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## Thinking about signs

When we are talking about information graphics or infographics and their visual representation of information, data or knowledge we have talked already about their need to explain information quick and simple. To afford this infographics often use tools like symbols and pictograms.



Many information graphics are specialised forms of depiction that represent their content in sophisticated and often abstract ways. In order to interpret the meaning of these graphics appropriately, the viewer requires skills of decoding individual graphic signs and symbols.

If we think about visualization information in an infographic we also have to think about to whom it is addressed and is the addressee able to understand the signs we try to use.

*Harold Dwight Lasswell  
(Feb. 13, 1902 — Dec. 18, 1978) was a  
leading American political scientist and  
communications theorist.*

Remember the Lasswell's maxim, "who says what to whom in what channel with what effect," as a means of circumscribing the field of communication theory.

### Semiotics - Signifier/signified

*Ferdinand de Saussure  
(Nov. 26, 1857 – Feb. 22, 1913) was a  
Geneva-born Swiss; the 'father' of 20th-  
century linguistics.*

Saussure actually saw the division of the sign into sound image and concept as a bit ambiguous. So he refined the idea by saying it might make things clearer if we referred to the concept as the signified (signifié) and the sound image as the signifier (signifiant) - this idea is shown in the graphic, which attempts to show how the signifier and signified coalesce into what we call a sign.

A sign is considered to be **iconic** if it looks like the object signified, bearing a resemblance to its object. The similarity or resemblance proposed by the sign is to be acknowledged by its receiver. This is most apparent in visual signs. For example signs denoting ladies and gentlemen's lavatories are icons.

An **indexical sign** draws attention to the thing to which it refers. The relationship is concrete, actual and usually of a sequential, causal kind. In other words it signifies the existential relationship to the phenomena it depicts such as smoke which is an index of fire.

A **symbolic sign** has no obvious connection to the idea it represents except through convention, agreement or rule in our culture that it does. The relationship between signified and signifier is unmotivated or arbitrary and requires the presence of an interpretant to make the signifying connection. Words, colour and numbers are symbols. It is important to note that the use of symbols is cultural interpretation.

Convention is necessary to the understanding of any sign, however iconic or indexical it is. We need to learn how to understand a photograph... Convention is the social dimension of signs...: it is the agreement amongst the users about the appropriate uses of and responses to a sign.



symbolic

iconic

The road sign consists of:

One **symbolic sign** (the triangle) which means: »Watch out« because we agree that's what it means – it is arbitrary; It could just as well be a square, circle, octagon, plastic model of a prune etc.

One **iconic sign** – it looks like a man at work. Think, though, of the extent to which that is determined by our culture. There are certain conventions at work here too. First of all the men at work mostly don't dig by hand the use an excavator or a jackhammer.



In a more rural culture, it could be read as a man shoveling manure, rather than road repair materials. In cultures where woman do such menial work, it could pass for a woman shoveling manure.

Icons are signs whose signifier bears a close resemblance to the thing they refer to. Thus a photograph of me can be said to be highly iconic because it looks like me. A road sign showing the silhouette of a car and a motorbike is highly iconic because the silhouettes look like a motorbike and a car.



Here again, the same sort of elements:

signifier	Signified
The symbolic red circle on a white background	Something is forbidden
The iconic cigarette	Cigarette

But here there is an additional element, the bar, which is indexial:

The indexial bar	You can't get to this
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We associate with a barrier or with crossing something out. Interestingly, this seems to be quite common on signs which are derived from road signs, though not on road signs themselves. For example, the road sign which means ›no bicycles‹ simply has a bike in a red circle; the road sign which means ›no vehicles‹ simply has a red circle. Neither has a bar cross.

**Archetype:** A symbol, usually an image, which recurs often enough in literature to be recognizable as an element of one's literary experience as a whole. Carl G. Jung used the term "archetype" to refer to the generalized patterns of images that form the world of human representations in recurrent motifs, passing through the history of all culture. Since archetypes are rooted in the collective unconscious, they may be conceived through the psychic activity of any individual, be it in the form of dreams, art works, the ancient monuments of religious activity, or the contemporary images of commercial advertising. Such archetypes as the "innocent babe," the "unheeded prophet," the "philosopher's stone," and many others which also have their source in the primitive darkness of the unconscious, are repeated in numerous works of cultural creation.

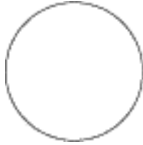
Beginning with the archetype, which in all cultures the same meaning I would like to have still briefly on movement symbolism, which effect of different forms on us humans and the cultural differences deal with these effects with us. All these things are very important for the Logodesign to consider and in the apron.

Archetypes (ancestral-sign or prototype-sign) They have the same meaning in all culture areas and to call the same associations out. With the knowledge of these associations the archetype can aim with the organization of pictograms, Logos, u.v.m. and begin meaningfully.

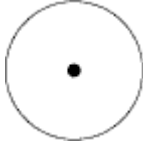
Examples of archetype:



**The spiral:** It shows up the mother as central figure of either all this to it or but induced away from it. The spiral reflects further the situation of a baby/child in its discovery phase. A further meaning is that it a beginning and an end gives.



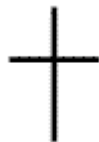
**The circle:** It is considered as symbol of unanimity, the entireness, perfection and completeness. The circle is to be found in many cultures as Mandala. For example in Tibet, China, India, but also Christian Europe and at Plato.



**The circle with center:** The baby/child recognizes that it an inside and an outside gives that things belong to it and not that it may do things, and that it may not do certain things. The point in the center is symbolful the center, from it goes out everything.



**The points:** They represent points of pulse, somewhat pulsating, dynamic, them are movement and life, expression of rhythmischem operational sequence, of heart impact, from breath.



**The cross:** The child recognizes, it gives an above, a down, a on the left of and right. In addition the cross reflects its effort after upright course again. Further the cross is the basis for an orientation in the area, it reflects structured entireness, stands for the four directions.

### Motional-symbolism

While disigning logos you have to think about, which form and/or direction is shown by your symbol or its elements.

It can be during the estimate of the Logos very importantly whether the line upward or downward goes, whether in a Logo an animal from left jumps to the right or in reverse.

I would like to give you a overview:



Above, sun, sky, strength, strength, spirit, air, height, health, Vitalitaet, upward motion, up, rise



Energy, strength, will, ascending, rising, trend-setting, goal-orients, vitally, healthy, innovatively



Future, far one, forward movement, vision, extrovertedly, future-oriented



Meaning: Earth, illness, misfortune, depression, sloping, sinking, down-falling, negatively



Earth, water, peace, stagnation, nativeness, depth, nature, roots, at present



At the beginning of, past, Unterbewusstsein, conservatively, reservedly, past



Backward step, backward motion, tradition, past, past-oriented, introvertiert, reservedly



Description: Religious, mental, Meditation, peace, immaterial, Transzendenz, over-powerfully



Description: In the middle of, center, security, protection, present, I referringness, symmetry, peace, balance,

There is always a danger of the misinterpretation of a logo. As we have started you need cultural knowledge of your recipient to develop symbols for description and/or for the correct interpretation of your message. If this knowledge is missing, then the sign can be easily misinterpreted.

### Indexes



In a sense, indexes lie between icons and symbols. An index is a sign whose signifier we have learnt to associate with a particular signified. For example, if we see someone walking down the street with a rolling gait, we may associate the rolling gait with the concept of 'sailor'. We may see smoke as an index of 'fire'. A thermometer is an index of 'temperature'. Peirce gives the examples of a weathercock, a barometer and a sundial.

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**Pictogram** The representative representation to a certain term the pictogram is a picture symbol. It releases a certain association with the viewer to a certain term. The design of a pictogram should be clear and simple.



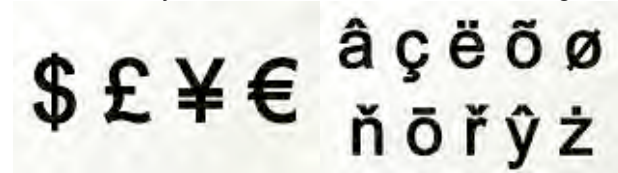
**Symbol** is a communication element intended to simply represent or stand for a complex of person, object, group, or idea. Symbols may be presented graphically, as in the cross for Christianity, the red cross or crescent for the life-preserving agencies of Christian and Islamic countries; representationally, as in the human figures Marianne, John Bull, and Uncle Sam standing for a whole nation like France, England and the USA



A **signet** is a seal used to authenticate a document, typically by leaving an impression in sealing wax.



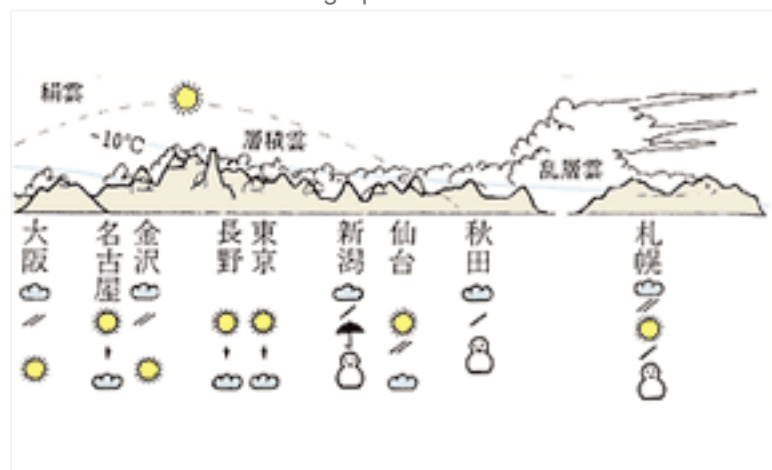
A **grapheme** is In typography the atomic unit in written language. Graphemes include letters, Chinese characters, Japanese characters, numerals, punctuation marks, and other glyphs. The €-symbol for example is an arbitrary grapheme. We recognize this conventions and/or know the meaning of this indication only, because we learned its meaning once.



**Icon** (in computing), a pictogram, used in graphical user interfaces, to represent a program, file, user, or other computing function, upon which one may click, with one's mouse, for example



So please think about at a fundamental level when creating your infographic material. The skills of decoding individual graphic signs and symbols must be acquired before sense can be made of an information graphic as a whole.



JAPANESE WEATHER MAP (14.5" x 30", detail shown)