How do you perceive the real world?

INVESTIGATE

3.3

Perception

As a Young Psychologist, I will be able to…

What is Perception?

It is the method by which the brain takes all the sensations people take in at any given moment & allows them to be interpreted in some meaningful fashion

We organize our perception based on how we give stimulus attention!

Illusions

Our perceptions are usually in line with sensation, but sometimes the perceptual process can lead to false or misleading impressions

Which line is larger?

This is the Ponzo illusion; the lines are the same size! The converging vertical lines alter our perception

A very common real-world optical illusion is the desert mirage.

How Perception Works

It begins whenever we select something we are going to pay attention to in a given environment.

Remember sensory reduction! We also call this selective attention. Example: At a party you ignore the other sensations to focus on 1 person talking

The brain focuses on sensory information based on psychological factors. Such as needs, desires, & expectations

Organizing Information

We have to perceive objects as separate from other stimuli & having a distinct & meaningful form

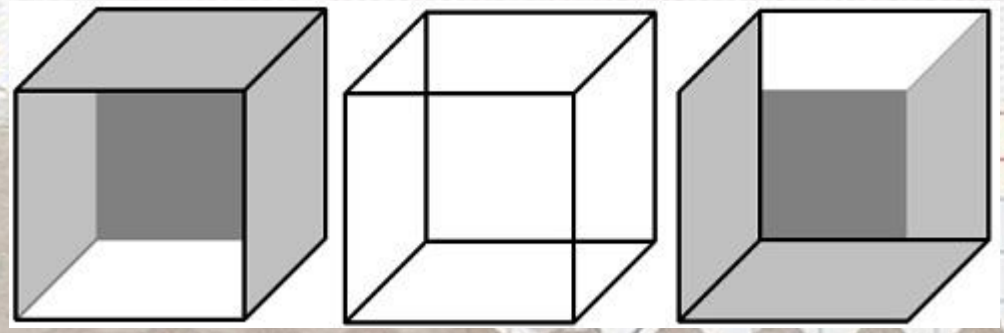
Gestalt- Form or Shape.

Gestalt Perception of Organization- Our ability to distinguish an object from its surrounding

Gestalt Principles- What are they?!

Focus on the human perception & the brains tendency to group objects & perceive whole shapes!

Lets take a look at The Necker Cube developed by Louis Albert Necker.



Gestalt Principle of Organization

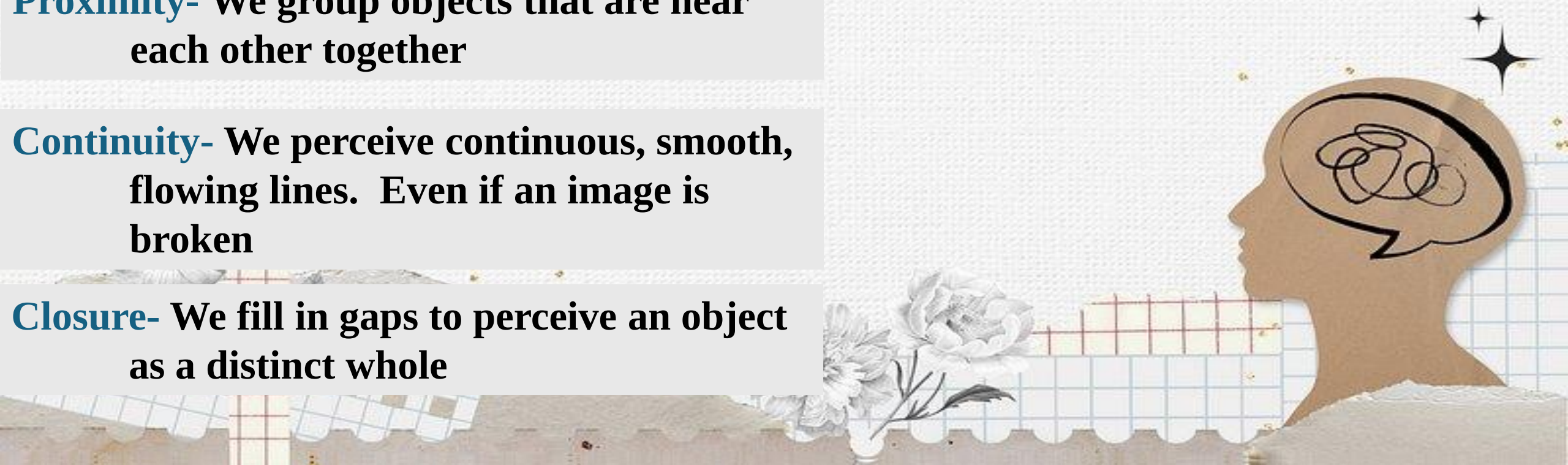
There are features on how we automatically group stimuli together

Similarity- We group objects together

Proximity- We group objects that are near each other together

Continuity- We perceive continuous, smooth, flowing lines. Even if an image is broken

Closure- We fill in gaps to perceive an object as a distinct whole



More on Relationships in Perception

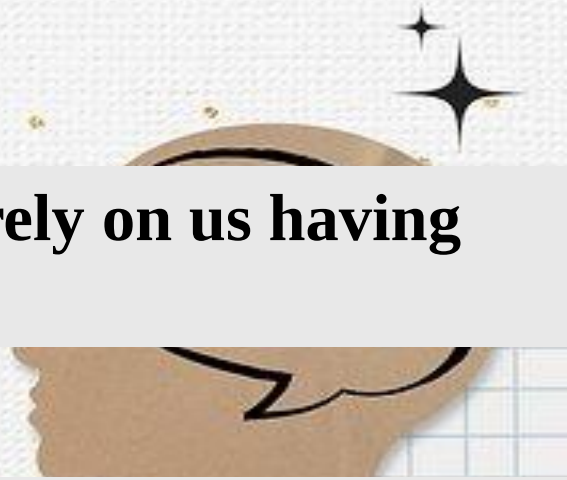
Figure-ground: The tendency to perceive objects or figures as existing on a background

Reversible Figures- This is when the figure & the ground seem to switch back & forth!

Form & Depth

Dimensional Form- An object's two-dimensional form in its height & width

Depth- How far an object is away from us. This is an innate perception even seen in babies



Binocular Cues- Cues that rely on us having two eyes.

Convergence- How close our two eyes turn toward each other when looking at an object

Form & Depth

Monocular Cues- **Cues that only rely on input from a single eye to indicate depth.**

Artists will use this cue often to indicate depth in paintings.

Motion Parallax- **Objects that are farther away from us appear to move more slowly**

Depth Cues

Depth Perception- **The ability to perceive the world in three dimensions**

Let’s take a look at the Visual Cliff Study!

Object Stability

We perceive objects as stable, even when appearance changes. People don't shrink & grow as they walk to & away from us.

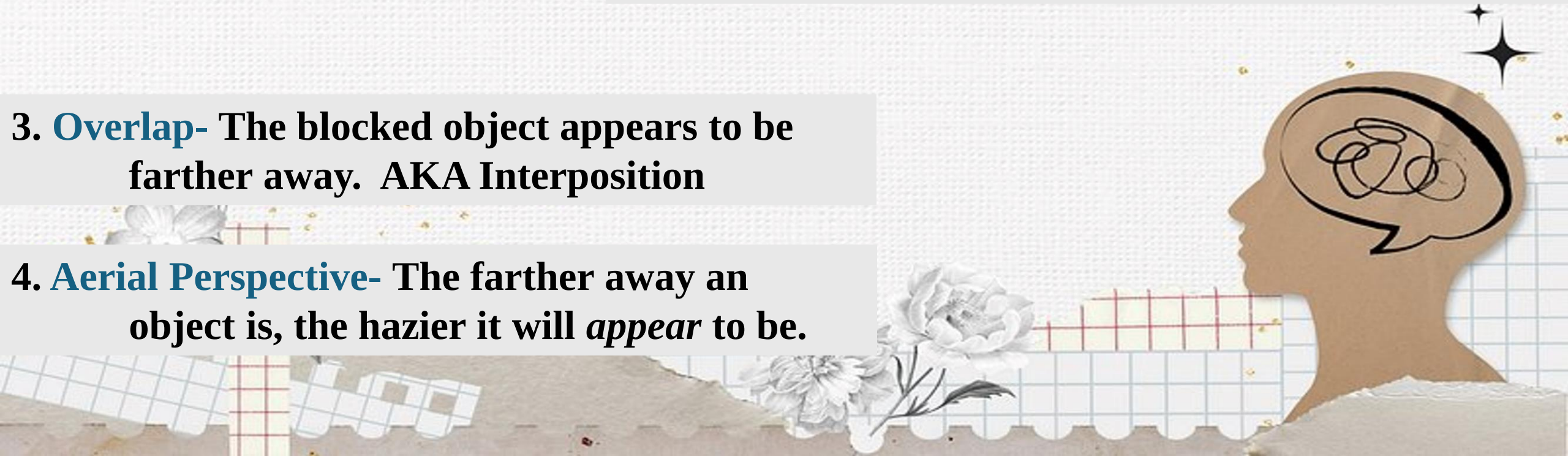
The film will often use this trick to make people appear smaller or larger than they actually are

Monocular Cues

Cues for perceiving depth based on one eye only!

1. Linear Perspective- When we see lines & they *appear* to converge

2. Relative Size- Size consistency when objects of a certain size *appear* small



3. Overlap- The blocked object appears to be farther away. AKA Interposition

4. Aerial Perspective- The farther away an object is, the hazier it will *appear* to be.

Monocular Cues Continued

5. **Texture Gradient-** The farther away something is, the less texture *appears*

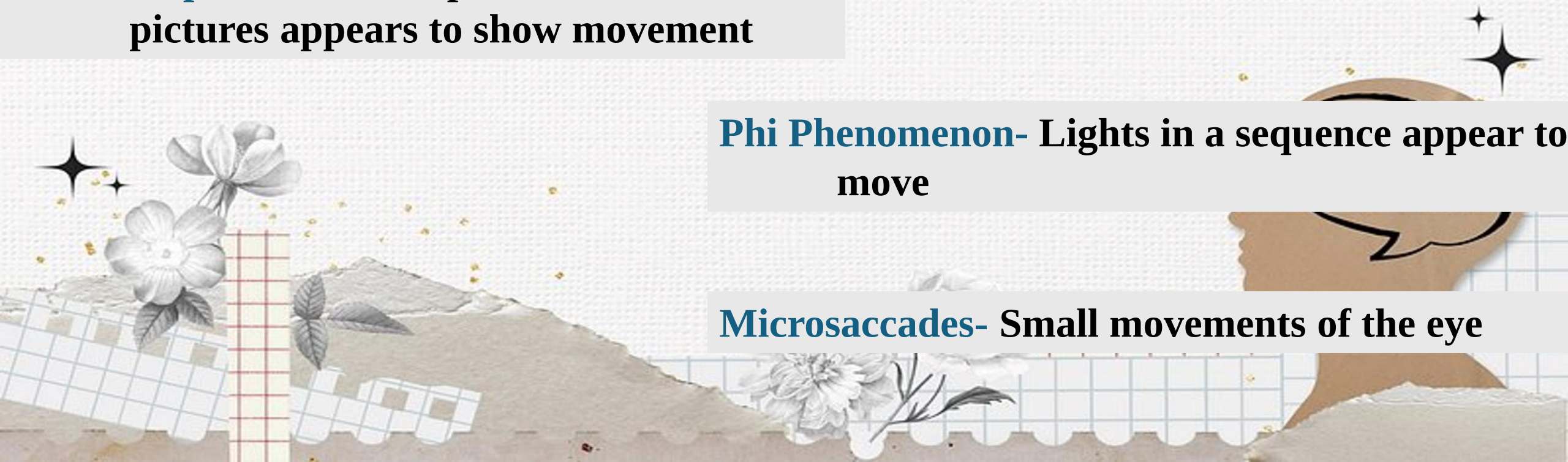
6. **Motion Parallax-** Objects in the distance *appear* to move slower than closer objects

7. **Accommodation-** When the lens of your eye changes shape to detect distance.

Illusions of Motion

Autokinetic Effect- A stationary light in a darkened room will appear to move because there are no cues to indicate its NOT moving

Stroboscopic Motion- Rapid fire of still pictures appears to show movement



Phi Phenomenon- Lights in a sequence appear to move

Microsaccades- Small movements of the eye

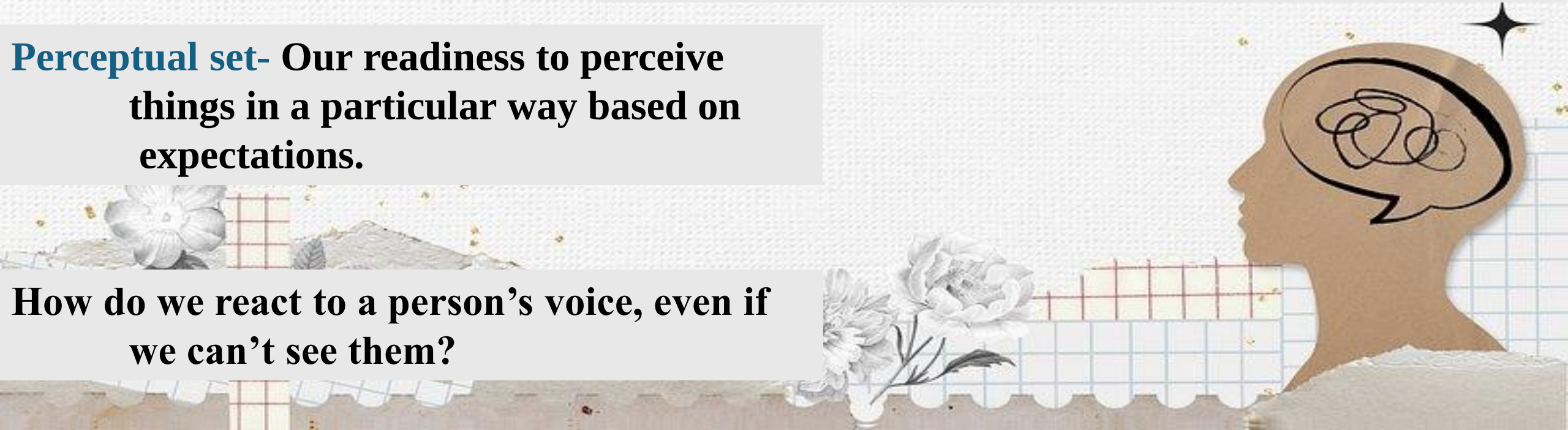
Interpreting Sensory Information

Our interpretation is influenced in part by context or frame of reference effects.

How might someone from California describe 50-degree weather in contrast to someone from Nebraska?

Perceptual set- Our readiness to perceive things in a particular way based on expectations.

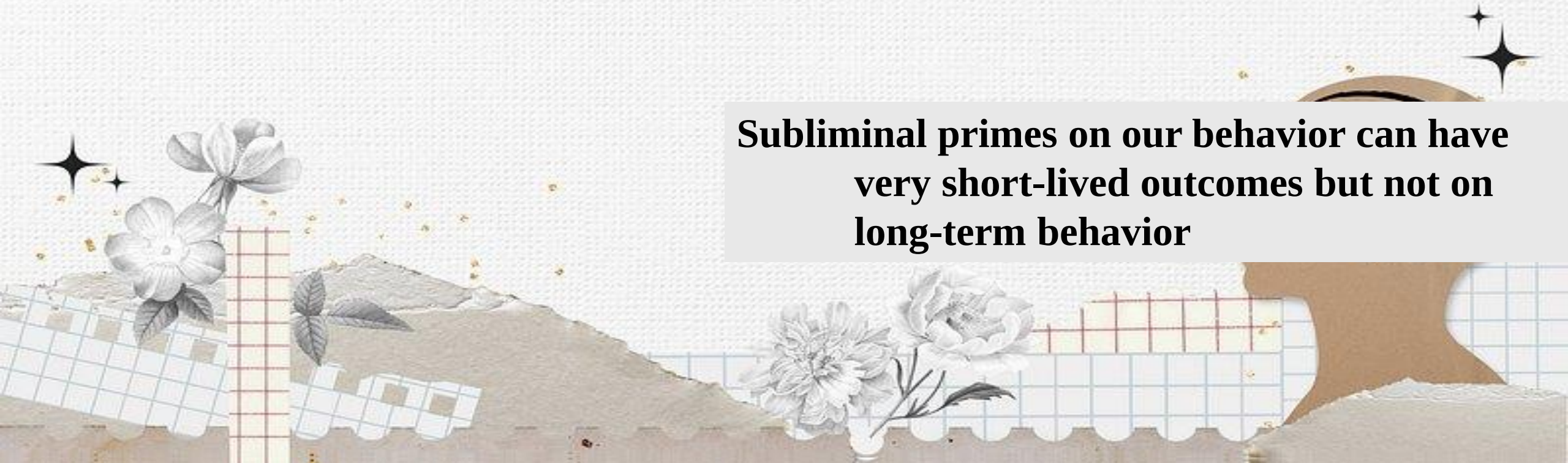
How do we react to a person's voice, even if we can't see them?



Interpreting Sensory Information

Our tendency to “see” things in different ways can have serious consequences.

If you are in a buffet where you can eat anything & you hear French music, what are you more than likely going to eat?



Subliminal primes on our behavior can have very short-lived outcomes but not on long-term behavior

What Else Influences Perception?

Perceptual Set/ Perceptual Expectancy- The Tendency to perceive things a certain way because previous experiences influence those perceptions

Interpret- The way we "decide" a process or function

Top-Down Processing- The use of preexisting knowledge to organize individual features into a unified whole

Bottom-Up Processing- The analysis of the smaller features to build up to a complete perception