

## The search for the color

There is the absolute definition of the blackness in the color black. It is the one that what does not reflect the light is blacker. We see colors by perceiving the reflective light from things. We distinguish colors by the volume or wavelength of it. Brightness depends on the volume of the light and color, for example red or blue, depends on the wavelength. So if we see two red colors of the same wavelength, that of highlight intensity seems more whitish and that of low-light intensity seems darker.

Here we imagine the color like the reddest "red" or the bluest "blue". We can expect these colors as those that have the wavelength of red or blue and have the decent light intensity. In fact, we cannot define clearly the reddest "red" or the bluest "blue" because our perceptions are different among each other. In the case of the color black, however, we can define the blackest "black" as *the color that does not reflect any light*, for what does not reflect the light seems blacker. *The color that does not reflect any light* is just the theoretical one, but it is clear that the closer to this definition, the blacker. So the black is supposed to be the stoic color that we are allowed to search for.

The history of black-montsuki is that of the search for the blackness. In Japan, black-montsukis have been said to be the symbol of the *nobility*. We have to perform bottoming again and again to create the depth of black color, so the black oxide finish needs plenty of dye, and then it becomes very expensive. In past technique, the clothing fabric becomes very rough and tough by the series of bottoming, so it is said that the cloth made of the black oxide finish would not be cut with a sword. But it was very difficult to tincture clothing fabric "black". If we lay "black" clothing side-by-side, the darker one seems blacker and the subtler one seems grayer, so it has been considered the blacker montsuki is, the higher its quality is. Thus the competition of the blackness has upgraded the Japanese black oxide finish to the highest level in the world.

