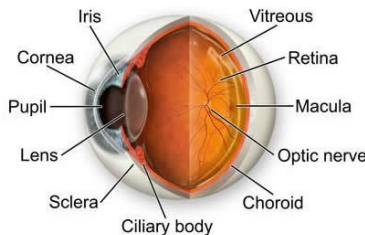


## The Science Behind Eyes: Making Eye Contact

Whether we realize it or not, the fact is that our human eyes are very unique in the animal kingdom. The ancient Greeks explained our eyes to be portals into our souls, not just being the means for which we can see out into the world. To better understand the significance of our eyes in our methods of communication one must first ask the right questions.

Firstly, how much do we communicate by shaping and moving our eyes alone? Scientists in German conducted experiments in which 4 distinct poses were made in direct contact with two test groups; Large Apes (Gorillas, Bonobos, and Chimpanzees) and Human infants. The human subject would sit directly across from the infant or large ape and create the following poses using only changes in head and eye position:

- Closed his eyes, but tilted his head up toward the ceiling
- Kept head stationary while looking at the ceiling
- Looked at the ceiling with both head and eyes
- Kept head stationary while looking straight ahead



Once these test trials had been conducted, some interesting results were obtained. When looking at the large ape results, the apes would look at the ceiling primarily when the head was tilted upward, regardless of eye movement. This was sharply contrasted by the fact that the infants primarily following the movement of the eyes. After further research and experimentations, some justifications for these findings were created. The human eye lacks a certain pigment that is found in the eyes of large apes, primarily in the sclera of the eye. This pigment is what causes a dark brown consistency in the eyes of apes where usually the white part would be in our eyes (sclera). The lack of contrast between the ape iris and sclera makes it difficult to track where their eyes are pointing. Human eyes have very vibrantly colored irises and very white sclera's, making it quite easy to track the directional movement of the eye. Infants also seem to be dependent on eye movement readings to read the emotions and expressions of their parents or caregivers. This technique continues to follow us, but less in magnitude, when we enter the later stages of our lives.

Whenever you hear that making eye contact is important during an interview or your first date, it is indeed a valid piece of advice. Consider how often you look at an individual's eyes when you subconsciously try to gauge their emotions or their attitude. Consider what sorts of messages

you get from someone when they look down at the floor during a conversation or if they look intensely into your eyes during an argument. A wide variety of studies continue to determine how significant our eyes are, even in the most mundane forms of our communication. These studies even play a role in software industries that design the emoticons that we use so often in our digital messaging.



Notice that these faces all employ very simplified facial features to convey very powerful and distinct messages. Even with these generalizations, slight variations in eye and mouth combinations were able to create the 20 distinct emoticons above.

#### Resources

- Why Eyes are so Alluring  
<http://www.livescience.com/4299-eyes-alluring.html>
- Reading the Mind in the Eyes (activity)  
<http://glennrowe.net/baroncohen/faces/eyetest.aspx>
- Test Your Social Intelligence  
<http://kgajos.eecs.harvard.edu/mite/>