

Visual illiteracy in non-western cultures

If you laugh at the following example, you may very well be in the wrong line of business. A European educational worker in Africa sets out to educate a small village on the danger of locusts. He builds a model of the insect, and to be sure all in the group can see it, he makes it quite big. He takes the model under his arm and heads to the village. During a village meeting, he tells the people to be on the watch for locusts, and to warn his organisation if they are seen. They will come and spay their fields so their crops will be safe. He feels quite content afterwards. Next year, the locusts come and destroy the entire crop. The educational worker goes back to the village and asks the people why they did not warn him. They tell him, they simply did not see locusts that were the size of his model.

A more immediately fatal error in communication was the launch of a certain type of medication launched in the 1970's in the Middle East. The medication was harmful for pregnant mothers and their babies, resulting in the birth of children with severe disabilities. A committee got together to address the problem of illiteracy when communicating the side-effect. They decided to design a pictogram of a woman with a baby in her belly, with a big red cross over it. Devastating results follow. Women thought it was able to induce a miscarriage (effectively an abortion) and word spread fast. Throughout the decade, hundreds of disabled children were born. Women who started out not wanting a child were now faced with the task of caring for a severely disabled child. Of course, nobody complained to the company, since

abortion was illegal. It took the pharmaceutical company nine years to find out.

Organisations that design public information campaigns for developing countries generally know which message they want to communicate. But finding the best form is frequently a larger challenge than expected. The "designers" have to address an audience that is marked by a fairly high level of illiteracy and that in many cases has hardly been exposed to Western visual culture.

In the 1960's and 1970's, the Norwegian scholar and art-director Andreas Fuglesang was among the first to study visual illiteracy as a phenomenon. In those years, development organisations began to rely on mass media to reach their audiences, but they soon found out that their messages were misunderstood or not understood at all. The term visual literacy refers to the competence to code and decode visual signs other than words. Fuglesang's studies revealed that the perception of visual illiterates is limited not only by the inability to read and write, but also by the inability to "read" 2-dimensional images, such as photos and illustrations. This pertains to various aspects: distinguishing light and dark; recognizing differences in grey values; understanding differences and similarities in shape, size, height, depth, perspective, distance, movement and speed; identifying objects; grasping spatial layout and the sequence of objects; and reading body language. Photos, pictograms and other visual materials, therefore, do not automatically function as effective tools for communication.

If in the West we are bombarded with visual

Photography

messages in various media, in many developing countries such visual excess is still absent. In those countries, logo's, corporate identities and abstract images are a fairly new phenomena; billboards are there, but their message only reaches those who can read. The oral tradition, by contrast, is deeply rooted and of an exceptional quality in terms of detail and narrative structure. The absence of written sources has led to a strong sense of shared memory and an ear for detail. For western publicity campaigns, which often rely heavily on text, this is a large obstacle. But also the oral language reality is all but easily accessible: in many countries there are several languages and dialects that vary from one region to the next, and this makes public information a very complex and time-consuming effort. Designers of public information campaigns, then, must always reckon with local differences in visual culture and carefully study them. Only after the various competencies in visual literacy are understood correctly will public information campaigns potentially be effective.

Every medium has limitations. With photography, you may be very surprised at the reactions obtained through testing. Photography has been a widely used medium in the western world for over a 100 years. In other cultures, this may not be the case. For a public information campaign in Zambia, for instance, Andreas Fuglesang considered using a photo of a perfectly healthy, smiling boy, who just came out of a rain shower (*figure 7*). A test however, revealed some surprising comments that made it highly dubious whether the photo should be used at all. Some of the experiment subjects thought he suffered from a skin disease (the raindrops were thought to be blisters), that he showed signs of leprosy (light spots on his cheeks and nose), or that he was blind (white spots in his eyes some viewed as evidence of cataract). These comments underscore that images are all but universal means of communication. Below are some specific problems in reading photo's.

Depth Three-dimensionality (or depth) we recognize through various elements, including shadows, relative size, perspective and overlapping. Photo's indicate shadow more clearly than illustrations because they suggest the light/dark situation more realistic. Relative size also adds depth to an image (*figure 1*). A person in the distance only appears to be bigger than a person in the foreground, but those who do not grasp the principle merely see a small and a big person. Perspective and overlapping can also be sources of confusion (*figure 2*). We normally recognize an invisible object that is hidden behind some other object as an expression of the photo's depth, but others may not.

Movement If a single images depicts movement we know that this only reflects one moment within a larger action or time frame. A single image cannot contain the entire movement (*figure 3*). Someone who did not learn that "freezing" a moment still indicates movement will not recognize it as such.

Illustration

Identity Photo's contain many clues about the depicted image as a whole. People with little or no experience in decoding images mainly tend to concentrate on details and this may be a source of confusion. In some cultures, for instance, a woman always wears earrings; if a woman in a certain photo or illustration does not wear earrings, she may not be recognized as a woman. In more intricate cases adjustments may be needed in order to make an object recognizable. *Figure 4* depicts a horse cart of which only one wheel can be seen well. The photo was adjusted to reveal both sides of the cart, so as to allow viewers to identify the wheels, the horse and the sitting man as a man on a horse cart.

Cropping Since the invention of photography, cropping is a common aspect of visual culture in the west. If we know that photos always represent a partial reality, visual illiterates are not necessarily familiar with this. *Figure 5* can be interpreted as an image of cut-off hands.

With illustrations, designers should represent situations accurately and true to nature (*figure 6*). The perception of an illustration begins with the identification of large contrasts and basic shapes, after which attention is paid to the details with a higher degree of recognition, such as the face and the hands of a person. Next, the image is further analyzed and finally perceived as a whole. The extent to which such analysis indeed takes place depends on the viewer's visual competence. A good example is the illustration of a goat that nearly all test subjects recognized as a cow. They did not see the goat's horns and goatee, but its tail was hanging downward in the illustration, and that is more typical than a cow. One could compare it to the frustration Europeans must feel when putting together an Ikea cupboard. You have all these bits and pieces, but some parts in your package don't look a bit like the parts on the explanatory chart. When developing illustration, all details have to be correct.

Pictograms Arrows, icons, crosses, pictograms are an abstraction that Westerners have been familiar with since childhood. In the West we assume that a reduction of reality is more easily recognizable, for many people in developing countries it is something they have simply never seen before. They are not used to interpret one-dimensional lines in a three-dimensional object; they perceive the lines without interpreting them. Similarly, signal colours like green and red are not universally recognized as such. At a project in Mali I noticed a poster on the subject of HIV/AIDS where the colors red, green, and yellow were used to indicate if something was safe or unsafe, or somewhere in the middle. In Mali however, there are hardly any traffic lights, which is why it is unlikely that people will have learned the colors to signal anything. In fact, the country's national flag has exactly those three colours and they will be more likely interpreted as a matter of pride in the country and its peoples.

Designers working in developing countries or for an audience in developing countries should take into account several visual literacy issues. It is important to know that visual illiterates may notice other things and relationships in a two-dimensional medium and that specific shapes are unusual or unnatural in certain context; billboards are a novelty in areas where the first straight-angled house is yet to be built. In some countries handmade media are also much more common than printed visuals, which is why developing countries rely more on local art and media forms such as theater, puppetry, music, textile and handicraft.

There is some very useful literature on visual communication in the context of development projects, the testing and re-testing of designs and images for the public is essential. Perhaps more than designers in general, designers targeting developing countries have to bridge the gap between theory and practice, move cautiously and intelligently from idea to application. Good intentions are no excuse: the results of communication errors can be fatal.

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Literature

Andreas Fuglesang, "Applied communication in development countries, Ideas and observations"

Published by the Dag Hammarskjold Foundation, 1973

(out of print)



figure 1



figure 2



figure 3

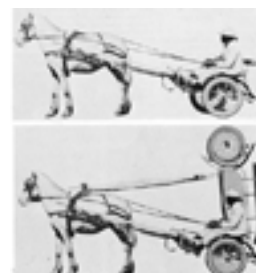


figure 4



figure 5



figure 6



figure 7

pictures 4-7
by Andreas Fuglesang