DESIGN CULTURE AND SEMIOTICS
- Some basic concepts

SEMIOTICS
- Etymology: from the Greek word "semeion" ("sign")
- Semiotics is a field of research that studies signs as an essential part of cultural life and communication. According to semiotics, we can only know culture (and reality itself) by means of signs, in other words, through the processes of signification.
- Semiotics has two founders: the Swiss linguist Ferdinand de Saussure (died 1913) and the American philosopher Charles Sanders Peirce (died 1914).

- "Every message is made of signs; correspondingly, the science of signs termed semiotic deals with those general principles which underlie the structure of all signs whatever, and with the character of their utilization within messages, as well as with the specifics of the various sign systems, and of the diverse messages using those different kinds of signs." (Roman Jacobson)

- Signs are the perceived / perceivable aspect of communication. They can be visual, auditive, tactile... Reading and interpreting signs is a fundamental cultural activity. We would not be able to live our lives without it. Design is a particularly semiotic activity, because it depends on the construction of signs (by the designer) and their decoding (by the customer, citizen, etc.).

FERDINAND DE SAUSSURE:
DEFINITION OF "SEMILOGY" (SEMIOTICS):

"Language is a system of signs that express ideas, and is therefore comparable to a system of writing, the alphabet of deaf-mutes, symbolic rites, polite formulas, military signals, etc. But it is the most important of these systems. A science that studies the life of signs within society is conceivable; it would be part of social psychology and consequently of general psychology; I shall call it semiology (from the Greek semeion, 'sign'). Semiology would show what constitutes signs, what laws govern them. Since the science does not yet exist, no one can say what it would be; but it has a right to existence, a place staked out in advance. Linguistics is only a part of the general science of semiology; the laws discovered by semiology will be
applicable to linguistics, and the latter will circumscribe a well-defined area within the mass of anthropological facts."

(1916)

FERDINAND DE SAUSSURE:
THE BASIC CONCEPTS OF SEMIOTICS ACCORDING TO SAUSSURE

- **Langue/parole** (language/speech). For Saussure language is a basic semiotic system, which is in a dynamic and mutual relationship with speech (the actual, localized use of language). When one speaks a sentence, language gets activated; speech is only possible because it is based on the system of the language. Language is the sum total of all available speech instances. The relationship between "language" and "speech" is similar to that between "code" and "message", used by most later semioticians. We put together and send messages by referring to a code, an existing system of relationships. Most semioticians agree that no messages are possible without the existence of a code (although its actual structure may be difficult to demonstrate).

- **The sign: signifier/signified.** For Saussure, a sign consists of two entities that cannot be separated from each other. Signifier represents its "form", whereas the signified represents the idea the sign expresses. The relationship between the signifier and the signified is conventional: it is based on an agreement. For example the word "horse", put together of the 'phonemes' h-o-r-s-e does not resemble the animal it refers to.

- **The principle of difference:** "the identity of a given signifier or a given signified is established through the ways in which it differs from all other signifiers or signifieds within the same system." Thus a language is not an object; it is a system of relationships.

- **Paradigmatic and syntagmatic relationships:** According to Saussure, the use of language has two dimensions which are activated simultaneously. When forming a sentence we make choices from existing paradigms (lists of alternatives, such as words or grammatical forms) and arranging them in syntagmatic relationships (word after word, etc.). There are rules that govern both. A sign's value is determined by its paradigmatic and syntagmatic associations. According to Roland Barthes, this principle can be extended to all kinds of sign systems, such as fashion (dressing up we choose the clothes from different alternatives and create a "syntagm", the combination of the clothes we wear).

CHARLES SANDERS PEIRCE (1839-1914):
DEFINITION OF THE SIGN
"A sign is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. That sign which it creates I call the interpretant of the first sign. The sign stands for something, its object. It stands for that object, not in all respects, but in reference to a sort of idea, which I have sometimes called the ground."

- Peirce's understanding of the sign is "triadic". He separates two triads:

**PEIRCE'S FIRST TRIAD: SIGN - INTERPRETANT - OBJECT**
- Sign is something we perceive, and which represents something else. According to Peirce there are many kinds of signs (Peirce separated 66 classes of signs!). Peirce's sign roughly corresponds with Saussure's signifier. The sign trigger's in the observer's mind another kind of "mental" sign, the interpretant. Sign stands for something in the real world, the object (or "referent"). The sign stands for the referent in some respect, which is called ground (this somehow corresponds with 'code').
- Peirce says that the interpretant can become a sign which produces a new interpretant, and so on endlessly. This resembles Umberto Eco's idea of "unlimited semiosis": signs from endless chains of signs.

**PEIRCE'S SECOND TRIAD: ICON, INDEX, SYMBOL**
- **Icon** = resembles its conceptual object in certain ways. It may share certain of the properties which that object possesses, or it may duplicate the principles according to which that object is organized. Examples: images and diagrams (equations, graphs).
- **Index** = "a real thing or fact which is a sign of its object by virtue of being connected with it as a matter of fact and by also forcibly intruding upon the mind, quite regardless of its being interpreted as a sign." Examples: weathervane, a pointing hand, a symptom (of a disease, etc.).
- **Symbol** = the relationship between the sign and its conceptual object entirely arbitrary (although occasional resemblances are possible). Example: natural languages and notational systems are pre-eminently symbolic. A national flag is a symbol.

- Peirce emphasizes the overlapping and flexibility of the sign categories in signifying practices. Photograph is both icon and index; a portrait equally, particularly to a person who knows the sitter. The richest signs are usually combinations of different types.

**ROLAND BARTHES:**
- **Code and message.** In our lives we constantly send messages that consists of different signs. These messages (basically anything from making a phone call, waving our hand or the clothes we wear) are based on codes, culturally defined systems of relationships. Living in a certain environment we internalize sets of codes that effect our semiotic behaviour, whether we are aware of it or not. Barthes claimed that there is only one exception to the rule "no message without a code": the photographic image, because it shows us something reproduced without human intervention (by means of a mechanical-chemical process). This idea has been much criticized, particularly after the breakthrough of digital photography which seriously challenges photography's earlier ontological status.

- **Denotation and connotation.** The distinction between denotation and connotation is the guiding idea of Barthes' semiotic theory. He claims that when we read signs and sign-complexes, we can distinguish between different kinds of messages. Denotation is the "literal or obvious meaning" or the "first-order signifying system". For example the denotative meaning of an image refers to its literal, descriptive meaning. Connotation refers to "second-order signifying systems", additional cultural meanings we can also find from the image or text.

- Barthes identifies connotation with the operation of ideology (which he also calls "myth"). According to Barthes, "ideology or "myth" consists of the deployment of signifiers for the purpose of expressing and justifying the dominant values of a given society, class or historical period (the signs express not just "themselves", but also all kind of value systems that surround them). As myths, signs tend to appear "natural" and self-evident (although they are basically always artificial, coded), hiding the operations of ideology.

- **Anchorage and relay.** According to Barthes, there are two kinds of relationships between text and image: anchorage and relay. All images are "polysemic": they are open to basically endless numbers of different readings, implying an uncertainty of meanings. Because of this a linguistic message is usually associated with every image, to guide their interpretation.

- In **ANCHORAGE**, the text "anchors" the meaning of the image by naming the intended denoted meanings (helping identification). On the level of connotation, the linguistic message guides interpretation. The principal function of anchorage is ideological: the text directs the reader through the signifieds of the image (towards a meaning chosen in advance). - In **RELAY** the text and the image are in a complementary relationship. Both the words and images are
fragments of a more general syntagm and the unity of the message is realized on a higher level. Relay can often be found in comic strips and films.

- **Drawing / painting is always coded because:**
  1) it requires a set of rule-governed transpositions, that are historical (perspective rules, etc.)
  2) there is a division between the significant and the insignificant. Drawing and painting always involves choices.
  3) drawing requires apprenticeship, learning
  - Barthes believed a photograph is a "message without a code" because it is produced automatically, without human intervention. It would be a "piece of nature" captured by the camera. This view has been much criticized. Critics have emphasized to which extend the photograph is a result of choices made by the photographer (framing, timing, etc.).

- **Closed and open systems.** In his book S/Z Barthes developed further his idea of the relationship between denotation and connotation: denotation is associated with closure and singularity (it is the enemy of free play, opposing even the limited plurality made possible by connotation), while connotation represents the principle of opening up the text to all kinds of cultural meanings, even to the point of questioning the coherence and the identity of the text. This leads to the issue of closed and open systems, two types of semiotic systems. Classical Hollywood cinema is an example of a closed system. It wants to be "read" in a certain way, guiding the viewer and resisting alternative readings. Experimental films are often open systems. There is no "correct" way of interpreting their meaning; on the contrary, they are open to all kinds of readings.

**COMMUNICATION**

"Every cultural pattern and every single act of social behaviour involves communication in either an explicit or implicit sense" (Edward Sapir)
- Communication is culture, culture is communication

**ROMAN JACOBSON ON COMMUNICATION:**
"meaning resides in the total act of communication. It is not a stable, predetermined entity which passes, untrammeled, from sender to receiver"
- depending on the situation, one of the elements of the speech act may dominate over the others, but all contributing factors should be considered

**THE "CLASSICAL" MODEL OF COMMUNICATION** (by Roman Jacobson)
THE "IMPROVED" MODEL OF COMMUNICATION
- includes the idea that communication involves the
  negotiation of signification

ENCODING - DECODING (Stuart Hall)
- According to Stuart Hall, all images are both encoded and
decoded. They are encoded in the production process and in
the placement within a certain cultural setting. They are
decoded by the viewers/readers.

- According to Hall, there are three positions the viewers
can adopt as decoders:

1) Dominant-hegemonic reading
   They can identify with the hegemonic position and receive the
dominant message of an image or text (such as a television
show) in an unquestioning manner.

2) Negotiated reading
   They can negotiate an interpretation from the image and its
dominant meanings.

3) Oppositional reading
   They can take an oppositional position, either by completely
disagreeing with the ideological position embodied in an
image or rejecting it altogether (for example by ignoring it.)

THE IDEA OF THE "BEHOLDER'S SHARE" (E.H. Gombrich, died 2001)

- The main work by Gombrich is Art and Illusion (1960) in which he presents the idea of the Beholder’s Share.
- key concept: "Beholder's Share" = the collection of perceptual and psychic acts through which the spectator brings an image into existence by perceiving and understanding it.
- According to Gombrich, RECOGNITION + RECALL + THEIR COMBINATIONS = PERCEPTION
- Gombrich: there is no "innocent look"; perceiving images is always influenced by our knowledge of the world and of other images
- Seeing is a matter of comparing our expectations with the message received by our perceptual system (against the idea of spontaneous visual creation).
- Gombrich claims that images can be considered ‘conventional signs’. Instead of representing reality directly, they spring from visual traditions internalized by the artist (schema = a "mental set").
- DEFINITION OF "SCHEMA": the mechanism of recall through imagery; a fairly simple, easily memorized structure which exists beyond its diverse manifestations (Jacques Aumont). Represents the coded, conventional aspect of visual traditions
- For Gombrich one style of painting is not "closer" to reality than another. Perspective has quasi-scientific value. The conventional aspect is painting on a flat surface. The ambiguities of perspective are similar in the image and in reality: we have to overcome them by interposing indices, pre-knowledge and already symbolized schemata "on" the image
- The interpretation of images easily leads to the question of projection: projecting interpretations and readings to the image which may be erroneous or excessive. Seeing figures in clouds; UFO sightings?

- "All art originates in the human mind, in our reactions to the world rather than in the visible world itself, and it is precisely because all art is 'conceptual' that all representations are recognizable by their style.” (Gombrich)
- "According to many there never was an image that looked like nature; all images are based on conventions, no more and no less than is language or the characters of our scripts. All images are signs, and the discipline that must investigate them is not the psychology of perception - as I had believed - but semiotics, the science of signs.” (Gombrich, 2000)