Interface Aesthetics Week 8
Signs, pictograms, and icons
OUTLINE

- Semiotics
- Building symbols
- Pictograms
- Icons
- Logos
Assignment 5
Design a new pictogram/logo/icon for:

• I School, or
• Your school or program (*non-I School*), or
• Your own project
Semiotics: The study of signs
Signified
The physical thing or idea that the sign stands for.

Signifier
The representation of the object, which could be a word, a picture, or a sound.

Sense
The understanding that an observer gets from seeing or experiencing either the signified or its signifier.

Warm, hot, burn, bright, dangerous, etc.
Signs
- Symbolic
- Iconic
- Indexical

[Charles Sanders Peirce, 1839-1914]
Symbolic signs
Code or rule-following conventions required
Symbolic signs
Language characters, numbers
Orb
[Ambient Devices]
Symbolic signs
Abstract visual representations

DOW
“Large blue-chips are rising”

NASDAQ
“Call the broker.”

Traffic
“Take the back roads.”

Weather
“Wear your heavy coat tomorrow.”

Golf
“Schedule a weekend tee time.”

Sailing
“Light wind today.”
Iconic signs
An intermediate degree of transparency to the signified object
Iconic signs
Drawings and caricatures
Iconic signs
Metaphors

[Jeremijenko, 1995]
Indexical signs
Directly connected to the signified.
Indexical signs
Natural signs
Indexical signs
Measuring instruments (scale, thermometer, clock)
Indexical signs
Countdowns
Symbolic
Language characters, numbers, abstract mapping (e.g. colors of “orb”)

Iconic
Drawings, caricatures, metaphors

Indexical
Measuring instruments
Signs in context of use

to represent “snow flake” == Iconic

to represent “cold weather” == Indexical

to represent “Ski Club” == Symbolic
| **Iconogram** | **Illustrative representation with common points between the signifier and the signified.** |
| **Pictogram** | **Pictorial representation. Represent complex facts through visual carriers of meaning.** |
| **Cartogram** | **A topological representation with complex functions (e.g. statistics) and iconic facts.** |
| **Diagram** | **Functional representation. A more functional carrier.** |
| **Ideogram** | **Representation of a concept. Independent of any formal identification.** |
| **Logogram** | **A visual, referential linguistic sign that does not take the phonetic dimension into consideration.** |
| **Typogram** | **Typographical representation. A sign derived from a written repertoire.** |
| **Phonogram** | **Phonic representation. A sign signifies sounds.** |
Iconogram
Illustrative representation with common points between the signifier and the signified.

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Pictorial representation. Represent complex facts through visual carriers of meaning.

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Phonogram
Phonic representation. A sign signifies sounds.
Signs and the surroundings
Icon
A fire extinguisher

from Pictograms, Icons & Signs (Abdullah & Hübner, 2006)
Surroundings
A door

Icon
A fire extinguisher

Symbol
Square and red

Indication: Behind this door is a fire extinguisher in case of fire

from Pictograms, Icons & Signs (Abdullah & Hübner, 2006)
Surroundings
The door of a room

Icon
Burning cigarette

= Smoking room

from Pictograms, Icons & Signs (Abdullah & Hübner, 2006)
Surroundings
An escalator

Icon
An escalator

Symbol
An arrow

This escalator is going down

from Pictograms, Icons & Signs (Abdullah & Hübner, 2006)
Surroundings
A corridor

Icon
Person running away from fire

Symbol
An arrow

Symbol
Square and green

Indication: In an emergency, this is the direction to take

from Pictograms, Icons & Signs (Abdullah & Hübner, 2006)
National Museum of Emerging Science and Innovation
Tokyo Japan
Pragmatics
The manner in which the receiver interprets the sign.
The Intention

**Indicative**
A person may smoke here, but he does not have to smoke. Up to the receiver what he does with information.

**Imperative**
The intention is to influence the receiver's behavior. Smoking is prohibited even if the receiver feels like smoking.

**Suggestive**
Represents an appeal to stop smoking for reasons of health, regardless of time and place.

from *Pictograms, Icons & Signs* (Abdullah & Hübner, 2006)
Building signs
The Bearer

The bearer is whatever holds the pictogram.

The landscape format reinforces the direction in which the symbol is going. The circular lamp reinforces the indicative message.

from *Pictograms, Icons & Signs* (Abdullah & Hübner, 2006)
The Format

A free standing pictogram only needs a protective area to separate it from surrounding elements. A pictogram with a background also needs an inner protective area.

from Pictograms, Icons & Signs (Abdullah & Hübner, 2006)
The Visual Balance

A vertical bar looks longer than a horizontal bar. A diagonal bar should appear shorter than a vertical or horizontal bars.

from *Pictograms, Icons & Signs* (Abdullah & Hübner, 2006)
If several bars intersect, the crossing point puts excessive weight on the positive form. It seems too thick or too black.

The negative space between the intersecting bars needs to be enlarged in order to re-establish the balance between positive and negative.

from *Pictograms, Icons & Signs* (Abdullah & Hübner, 2006)
from *Pictograms, Icons & Signs* (Abdullah & Hübner, 2006)
Line Endings

Using open forms means that there are more line endings. The endings could be rounded or squared off.

from *Pictograms, Icons & Signs* (Abdullah & Hübner, 2006)
Corners

Both inner and outer corners may be either rounded or squared off.

from *Pictograms, Icons & Signs* (Abdullah & Hübner, 2006)
Styles

The designs could be faded, sketched, blurred or fragmented.
Creates a big visual impact.

from Pictograms, Icons & Signs (Abdullah & Hübner, 2006)
Structure

Shapes could be empty, fully or partially filled.

from Pictograms, Icons & Signs (Abdullah & Hübner, 2006)
Line thickness

Thinner lines may not have enough visibility. Thick lines could overwhelm the negative space and affect recognizability.

from *Pictograms, Icons & Signs* (Abdullah & Hübner, 2006)
Visualizing prohibition

Traffic signs have made us associate round and red with prohibition, even without crossing through the motif of the pictogram.

from *Pictograms, Icons & Signs* (Abdullah & Hübner, 2006)
Crossing out
Method of visualizing a ban.

from *Pictograms, Icons & Signs* (Abdullah & Hübner, 2006)
Red, round, and crossed out

A prohibitive sign with an additional line has a heavier and more urgent impact.

from *Pictograms, Icons & Signs* (Abdullah & Hübner, 2006)
Prohibition

Diagonal lines are best suited to indicate prohibition. Horizontal and vertical lines could suggest a division.
from Pictograms, Icons & Signs (Abdullah & Hübner, 2006)
Mirror image of the motif

Crossing out a pictorial motif can reduce the ability for people to recognize the sign. Recognition could be restored through mirroring image.
Visualization of the diagonal

Provided that the prohibition is clear, a thinner diagonal can enhance the motif. A transparent diagonal can help to make the motif stand out.

from Pictograms, Icons & Signs (Abdullah & Hübner, 2006)
Complex or multiple messages

Each message should be visualized through its own pictogram. Otherwise there is a risk that individual messages could get lost or be misunderstood.

from Pictograms, Icons & Signs (Abdullah & Hübner, 2006)
Examples
This old motif for the ‘footpath’ sign had to be changed – not for the sake of modernization, but because the man in the hat holding hands with the little girl suggests a possible abduction rather than a father taking his daughter for a walk.

German traffic signs

1. Pedestrian path
2. Entry to pedestrian zone
3. End of pedestrian zone
4. Pedestrian and cycle route
5. Segregated cycle and pedestrian route
6. Segregated pedestrian and cycle route
7. Cycle path
8. Pedestrian crossing
9. Underpass or footbridge
10. Horse-riding path
A system for German railway company. The thin white line around the outside help the sign to stand out against the surrounding.
Berlin Transport Services
A pictogram system created by Meta Design Berlin in 1993. Introduced a five-color system and consistent directional representations.
An extended pictogram system created by Meta Design Berlin.

Düsseldorf Airport
Swiss Post
A system designed by Designalltag Zurich.
Cologne/Bonn Airport
Designed by Integral, Paris. Both signs and type incorporated the same structures and basic forms.
Pacific Bell - Yellow Pages

Visual guidelines by Michael Renner and Joachim Müller-Lancé, to illustrate the different themes of Yellow Pages.
Zurich Waste Disposal
Designed by Designalltag Zurich

1. Brown glass
2. Wine bottles
3. Broken glass
4. Window glass
5. Household rubbish
6. Aluminium
7. Tinplate
8. Paper
9. Cardboard
10. Data-processing paper
11. Poison
12. Garden compost
13. Wood
14. Water pollutants
15. Compost
16. Cooking oil
17. Motor oil
18. PVC
19. Polystyrene
20. Polythene
Sto AG
A product label system designed by Meta Design for Sto AG, a major manufacturer of building materials and paint. Reduced multilingual instructions.
Pictograms showing the products and how they are to be used:

1. Highest temperature for use
2. Follow-up treatment necessary
3. Lowest temperature for use
4. Drying time
5. Can be worked on after 15 minutes
6. Follow-up treatment with foil
7. Follow-up treatment with fluid
8. Wet surface beforehand
9. Scratch with spatula
10. Apply in two layers
11. Whitewash
12. Minimum application in mils
13. Minimum application cm²
14. Can be shaded with silicate/silica resin full-tone paint
15. Add 5 litres
16. Add 6%
17. Can be shaded with organic full-tone paint
18. Shake before use
19. Component A
20. Component B
21. Decant
22. Maximum time in container
23. Stir
24. Minimum stirring time
25. Read instructions carefully
26. Proportions for mixing, by volume
27. Phases of work
28. Maximum dilution

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1:10 Vol.

3 x

500 ml
500 g

1 m
1 m²

StoSilikat
StoColor

5 l
5%
80% max.
Natural History Museum
Berlin
Designed by Mohn Design, Berlin. A dynamic movement that varies according to the distance at which one is standing.
Illustrative diagrams
A lit cigarette is carried at the height of a child's face.
700度の火を持って、私は人とすれちがっている。

I carry a 700°C fire in my hand with people walking all around me.

私に手を振る人がいた。
煙を払う仕草だった。

A person was waving at me.
He was waving away my smoke.

スタンド灰皿。火を消さないで入れるのは、煙をふやす行為だ。
Stand ashtrays.
Disposing of a lit cigarette in one just creates more smoke.

煙の行方。本人だけが、他人事だった。
Where does the smoke go?
Only the person producing it is unconcerned.
吸いがらを排水溝に捨てた。ということか隠した。
I threw my cigarette butt into the drain. That is to say, I hid it in the drain.

体はよけた。それでも煙はぶつかった。
I moved to avoid him. But my smoke didn't.

日本一、目にとくゴミは、吸いがらかも。
Probably the kind of litter I see most often in Japan is cigarette butts.
Amplification through simplification

[McCloud, 1994]
WHEN WE ABSTRACT AN IMAGE THROUGH CARTOONING, WE'RE NOT SO MUCH ELIMINATING DETAILS AS WE ARE FOCUSING ON SPECIFIC DETAILS.

BY STRIPPING DOWN AN IMAGE TO ITS ESSENTIAL "MEANING," AN ARTIST CAN AMPLIFY THAT MEANING IN A WAY THAT REALISTIC ART CAN'T.
Another is the universality of cartoon imagery. The more cartoony a face is, for instance, the more people it could be said to describe.
AND IN EVERY CASE, OUR CONSTANT AWARENESS OF SELF--

--FLOWS OUTWARD TO INCLUDE THE OBJECT OF OUR EXTENDED IDENTITY.

AND JUST AS OUR AWARENESS OF OUR BIOLOGICAL SELVES ARE SIMPLIFIED CONCEPTUALIZED IMAGES--

--SO TOO IS OUR AWARENESS OF THESE EXTENSIONS GREATLY SIMPLIFIED.

from Understanding Comics (McCloud, 1994)
IF THESE LINES ARE EXPRESSIVE OF FEAR, ANXIETY AND MADNESS--

--THEN Couldn’T THESE LINES BE SAID TO PORTRAY CALM, REASON AND INTROSPECTION?

IN TRUTH, DON’T ALL LINES CARRY WITH THEM AN EXPRESSIVE POTENTIAL?
BY DIRECTION ALONE, A LINE MAY GO FROM PASSIVE AND TIMELESS--

--TO PROUD AND STRONG--

--TO DYNAMIC AND CHANGING--

BY ITS SHAPE, IT CAN BE UNWELCOMING AND SEVERE--

--OR WARM AND GENTLE--

--OR RATIONAL AND CONSERVATIVE--

BY ITS CHARACTER IT MAY SEEM SAVAGE AND DEADLY--

--OR WEAK AND UNSTABLE--

from Understanding Comics (McCloud, 1994)
Figure 7. Demonstration of kiki and boubu. Because of the sharp inflection of the visual shape, subjects tend to map the name kiki onto the figure on the left, while the rounded contours of the figure on the right make it more like the rounded auditory inflection of ‘boubu.’
Can emotions be made visible?

Is this anger?

Tension?

Intimacy?

Joy?

Serenity?

Madness?
BACKGROUNDs can be another valuable tool for indicating invisible ideas... particularly the world of emotions.

Even when there is little or no distortion of the characters in a given scene, a distorted or expressionistic background will usually affect our "reading" of characters' inner states.

This principle is evident in many European color comics and in Japanese romance comics where expressionistic effects have been devised for almost any emotion imaginable!

Certain patterns can produce an almost physiological effect in the viewer.

But for some reason, readers will ascribe these feelings, not to themselves, but to the characters they identify with.

Expressionism and synaesthetics are distortive by their nature. If strong enough, their effects can obscure their subjects.

But a lack of clarity can also foster greater participation by the reader and a sense of involvement which many writers and artists prefer.

Such internal effects are, of course, best suited to stories about internal matters.

When a story hinges more on characterization than on plot, there may not be a lot to show externally.

But the landscape of the characters' minds can be quite a sight!

Creators who use these effects may need to clarify what is being shown. However.

Either through the content of surrounding scenes or, of course, through words.
Icons
Sign

- Symbolic
- Iconic
- Indexical

Pictograms
Pictorial representations. Represent complex facts through visual carriers of meaning.

Icons
Iconographic representations. Represent any kind of object or action, most often in computer context (folder, tools, moods).

Logos
A graphical element (a set of symbols and typeface) for forming a trademark or brand.
Icons
The free spirits of the sign world. Greater freedom of design.
Pictogram

Icon
Interface Aesthetics 03/16/09
by Susan Kare (1980's)
from Pictograms, Icons & Signs (Abdullah & Hübner, 2006)
by Meta Design, San Francisco
from Pictograms, Icons & Signs (Abdullah & Hübner, 2006)
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- Pictographic and ideographic logos
- Typograms
Logos
Pictographic
Ideographic
Pictographic logos

Signs as pictograms which pinpoint an idea or message, in a graphically reduced form.

from *Los Logos* (Mischler, Bourquin, & Klanten, 2002)
Ideographic logos

Abstract signs that convey a feeling, a form, a movement, an idea. Their content and meaning is not revealed at a glance, but requires a certain “willingness to read.”

from *Los Logos* (Mischler, Bourquin, & Klanten, 2002)
Typograms

Type as type

Pictorial type

Type as pictures
Type as type
Lettering developed from existing typefaces, consistently avoiding additional graphic elements and other interventions.

from *Los Logos* (Mischler, Bourquin, & Klanten, 2002)
Type as type

from *Los Logos* (Mischler, Bourquin, & Klanten, 2002)
Variations in balloon shape are many and new ones are being invented every day.

While inside those balloons, symbols are constantly being appropriated or even invented to cover the non-verbal.

Even the variations of lettering styles, both in and out of balloons, speak of an ongoing struggle to capture the very essence of sound.

From *Understanding Comics* (McCloud, 1994)
Pictorial type
Typograms in which additional graphic elements communicate content.

from Los Logos (Mischler, Bourquin, & Klanten, 2002)
Pictorial type

from *Los Logos* (Mischler, Bourquin, & Klanten, 2002)
Type as pictures

Typograms that gain their significance from the free approach to characters, the typography broken down to the point of illegibility.

from Los Logos (Mischler, Bourquin, & Klanten, 2002)
Type as pictures

from *Los Logos* (Mischler, Bourquin, & Klanten, 2002)
lettering: type as pictures  Schriftzüge: Schrift als Bild

from Los Logos (Mischler, Bourquin, & Klanten, 2002)
lettering: type as pictures

from Los Logos (Mischler, Bourquin, & Klanten, 2002)
**Sign**

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**Typograms**
Pictographic and ideographic logos
Assignment 5
Design a new pictogram/logo/icon for:

- I School
- Your school or program (non-I School)
- Your own project

Be clear what type of sign you are designing (e.g., pictogram, ideographic logo, type as picture, etc.) and describe how your sign stands for the signified.

Post your design and description of your design on the web by Saturday 28th. You will present your design at the workshops on March 30th.