

Metaphors in Interactivity

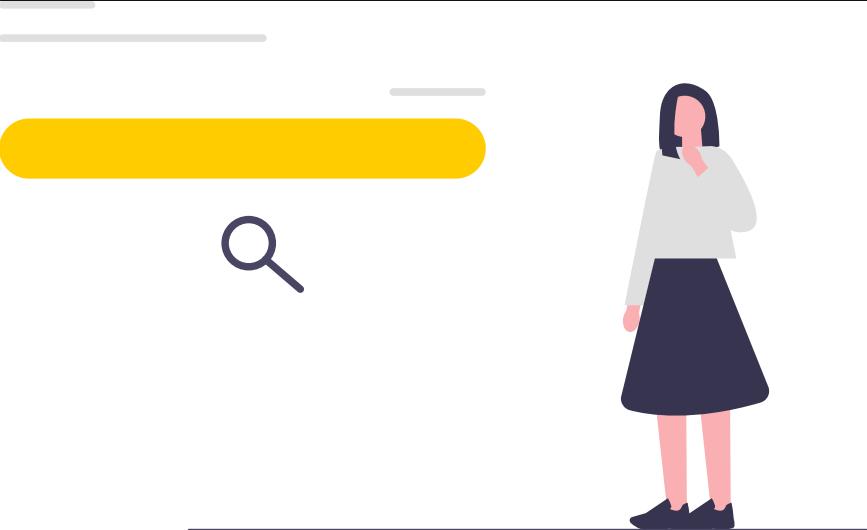
Creative Coding

COD 208 - Week 05 Class →



Metaphor

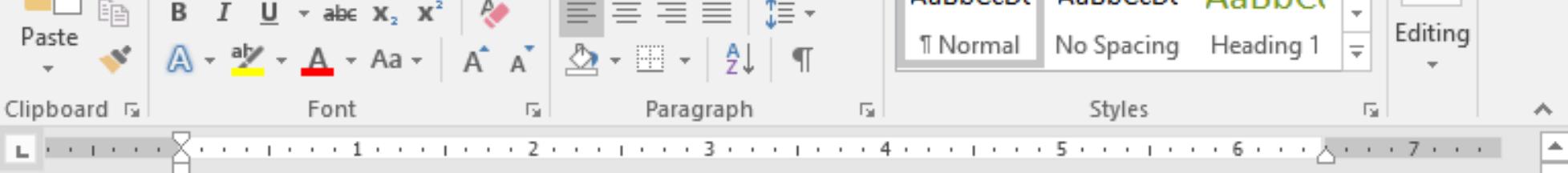
metaphor is a comparison between two unlike things



An illustration of a person from the waist up, wearing a light grey long-sleeved shirt and a dark blue skirt. They are looking down at a white rectangular area containing a yellow search bar with a magnifying glass icon on its left side. The background is black.

Designers use metaphors to convey the message to their users.

Everything regarding digital systems in one way or another involve metaphoric narrative.



Metaphors for computers

| MS Word's empty page image. It is not the same one that we use in analog world.

The familiar abbreviation WYSIWYG (What You See Is What You Get) has an underlying caveat: between observation and realization lies a certain degree of figurative alteration.

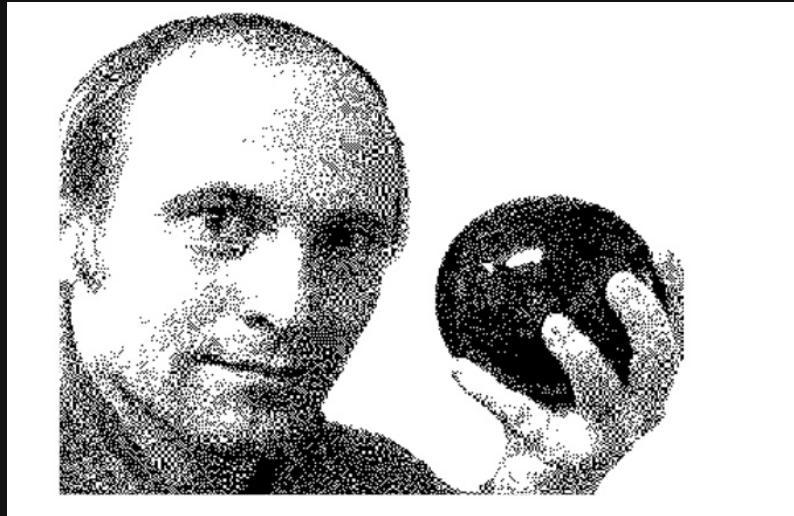
Metaphors for computers



A floppydisk icon like many other icons on virtual environments is a metaphor.

Feature Extraction

We can recognize/perceive the imagery by using the process called Feature Extraction from Neurophysiology.



Feature Extraction

We can identify the following portion of the image also.



What about this one?



Isolated pupil from the image

How does the feature extraction process work?

1. Edge detection

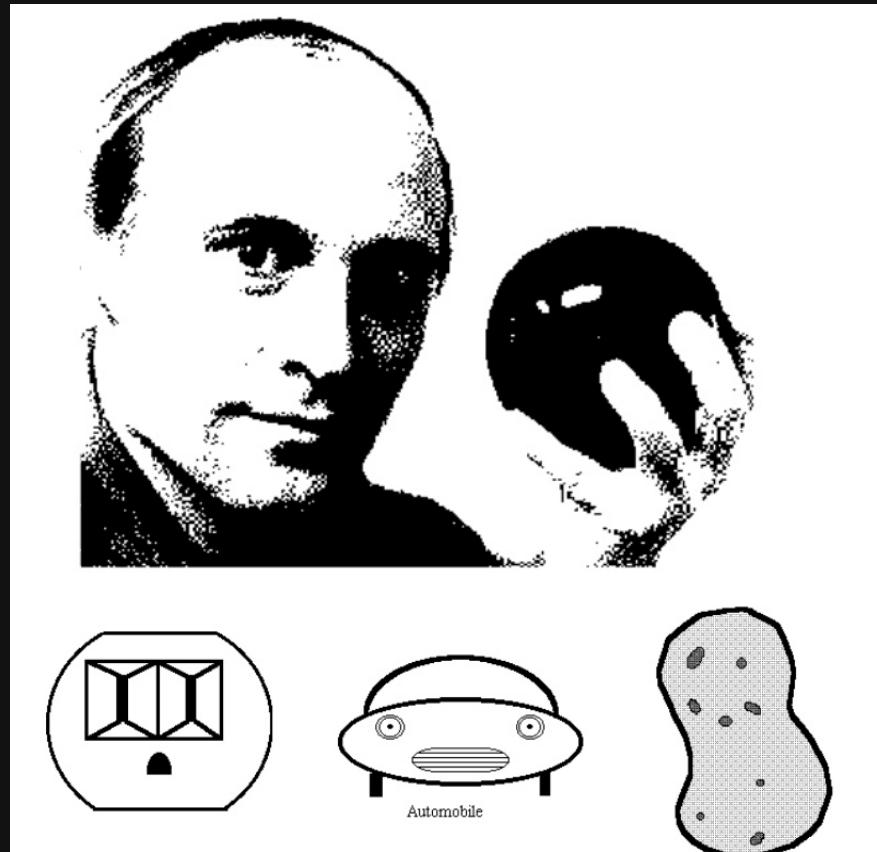
The retina of an individual is responsible for the edge detection process. The processed image looks like the following image;

2. Texture Recognition

Helps us to determine the shape of 3D objects even if the input is 2D.

3. Facial Feature Extraction

Now we have a sharper image which is cleared from visual noises.





For countless ages, artists have possessed a technique that programmers have yet to master: the art of accomplishing more by simplifying an image rather than elaborating upon it. The painter or cartoonist does not endeavor to attain a faithful reproduction of reality, but instead endeavors to simplify the details of an image so as to direct the viewer's attention to the intended pattern with utmost precision.



The simpler image communicates happiness better because all unnecessary detail has been eliminated. By giving the brain a bare minimum of information, we force it to recognize the pattern "happiness," even though there's not enough information to "truly" or "accurately" depict a human face. The only features presented are those necessary to trigger recognition of the mental template for "happiness."

Steps of Metaphor Creation

Step 1

Determine the qualities of the subject that you want to express via metaphors.

Step 2:

Create a list of objects that share some common features with the thing to be described with a metaphor.

Step 3:

Compare the feature sets of the candidate objects (Wheel) with the feature set of the metaphoree (Leg).

Features that match and those that don't match should be noted during this comparison.

Step 4:

Choose the common ones and eliminate the non-mutual points. It doesn't matter how extensive the list is.

Step 5:

You can either eliminate the *mismatching* or *negating* points to construct the metaphoric relation between objects

Ignoring The Mismatches

e.g: Jeep's tires handling the challenging ground by its strong grip on the ground.

Negating The Mismatches

e.g: The truck dug its heels into the pavement.

Negating Mismatches in Visuals

In cartoons there are some examples that emphasizes the use of mismatch features.

→ While Roadrunner runs away from Coyote, the animation of the legs becomes circular and creates a motor engine sound.



→ In Futurism, we encounter such use of visual metaphors in several artworks. E.g. Giacomo Balla: "Dynamism of a Dog on a Leash", oil on canvas, 1912



Conclusion

You can utilize metaphors into interactivity design in two ways

1. Extending Existing Metaphors 🤢
2. Creating New Metaphors 👍

The text suggests that metaphor is a deeply ingrained part of our thinking and may not be reducible to engineering practice. It also notes that interactivity designers are a combination of engineers and artists.



BREAK

10 mins.

Then lab study...

Assignment

1. Research on masks. ([Mask - The wearing of masks | Britannica](#))
2. Create a mask using simple shapes. Use your imagination. Start with paper and pen!!!
Benefit from symmetry...It can be anything an abstract one or a figurative or a tribal....E.g.
[Generative Masks](#)
3. Create some test sketches using Illustrator.
4. Analyze your illustrations. Think about how you can draw it using P5js. Note down your steps and develop the code step by step.
5. Upload your sketches. The one with paper and illustrator.
6. Upload your openprocessing codes.
7. Paste the openprocessing link also.
8. READ it carefully please. Or ask it your instructors. Please do not tell me "i thought it was..." or in Turkish "Ama ben öyle sanmıştım."

Reading: Randomness, *Computer Graphics & Computer Art*, H. Franke, 1985