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# Towards a cultural history of the Bengalese Finch (Lonchura domestica)

## Zur Kulturgeschichte des Japanischen Mövchens (Lonchura domestica)

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### Abstract

The Bengalese finch, *Lonchura domestica*, first appeared in European zoos (London, Antwerp, The Hague) in the 1860s and it soon after became popular in the bird trade and among hobby aviculturalists. The species had been bred for many years in Japan before it was imported to Europe. Many theories about its background prevail in the handbooks. Although it was clear from the beginning that it was a purely domestic bird, its origin remained a mystery. Some authors maintain the view that it is a hybrid between various *Lonchura* species. However, new research has shown that the Bengalese finch is a domestic form of the Whiterumped Munia, *Lonchura striata* (Linnaeus, 1766), but if it was actually domesticated in China or Japan cannot be determined without further investigation.

Keywords: Bengalese finch (Lonchura domestica); Aviculture; Cage birds; Domestication; Ethnobiology; Zoohistory

### Introduction

In the early 1960s, while still a child, I bought my first cage birds. We had only one small pet store with a very limited selection in my hometown. The owner suggested that I start with Bengalese finches, *Lonchura domestica*. They were attractive birds, easy to care for and they bred without trouble. My Bengalese became the beginning of several years of hobby aviculture. At that time very few handbooks about cage

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birds were available in the local bookstore and the only one I got hold of was a somewhat dated book by Swedish ornithologist Rudolf Söderberg. The information about the Bengalese finch was brief, and according to the book the species was a cultural product from East Asia originating from various kinds of Mannakins. The author obviously regarded the finch as a hybrid between several species (Söderberg 1957).

When I many years later wrote a small book about the cultural history of cage birds and other pets in Sweden, I was surprised that so little information was available internationally about the domestication history of the Bengalese finch (Svanberg, 2001b). Many handbooks still regarded it as a hybrid originating from China, which once was imported to Japan, and from there exported to Europe. Since then I have been looking for more information about the domestication history of this small, and still common and delightful, cage bird. This ethnobiological survey is an attempt to put together what is known about the background of the Bengalese finch within aviculture.

The Bengalese finch is indeed very popular among bird fanciers. It is nowadays kept all over the world. According to information from 1998, around 25,000 Bengalese finches were produced annually by members of a German bird association (Wriedt, 2001). The world figure is of course much higher. Many colour varieties (including white, chocolate, chestnut, fawn, grey, pearl, pied, dilute, tricolour, and clearwing) exist; also various crested forms are known (Oppenborn, 1992; Robson, 2007). It is a very prolific breeder, easy to maintain and its biology in captivity has been studied in detail. Newer research deals with ethology, song-pattern, heredity and neurobiology (Eisner, 1960; Okanoya, 1997; Honda & Okanoya 1999; Wriedt, 2001; Mizuta et al. 2003; Okanoya, 2004; Soma, 2007). The Bengalese finch is from many points of view nowadays a well-known bird, but its origin remains a mystery.

## History within European Aviculture

Although song and ornamental birds have been kept in cages and aviaries since Antiquity, it was not until the Renaissance that the canary bird, *Serinus canaria* (Linnaeus, 1758), became domesticated in Europe (Stresemann, 1951; Birkhead et al. 2004). This was the first and for a long time only domesticated bird among smaller cage birds in Europe. Most birds in the market were still usually locally available wild captured species. Due to the colonial expansion the following centuries, more and more exotic bird species became common in the European bird trade. In the eighteenth century various exotic finches became available (cf. Albin, 1740; Bechstein, 1795; Robbins, 2002; Svanberg, 2007a). According to one survey, not less than 72 non-European bird species were offered in the bird trade in Central Europe in 1794 (Bezzel & Prinzinger, 1990).

During the nineteenth century aviculture developed quickly in Europe. With better communications due to steamships and railways, but also through increasing demands due to new tastes and fashions of the time, birds from all continents became common on the market. Pet stores were established all over Europe during the second half of the century (Brehm, 1872; Wiese, 1896; Svanberg, 2008a). In 1870, around 230 species were mentioned in the Central European bird trade; in 1920, lists of 1,450 species of

interest for private aviculturalists were compiled (Bezzel & Prinzinger, 1990). Our knowledge about the history of aviculture in Europe is still very inadequate, and when it comes to non-European areas only minor details are known (Erkes, 1942; Thiede & Thiede, 1974; Layton, 1991; Birkhead & van Balen 2005; Jepson & Ladle 2005; Svanberg, 2001a; 2001b; 2001c; 2007a; 2007b; 2008a; 2008b).

Japan was for a long time a very secluded society. During the Tokugawa Shogunate from 1603 the country adopted a policy of isolationism and had very limited relations with the outside world, including China. However, when it was forced to open up for the surrounding world after the Convention of Kanagawa in 1854, many foreigners visited and a lot of Japanese trade products soon became popular in Europe and North America. Among many amazing things, the foreign traders also found a white domestic bird, which was brought to Europe.

The earliest importers of Bengalese finches to Europe were zoological gardens. According to August F. Wiener two specimens of the white Bengalese finches were purchased by the Zoological Society in London in October, 1860. These birds kept by the London Zoo are the first known specimens of the species in Europe. However, they soon became common in the bird trade. Mr. Wiener himself purchased the first white Bengalese finches from a London dealer in 1869 or 1870, "the first bird of the kind I had seen" (Blakston, Swaysland & Wiener 1877-80). "I had a pair of white birds [...], kindly sent to me by Mr. Hawkins on their first introduction into this country," writes C.E. Dyson in 1878 (Dyson, 1878). Another early aviculturalist who had some years of experience of the Bengalese finch was obviously Charles William Gedney. He claims to have imported the birds himself from Japan (Gedney, 1879). In Antwerp around the same time, Jacques Vekemans (b. 1815, d. 1888) was an enthusiastic pioneer in breeding and keeping many cage birds, including budgerigars. He was a director at the local zoological gardens from 1865 until 1888. Vekemans received some Bengalese finches in a shipment of African estrilds in the 1860s. In 1871, a number of white and variegated Bengalis were offered on the market by the zoo in Antwerp. Also zoological gardens in the Netherland kept the new species in the 1880s. A few years later, thousands of the Bengalese finch were bred annually in Europe (Greene, 1899; Russ, 1872).

The first birds known in Europe seem to have been completely white. However, soon also variegated Bengalis were available. Three colour varieties seem to have been found: the pure white, the fawn pied with white background and the chocolate brown pied with white background (Dyson, 1878; Björkman, 1902; Neunzig, 1921; Wetmore, 1938; Soderberg, 1956). They soon became popular all over Europe and North America, not only because they were easy to breed and care for, but also because they could be used as fostering birds for more difficult breeding species, such as the Lady Gouldian finch (*Erythrura gouldiae* (Gould, 1844)) and other species (Randall, 1996:83; Anonymous 2007).

### Naming

The Japanese name for this bird is jūshimatsu. The name itself seems to be from Chinese language meaning 'in group'. However, the traders in England, for

unknown reasons, obviously associated the bird with Bengal in eastern South Asia. The name was probably given to them because the bird retailers, not aware about their origin, got them from ships that arrived from India. However, the bird has no connection what so ever with Bengal (Ellis, 1984). Another explanation is that in the early days "Bengali" was used indiscriminately for many exotic finches that appeared in the bird trade (Eisner, 1957). According to August F. Wiener, the English dealers called it White Bengalese, and in French a similar name was used, Bengali blancs. Wiener prefered the name pied mannikin (Blakston et al. 1877-1880). In North America, it was sometimes called Bengalese, but it was in the 1880s commonly known as Japanese Nun, according to George H. Holden (Holden, 1888). Nowadays it is commonly called Society finch in the United States, a rather recent probably post-World War II name. Alternative names are Bengalese mannikin, Bengalese finch or just Bengalee in English. Oddly enough, hardly any dictionaries have documented the names of this bird taxon. However, Webster's New International Dictionary has Bengalee as an entry for "any of several small tropical songbirds commonly kept as cage birds" (Webster, 1961). While English-speaking aviculturalists never recognized its Japanese origin in the naming, their German collegues did. The famous German aviculturalist Karl Russ (b. 1833, d. 1899), who bought his first specimens in 1871, baptized this newcomer on the bird market to Japanesisches Möychen (Russ, 1872). The name is obscure. The reason behind the name (diminutive of Möwe 'Gull') is probably not that the small and lively pure white birds reminded him of small gulls. More likely is that it was created as a kind of opposite name to Chinesesisches Mövchen – a pigeon breed imported from France. The name for this breed was probably invented by the French pigeon dealer Mr. Destriveaux. In 1865 Mr. Destriveaux sent Chinesesische Mövchen to a breeder in Germany. It is also mentioned in the first issues of Gefiederte Welt 1872. This pigeon breed, known as Chinese owl in English, has nothing to do with China, but probably originates in Spain. It can be traced back to around 1850. The various kinds of pigeons belonging to the Mövchen group are said to originally have been similar to herring gulls (Larus argentatus Pontoppidan, 1763), German Silbermöwe (cf. Marks, 1983). Maybe the original Bengalese finches that were imported from Japan in their shape and coloration reminded Russ of these kinds of pigeons.

Karl Russ' German name for the Bengalese finch, nowadays usually spelled Japanische Mövchen, has been translated into several languages, i.e. Japanse meeuw in Dutch and mewka japońska in Polish. Scandinavian bird retailers got their birds from German traders and followed the naming pattern used there. It was translated into Mågefinke in Danish (Wiese, 1894) and måsfink in Swedish (Adlersparre, 1917; 1919). Its geographical background as indicated in the German determiner was seldom mentioned. The Swedish name japansk bronsfink, suggested by L.E. Björkman in the beginning of last century, never became accepted in the cage bird business (Björkman 1902). In French it is commonly called Moineau du Japon or Domino. Other French names used within aviculture are Muscade Blanche, Societé, Pinson société, and Bengali.

## Theories about its background

Many handbooks and webpages still maintain that the origin of the Bengalese finch is obscure, because it does not occur in the wild. It is a purely domestic bird, which arrived in Europe from Japan in the 1860s. Domestication is here defined as a process of hereditary reorganization of wild taxa into forms more accommodating to the interests of people. Obviously very few facts for a historiography are available, and several anecdotes and non-corroborated stories are flourishing.

Some writers believed that the Bengalese finch was a result of crossbreeding done in China centuries ago; others have tried to trace it back to one of the many Mannikin species found in East Asia. The finch is actually easy to cross with related *Lonchura* species which results in fertile hybrids (Gray, 1958; Oppenborn, 1992; McCarthy, 2006). According to Karl Russ the Bengalese finch is a domestic form of Sharp-tailed finch, *Lonchura acuticauda* (Hodgson, 1836); Mr. Wiener viewed it as a domestic variety of White-rumped munia, *Lonchura striata* (Linnaeus, 1766). Both these authors were convinced that the Bengalese finch originated from one species (Russ, 1875; Blakston et al. 1877–80). These two *Lonchura* species are by the way nowadays considered as being the same taxon (Restall, 1996).

However, a Mr. Joseph Abrahams, an experienced breeder of the Bengalese finch at the end of the century, who is also known to have bred the first yellow budgerigar, launched a third theory. Mr. Abrahams based his notion on morphological features, and was convinced that the Bengalese finch was a cross between the White-rumped Munia *Lonchura striata* and the Indian Silverbill, *Lonchura malabarica* (Linnaeus, 1758). British author and finch specialist Arthur Gardiner Butler (b. 1844 d. 1925) – who had got his first Bengalese finches from the renowned banker and bird fancier Walter Rothschild (b. 1868, d. 1937) – agreed because of Mr. Abrahams' impressive experience of the species in captivity. It is thanks to Butler that Mr. Abrahams' theory about hybridization became introduced into the cage bird literature (Butler, 1899). His theory became an accepted truth among many aviculturalists. The view that it is a "cultural product" of many *Lonchura*-species is still maintained in many handbooks (Wetmore 1938; Robiller 2003). Hybridization during the domestication process has been suggested for many domestic species, while recent genetic studies have shown that this is not so common (Birkhead, 2003; Gentry et al. 2004).

## East Asian origin

Even though it seems to be a generally accepted view that the Bengalese finch was first domesticated in China, almost no information is available to prove this view (Eisner, 1960; Oppenborn, 1992; Wriedt, 2001). It is true that especially song birds (although some have also been used by fortune-tellers) have been popular for centuries in China (Pereira, 1935; Erkes, 1942; Wetmore, 1938; Layton 1991; Svanberg, 2001b). We also know that the Chinese traded cage birds, including Yellow-crested Cockatoos, *Cacatua sulphurea* J. F. Gmelin, 1788, imported from Southeast Asia, with Europan

merchant ships coming to Canton in the mid-eighteenth century (Torén, 1757; Svanberg, 2007a).

While the Chinese always have taken great pleasure in keeping birds, they have prefered song-birds, such as White-eyes, Bulbuls and Timalias, which were captured in the wild, not bred. It is therefore strange that they should have been interested in the forefathers of the Bengalese finch, which are insignificant singers. Many writers, without giving any sources, maintain that the Bengalese finch can be traced back to the Tang Dynasty or even earlier, thus making it the oldest domestic cage bird known (cf. Sossinka, 1982). As far as I know no Chinese sources that can prove this background are revealed. The Chinese certainly domesticated pet animals, such as the gold fish (*Carassius auratus* (Linnaeus, 1758)), throughout history and they have for a long period of time been keeping song-birds in cages, but we have no information available about this bird's ancestry in Chinese culture. The information goes back to Japanese sources, which state that the Bengalese finch was imported from China in the early eighteenth century (Taka-Tsukasa, 1922).

Our knowledge about the history of Japanese aviculture is scarce. Newer Japanese encyclopedias that I have consulted give no information and I am not aware of any book on the issue published in Japan. A recent overview about introduced exotic birds in Japan originating from the bird trade, unfortunately, gives no details about the history of aviculture in the country (Eguchi & Amano, 2004). Our basic source is still Prince Nobusuke Takatsukasa's (b. 1889, d. 1959) essay about the history of Japanese aviculture, published in 1922. He published several books about cage birds in Japanese, such as *Kaidori* 'Cage birds' (1917, several editions) and *Kaidori shûsei* 'Collected works on cage birds' (1930).

Prince Nobusuke Takatsukasa claims – refering to an old unidentified Japanese cage bird book – that the first Bengalese finches were imported to Japan from China in the early eighteenth century, despite the isolationist policy at that time. Private Chinese merchants could, like the Dutch, do some trading through the Dejima Island in Nagasaki harbour. Some Chinese ships brought living birds to Japan (Isono, 2007). Japan remained very closed during the eighteenth century, but we actually have evidence that also Europeans tried to trade exotic birds with Japanese buyers. Carl Peter Thunberg mentions a story about an attempt to smuggle a parrot into the tightly controlled country (Thunberg 1791). According to two newer publications, there are records of *Jūshimatsu* arriving from China in 1717, 1762 and 1816 (Kajishima, 2002; Isono 2007). In Japan, the Bengalese finch became subject to further domestication and several colour variations developed (Taka-Tsukasa, 1922). There is a record of a Dutch ship that brought Bengalese finches back from Japan as early as in 1833, but this can not be confirmed by any European source (Isono, 2007).

As already mentioned, the first Bengalese finches that came to Europe from Japan were white. I think the Japanese breeders actually gave priority to white birds – the colour of purity – and the pied or variegated ones were seen as bi-products (cf. Soma 2007). In fact, the Japanese were – in contrary to the Chinese – skilled breeders that had developed an expertise that defies our modern opinion about how to breed birds successfully. The Bengalese were bred by the Japanese in very small cages in large numbers (Blakston, Swaysland & Wiener, 1877–80).

Japanese bird fanciers also bred another domesticated bird in great number, that is the white Java sparrow, *Padda oryzivora* (Linnaeus, 1758). The wild variety of this species – the grey one with white-cheeked black head – was imported in large numbers to Europe from Southeast Asia already in the eighteenth century, and it remained one of the most common species in the trade until the mid-twentieth century (Robbins, 2002; Holden, 1888; Blakston et al. 1877–80; Wetmore, 1938).

The Japanese, however, have bred a white domesticated variety of the Java sparrow for centuries, especially in Nagoya (Taka-Tsukasa, 1922). It is also said to have been originally imported from China, but it has obviously been popular among the Japanese for a long time. The Japanese bred the white Java in large numbers (Holden, 1888; Neumann, 1921:386). It was kept "very much like a breeding machine" (Blakston et al. 1877–80). The white Java sparrow – who also produces grey offsprings – must be regarded as a true domesticated bird, but its history is still not very well known. As long as the wild captured grey birds were low in price, the domesticated birds continued to be rather uncommon in the European and North American trade. Nowadays, when imports from Southeast Asia have ceased, most grey Java birds – and other colour variations like agate, cinnamon and silver – among bird fanciers originate from the Japanese domesticated birds.

However, the Japanese did not only domesticate the Bengalese finch and the Java sparrow, but also Japanese quail, *Coturnix japonica* Temminck & Schlegel, 1849, and they have a long tradition of developing strange breeds of chickens, known for their plumage and unusual bright colours, such as the long-tailed *onagadori* (Takatsukasa, 1967; Wakasugi 1984; Svanberg 2001a). The Japanese breeders mastered the art of bird domestication. Aviculturalists in Japan were also skilled breeders and have continueed to be that. Already in the beginning of the twentieth century the Japanese bred Lady Gouldian Finches in large number (Taka-Tsukasa, 1922). I think the Bengalese finch is a product of these skilled breeders. China's role in the domestication of the species can of course not be ruled out without further investigations.

#### Newer Research

It is unclear if any genetic tests have been done to determine the exact origin of the Bengalese finch. However, its domestication history is probably not as old as is sometimes assumed. Japanese scholars, which recently have been studying various aspects of its biology, are of the opinion that it became domesticated in Japan in the mid-eighteenth century (Kakizawa & Watada 1985; Okanoya, 1997; Soma, 2007).

Although there has been over a century of speculation about its hybrid background, new research has shown that *Lonchura domestica* is a domestic strain of the White-rumped Munia, *Lonchura striata* (Restall, 1996; Honda & Okanaya, 1999). Eisner (1957), who compared a large number of skins of *L. striata* with Bengalese specimens produced in her research, concluded that the domestic bird must originate from one of the geographical subspecies of *L. striata*. She suggested the subspecies *Lonchura striata squamicollis* (Sharpe, 1890) = *L. s. swinhoei* (Cabanis, 1882) from

southeastern China as the ancestor of the Bengalese finch. There was, according to her, no reason to suppose any hybrid background. This view is also argued by newer research, and Robin Restall (1996) recently confirmed that the Bengalese finch is a domesticated form of the White-rumped Munia, "almost certainly" the Chinese subspecies *L. striata swinhoei* (Cabanis, 1882).

## Discussion

As far as we know the process of domestication of the *Lonchura domestica* has taken place primarily in Japan, and the Japanese breeders selected especially white birds, which were preferred for esthetic and cultural reasons. So they did also with the Java sparrow, which was domesticated too and bred in large number in Japan. Local bird keepers were very skilled and the birds were probably kept just as pets, not for instance as ritual release birds within Buddhist cult (cf. Agoramoorthy & Hsu, 2007; Svanberg, 2001a; Soma, 2007).

During the domestication process the species has been modified in many ways, especially as regards colouration and behaviour. Through centuries of selection first in Asia, and later in Europe and North America, it has – like the dog, horse, Barbary dove and canary bird – become a cultural product, entirely depending on humans. It is actually very well adapted to living with human beings. Due to their pleasant character in every sense and ease of care they are – in the same way as they were for me as a boy – still the ideal species to begin with for anyone interested in aviculture and cage birds. Japanese breeders actually still contribute with new breeds, e.g. the frilled Chiyoda, Bonten, Chuunagon, and Dainagon. Since the Bengalese finch is a recognisable entity, it could still be named *Lonchura domestica*.

In the last few decades a new bird has turned up especially in North America, called European society finch or Continental Bengalese, which in fact is a cross-breed between the Bengalese finch and various species of Munias and Mannikins. These new birds, which consequently are not "real" Bengalese finches, are the result of the efforts that began among some European aviculturalists forty to fifty years ago (Oppenborn, 1992; Oppenborn, 2006). These hybrid Society finches are sometimes said to be poor parents and often produce infertile eggs. Randall (1996:83) concludes that these modern breeders are attempting to turn the Bengalese "into the hybrid it never was". However, some breeders have managed to reproduce them for several decades now without any further hybridization. The approach to canaries is different. We do not regard red canaries as hybrids even though breeders in the past used the red siskin (*Carduelis cucullata*) for interbreeding with domesticated canaries in order to produce the varieties with red in the plumage.

## Zusammenfassung

Japanische Mövchen, *Lonchura domestica*, wurden zuerst in den 1860er Jahren in europäische Tiergärten (London, Antwerpen, Den Haag) eingeführt, aber bald erfreuten sie sich auch im europäischen Vogelhandel und bei privaten Haltern und Züchtern großer

Beliebtheit. Die Art war schon lange in Japan gezüchtet worden. In den Handbüchern kursieren verschiedene Theorien über den Hintergrund dieser Art. Zwar bestand nie ein Zweifel, dass es sich um Züchtungen handelte, aber ihr Ursprung blieb rätselhaft. Einige Autoren sahen in ihnen Hybriden verschiedener *Lonchura*-Arten. Andere waren der Meinung, dass sie aus einer einzelnen *Lonchura*-Art hergezüchtet wurden. Neuere Forschungen zeigen, dass das Japanische Mövchen eine domestizierte Form des Spitzschwanz-Bronzemännchen (*Lonchura striata*) ist. Wenn und wo es ursprünglich domestiziert wurde – in China oder Japan – lässt sich nicht ohne weitere Forschung bestimmen.

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