

Special Eyes

by Chiara Epifanio



Photo: Biodiversitätsmuseum, Georg August University, Göttingen.

What do you think when you look in those eyes? Despite that they are beautiful you are maybe wondering about their different colours and whether this could be real or just a peculiarity of a funny taxidermist back in the 19th century. Normally we know this phenomenon from dogs, cats, horses or rarely also humans but did you ever hear of a monkey with an asymmetric eye colour? Yeah, me neither.



Photo: Biodiversitätsmuseum, Georg August University, Göttingen.

These eyes belong to Tokuni (Japanese for “special”), a female Japanese macaque, also called *Macaca fuscata* which is shown as a specimen in the museum of biodiversity in Göttingen. She was adopted from the

Zoologischer Garten in Hamburg in 1893. Sadly, there are no further information about when or by whom she was prepared and how she got to Germany in the first place. Because as the name suggests the Japanese macaque is only abundant in Japan (endemic species) and it is not clear if Tokuni came to Germany alive, spend some time in a Zoo before she died and was then chosen to become a specimen. Or if she was maybe already prepared in Japan and was then transferred here as an enrichment of a zoological collection.

We will probably never solve the riddle of her origin but at least the question of her eye colour can be answered with high certainty. In 2006 two Japanese scientists did a study on Japanese macaques to see which eye colours are occurring and if they are distributed in a specific way¹. The results present that there are eye colours from orange to blue and that young macaques often have blue eyes while adults more often have orange ones. They investigated almost 2000 individuals and in one specific case a male macaque had one blue and one orange eye, just like Tokuni! Even though the evidence for asymmetric eye colours in *Macaca fuscata* exists we cannot be 100% sure that our female was carrying this special feature and that the taxidermist who lived long

¹ Peng Zhang and Kunio Watanabe, Preliminary study on eye colour in Japanese macaques

(*Macaca fuscata*) in their natural habitat, *Primates* (2007) 48:122–129

before this study, knew about that it was possible.

However, if we assume that he/she took his/her job seriously and did not just pick the glass eyes randomly then it is likely that either Tokuni herself had the asymmetric eye colour or that this was a commonly known fact and the taxidermist wanted to show it to the public by changing the original colour of her eyes.

Either way, the museum is very happy to have Tokuni as a part of their collection and if you want to learn more about her species in general and the fact that Japanese macaques are enjoying a hot bath in winter just like humans (sometimes even together), then you definitely should visit the exhibition in Göttingen and find out!