



"Water"

Giuseppe Arcimboldo, 1566

Six Theories of Visual Communication

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Six Theories of Visual Communication

Visual communication is precisely what its name suggests: Communicating information through visual images and design. It's typically a combination of images—graphics, illustrations, photos, video—and text.

The emphasis should be on communication, on how to most effectively convey concepts and data to an audience, and not solely on visual appeal. Although there is an aesthetic consideration, the goal is not to produce a fine art object. There shouldn't be an attempt at personal expression.

Visual communication is in fact more concerned with human psychology than art, in particular how most people respond to visual stimuli. And that is where the theories summarized here originate, with human perception studies and observations.

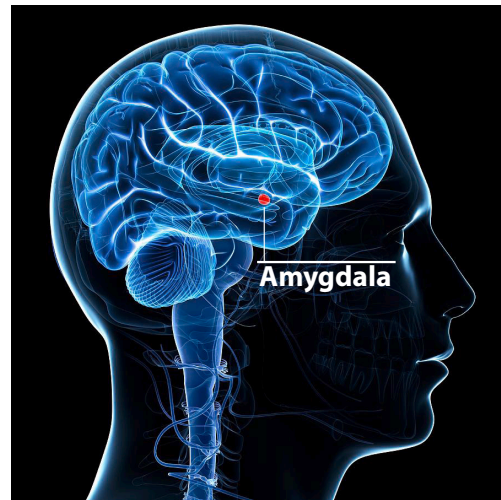
The Amygdala

The goal of effective communication is not just to appeal to the intended audience but to make a lasting impression, to get the audience to understand and remember what is being communicated. And this is where a little understanding of how the brain works can help.

The brain is complicated, of course, and we don't fully understand how it works. We do know that there are areas in it that serve certain functions, and one in particular, a small area called the amygdala (there are actually two, one for each hemisphere) seems to control emotions to some degree. It also serves as a filter for all the incoming visual stimuli from our eyes, which would otherwise overwhelm us. In order for information to get to our frontal lobes where it is processed, and then to get stored in memory, it first needs to get through that filter. And that's what effective visual communication needs to accomplish.

The challenge is to not just stand out in the sea of visual stimulation that most of us experience daily but to get what we're trying to communicate to make its way into the conscious areas of people's brains, be understood, and remembered.

The following theories provide more insights into how people respond to what they see and how they make sense of it. Understanding that may lead to more effective and lasting visual communication.



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1. Gestalt Theory

“The whole is greater than the sum of its parts.”

It is our nature to look for patterns in what we see in the world around us, which allows us to make sense of our environment. Without pattern recognition, the visual information our brains receive would not be of much use in helping us to navigate the world.

Gestalt Theory started with a group of early 20th-century German psychologists studying human perception. The word Gestalt roughly translates to English as form, pattern, or configuration. The theory at its simplest states that rather than perceiving lots of individual objects, we tend to group them together into something larger.

As a simple example, as you’re reading this, you’re not perceiving each letter as a separate object, you’re grouping them together into words, and then grouping the words together into sentences. You are more cognizant of each word as a single object than you are of the letters that compose it.

Artists and designers find value in this theory. Using principles derived from Gestalt Theory can help pull an image or design together to create a stronger overall impression than its separate parts could achieve on their own.

In visual design, the most commonly-employed Gestalt principles are **proximity, similarity, continuation, closure, and figure-ground**.

This artwork, also shown on the cover, is a painting done by Giuseppe Arcimboldo, a 16th-century Italian artist who did a series of paintings along this theme, employing Gestalt principles even though they had not yet been defined. In this example, the different sea creatures combine together to suggest a person’s profile, in effect, creating something larger than its individual parts.



Gestalt Principles

There are several principles that can be used in visual design to achieve a greater sense of unity. These are the most commonly used ones.

• Proximity

The closer elements are to each other, the more likely we see a group instead of separate parts.

proximity

• Similarity

The more elements resemble each other, the more we see a pattern instead of separate parts.

similarity

• Continuation

Our eyes are inclined to follow lines and curves, so if objects are arranged along paths then we perceive a larger construct and also a sense of movement. Diagonals enhance a sense of movement.

Continuation

• Closure

We tend to compare incomplete patterns to things we've seen before, causing us to mentally complete them. This allows artists and designers to merely suggest images rather than having to photo-realistically depict them.

A related phenomenon known as pareidolia causes us to see images, particularly faces, even in random patterns found in nature.



Panda logo © World Wildlife Fund, Switzerland

• Figure/ground relationship

A state of gestalt is achieved when all the parts of your design combine to form a larger impression, and that includes everything in the frame, both the positive and negative areas. These are also referred to as figure/ground and foreground/background.



Michael Vanderbyl. Symbol proposed but not used for the California Conservation Corps.

Gestalt examples



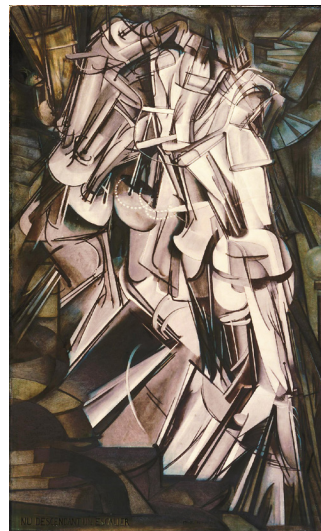
House Beautiful Magazine cover Sept. 1929



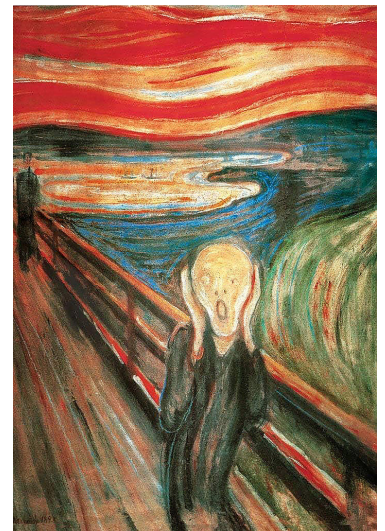
Illustration by Octavia Ocampo



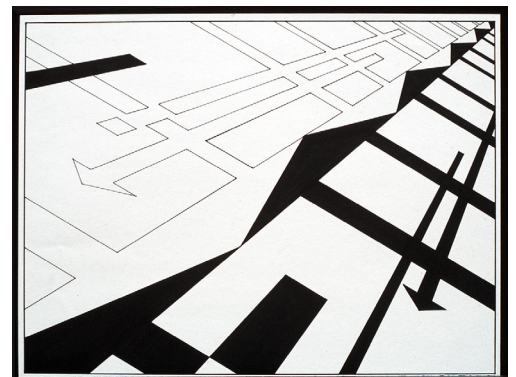
Starry Night. Vincent Van Gogh



Nude Descending a Staircase No. 2, Marcel Duchamp



The Scream. Edvard Munch



Student work, Pierce College, 1994

2. Cognitive Theory

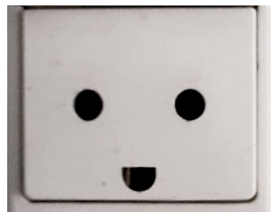
Perception is not just the result of visual stimuli, but involves a series of mental processes in which we compare what we see to our catalog of memories and perceptions and use those to try to identify what we see. In other words, we understand what we're looking at by comparing it to what we're familiar with.

We are constantly searching for patterns with which we're familiar. This allows us to quickly make sense of the world around us. It would otherwise be close to impossible to constantly figure out everything we see at every moment.

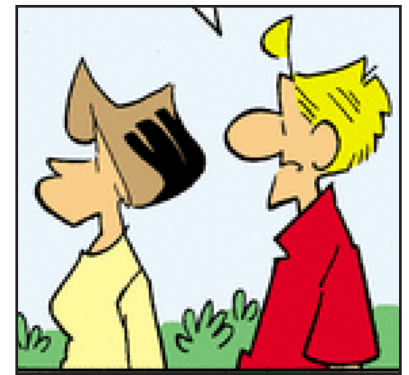
This human quality allows artists and illustrators to make abstract representations and caricatures of reality. Without it, all artwork would have to be as realistic as a photo for anyone to understand it.

Pareidolia

This is the phenomenon in which we see faces and other things in otherwise random groups of shapes. This is the result of our looking for recognizable patterns that conform to what we know and have previously experienced.

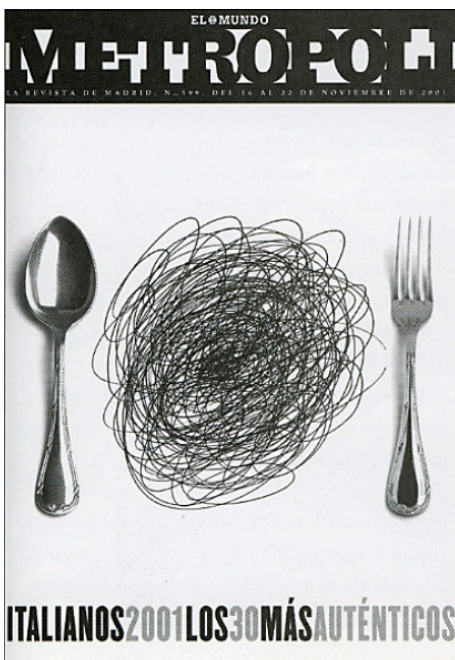


Petapixel



Arlo & Janice by Jimmy Johnson

Comic strip characters might bear little resemblance to real humans, yet we recognize them as such because they fit into our preconceived images of basic human physical features.



El Mundo

3. Huxley-Lester Model

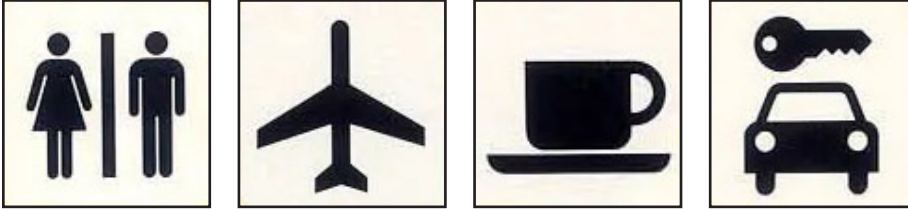
This is very similar to Cognitive Theory. Sight and thought are inseparable. We go through cycles of perceiving, focusing on particular things we see, learning from that and committing it to memory and then applying that knowledge to what we perceive. The more knowledge and experience you gain, the easier it is to interpret what you're looking at. So, "the more you know, the more you see."

We apply our experience of a plate of spaghetti to the scribbled lines and make the association in our perception of this magazine cover. Without the spoon and fork however, we probably wouldn't make the connection.

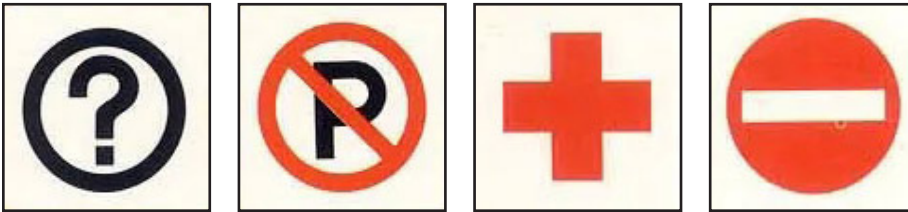
4. Semiotics

This is the science of signs and symbols. It relies on Cognitive Theory because it requires us to associate the image with something we know. There are three categories: iconic, symbolic, and indexical.

Iconic: It resembles what it signifies.



Symbolic: Its association has to be learned.



Indexical: It suggests a causal or other connection to something else, such as an event.



Adapted from Darrell Gulin , art.com

5. Constructivism

When we look at anything, we have to piece it together. We do this through a series of rapid eye movements that assemble a blueprint of what we're looking at, while at the same time comparing the results to memory and past associations. So, in effect, we construct images out of many narrowly focused observations.



National Eye Institute

The fovea, central part of the macula at the back of the eye, is where we see most sharply. With it, we scan objects through a series of rapid eye movements.

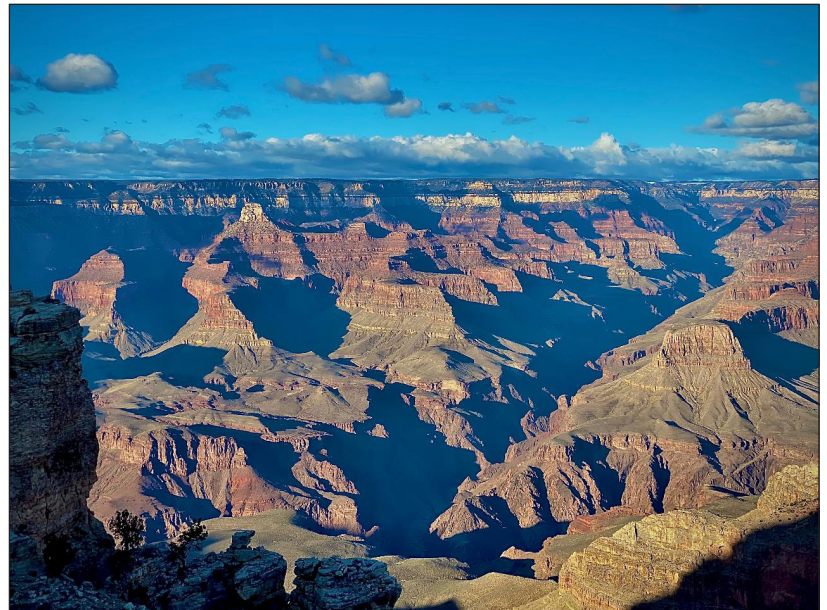
6. Ecological Theory

We interpret what we see through spatial properties in the environment: Surface layout, composition, lighting, motion, gradation, shape, size, solidity and scale.

Light — the way it reveals the three-dimensionality of objects, and scale — the way objects diminish in size as they recede from us — are the two most important properties that we use to interpret space.



Eyvind Earle, Green Hillside, 1970



National Park Service



Shutterstock

Atmospheric effects also help us interpret space as more distant objects become hazy.

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