

# METAPHOR AND AFFORDANCES

“form ever follows function,  
and this is the law”

— Louis Sullivan

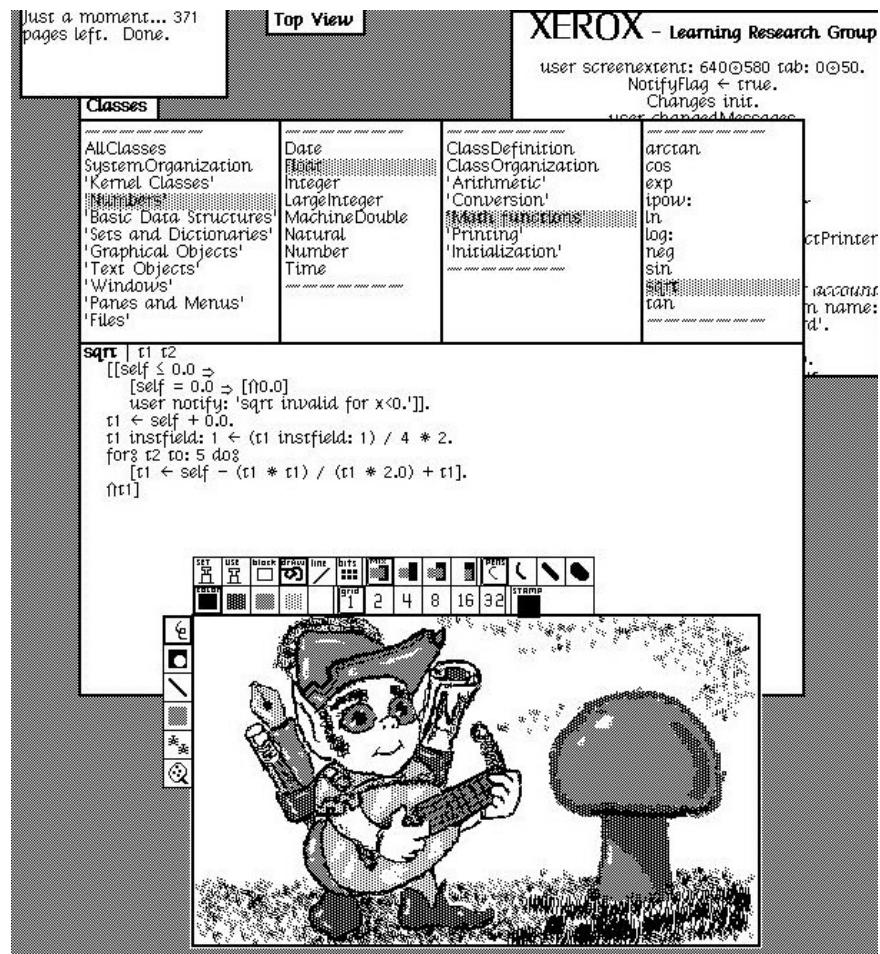
**Source:**

- ▶ Horatio Greenough, *Form and Function: Remarks on Art*, edited by Harold A. Small (Berkeley, Univ. of California Press, 1947)

WHAT ABOUT NEW FUNCTIONS  
WITH UNDECIDED FORMS??

# UI METAPHOR

# XEROX ALTO

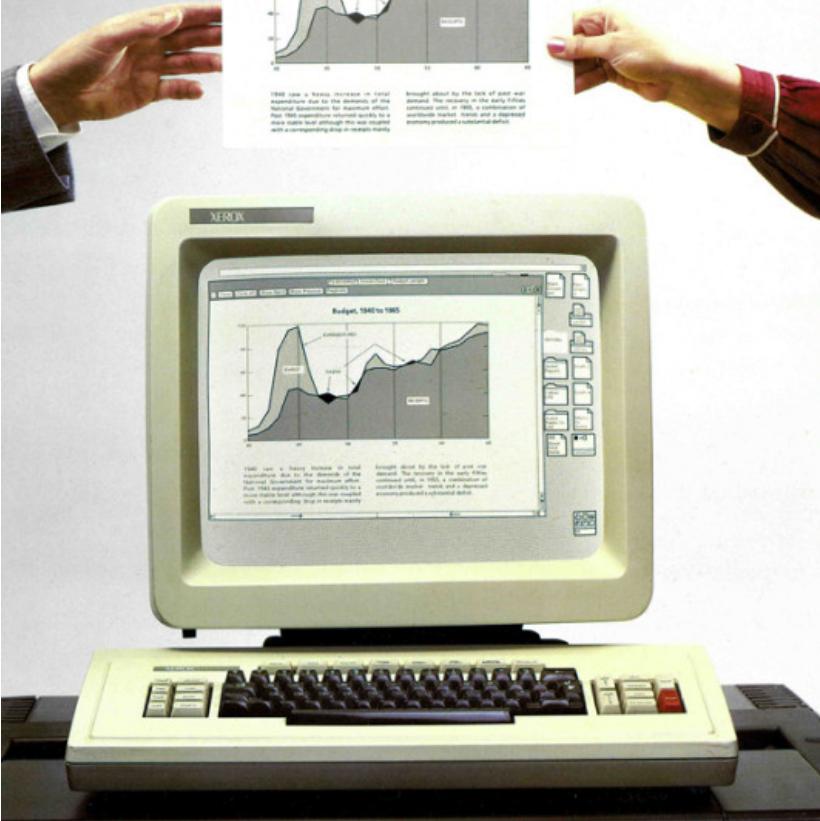
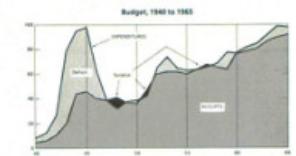


## Sources:

- ▶ <http://www.righto.com/2017/10/the-xerox-alto-smalltalk-and-rewriting.html>

RANK XEROX

## Now you can create documents with words and pictures



# XEROX STAR

### Sources:

- ▶ Xerox. "Now you can create documents with words and pictures." Print advertisement for Xerox 8010 Star Information System, ca. 1981. Xerox Historical Archives.

# APPLE LISA



## Sources:

- ▶ <https://www.mac-history.net/apple-history-2/apple-lisa/2007-10-12/apple-lisa>

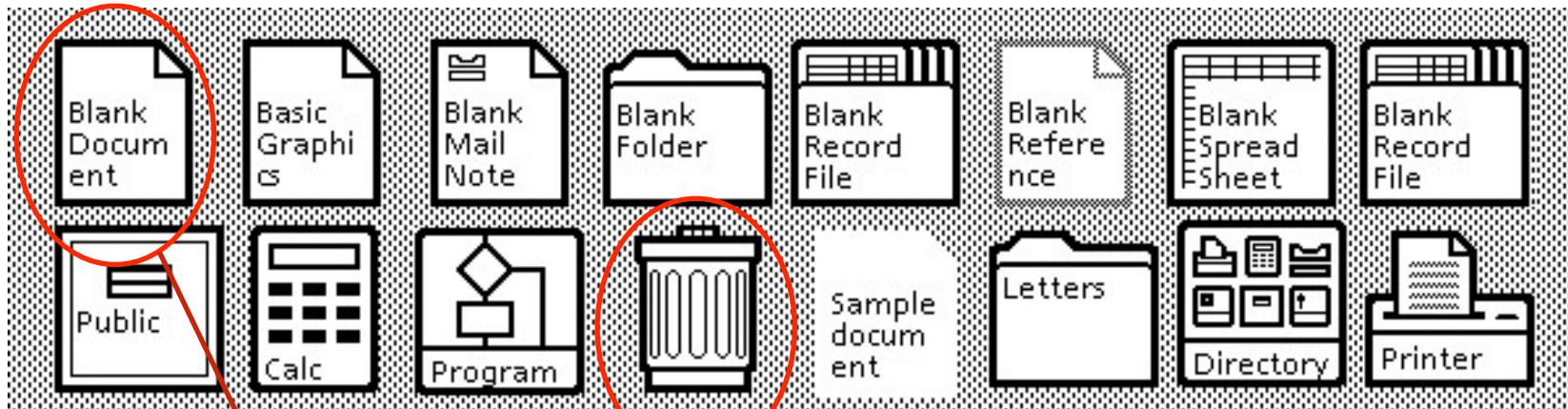
# APPLE MACINTOSH



## Sources:

- ▶ <https://www.mac-history.net/top/2020-02-10/the-history-of-the-apple-macintosh>
- ▶ [https://www.youtube.com/watch?v=VtvjbmoDx-l&ab\\_channel=MacHistory](https://www.youtube.com/watch?v=VtvjbmoDx-l&ab_channel=MacHistory)

# METAPHOR



THE DATA IS A  
DOCUMENT

DELETING FILES IS  
USING A TRASHCAN

# METAPHORS HAVE ENTAILMENTS

Juliet is gaseous

Juliet is warm

Juliet is radiant

**Juliet is the sun**

Juliet gives life

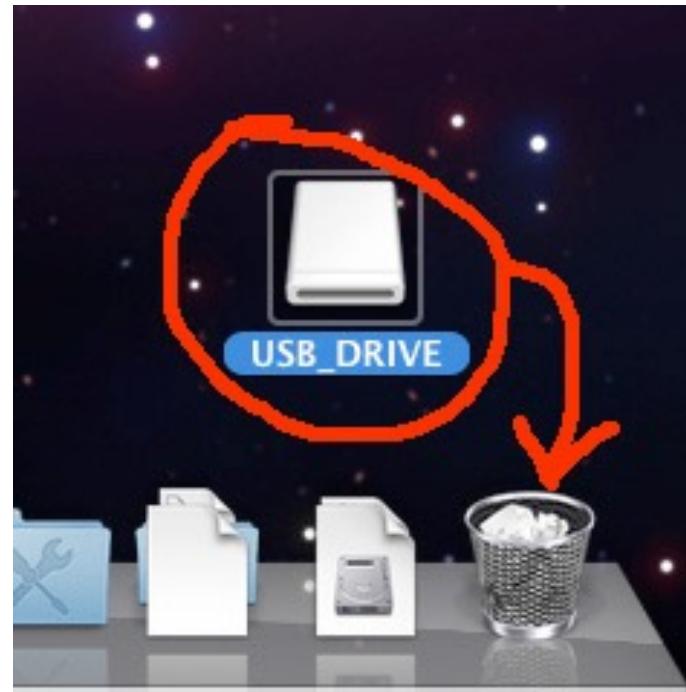
Juliet is massive

Juliet is ON FIRE

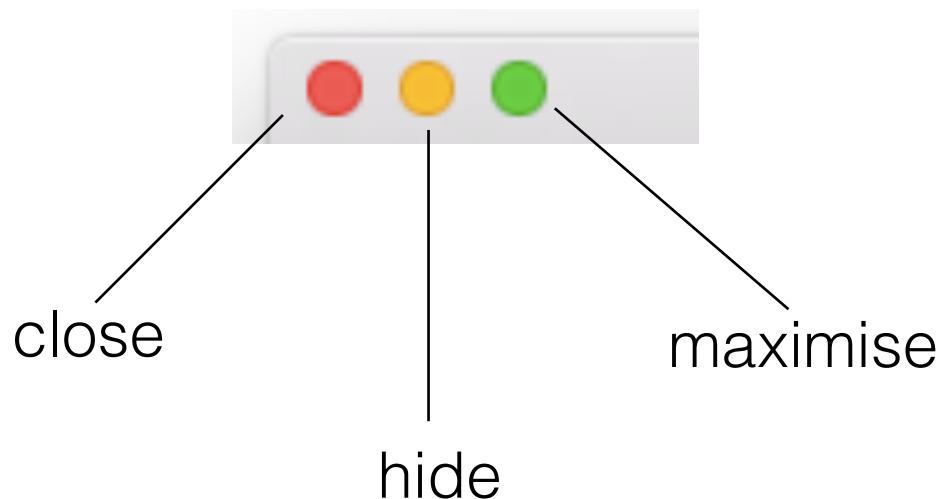
# METAPHORS HAVE ENTAILMENTS



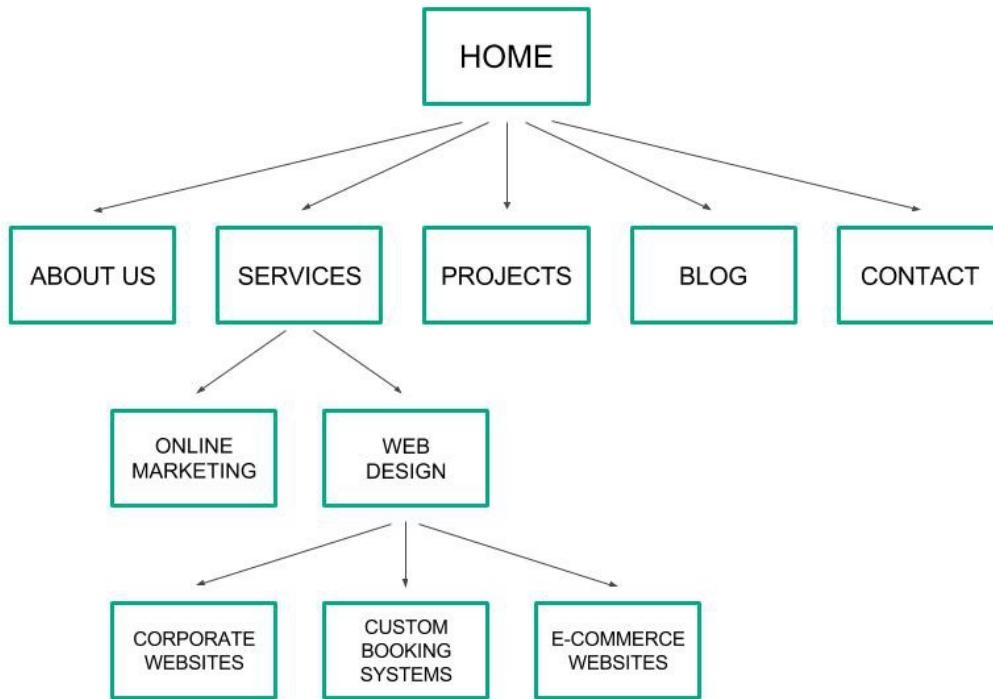
# METAPHORS AREN'T ALL EQUALLY STRONG



# METAPHORS AREN'T ALL EQUALLY STRONG



# WEBSITES AS HIERARCHICAL TREES



## Sources:

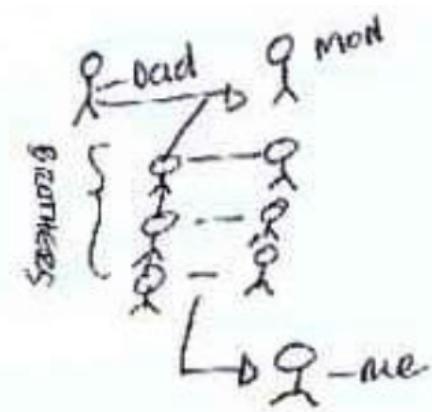
- Marion Walton and Vera Vukovic. 2003. Cultures, literacy, and the web: dimensions of information "scent". *interactions* 10, 2 (March + April 2003), 64–71.

# FAMILY TREES AS HIERARCHICAL TREES

mother  
Grandparents  
Uncle  
Cousins

Father  
Grandparents  
Uncles  
An aunt  
cousins

We all  
Scattered

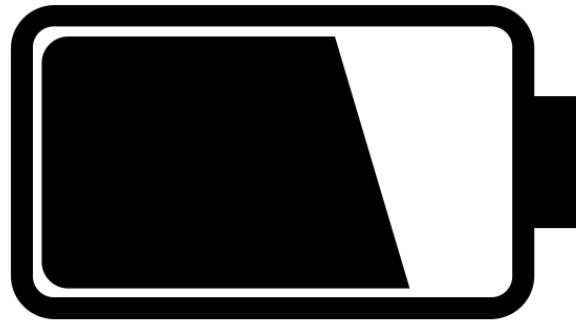


## Sources:

- Marion Walton and Vera Vukovic. 2003. Cultures, literacy, and the web: dimensions of information "scent". *interactions* 10, 2 (March + April 2003), 64–71.

**SKEUOMORPHS**

# SKEUOMORPHIC DESIGN

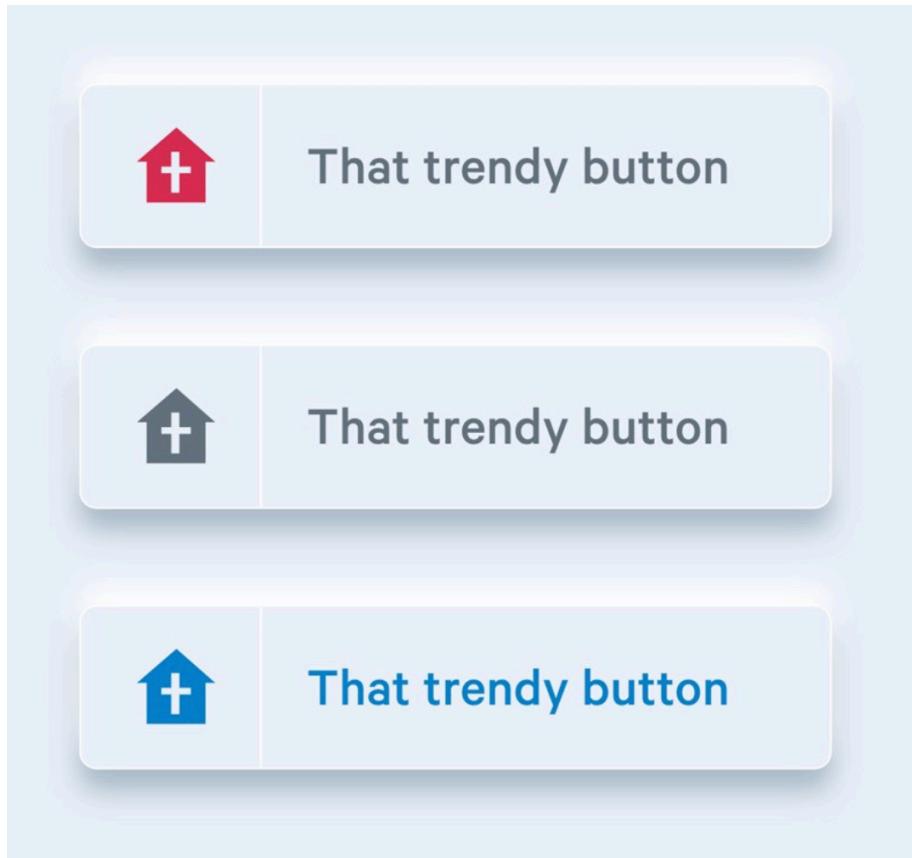


Created by Kristina Margaryan  
from Noun Project

## Sources:

- Marion Walton and Vera Vukovic. 2003. Cultures, literacy, and the web: dimensions of information "scent". *interactions* 10, 2 (March + April 2003), 64–71.

# NEUROMORPHISM



## Sources:

- ▶ <https://medium.com/@artofofiare/neumorphism-the-right-way-a-2020-design-trend-386e6a09040a>
- ▶ <https://www.inputmag.com/design/apple-macos-big-sur-the-rise-of-neumorphism>

# AFFORDANCES

# AFFORDANCES

- perceived and actual properties of a thing
- properties that determine how the thing could be used
- always relative to an agent



# AFFORDANCES



# NOT JUST BINARY



## Sources:

- ▶ <https://www.theatlantic.com/business/archive/2014/06/how-cities-use-design-to-drive-homeless-people-away/373067/>
- ▶ Davis, Jenny. 2020. Chapter 4: Mechanisms of Affordance, from How Artifacts Afford.

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Montréal-Nord

Now  
-6°C

18:00 | 21:00 | 00:00 | 03:00

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Diplomats warn 'the world is



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The  
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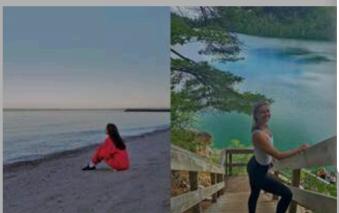
## Sources:

- Davis, Jenny. 2020. Chapter 4: Mechanisms of Affordance, from How Artifacts Afford.

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## Sources:

- Davis, Jenny. 2020. Chapter 4: Mechanisms of Affordance, from How Artifacts Afford.

# ENCOURAGE

15.2k

Why was I taught cursive in school in the late 90s when I've never actually used it in my life outside of elementary school and writing my own signature? In fact, I don't know anyone who writes in cursive.

Answered

Edit: Wow, I didn't expect this to blow up like it did! Thanks for all the answers everyone!

For me personally, I was never great at writing in cursive, but I can still read it just fine. I've always been able to write in print faster than writing in cursive. Plus, the only time I really ever have to write deals with paperwork that typically states "please print clearly".

Edit 2: 700+ comments?! This is insane! Thank you so much everyone!

Edit 3: Unless you got them for free, please stop giving me awards. Please donate that money to a local homeless shelter or local animal shelter. At the very least, give someone a positive compliment today. Make someone else's day a little better.

2592 Comments



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87% Upvoted

Comment as [Historical-Bell1899](#)

What are your thoughts?

B i o s </> A^ !

T

≡

...

Markdown Mode

Comment

## Sources:

- Davis, Jenny. 2020. Chapter 4: Mechanisms of Affordance, from How Artifacts Afford.

# DISCOURAGE



[No thanks, take me back to the meme zone!](#)

## Sources:

- Davis, Jenny. 2020. Chapter 4: Mechanisms of Affordance, from How Artifacts Afford.

# REFUSE

Specimen & Blood Test	Questions	CLSC Parc-Extension	Choose date and time	Complete your booking

## Sources:

- Davis, Jenny. 2020. Chapter 4: Mechanisms of Affordance, from How Artifacts Afford.

# ALLOW

Women Men Denim About

EVERLANE

Q Search

Hi, Rilla



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#### Sources:

- Davis, Jenny. 2020. Chapter 4: Mechanisms of Affordance, from How Artifacts Afford.

# SUMMARY

- The “loose” relationship (and lack of “natural mappings”) between form and function in the context of software means that interaction designers have to consciously design to convey meaning
- Metaphor: using one concept to flesh out understandings of another
- Skeuomorphism: design that imitates real world counterparts
- Affordances
  - clues about the operation of things
  - not just “if” but “how”: request, demand, encourage, discourage, refuse, and allow