**FRENCH DROP COIN ILLUSION**

**Station Script**

Description of the Illusion

The magician holds a shiny coin in his left and makes it seem to disappear until he pulls it out of the subject’s right ear.

The “method” to the illusion is:

1. Hold the coin between the “pointer” and middle fingers of the left hand while rotating the coin with the “index” finger of the same hand. This causes the subject to focus on the coin.
2. Drop the coin into the left palm where the coin is “cupped,” thereby securing it in the palm of the left hand.
3. At same time, the magician brings his index finger and thumb on the right hand over the coin pretending to grasp it.
4. Subsequent movement of the magician’s right hand toward the subject re-directs the subject’s attention to the magician’s right hand.
5. Rotate the left hand so its palm is facing the ground to convince the subject the coin cannot be held in the left hand. If it were in the hand, it would fall to the ground.
6. Grind the fingers of the right hand and blow the coin away.
7. Open the right hand showing there is no coin in the hand.
8. Use the left hand to pull the coin out of the subject’s ear.

What Is Happening

Neuroscientists refer to this illusion as a classic “**Bottom-up” illusion**. The subject’s **lower level**, external **senses** send **false information** to fool the brain. The lower level “sight sensory system” sends signals to the brain redirecting the subject’s attention to a different location than where the illusion “**method**” is being carried out. In this illusion, the magician directs the fovea centralis which in turn, redirects the subject’s attention.

Directing the Fovea:

The **fovea** **centralis** is a small pit in the retina of the back of each eye composed of **densely packed cone cells**. Cones are the cells that **sense color** in the eye and, because they are densely packed in this pit, **vision** from this area is much **more detailed**. If one were to straighten one’s arm and look at the thumb nail, the area of the thumb nail approximates the area of high contrast, colored vision. All other areas of the vision field for the eye see less detail and sense only black and white colors.

Since the fovea centralis provides much more detailed information to the brain, the **brain attends** to its information **more** than to the signals coming from the rest of the cells in the outer regions of the retina. The act of twisting the coin **attracts the brain’s attention** to location of the coin.

Attention Direction:

When the magician’s right hand moves between the subject’s eyes and the coin and, subsequently, moves toward the eyes of the subject; the **attention** of the subject is **moved** from the left hand, which actually holds the coin, to the right hand because it is moving toward the eyes. While the subject’s attention is focused on the right hand, the magician’s left hand rotates so the palm is pointed toward the ground. When the left and is rotated such that the palm is facing downward, the brain believes the hand cannot contain the coin because, in the brain’s prior experience, the coin would fall to the ground. Thus, the **brain interprets the right hand** as holding the coin.

When the magician blows on the right hand and grinds the fingers together signaling grinding the coin into thin air, the brain interprets the action as the coin magically disappearing.

Then, the coin reappears when the magician pulls it out of the subject’s ear.

In summary, moving the fovea centralis toward the coin, combined with the magician’s right hand moving toward the subject’s eyes, causes the subject’s **attention to be directed away** from the left hand which is still holding the coin.