Semiotics is the science of signs.

The study of semiotics is important because it is the most scientific study of graphic design that exists.
Remember this chart from before? Today we are going to talk about syntax and pragmatics.

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- **Syntax**
  - Language hardware
  - Grammar
  - Structure

- **Semantics**
  - Language software
  - Associative meaning
  - Signs and signifiers

- **Pragmatics**
  - Function and context of use
  - Audience-centered design

**Icons**
- A representation
- Photographs
- Realist statues
- Maps, floorplans, diagrams
- Audience understands by resemblance

**Indices**
- An indicator
- Hand gestures
- Symptoms
- Classes
- Audience can figure out cause and effect relationships

**Symbols**
- A code
- Languages
- Numbers, alphabets, abstract trademarks
- Audience must learn the associations
pragmatics
So, let’s talk about pragmatics. According to wikipedia, pragmatics are the relation between signs and the effects they have on the people who use them. (the relationship between humans and language)

Similarly to the wiki definition, Katherine McCoy states that it is the function and the context of use for signs.

And lastly, it has been defined as the study of the ways in which signs are used and interpreted. about the daily use and context that affects our language. Think about how you communicate in different situations.
Denotation (dee-no-tation) is the **primary meaning** that we give a word or an image. What you see is the primary meaning.
connotation

A sign’s secondary meanings.

- Leverages the viewer’s past experiences, learned social rules and conventions.
- Not just what is pictured, but how it is pictured

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Opposed to denotation, is **connotation, the secondary meanings and associations** that you have with a sign.

It is interesting because we bring to it our own past experiences as a viewer, including the social rules and conventions that we have learned over time. It is not just what is pictured, but how it is pictured (or with language it is how that word is said.)
You could say the word “dog” a number of different ways. Depending on your inflection, tone and volume, it could be interpreted a number of different ways. Loudly, it could be a warning, DOG! It could be a question, dog? It could be taken as an insult, or a really lame greeting from someone like me, “whassup dog?”

It's about how you say it, or how you picture it. That's what bring the secondary meanings and associations for people.
When looking at this image, what is the denotation, or primary meaning? (a child soldier in the jungle holding a machine gun)

What are the secondary meanings (connotations) that we bring to it? We could think that maybe he is forced into being a soldier, maybe we consider him to be rebel forces, any number of things that we may bring to the meaning that aren’t actually pictured here.
The denotation (primary meaning) of this is that it is an apple, a simple silhouette of an apple with a bite out of it. More specifically that it is the logo for the Apple computer corporation.

The connotations (secondary meaning) for this particular apple is that it is sleek, sophisticated, contemporary, stylish, modern, as well as our perception of the brand in general.
In all of these images, we see pictured the same thing. What are the facts?

What are the primary definitions (denotations) here? They are all apples.

But how they are pictured versus what is pictured brings about various connotations.

What are the different connotations you see here? One might be the idea of tartness, another sweetness. The bottom right could be freshness, because of the water droplets, and of course the bottom left could connote school, education, teachers – all of those cultural conventions that we have.
Polysemy translates to “many meanings.”

- Roland Barthes says all images are polysemous, all images have multiple meanings.
- French theorist & semiotician.

The next term polysemy (poly-see-me) literally translates to many meanings. Poly = many. semy = meanings.

He talked about media, image and culture, a lot. If you go to grad school, you will learn a lot about Roland Barthes. He says that all images are polysemus (poly-see-mus), all images have multiple meanings. That thing that is pictured is what is pictured and can go in multiple directions of meaning.

He often would critique pieces of cultural material to expose how bourgeois society used them to impose its values upon others.

For instance, the portrayal of wine drinking in French society as a robust and healthy habit would be a bourgeois ideal perception contradicted by certain realities (i.e. that wine can be unhealthy and inebriating).

He found semiotics useful in conducting these critiques.
He offers three pieces of a system for decoding or unpacking a message:

- the linguistic message,
- the coded iconic message
- and the non-coded iconic message.

The first is the **linguistic message**, the text itself with its denotations and connotations. What you read, the dictionary definitions and the connotations that you bring to the text.

The next part in this act of de-coding is the **coded iconic message**. The symbolic message, the imagery, the symbolism that it brings and the connotations. Here the reader starts to participate in the meaning by applying their knowledge of cultural codes and signs. So you are bringing all of that cultural baggage with you.

And the third part is the **non-coded iconic message**. Again, the dictionary message of what you are seeing. The denotative reading of the image, such as a photo or illustration. It is what it is.

The coded and non coded iconic messages cannot be separated in terms of signification. When you look at an image, you simultaneously see the denotation and start making associations. They are read simultaneously. Just like the apple logo. It is not just what is pictured, but how it is pictured. This is happening in a split second.
Take this house. What all could it mean? It could mean affluence, it could mean home sweet home, it could mean a particular geographical location. It could conjure memories of childhood. It depends on what you are using the image for. According to Barthes, every image is polysemous, so it will have multiple meanings associated with it.
syntax
A sin-tag-um is a collection of signs organized into a linear sequence. Syntagms can occur at multiple levels, and it is important to keep this in mind since it can get more and more complex.

It can occur at the level of word, the level of sentence and level of story formation. It could also be a sequence of stories if you are talking about a television show or series of comic books or something like that. It’s all about linear sequence. What do you see first? What do you see second, and so on.

Think syntax. It is about the order. right?
In this image-based syntagm, based on our western conventions of reading left to right, that the syntax of this image makes no sense. It has been rearranged and images have been omitted, so that the story is confusing.
But when we fill in the blanks, and rearrange the images in the proper syntax (or order) then the sequence starts to make sense to us. It becomes understandable.

This can happen with typography, even on a single frame. Hierarchy can guide a reader through a particular sequence of reading. Left to right, top to bottom, headers and body copy, all create a particular type of syntax with in a single frame.
If you think about syntax and their creation at various levels, you can see how by these examples – letterforms – of how order is crucial to meaning. The idea of book and the letter sequence determines the reader's comprehension. Of course “boy bites dog” has a completely different meaning than “dog bites boy.”

These conventions form over time. As language develops and changes, that's how we get our rules in grammar. If you study a foreign language, you know that syntax in English is different than it is in Spanish or French. We tend to put subjects before verbs or vice versa, depending on what language you are speaking.
A good way to think about syntax is to relate it to writing and running horizontally. So you have word 1, word 2, word 3, etc. Of course you can stick images in there as well, but it is easy to think of them running in a horizontal manner, like a sentence.
paradigms
In contrast to syntagm (sin-tag-um) is paradigm (pair-a-dime) is a set of items that form mutually exclusive choices.

Another way to define paradigm is the class of all items that can be substituted into the same position (or slot) in a grammatical sentence. If we are talking about a visual thing, it can be any number of things that can be slotted into a composition. They are in a paradigmatic relation with one another.

It is helpful to think of paradigms as running vertically, as opposed to syntagms running horizontally. Think of this as a sentence structure with the third word being an adjective.
Think of Mad Libs. The basic story is a syntagm (sin-tag-um) and the blanks to fill in are the paradigms.
paradigm

Think about a coloring book. You have an apple on a coloring book page. You could make all sorts of choices about what to color use to color in that apple in. Red, green purple. Those are the mutually exclusive choices that you have.

Quick: what is the signifier and what is the signified in that coloring book example?
Paradigm— Again, if you think about the alphabet and the formation of a word. The middle “slot” between the D & the G can be filled with several choices.
We can choose different letters to place in the slot and get different words.
Each of those slots make up a mutually exclusive choice.
Paradigm— The same goes for color choices. For each of the rings, we can choose to color them differently, making paradigm choices for each of the colors on the concentric circles. Bullseye to
the symbol of the RAF (Royal Air Force) to
the logo for Target.
a combination of paradigms and syntagms that make up an oft-told story with elaborate cultural associations, e.g., the cowboy myth, the romance myth.
Codes that reinforce or are congruent with structures of power. Ideology works largely by creating forms of "common sense," of the taken-for-granted in everyday life.
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