

MEET ED, THE TALKING HEAD

If we look at the picture of Ed, the process seems simple enough. One of his senses detects something, and a result gets broadcast to the world. However, the process contains many more exotic steps. Just like your computer, where a vast amount of 'things' occur between your keyboard and your printer, so do many things happen between "out there", and inside our skins.

If Ed were standing near an object which we call a tree, and someone asked him, "What do we call that?" Ed would probably answer, "We call that a tree." Let us take a closer look at the mechanics necessary to arrive at that answer.

First of all, the object we call a tree was reflecting a great amount of light. Some of this light struck Ed's body, with little or no effect. However, two small dark spots on Ed's body, with the total area of about .05 square inches permit the light to enter Ed's body. We call the dark spots the pupils of his eye.

The light arrives at about 186,000 miles per second (that's fast) and as it passes through the pupil, lens, and the liquids in the eye, it slows down a bit. It then strikes the central part of the retina in the rear of the eye and stimulates certain nerves. The nerves transmit the results of this stimulation to the brain at about 255 miles per hour. While this speed does not approach the speed of light, the short distance of the transmission makes it almost instantaneous.

The eye can process far more information than the brain can utilize in a given time. The brain must decide what information it will use. We call this *abstracting*. Perhaps we can liken it to our daily morning routine. We need a pair of socks. We open the sock drawer and root around until we find a matching pair, then ignore the rest. The brain does a similar thing by checking the database in Ed's head for things that correspond to the information it is receiving. (Size, color, shape, etc.) After ignoring most of the information, or even discarding it, the brain creates an image. But the process must continue. The image is now subjected to another database search. This time the brain looks for a label that matches the image. When the label is applied to the image we call this the verbal level.

To avoid confusion, we call the formation of the image the 'silent level' or 'non-verbal level.' When Ed applies a label or name to the image, we call this the 'verbal level', even though Ed has yet to speak to anyone but himself. Ed can communicate this label or name by speaking, writing, or even drawing a picture.

Now if Ed had never seen a tree, his first viewing of it might have caused some confusion as his brain started looking for matching data. Since he also had no label, he might resort to describing the object as some big green thing. Perhaps you have had the experience of seeing something completely unusual for the first time and found yourself unable to make heads or tails out of the object. Now you know why. No matching data in the databank leads to initial confusion.

Let us return to Ed and his tree. He has supplied his questioner the answer, “We call this a tree.” Now suppose another question is posed. “What kind of a tree is it?” Ed might look at the tree again, see the shape of the leaves, and answer, “We call this a maple tree.” Now comes an interesting part of abstracting. The second time Ed viewed the tree, approximately the same amount of information reached his eye as the first viewing. His brain had not originally noted the shape of the leaves and had only abstracted the color and shape of the object, and matched it to the label ‘tree’. When the second question was posed, Ed could not locate the originally ignored information regarding the leaf shape in his original silent image. He had to look again to create a new silent image from which he abstracted the shape of the leaf. He then matched that to his database of tree leaves and concluded as appropriate the label ‘maple’.

Note this important bit of information. If Ed lived among Vermont maples, and you lived among Alaskan evergreens, the image in your database for tree could widely differ from Ed’s image. What you see combines the signal from the object, your previous experience, and your brain’s action. Your tree can only resemble other people’s trees, not duplicate them. Please keep this limitation in mind when you are tempted to argue with someone about what they saw.

MEET ED, PART B.

Let's try another example of the *abstracting process*. You and Ed go to a restaurant to have soup and salad. Ed takes a spoonful of soup, makes a sour face, and says, "This soup is too salty." (Ed obviously missed the lessons on 'is') A more accurate statement might have sounded like, "This soup contains too much salt for my taste."

What happened here? The soup touched Ed's tongue and stimulated the nerve endings. The message went to his brain where the flavor was matched to flavors in Ed's database. Ed's database contained a reference to what Ed considered properly salted. When Ed compared a dominant taste of this soup, which he abstracted from the others, and matched it to *his* definition of suitably salted, it came out too strong. Ed first silently experienced this data base match (the sour face), then verbalized it to himself, then finally spoke to you.

You utilized a similar process and determined that the soup met your criteria for proper salt content. Should we consider one of you correct, and the other wrong? No. We are all entitled to our own abstractions and evaluations, as long as they reflect the real world, and are communicated in language upon which we agree. We should remember not to try to force our evaluations on others as though they were authentic. If Ed had looked at the thing we call a tree, and argued that it should be called an elephant, we might say that Ed has a problem

Just because we can verbally separate words like 'observer' and 'observed' does not mean that we can do it in the real world. The information we receive from the process called observation inexorably remains the product of the observer-observed. Whichever of our five senses supplies us with the relevant information, the stimulus must be processed in the manner described above. We cannot remove 'you' from your observations. Consider this when you prepare to argue with someone else who just observed the "same" object or event as you did. He observed his tree while you observed yours.