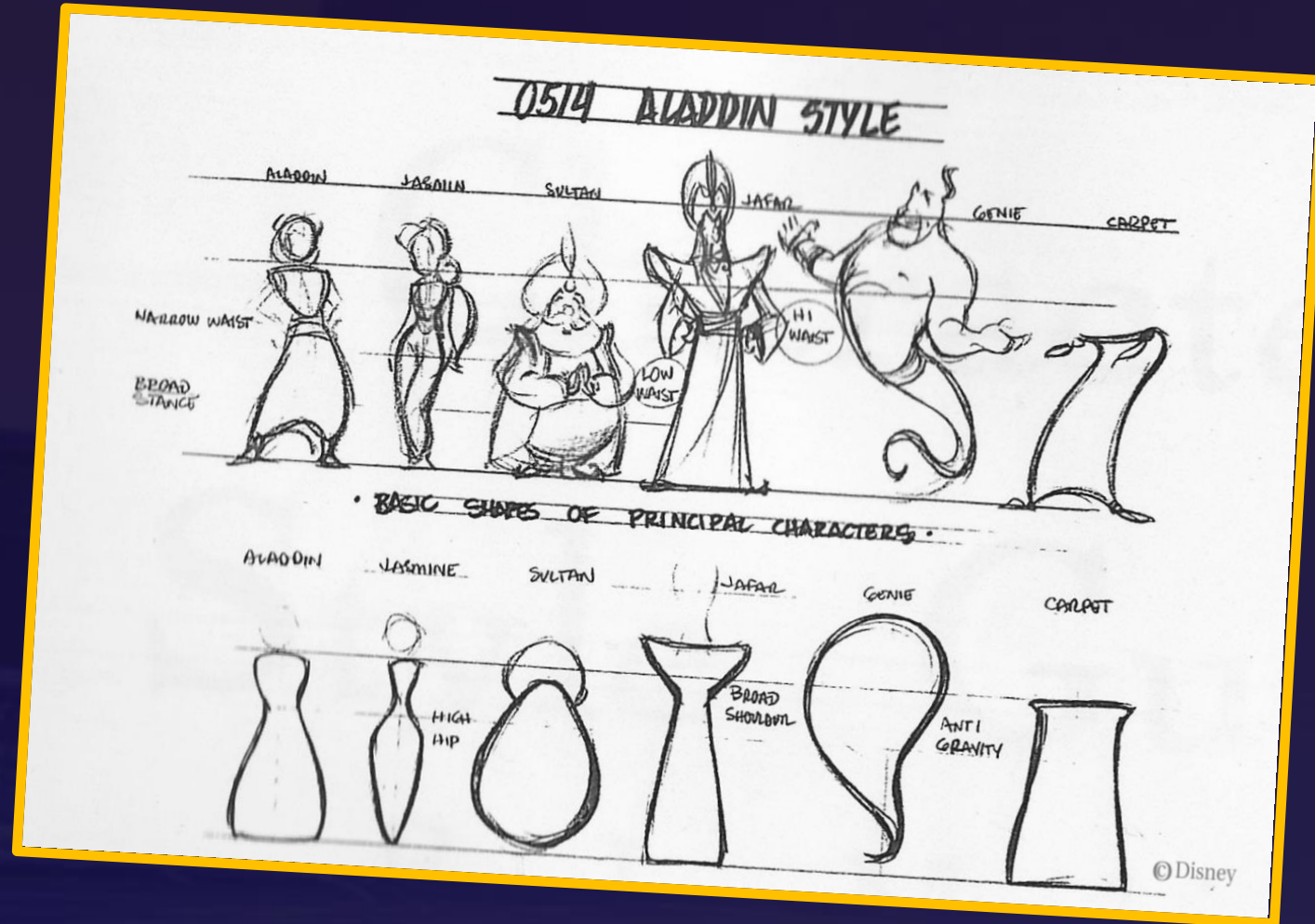
Along with the other elements of design, shapes allow designers to convey **characteristics and emotions** in a non-verbal way. [1]





Shape Theory Overview

Conversely, failing to understand the meanings of shapes can result in **unintended or mixed messages** [1].





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Shape Theory

Shape Theory

Different Types of Shapes



Different Types of Shapes

Since **all visible matter has a shape**, the sheer number of potential shapes and meanings can seem never ending. This is why it is useful to **sort shapes into overarching categories** that share meanings as groups.

While these categories can sometimes overlap, some of the **common types of shapes** are as follows [1]:



Different Types of Shapes

Since **all visible matter has a shape**, the sheer number of potential shapes and meanings can seem never ending. This is why it is useful to **sort shapes into overarching categories** that share meanings as groups.

While these categories can sometimes overlap, some of the **common types of shapes** are as follows [1]:

- ▶ **Simple vs. compound**
- ▶ **Organic vs. inorganic**
- ▶ **Abstract vs. non-abstract**

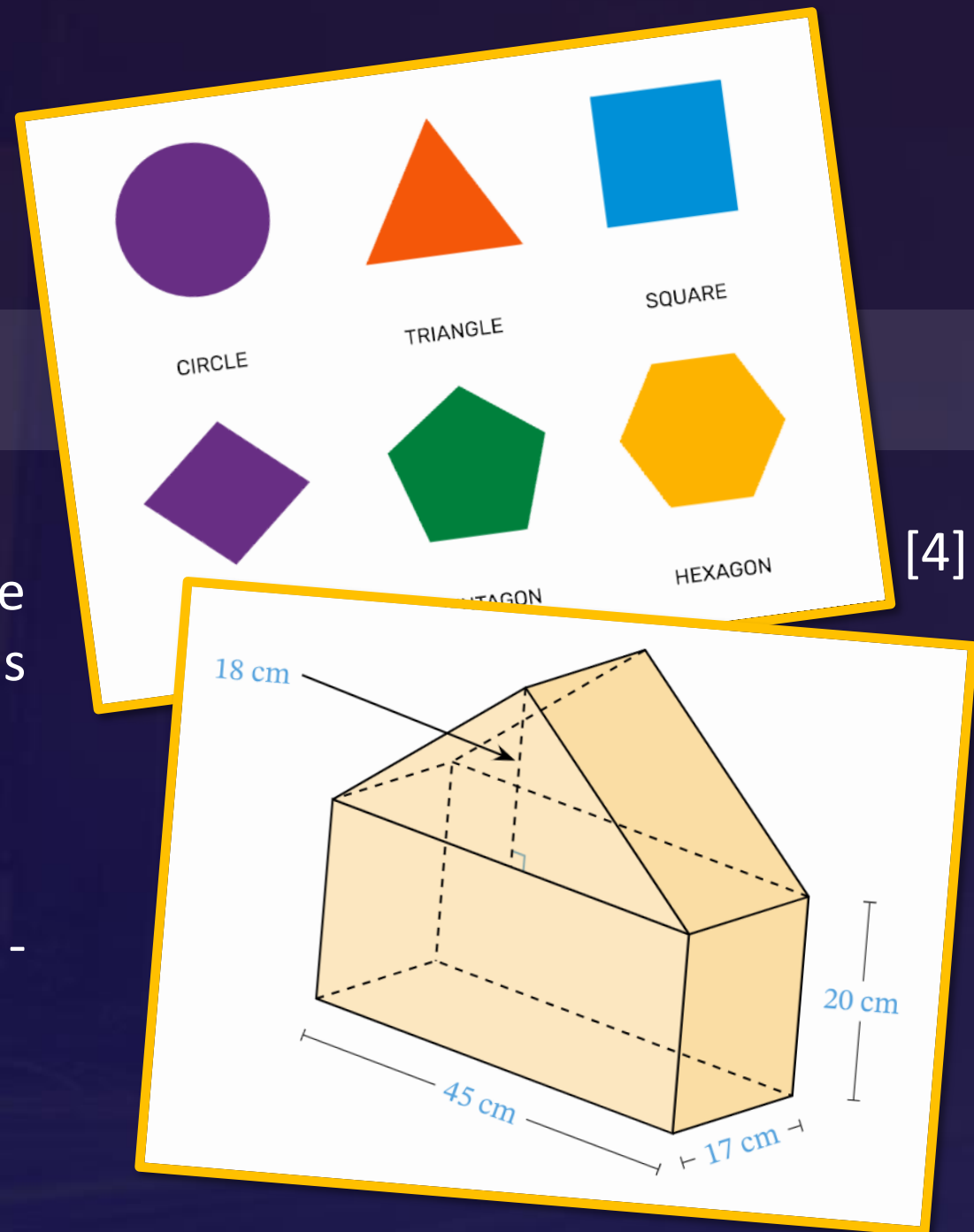


Different Types of Shapes

► Simple vs. Compound

Simple shapes, sometimes called primitives, are the foundational geometric forms such as **squares, triangles and circles**.

This also includes their corresponding 3D forms - **cubes, cylinders, cones and spheres**. [1]

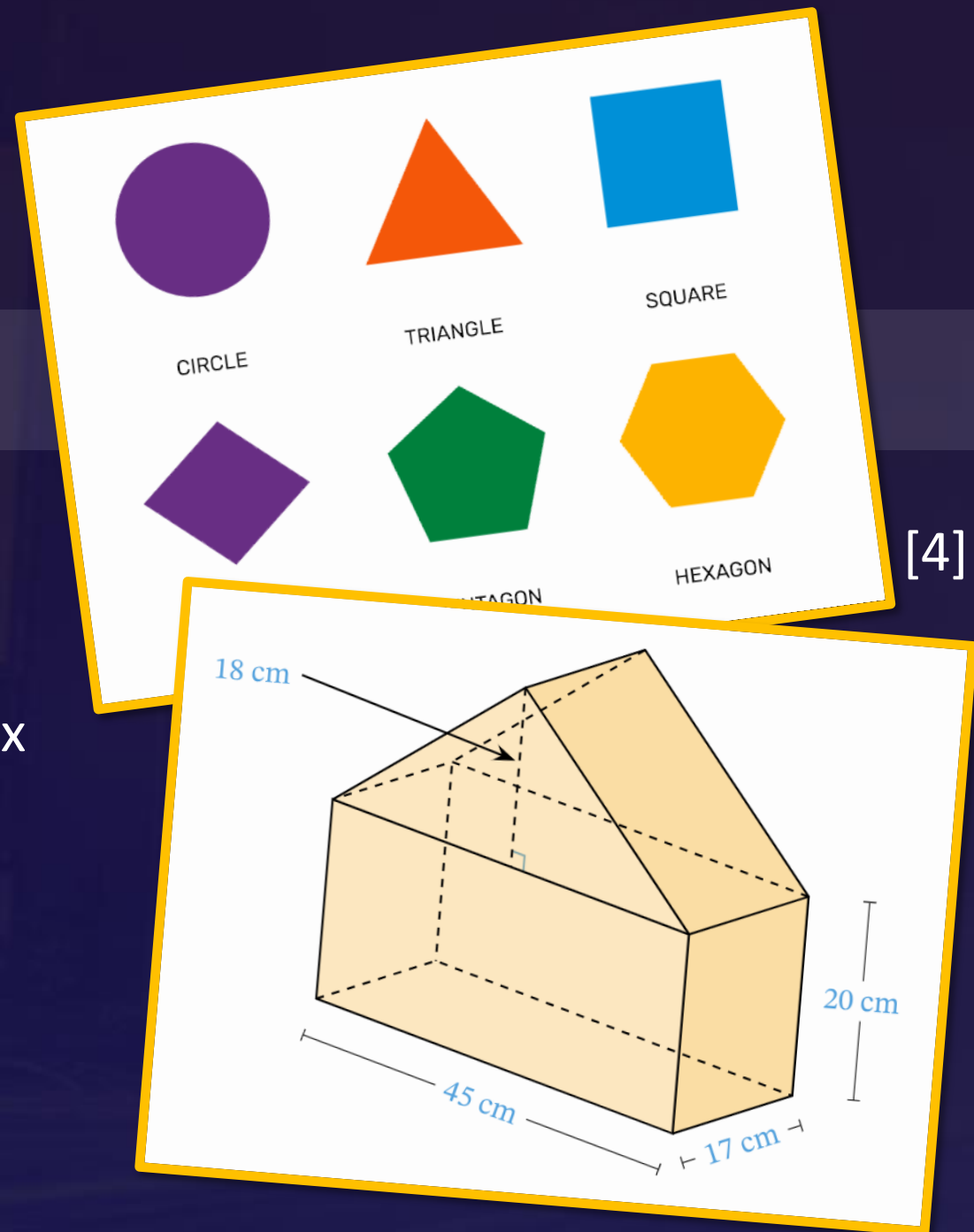




Different Types of Shapes

► Simple vs. Compound

Compound shapes are larger, more complex shapes **built out of simple shapes** [1].





Different Types of Shapes

► Organic vs. Inorganic

Organic shapes are those that **regularly occur in nature**, such as a tree limb or rolling hillside.

They tend to be **curvier, composed of looser lines and less symmetrical** than inorganic shapes. [1]





Different Types of Shapes

► Organic vs. Inorganic

Inorganic shapes are **rigid, geometrical forms** that are reminiscent of **man-made objects** such as **buildings or machines** [1].





Different Types of Shapes

► Abstract vs. Non-Abstract

Abstract shapes, while often **geometric and compound**, tend to act as a **symbolic reference**.

Most commonly these come in the forms of icons, such as the abstract humanoids used in **bathroom signs**. [1]





Different Types of Shapes

► Abstract vs. Non-Abstract

Instead of the explicit shapes, the **circles and rectangles make up this abstract icon**. We understand the shape to represent a person **due to our familiarity** with the symbol.

Abstract shapes depend on **prior context or cultural knowledge**. [1]





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Psychology of Shapes in Design



The Psychology Of Shapes

The psychology of shapes delves into the **symbolic and emotional effects** of different shape designs.

Different shapes evoke different emotions, guiding designers to create impactful, mood-setting designs that resonate with viewers.

It's our natural instinct to **organize the chaos around us and give it a theme** for more significance. **Shapes aren't just random forms**; they're our visual language, **influencing how we feel about what we see** [5].



The Psychology Of Shapes

Whether you're into neat geometric shapes or more free-flowing forms, **your choice can seriously impact how your design feels.**

Designers often play with this concept of shapes and psychology, **especially in creating logos** that say a lot about a brand without words [5].



Psychology of Shapes in Design [5]

SQUARES	RECTANGLES	CIRCLES	TRIANGLES
			
▪ Stability ▪ Framing ▪ Importance	▪ Calm ▪ Security ▪ Order	▪ Gentleness ▪ Unity ▪ Balance	▪ Stability ▪ Power ▪ Energy



Psychology of Shapes in Design [5]

PARALLELOGRAMS	TRAPEZIUMS	RHOMBUS	PENTAGONS
			
▪ Dynamic ▪ Harmonious ▪ Balanced	▪ Stability ▪ Movement ▪ Modernity	▪ Luxury ▪ Sophistication ▪ Abstract Style	▪ Protection ▪ Unity ▪ Five Elements



Psychology of Shapes in Design [5]

HEXAGONS	GEOMETRIC LINES	FLUID LINES	FLOWING CURVES
			
▪ Communication ▪ Balance ▪ Trust	▪ Structure ▪ Order ▪ Visual Hierarchy	▪ Movement ▪ Energy	▪ Continuity ▪ Grace ▪ Elegance



Psychology of Shapes in Design [5]

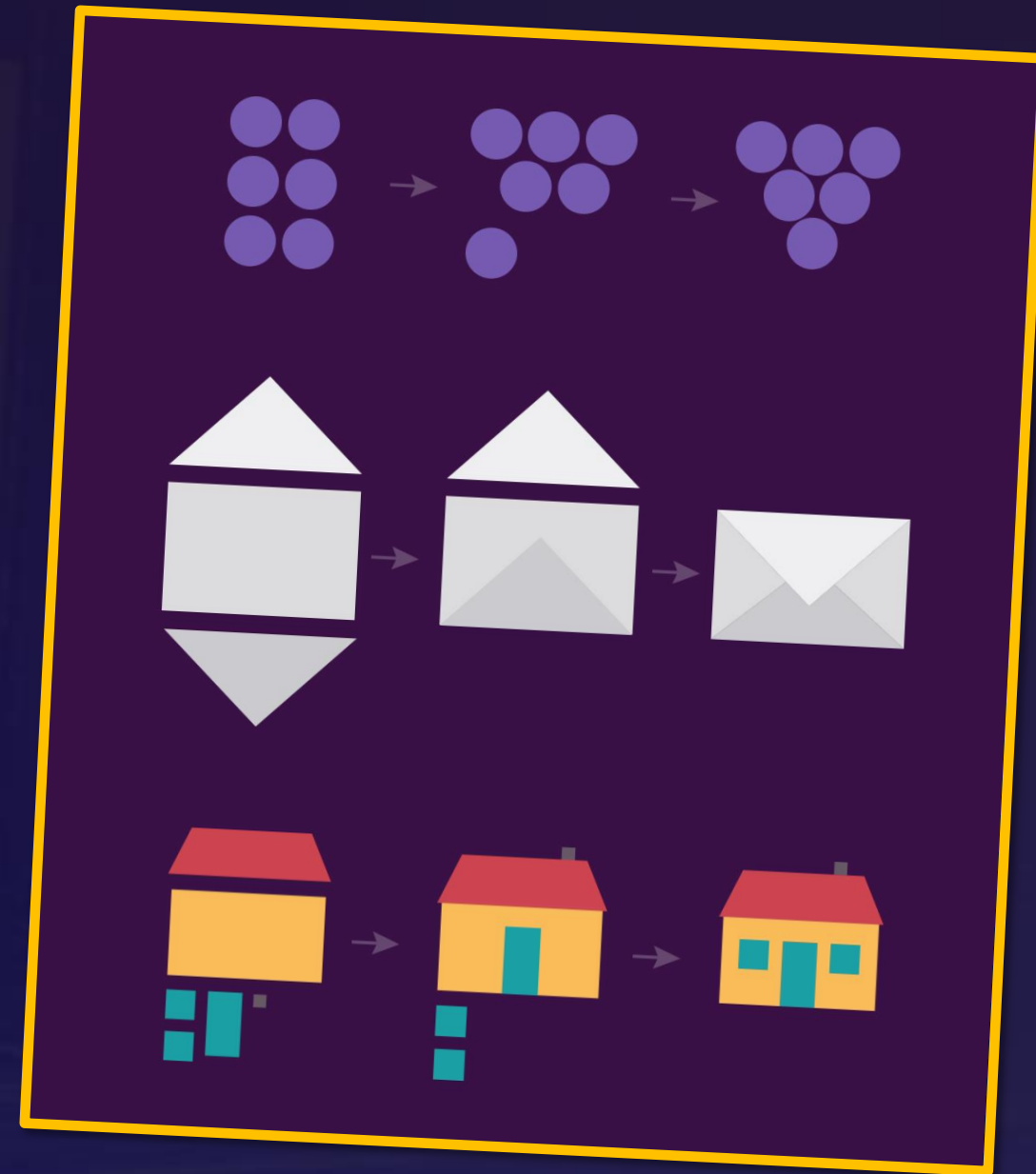
CREATIVE SPLOTCHES	ORGANIC ICONS	ABSTRACT SHAPES
		
▪ Spontaneity ▪ Unpredictability	▪ Connection with Nature ▪ Growth	▪ Curiosity ▪ Emotions ▪ Storytelling



Psychology of Shapes in Design

You can also **use shapes as elements** of a larger image [6].

This can be used purely as a stylised design approach, but if you understand how **shape psychology can influence how images are interpreted** you should be able to create more visually effective and informed work.





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Shape in Character Design



Shape in Character Design

Applying shape theories to character design can be an **effective way to visually communicate details and traits** to an audience such as the following:



Shape in Character Design

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- Personality
- Motivations
- Physical and/or mental abilities
- Friend or foe



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How do geometric shapes affect the psychology of characters?



Shape in Character Design

Shape language: Circle

You probably have seen some chubby faces and wondered: “Isn’t that cute?” Well, there’s a reason for that. Circles and ovals are mostly used for **friendly and outgoing faces**.

You can experiment with putting circular shapes in different parts of a **character’s body, clothes, and hair** to show the same warm feeling. [6]





Shape in Character Design

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CIRCLES

TECHNIQUE: Circles are organic and natural shapes. Round out edges and add curves to evoke a warm and welcoming feeling.



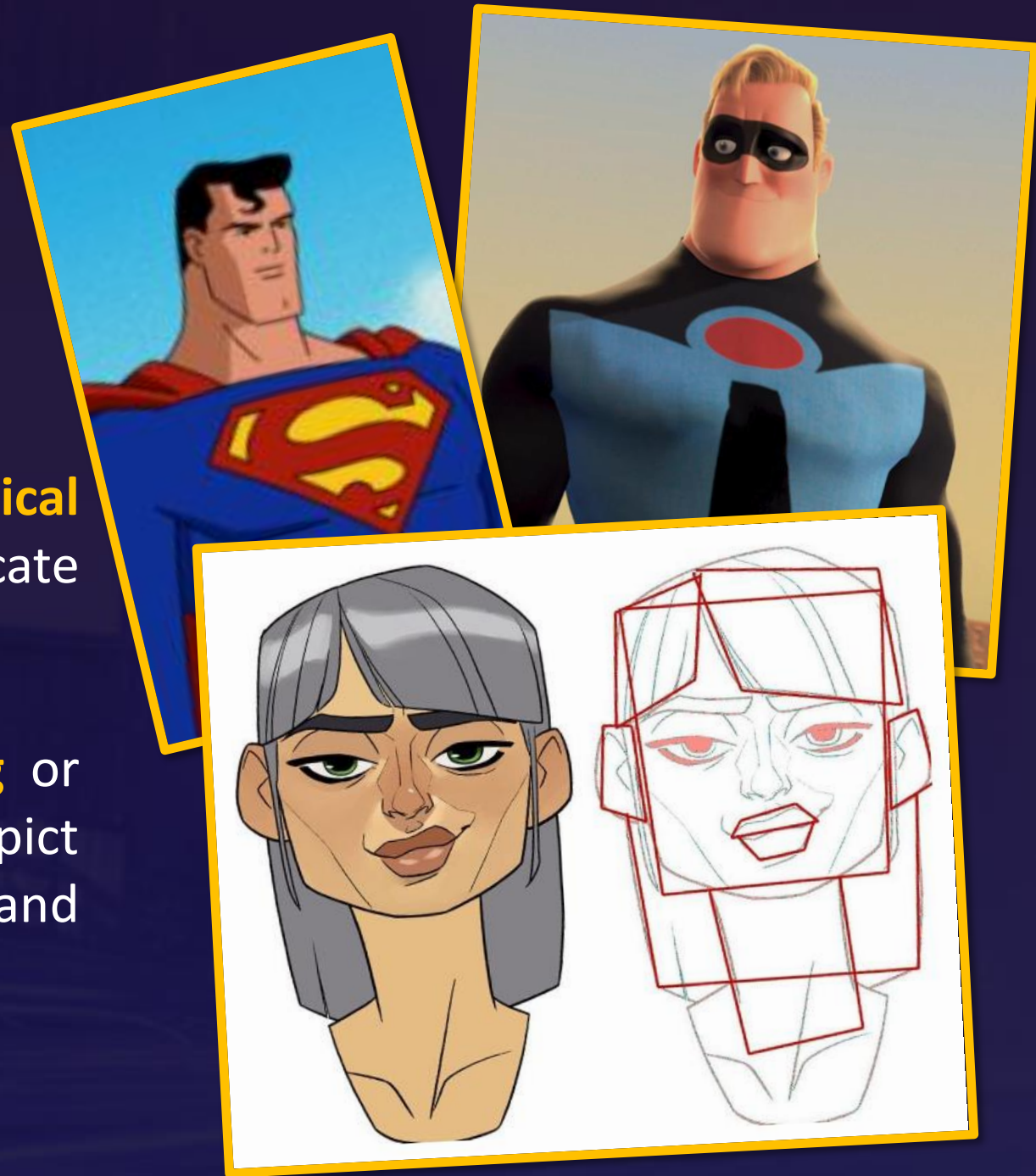


Shape in Character Design

Shape language: Square

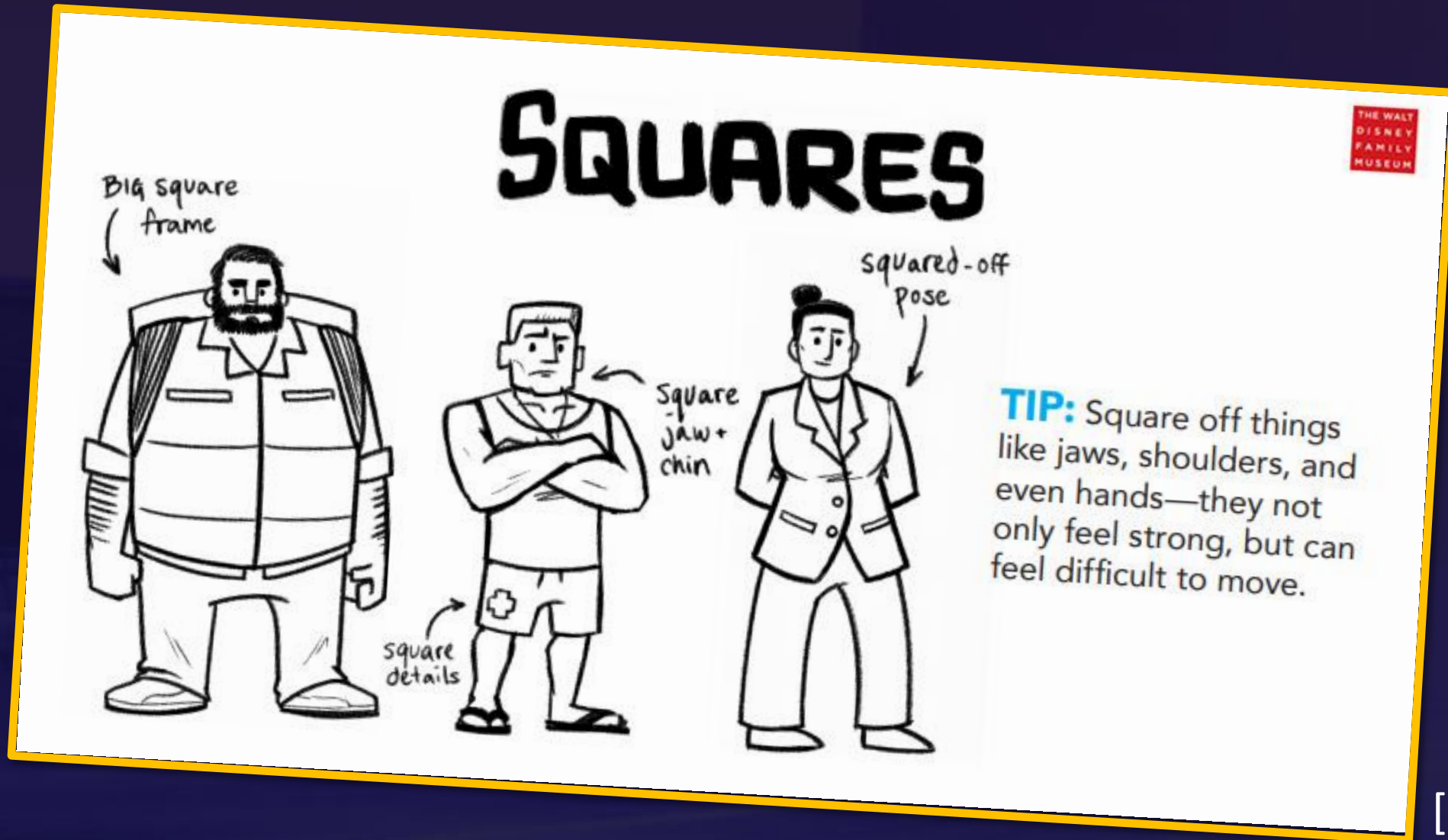
Square-like shapes relate to **straight vertical and horizontal lines** that communicate **strength, stability, and confidence**.

Squares can both be **large and daunting** or **comforting and clumsy**. They often depict steadfast characters who are dependable and are **commonly used for superheroes**. [6]





Shape in Character Design





Shape in Character Design

Shape language: **Triangle**

Triangles are the **most dynamic** of the three basic shapes mentioned in this presentation.

Bad guys and villains are often based upon dominant triangular concepts, as they appear **malicious, sinister**, and communicate with the most **aggression**. It is the **circle's most opposing shape** and is often used for **antagonists**.





Shape in Character Design

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MUSEUM

TRIANGLES

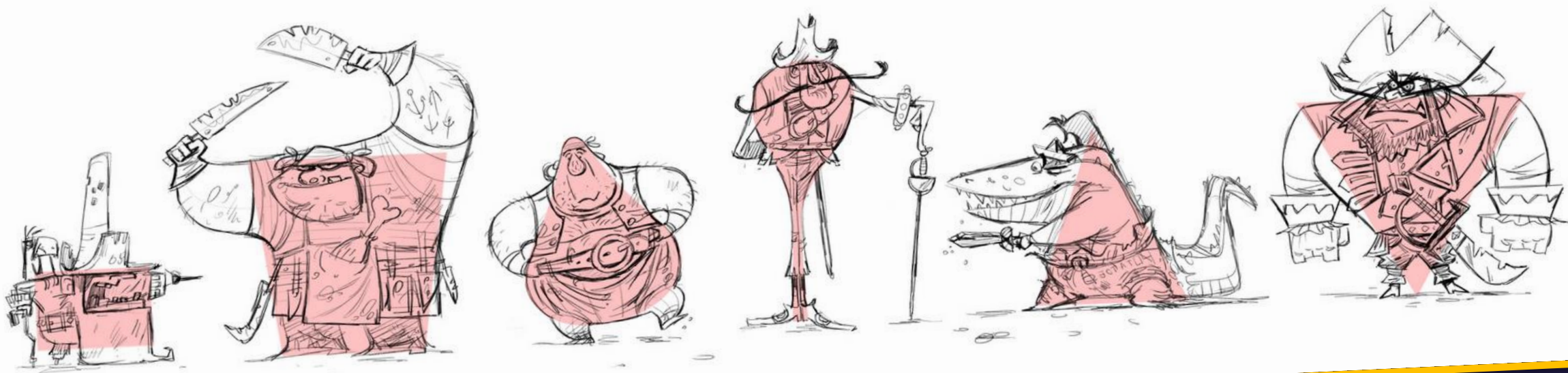
TIP: Triangles are sharp. Exaggerating the size and length of these shapes can heighten fear and transform how menacing the character is.





Shape in Character Design

Examples by Stefano Camelli [7].



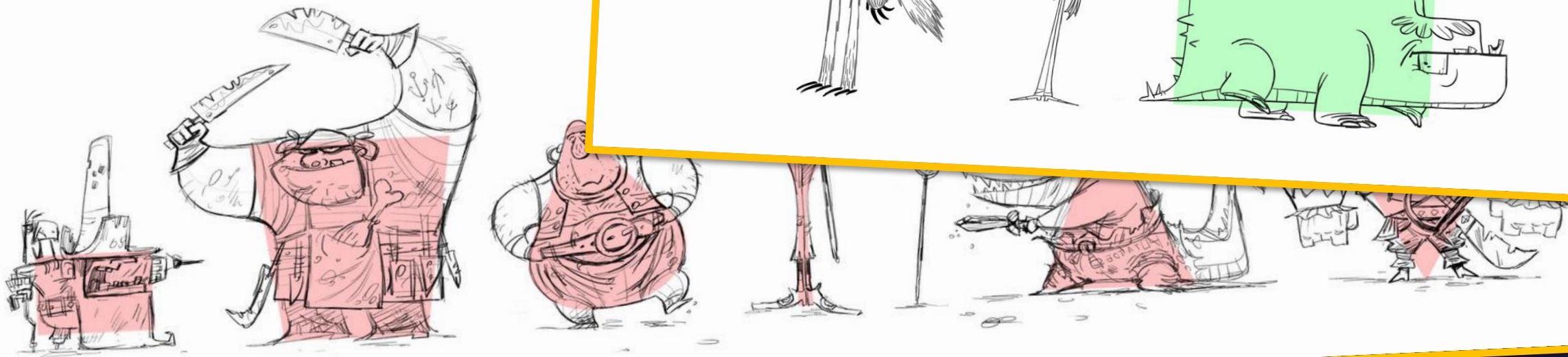
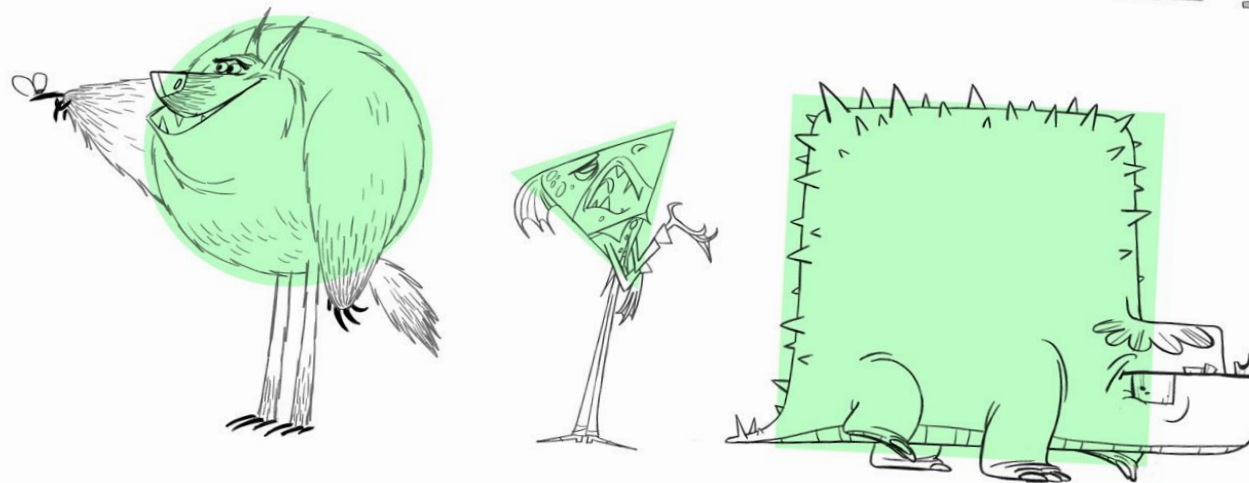


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Shape in Character Design

Examples by Stefano Camelli [7].



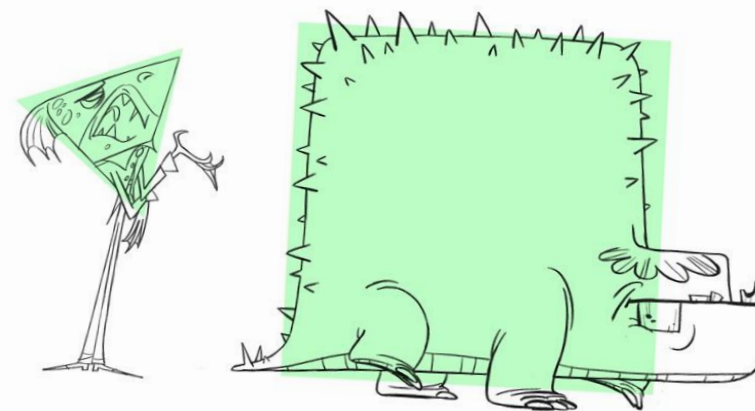
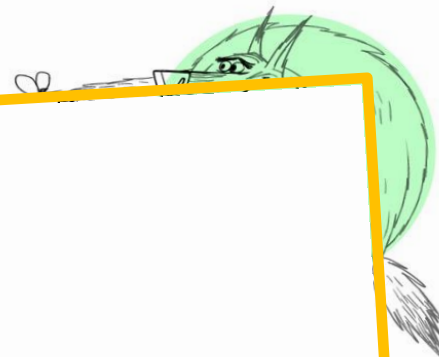


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Examples by Stefano Camelli [7].





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Subverting Expectations with Shape Design



Subverting Expectations with Shape Design

It would be easy to think that all characters are made up entirely of basic shapes like circles, squares, and triangles, but **there are situations where a creator can mix all these shapes** to create a character.

Despite guidelines and shape psychology, Circles, squares, and triangles **don't always have to mean one thing.**

There might be times when shapes are used to **disguise the purpose or functionality** of a character, object, or location [6].



Subverting Expectations with Shape Design

Circles: There may be circular and rounded characters who are **designed to look kind** and are the **antagonist**.

Using circular shapes is purposeful and can **mislead the audience about who the character is**.

Adding circles to villains can imply their level of weakness and express that **they do not have to look dangerous to be dangerous**. [6]





Subverting Expectations with Shape Design

Triangles: These shapes don't always mean things are bad. Lots of triangular shapes on an object can allude to its **strength**.

Triangles on a character **don't always mean that they are a villain** either. They can have spikes on their clothes for protection like a warrior, or points in their hair or face because they are **intellectually sharp**. [6]





Subverting Expectations with Shape Design



Triangles: These shapes don't always mean things are bad. Lots of triangular shapes on an object can allude to its strength. Triangles on a character don't always mean that they are a villain either. They can have spikes on their clothes for protection like a warrior, or points in their hair or face because they are intellectually sharp.



Any Questions?



Bibliography

- [1] Levanier, J. (2021). 99 Designs blog. The meaning of shapes in design [Online]
<https://99designs.com/blog/tips/meaning-of-shapes/>
Accessed 1/10/24

- [2] (No author) (2024). Drawing Tutorials 101. How To Draw A Bugatti Car [Online]
[How to Draw a Bugatti Car \(Sports Cars\) Step by Step | DrawingTutorials101.com](https://drawingtutorials101.com/how-to-draw-a-bugatti-car-sports-cars-step-by-step/)
Accessed 5/11/24

- [3] (No author) (No date). Basic Design Blog. [Online]
<https://fsmtemeltasarim.blogspot.com/2013/09/mimarliga-giden-yol-temel-tasarm-denilen.html>
Accessed 5/11/2024

- [4] (No author) (2024). Freepik.com Basic Geometric Shapes Set [Online]
https://www.freepik.com/premium-vector/basic-geometric-shapes-set_16423759.htm
Accessed 5/11/24



Bibliography

- [5] (No author) (2024). DocHipo.com. Understanding the Psychology of Shapes in Design [Online]
<https://www.dochipo.com/psychology-of-shapes/>
Accessed 1 oct 2024

- [6] Velarde, O. (2017). Visme.co. The Meaning Of Shapes and How To Use Them Creatively In Your Designs [Online]
<https://visme.co/blog/geometric-meanings/>
Accessed 5/11/24

- [7] Camelli, S. (2012). The Art Of Tark. CGMA Character Design Classes with Nate Wragg [Online]
<https://tarkstuff.blogspot.com/2012/08/cgma-character-design-classes-with-nate.html>
Accessed 4/11/24



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