

S216

Disappearing Body

きえるからだ

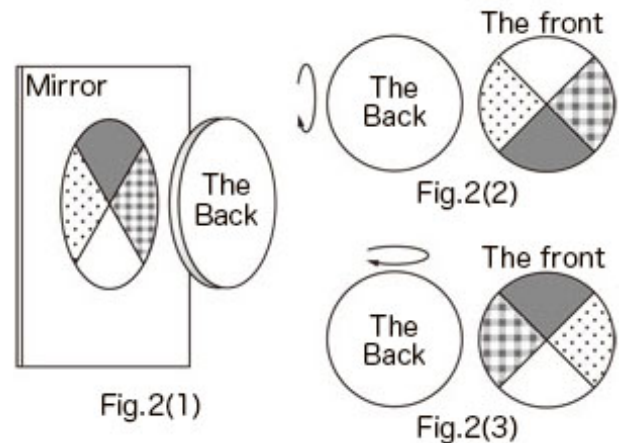
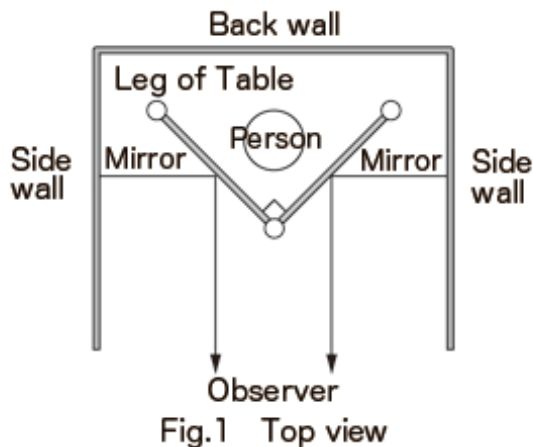
■ Purpose of Exhibition

In the box on the table, you can see your friend without his/her torso and only his/her neck is floating. Seeing that your friend is smiling, he/she seems fine, but what in the world is going on? It is always important to think "why?" on your own and try to reveal this magic trick before reading the article below. Here is a hint, "Mirrors".

Additionally, this exhibit was presented under the name of "Vanished Body" in the old Science and Technology Building.



■ Additional Knowledge



[Revelation of the Magic Trick]

Although it seems like there is nothing under the table, as shown in figure 1, two mirrors are placed between the legs of the table. The audience thinks they are looking at the mirrors behind the table, but actually they are looking at the side wall which is reflected in the mirror. In fact, there is nothing under the table and it looks like our torso is gone. When light reflects, considering that angle of incidence equals angle of reflection, a mirror is arranged properly.

[Why is the figure reflected in the mirror reversed right and left, but not up and down?] The figure reflected in the mirror is either reversed right and left, but not up and down, or reversed up and down, but not reversed right and left. Namely, there is a case in which they reverse up and down.

For example, consider that the circle colored in 4 different colors is reflected in the mirror. (Figure 2)(1) You are looking at the back of the circle. Turn the front side over here.

(2) Turn the circle over as shown in (2), and compare it with the figure in the mirror. It is "reversed up and down, but not right and left." (3) When turning the disk over as seen in (3), it is "reversed right and left, but not up and down." It is due to a psychological trick for you to think that the figure in the mirror is reversed right and left. When comparing ourselves with the figure in the mirror, we are with (3). But try to think flexibly and go

ahead with (2).

Article by Keiko Ishida, curator