

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/78123> holds various files of this Leiden University dissertation.

Author: Gasso Miracle, M.E.

Title: Temminck's order : debates on zoological classification: 1800-1850

Issue Date: 2019-09-18

PART ONE

Birds, cabinets and museums

CHAPTER ONE

From catalogues to monographs

“They will not accept you, my appreciated Temminck, because you are not a scholar,” said Louis Napoleon to Temminck when he was denied admittance to the Koninklijk Instituut van Wetenschappen, Letteren en Schoone Kunsten.¹ That must have been a very bitter pill to swallow, however royal. After all, the Koninklijk Instituut did not have such limitations when it came to admitting new members. Good relations, a high social position and even family ties were good enough as credentials for some of its members.² Somehow, when the Koninklijk Instituut was founded in 1808, Temminck did not qualify as a member. Probably, politics, personal antipathies and hidden agendas were at play. Nonetheless, Temminck succeeded in the following decades in securing for himself both an influential—and remunerated—position as director of a national institute, as well as the respect of his fellow naturalists. He even managed, in 1836, to become a member of the Koninklijk Instituut. How did he do all this?

Between 1805 and 1820, Temminck did indeed play both his social status and his knowledge as trump cards to ensure that “not being a scholar” would never again be an obstacle. However, two more factors must be added if we are to understand Temminck’s career. The first is related to his understanding of a changing milieu. Temminck knew how to enhance his status in the changing political landscape of the Netherlands between 1795 and 1810 and he adapted accordingly. He understood that, if he wanted to pursue a career in natural history, he needed an official position and he worked relentlessly towards it.

The second factor of his success was the emergence of systematics as a subdiscipline within natural history. At the Dutch universities and academies the subject of *Natural*

¹ The Royal Netherlands Academy of Arts and Sciences. Susanna, “Levensschets van Temminck,” 74. The Koninklijk Instituut van Wetenschappen, Letterkunde en Schoone Kunsten, now the Koninklijke Nederlandse Akademie van Wetenschappen (KNAW) was founded in May 1808 by Louis Napoleon.

² Klaas van Berkel, *De stem van de wetenschap. Geschiedenis van de Koninklijke Nederlandse Akademie van Wetenschappen*, vol. 1 (Amsterdam: Bert Bakker, 2011), 124-25.

History included comparative anatomy, physiology, botany and geology, while systematics played a minor role, except at the University of Groningen. However, the material requirements of each field in the form of collections of stuffed animals, anatomical preparations, botanical gardens or herbaria differed widely, and this determined where and by whom each discipline could be practiced. As Temminck quickly specialized as a systematist, his work was inextricably linked to the fate of these collections, where he could examine external characters and make comparisons within groups of animals. These collections were not at the universities. Also, the breaking up of natural history into subdisciplines resulted in specialized practitioners, some of them in the academic world, others as independent amateurs, and a few in natural history museums. Temminck had to ensure a post outside the universities and academies. He thus intentionally paved his way into a professional career where he could thrive as a non-academic working with a large natural history collection. He played his cards well and let no opportunity slip away. His efforts culminated in the foundation of 's Rijks Museum van Natuurlijke Historie, with himself at the helm. This was as much the result of his own efforts as the consequence of specialization. To start with, taking on the tasks that the directorate of such an institution involved, would pose an impossible burden for university professors. But in addition to the enormous amounts of work and time it entailed, taking care of a natural history collection—let alone arranging it and expanding it—required very specific skills and knowledge that were not taught at the universities, but that were learned from hands-on experience which, incidentally, is still very much the case today.

Interestingly, once in charge of 's Rijks Museum Temminck surrounded himself with university-trained naturalists, most of them brilliant young men with a doctor's degree. He also continued to expand his international circle of correspondents and travellers. Yet, he was not admitted to the Koninklijk Instituut until 1836, after sixteen years as director of 's Rijks Museum, several honorary titles (including an honorary doctorate from the University of Groningen) and with an outstanding scientific reputation in Europe. The definition of *qualified naturalist* changed during the first half of the century and it varied between institutes, ranging from prolific amateurs to museum directors. Temminck made sure that, in the end, he would belong to the last category.

Exotic birds on cupboards and plates

The Temminck family had enjoyed a prominent status within patrician society for generations. Some of them had been important members of the Amsterdam and Amersfoort political elite, including, for example, Egbert de Vry Temminck (1700–1785),

mayor of Amsterdam between 1749 and 1784 and a director of the Vereenigde Oost-Indische Compagnie (VOC) and the West-Indische Compagnie (WIC). Others were wealthy merchants, dealing in luxury goods like Spanish wool. Coenraad J. Temminck's grandfather, Coenraad Temminck (1687–1762) was mayor of the city of Amersfoort and his brother, Matthias Temminck (1734–1814), practiced law in Amsterdam and was a director of the VOC.³ Through these ties with the VOC and the WIC, the family had occasionally been engaged in some kind of patronage of natural history. Egbert de Vry Temminck, for instance, who had an interest in botany and owned a private botanical garden in Haarlem,⁴ helped Carl Peter Thunberg to enroll as a surgeon on board of the VOC ship *Schoonzigt* in 1771 for botanical research in the Indies.⁵ Thunberg obtained letters of recommendation from De Vry Temminck, indispensable to enter the East Indies and Japan, areas strictly controlled by the VOC.⁶

Coenraad Jacob Temminck was born on March 31, 1778, son of Jacob Temminck (1748–1822), Amsterdam patrician and general-treasurer for the VOC, and of Aleida van Stamhorst (1751–1806). Through his contacts at the VOC and in Amsterdam, Jacob Temminck built one of the most renowned collections of natural history in the Netherlands. It included mainly birds, but also mammals, fossils, fish and several skeletons and even an aviary with living exotic birds, all situated at the family's home at the Heerengracht, in Amsterdam.⁷ The cabinet—and the visitors it attracted—played a decisive role in Coenraad's early life and, later, in defining his career.

It was all very fashionable and a sign of good taste and wealth. For example, the VOC governor Arnoldus Ameshoff also owned a huge aviary: his pride and joy were the exotic species of water birds brought to him from all corners of the globe. Coenraad remembered the extravaganza of a dinner party at the Ameshoff's manor house *Amstelrust*, where they enjoyed some of his exotic birds served for dinner: "I remember attending a dinner as a child at M. Ameshoff's, who, in order to display the

³ Johan Engelebert Elias, *De Vroedschap van Amsterdam, 1578–1795* (N. Israel, 1963), 785–89, 986. More information on the family can be found in Didericus Gijsbertus van Epen, ed. *Nederland's patriciaat 1868–1930*, vol. 5 ('s-Gravenhage: Centraal bureau voor genealogie en heraldiek, 1914).

⁴ Bert C. Sliggers, "Henry Hope's vermakelijke buitenleven en de Haarlemmerhout," in *Paviljoen Welgelegen 1789–1989. Van buitenplaats van de bankier Hope tot zetel van de provincie Noord-Holland*, ed. F. W. A. Beelaerts van Blokland (Haarlem: Schuyt & Co, 1989), 28.

⁵ Frederik J. L. van Dulm, '*Zonder eigen gewinne en glorie: mr. Iman Wilhelm Falck (1736–1785), gouverneur en directeur van Ceylon en onderhorigheden*' (Verloren, 2012), 307; L. C. Rookmaaker, *The Zoological Exploration of Southern Africa, 1650–1790* (Rotterdam: A. Balkema, 1989), 148.

⁶ Carl Peter Thunberg, *Reise durch einen Theil von Europa, Afrika und Asien, hauptsächlich in Japan, in den Jahren 1770 bis 1779*, 1 Auflage (Berlin: Haude und Spener, 1792), 68, 189.

⁷ Gijzen, " 's Rijks museum," 32; Pieter Smit, A. P. M. Sanders, and J. P. F. van der Veer, eds., *Hendrik Engel's Alphabetical List of Dutch Zoological Cabinets and Menageries*, 2 ed. (Amsterdam: Rodopi, 1986), 321.

magnificence of his menagerie, served at his table not only *Pauxis*, *Hoccos* and various species of exotic pheasants, but also mandarin ducks from China and wood ducks from Louisiana, a feast worthy of the time of Heliogabalus.”⁸



FIGURE 1.1. Portrait of Coenraad J. Temminck (1778–1858), by Jan Adam Kruseman, 1836.

The size and quality of the Temminck collection in Amsterdam attracted the attention of European naturalists. Many thought it worth travelling to Amsterdam just to study it. Naturalist and voyager Georg Forster praised not only the beauty and rarity of the specimens, but also the “inimitable perfection of the art of stuffing birds, attained

⁸ *Pauxi* and *Hocco* are two genera of curassows, limited to the Americas. Coenraad Jacob Temminck, “Histoire naturelle générale des gallinacés,” in *Histoire naturelle générale des pigeons et des gallinacés*, vol. 2 (Amsterdam: J. C. Sepp & fils, 1813), 458; see also Van Lynden-de Bruïne, *In vogelvlucht*, 13.

nowhere else.”⁹ Although none of the visitors nor Temminck himself mentioned who was actually responsible for mounting the specimens, the preservation skills needed for such a display are remarkable. Many specimens were used as models for the descriptions and illustrations of ornithology books, like Cornelis Nozeman and Christian Sepp’s *Nederlandse Vogelen*.¹⁰ The French explorer and naturalist François Levaillant, a friend of the family, also found models for his books among Jacob’s birds, and he asked the artists Lebrecht Reinold and Jacques Barraband to visit Amsterdam and make drawings from Temminck’s specimens.¹¹ The aviary was also worthy of praise. According to Levaillant, Jacob Temminck had managed not only to keep alive many exotic species of birds, but they also reproduced successfully in captivity.¹²

In 1790, Forster paid a visit to the Temmincks in Amsterdam and introduced Alexander von Humboldt to the Temminck family, as Humboldt himself fondly recalled in a letter to Temminck in 1857.¹³ Coenraad Jacob was only twelve years old when Forster and Humboldt visited in 1790. He grew up in a house where visitors, collections, books and dinners revolved around ornithology. It is easy to imagine how conversations about exotic animals, strange countries and undaunted travelers may have ignited young Coenraad Temminck’s fascination with natural history.

Very little is known about Coenraad Temminck’s education. As a child, Coenraad received private education at home. He had a French–Swiss tutor, whom Temminck remembered with disdain.¹⁴ There are no records of him attending school.¹⁵ At seventeen, Coenraad Jacob started to work as one of the three auctioneers of ships and merchandise for the VOC, a post no doubt arranged by his father to gain entry for young Coenraad into the VOC.¹⁶ However, in 1795 the VOC went bankrupt and the democratic Patriots

⁹ Georg Forster, *Ansichten vom Niederrhein, von Brabant, Flandern, Holland, England und Frankreich* (Leipzig: Reclam, 1905); translated in Stresemann, *Ornithology from Aristotle to the Present*, 111.

¹⁰ Cornelis Nozeman, Martinus Houttuyn, Christiaan Sepp et al., *Nederlandsche vogelen volgens hunne huishouding, aert en eigenschappen beschreeven. Door Cornelius Nozeman. Alle naer 't leeven geheel opnieuw en naeukeurig getekend, in 't koper gebragt, en natuurlijk gekoleurd door, en onder opzicht van, Christiaan Sepp*, 5 vols. (Amsterdam: Jan Christiaan Sepp, 1770–1829).

¹¹ For example, Barraband made several plates for Levaillant for his book on parrots (François Levaillant and Jacques Barraband, *Histoire naturelle des perroquets*, 2 vols. (Paris: Levrault, 1801–1805)).

¹² François Levaillant, *Second voyage de F. Levaillant dans l’intérieur de l’Afrique par le Cap de Bonne-Espérance, pendant les années 1783, 84 et 85* (Paris: H. J. Jansen et compagnie, [1795 or 1796]), 135.

¹³ Alexander von Humboldt to Coenraad Jacob Temminck, 29 March 1857, Naturalis Biodiversity Center Archives, Archive C. J. Temminck; Alexis J. P. Raat, “Alexander von Humboldt and Coenraad Jacob Temminck,” *Zoologische Bijdragen* 21, no. 1 (1976): 31.

¹⁴ Susanna, “Levensschets van Temminck,” 49.

¹⁵ *Gemeentelijke Archiefdienst Amsterdam* to Coenraad Jacob Temminck, 6 April 1798, Naturalis Biodiversity Center Archives, Archive C. J. Temminck.

¹⁶ Raat, “Coenraad Jacob Temminck,” 91; Van Lynden-de Bruïne, *In vogelvlucht*, 13.

(mostly members of bourgeoisie striving to democratize the country, opposed the rule of the stadtholder, William V Prince of Orange) took the lead. The Batavian Republic, proclaimed in January 1795—and in fact a client state of France or "sister-republic"—became the owner of the VOC. Three years after it was nationalized, the VOC ceased to exist. In April 1798, Temminck received a letter from the president of the Administrative Municipality of Amsterdam bluntly informing him that he was dismissed from his post in the VOC as auctioneer, together with many other "useless and unworthy local civil servants and clerks" who were to be replaced "by worthy and skillful patriots."¹⁷ Through a letter of objection, these civil servants, who apparently had quite an influence in the Republic, turned the discharge around and were reinstated in their posts a month later. Temminck kept this job until the beginning of April 1812, although it was now an honorary post.¹⁸

Around 1800 Coenraad Jacob was in charge of his father's collection, even though Jacob Temminck would live for another twenty years.¹⁹ From 1800 to 1806 the Temminck collection grew rapidly and the number of species doubled in just five years.²⁰ Coenraad took up the task of cataloguing the cabinet somewhere between 1800 and 1804. The title page of this handwritten list reads *Catalogue du Cabinet de C. J. Temminck*, indicating that by then, the collection had already passed from father to son. The first 450 species listed in the catalogue were already present in Temminck's father's collection, including some of Levaillant's specimens brought from southern Africa in 1784. The catalogue listed a total of 839 species.²¹ The manuscript catalogue of Temminck's collection followed Buffon's classification for the birds and Audubert's for

¹⁷ Administrative Municipality of Amsterdam to Temminck, 6 April 1798, Naturalis Biodiversity Center Archives, Archive C. J. Temminck.

¹⁸ Records of this episode are kept in the Naturalis Biodiversity Center Archives, Archive C. J. Temminck. See also Van Lynden-de Bruïne, *In vogelvlucht*, 14; Holthuis, *Rijksmuseum*, 19.

¹⁹ Van Lynden-de Bruïne, *In vogelvlucht*, 14.

²⁰ Erwin Stresemann, "Analyse von C. J. Temmincks 'Catalogue systématique' (1807)," *Zoologische Mededelingen* 31, no. 29 (1953): 320-22; Holthuis, *Rijksmuseum*, 19. C. J. Temminck married Dionysia C. Cau, and in 1806 they (and the cabinet) moved from the Herengracht to another house in the same canal, no. 401 (Van Lynden-de Bruïne, *In vogelvlucht*, 14).

²¹ A handwritten copy of the catalogue, in Coenraad's distinctive handwriting, is now kept in the archives of Naturalis. Justin Jansen dates this manuscript catalogue ca. 1803–1804, in "An Unpublished 'Catalogue du Cabinet de C. J. Temminck' (c. 1803–1804)," *Archives of Natural History* 44, no. 2 (2017). Jansen's dating is mainly based on Temminck's annotations on the margins, especially those that refer to Levaillant's works. However, these annotations may have been added to the manuscript while Temminck was preparing a new and revised version of the catalogue. Accompanying documents supporting this interpretation are kept at the Naturalis Biodiversity Center Archives. Furthermore, these margin annotations are too inconsistent to draw conclusions about dates. Sometimes the page numbers of Buffon's or Levaillant's books are given, while in other occasions, only the plates of that same work are noted down. In my opinion these notes therefore do not provide a reliable clock to date the manuscript.

the apes and lemurs (which are only introduced but not listed). Temminck actively pursued the acquisition of new species through purchase and exchange. With the decline and final dismantling of the VOC, he could not keep on adding specimens to his collection through his father's contacts within the VOC. Instead, Temminck contacted other collectors and naturalists. His excellent networking skills were to prove extremely useful. By the time his first publication appeared, in 1807, his name was already known in the world of collectors. An extensive and scientifically significant natural history cabinet was much more than an exuberant hobby and a source of information for naturalists. It was also considered a sign of culture and refinement. When Coenraad Jacob received the order of *Chévalier de la Légion d'Honneur* in 1802, at the age of twenty four, it may have been thanks to his cabinet. The order had been created that same year by consul Napoleon Bonaparte, and was meant to be—and still is—a recognition for civil and military merits, including excellence in a trade or a profession as well as having contributed to the welfare of others and the nation. A civilian may obtain such an honor if he has enhanced the reputation of the country by his work in the arts, the sciences or politics. As Temminck's cabinet ranked amongst the best in Europe, it is possible that the *Légion d'Honneur* was a recognition of his collection.²²

Coenraad Temminck played a more active role than his father in the production of Cornelis Nozeman and Christian Sepp's *Nederlandsche Vogelen*. After Nozeman died in 1789, before the publication of the second volume, Martinus Houttuyn took over the work. By an unfortunate coincidence, Houttuyn in turn died, before the publication of the third volume, in 1797. Then Christiaan Sepp and his son, Jan Christiaan, asked Temminck for help with the fourth volume. In this volume, published in 1809, father and son Sepp refer to the cabinet of "the honorable mr. C. J. Temminck," who had not only allowed them to depict specimens from his excellent collection, so well-known throughout Europe, but had also provided them with the most accurate ornithological observations.²³ While the fourth volume included many birds from Temminck's collection, in the last volume, which appeared in 1829, almost all plates were made from Temminck's birds.²⁴

²² Van Lynden-de Bruïne, *In vogelvlucht*, 16.

²³ Nozeman, Houttuyn, Sepp et al., *Nederlandsche vogelen volgens hunne huishouding*, vol. 4, 385.

²⁴ Nozeman, Houttuyn, Sepp et al., *Nederlandsche vogelen volgens hunne huishouding*, vol. 5, ii. The fifth volume followed Temminck's classification of birds as published in his *Manuel d'Ornithologie* (Coenraad Jacob Temminck, *Manuel d'ornithologie ou Tableau systématique des oiseaux qui se trouvent en Europe*, 1 ed. (Amsterdam: J. C. Sepp et fils, 1815).



FIGURE 1.2. Two specimens from Temminck's private collection, a scarlet macaw and a mandrill.

On April 3, 1804, Coenraad Temminck married Dionysia Catharina Cau (1779–1828), known as Caatje. She was as well-born as Coenraad. Her family was rich as well as influential, with ties with the political elite and the VOC. Her father, Iman Meijnard Cau (1755–1791), who had married the daughter of a VOC commander, was one of the forty eminent citizens, the *Veertigraad* of Delft, a group with the power to put forward names for the function of city mayor and similar offices. If the marriage had been arranged by the families, neither Caatje nor Temminck seemed to object. Caatje wrote in her journal on the day of their twentieth wedding anniversary: “I was up early and I remembered with joy the privilege of reliving today, once again, our wedding day.”²⁵ In the intimacy of her journals, she sometimes referred to her husband as “mijn lieve Temminck” (my dear Temminck).²⁶ Caatje moved to the *Heerengracht* to live with her husband and parents-in-law. In 1806 the couple—and the collection—moved to a smaller house in the same canal. Their new house was filled to the brim with stuffed birds and mammals.

²⁵ Van Lynden-de Bruïne, *In vogelvlucht*, 26.

²⁶ Van Lynden-de Bruïne, *In vogelvlucht*, 47.

Specimens were staled in the entrance, corridors and the attic, where visitors walked around admiring the cabinet, twice a week.²⁷

Coenraad Temminck has been portrayed as a quiet, reserved man, for whom propriety, order and precision were of the utmost importance.²⁸ He preferred work above entertainment, nature above theaters and hunting above eating. He “led a sober life and was uncommonly neat and exceedingly precise about his clothes and surroundings.”²⁹ Despite his patrician upbringing, Temminck disliked having a valet, who was not allowed to help him get dressed, not even when advanced age and illness kept him in his bed, when he always received visitors so well dressed as if he was ready to leave the house.³⁰ Temminck liked to keep his distance and had a curious way of suddenly interrupting a conversation to steer it towards a different subject.³¹ He was not quick to give his own view unless it really mattered to him, but when he did, he did so politely. When affronted, he did not hesitate in his replies. Intelligent and quick, Temminck could also be condescending, even sarcastic. Compliments and honors were received with relative indifference, but then again, he seemed to be a master in hiding whatever went on inside him and he never revealed any religious or political feelings.³²

Regarding his religious beliefs, Temminck was a Mennonite, or *Doopsgezinde*, member of a community that was considered in the Netherlands to be trustworthy and honorable, whose members mostly followed an austere life.³³ Indeed, as well as righteous, Temminck could be honest to a fault.³⁴ Even though Temminck seems to have been quite picky, his selected friends were friends for life, towards whom he acted generously and obligingly. His friends were always welcome to stay at his home, whether in Amsterdam or at his country house *Wildlust* in Lisse, for long periods of time. He always remained Spartan, but treated his guests as lavishly as if they were

²⁷ Witkamp, “Vier-en-twintig voorgangers,” 194.

²⁸ Vrolik, “Levensbericht van Coenraad Jacob Temminck,” 78. For descriptions of Temminck’s character, see also Susanna, “Levensschets van Temminck”; Snellen van Vollenhoven, “Coenraad Jacob Temminck.”

²⁹ Snellen van Vollenhoven, “Coenraad Jacob Temminck,” 7.

³⁰ Susanna, “Levensschets van Temminck,” 70.

³¹ Snellen van Vollenhoven, “Coenraad Jacob Temminck,” 7.

³² Susanna, “Levensschets van Temminck,” 70.

³³ There is a marginal note in a letter from Temminck to the Ministry of Home Affairs reading simply “Mennonite” (Coenraad Jacob Temminck to the Ministry of Home Affairs, 27 February 1819, National Archives of the Netherlands, The Hague, Binnenlandse Zaken, nummer toegang 2.04.01, inventarisnummer 4072). In this letter, Temminck requested to be excused from taking an oath—a guarantee for his honest dealing with the funds given to him to buy specimens for the Southern Universities. The minister agreed, and he was allowed to give a written affirmation instead.

³⁴ Holthuis, *Rijksmuseum*, 23.

attending a wedding.³⁵ Regarding his own family, the man portrayed in his wife's diaries was loving and caring. Caatje accompanied him everywhere, sharing with him hours of uncomfortable rides on Temminck's carriage during his tours around Europe, for months at a time. In return, Temminck made the sacrifice of attending concerts and soirées with her. The couple remained childless. Caatje died in November 1828, at fifty years of age. Two years later, Temminck married Catharina Nepveu (1785–1834), who sadly, died after four years of marriage. Temminck's third wife, Agneta Smissaert (1806–1865), was the daughter of a friend of Temminck, Marinus Smissaert, steward at the Royal Palace in Amsterdam. They had three sons between 1838 and 1841: Coenraad Jacob, Marinus and Willem Anne Temminck.³⁶

François Levaiillant and Bernhard Meyer

François Levaiillant was probably the most influential person in kindling the love of young Temminck for natural history. Levaiillant was a friend of the family and a frequent guest of Jacob Temminck. He had met Jacob Temminck around 1780 and was instantly most impressed with Temminck's collection, "an assembly of precious objects as I have never seen in France. Everything seemed to me extremely rare and exceptionally well preserved."³⁷

Temminck's father admired Levaiillant, so much so that he acted as Levaiillant's patron by helping him to get to South Africa in a VOC ship in 1780. He gave Levaiillant letters of introduction and sponsored the voyage. During the following three years, Levaiillant collected about two thousand specimens of birds, as well as mammals, insects, plants and Hottentot artifacts. Several specimens went to Jacob Temminck's collection.³⁸ During Levaiillant's voyages, Temminck kept in touch, mostly trying to steer Levaiillant towards interesting collecting sites, like Madagascar. He arranged for Levaiillant a passage on a VOC slave ship that was scheduled to make port in the Cape of Good Hope, where Levaiillant could embark. Levaiillant happily agreed at first, but after sensing the antipathy of the captain of the slave ship, who appeared to be very reluctant to take Levaiillant with him, he decided to leave the trip for another time.³⁹

³⁵ Susanna, "Levensschets van Temminck," 71.

³⁶ Van Lynden-de Bruïne, *In vogelvlucht*, 21.

³⁷ François Levaiillant, *Voyage de M. Le Vaillant dans l'intérieur de l'Afrique: par le Cap de Bonne-Espérance, dans les années 1780, 81, 82, 83, 84 & 85*, vol. 1 (Paris: Leroy, 1790), 1. See also Stresemann, *Ornithology from Aristotle to the Present*, 86, 111; Rookmaaker, *Zoological Exploration*, 259.

³⁸ Levaiillant, *Voyage de M. Le Vaillant*, vol. 1, 1-2, 28.

³⁹ Levaiillant, *Second voyage de F. Levaiillant dans l'intérieur de l'Afrique par le Cap de Bonne-Espérance, pendant les années 1783, 84 et 85*, 361.

After his return to France, Levaillant published an account of his first and second voyages in 1790 and 1795. The books were vivid descriptions that had immediate success and were translated into many languages, including Dutch. In 1799, the first ornithological work of Levaillant, the *Histoire Naturelle des Oiseaux d'Afrique*, appeared in Paris, dedicated to Jacob Temminck—and according to Stresemann, paid for by Temminck, as well.⁴⁰

Coenraad was between twelve and twenty-one years old when the fashionable books of Levaillant were published, written in a vibrant prose about many adventures and an exotic natural world, the kind of books that excited the imagination and aroused curiosity. Through the initial friendship with Jacob, Levaillant and Coenraad became friends as well. After the latter took over the care of the cabinet and started his own study of birds, Levaillant continued his gifts in the form of interesting specimens and valuable information, and he was allowed to illustrate birds from the Temminck cabinet in his works.⁴¹ As Temminck learned and progressed, Levaillant recognized his potential in 1806: “M. Temminck, although still young, is a remarkable man, different from all those collectors who, loving only brilliant and beautifully plumaged species, accumulate at great expense collection upon collection, without any taste for scientific study.”⁴² Initially at least, Levaillant adopted the role of mentor. Temminck wrote: “I owe to Levaillant and his writings my first thoughts and my first steps in natural history; his works and his advice served me as guides in the practical study of this science, and I am pleased to admit that, on his return from Africa, he laid the first foundations of a collection which, passing from father to son, is today the most beautiful ornament of the Museum of the Netherlands.”⁴³ In recognition, Temminck named two birds after him, *Indicator Levaillantii*, a honeyguide, and a species of snake bird, *Plotus Levaillantii*. Incidentally, in what might seem an absence of filial deference, Temminck made no other reference to his father nor his father’s cabinet in his scientific writings than this meager sentence.

⁴⁰ Stresemann, *Ornithology from Aristotle to the Present*, 88; Siegfried Huigen, *Knowledge and Colonialism: Eighteenth-century Travellers in South Africa* (Brill, 2009), 137-38.

⁴¹ Coenraad Jacob Temminck, “Histoire naturelle générale des gallinacés,” in *Histoire naturelle générale des pigeons et des gallinacés*, vol. 3, 640.

⁴² François Levaillant, *Histoire naturelle des oiseaux d'Afrique*, vol. 5 (Paris: J. J. Fuchs, 1806), 31.

⁴³ Coenraad Jacob Temminck and Guillaume Michel Jérôme Meiffren Laugier de Chartrouse, *Nouveau recueil de planches coloriées d'oiseaux: pour servir de suite et de complément aux planches enluminées de Buffon*, vol. 5 (Paris: F. G. Levrault, 1838). Livraison 64, pl. 380. See also Rookmaaker, *Zoological Exploration*, 259. For the dates of publication of the livraisons, see Edward C. Dickinson, “Systematic Notes on Asian birds. 9. The “Nouveau recueil de planches coloriées” of Temminck & Laugier (1820-1839),” *Zoologische Verhandelingen* 335 (2001): 7-54.



FIGURE 1.3. Plate of *Plotus LeVaillantii* from Temminck and Laugier's *Nouveau recueil de planches coloriées d'oiseaux*, vol. 5, pl. 380 (1825).

Levaillant had yet another, even more valuable gift for Temminck: arsenic soap. Levaillant had learned how to prepare and stuff bird skins from Jean-Baptiste Bécœur, a French pharmacist and naturalist from Metz and the inventor of the arsenic soap method. It was an excellent procedure for preserving skins of birds and mammals that protected them from voracious insects without damaging the skins. Although Bécœur kept his formula secret and never published it, Levaillant had learnt it directly from him and Temminck learned it again from Levaillant.⁴⁴ Thanks to this very effective technique, Temminck's specimens aged much more gracefully and in a much better shape than others from this period, which either disintegrated after being treated with

⁴⁴ Temminck to Johann Karl Wilhelm Illiger, 4 May 1810, Museum für Naturkunde Berlin Archives; Stresemann and Thomsen, "Ornithologen-Briefe aus den Jahren 1816 bis 1820," 85. See also L. C. Rookmaaker, P. A. Morris, I. E. Glenn et al., "The Ornithological Cabinet of Jean-Baptiste Bécœur and the Secret of the Arsenical Soap," *Archives of Natural History* 33, no. 1 (2006).

salt and alum, ended bald after losing their feathers, rotted away from the inside out or were eaten away by vermin.⁴⁵ The formula also allowed Temminck (and others after him) to study all the details of bird plumages, as feathers retained their original colors and structure. Temminck's superb taxidermy skills soon opened doors towards a more professional office.

Levaillant's influence on Temminck was, however, limited to a passion for birds, their natural history and taxidermy. He did not provide Temminck with any scientific training. Levaillant, with his appealing prose, lacked a methodical or scientific approach to ornithology. He embellished his descriptions with invented details and he was accused of creating his own new species by making artifacts, gluing parts of different species together. The Swedish zoologist Carl Jakob Sundevall, for one, accused Levaillant—many years after the fact—of not only making many errors, but also of using the plates from other works to describe new species.⁴⁶ When Jules Verreaux, the French ornithologist, visited Temminck's cabinet in Amsterdam, Temminck showed him eight or nine of Levaillant's artifacts. Although Verreaux encouraged Temminck to publish about them, he declined, perhaps as a kind gesture to his father's long-time friend, but he gave permission to Verreaux to do so if he wished. Later, Verreaux confessed his fear of upsetting cabinet owners by publishing these findings.⁴⁷

In the end, Levaillant's popularity faded and the last volume of the *Histoire naturelle des oiseaux d'Afrique* did not sell well. His friendship with Temminck also declined with time. In 1809, as Temminck's career began to take off, Levaillant complained about Temminck's attitude to his friend and associate, the artist Jean-Gabriel Prêtre:

Are you still pleased with our *fino* T., as for me, I am not really happy? I have received a letter from Mr. Gosse from Geneva, who is not very pleased either, and neither is Mr. Boissiere with the exchanges he made with Temminck. It seems he is reprimanding everyone. You undoubtedly know that he is president of an Academy, director of a School of Art, advisor to the King and Knight of the Union. God's will has it that these honors have changed him a little.⁴⁸

⁴⁵ Farber, "Development of Taxidermy," 553.

⁴⁶ Carl Jakob Sundevall, "Kritisk framställning af fogelarterna uti äldre ornithologiska arbete," *Kongliga Svenska Vetenskaps-Akademiens Handlingar* 2, no. 3 (1857).

⁴⁷ Edward Wilson to Hugh Strickland, 25 July 1849, in L. C. Rookmaaker, *Calendar of the Scientific Correspondence of Hugh Edwin Strickland* (University Museum of Zoology, Cambridge, 2010), 176.

⁴⁸ François Levaillant to Jean-Gabriel Prêtre, 15 January 1809, Staatsbibliothek zu Berlin, Manuscripts Department, Slg. Darmstaedter Afrika 1780: Levaillant, François. It seems that Prêtre did not necessarily agree with Levaillant, as he later worked with Temminck on the book of pigeons and gallinaceous birds. Nonetheless, Prêtre and Levaillant continued to correspond for several years. With "directeur d'une École

The apprentice–teacher relationship formed during Temminck’s youth was replaced by an altogether different relation. Their friendship was strained partly by their different views of classification, but mostly by Temminck’s growing self-confidence and, apparently, by a somewhat pompous attitude towards Levaillant.

Levaillant detested the binomial system of Carolus Linnaeus and preferred Buffon’s narrative style, while Temminck not only adopted Linnaean nomenclature and classification methods, but also dedicated most of his life to the classification systems Levaillant disliked. In his publications Temminck attempted to raise ornithology to the level of a science and, as Paul Farber puts it, “held the fashionable bird art books of the period in contempt.”⁴⁹ Temminck also condemned the making of artifacts: it impeded the advance of science and served only the ego of those who made them.⁵⁰ Although Temminck never explicitly criticized Levaillant’s works or artifacts he was in all probability referring to them. Tension arose between the two men. Temminck relied on Levaillant for information on birds he worked on, and at times, he could be impatient if the information he needed was delayed. In 1812, Temminck was working on a monograph on pigeons and gallinaceous birds that appeared in installments. In June, he sent a list of five questions for his friend Levaillant. Judging from Levaillant’s answer a month later, Temminck had been quite insistent. After giving Temminck the requested information, he complained about the fact that, while Temminck demanded prompt answers, Levaillant had been waiting for months for money that was owed to him: “you have to admit that you are a devil of a man.”⁵¹

When Levaillant died in 1824, in poverty and without friends, no obituaries were published.⁵² Temminck wrote a short notice hidden in a footnote, lamenting the harshness with which Levaillant’s work had been judged—work full of interesting and necessary observations, which Temminck deemed very useful. He seemed disappointed by the indifference of ornithologists towards Levaillant’s passing:

Would it be for having expressed himself with too great frankness about writings of this kind, because of having enounced severe, perhaps often overly bitter criticism, that this learned ornithologist has been reduced in his old age to the barest minimum, without any kind of encouragement and without being able to pick the smallest fruit of his labors, while his compatriots receive rewards,

de peinture,” Levaillant meant the Koninklijke Kunst Museum (Royal Art Museum) where Temminck briefly was acting director while the director travelled abroad.

⁴⁹ Farber, *Emergence of Ornithology*, 90.

⁵⁰ Temminck, “Introduction,” *Manuel d’ornithologie*, 2 ed., vol. 1, xxi.

⁵¹ Levaillant to Temminck, 27 July 1812, Naturalis Biodiversity Center Archives, Archives C. J. Temminck.

⁵² Rookmaaker, *Zoological Exploration*, 181.

expressions of thanks and titles, awarded always for real merits and to famous men of whom France is proud.⁵³

The second key figure in Temminck's formation was Bernhard Meyer, physician, dentist and naturalist from Offenbach, Germany. Meyer worked then as a dentist and owned an apothecary business, but he was mostly known for his contribution to the botanical work *Oekonomisch-technische Flora der Wetterau* (1799) together with Gottfried Gaertner and Johannes Scherbius, as well as for his superb collection of birds, nests and eggs. Temminck and Meyer probably met because of their collections, but Meyer may have been also a friend of Coenraad's father. In 1804, Temminck and his wife, Dionysia Catharina Cau (Caatje), stayed for six months in Offenbach as guests of Bernhard Meyer.⁵⁴ During his stay in Offenbach, Temminck also met the physician and naturalist Johann Philipp Achilles Leisler and, most likely, Johann Wolf. These meetings would later spur Temminck to engage on his own enterprises.

At the time of Temminck's visit, Meyer and Wolf were working on a manual of the birds of Germany, the *Naturgeschichte der Vögel Deutschlands in getreuen Abbildungen und Beschreibungen*, published in 1805 (the introduction is dated May 1804). This work could not be more different from those by Levaillant, with his elaborate descriptions and literary style. Meyer and Wolf set a list of rules to be followed in order to describe and figure the birds "with fidelity." First-hand observations and accurate descriptions and measurements were essential; Temminck had provided the authors with additional information on certain species.⁵⁵ The *Naturgeschichte der Vögel Deutschlands* included a systematic index and each species description consisted of a literature list, a morphological description, and remarks on distribution, nutrition, reproduction, usefulness, damage to man, enemies, how to hunt it, varieties and other comments. So it seems that in Offenbach, Temminck was introduced to the methodology of naming and classifying as it is to be found in Meyer's works, the scientific and practical skills he lacked at the time.⁵⁶ A few years later, Temminck drew his inspiration from these and other German works to write a treatise on European birds, his *Manuel d'Ornithologie*,

⁵³ Temminck and Meiffren Laugier, *Nouveau recueil*, vol. 3, 295.

⁵⁴ Stresemann suggested the couple regarded the trip to Offenbach as a honeymoon in *Ornithology from Aristotle to the Present*, 115. However, at the beginning of the nineteenth century, it was customary for newlyweds to travel to visit friends and relatives that could not attend the wedding, and a honeymoon as we know it now did not become a practice in Europe until mid-1800s. Unfortunately, I could find no records of the preparations to visit Offenbach, nor the motives behind the choice.

⁵⁵ Johann Wolf and Bernhard Meyer, *Naturgeschichte der Vögel Deutschlands in getreuen Abbildungen und Beschreibungen* (Nürnberg: J. F. Frauenholz, 1805–[1821]), 33, 38.

⁵⁶ Vrolijk, "Levensbericht van Coenraad Jacob Temminck," 67; Susanna, "Levensschets van Temminck," 50.

first published in Amsterdam in 1815. Temminck noted in the introduction that his work was based on Meyer's classification of the *Naturgeschichte*, while he also used Illiger's *Prodromus Mammalium et Avium* (1811) as a guide.⁵⁷

From listing to classifying

After his return from Offenbach, Temminck started updating and finishing the collection catalogue he had started around 1800, soon after taking charge of his father's collection.⁵⁸ That first catalogue gives a glimpse of young Temminck's perception of ornithology. In an opening section entitled *Sur la division des Oiseaux en Général*, he pointed out the problems he faced while working on the classification of his collection of birds. While some "ornithologists" based their descriptions on coloration, which created confusion in species in which juveniles have different patterns than the adults, others based their classifications on habits and nutrition, which yielded equally unsatisfactory results.⁵⁹ Using Buffon's system as a starting point, naturalists had improved the classification of birds, but with the increasing numbers of new species arriving from the tropics, the achievement of a "complete Natural History" of birds seemed to Temminck a goal for a very distant future. Buffon had suggested that naturalists should study birds methodically—one country at a time.⁶⁰ In Temminck's view, the road ahead was long and difficult, and such a work needed to combine classification with the observations from the field so as to describe each bird's life history—observations like those provided by Levaillant and Audubert.⁶¹ He was looking for accuracy, totality, synthesis and structure in the systematic arrangement of birds.

Standardization preoccupied Temminck. After 1804, he applied himself to the manuscript catalogue with the specific purpose of publishing it. Apparently, he did so spurred by the many requests he received from interested and curious naturalists who wished to have a catalogue of his cabinet.⁶² He therefore revised and updated his first catalogue, putting what he had learned in Offenbach into practice. Temminck revised

⁵⁷ Temminck, "Avant-propos," *Manuel d'ornithologie*, 2 ed., vol. 1, xxxi.

⁵⁸ The manuscript catalogue is the only remaining list of the Temminck's collection as it was at the turn of the century. It is known as "the heart book" for the heart-shaped paper glued on the front cover, reading quite simply "Catalogue," and on the title page, "Catalogue Cabinet Temminck," (Naturalis Biodiversity Center Archives, C. J. Temminck, n.d.).

⁵⁹ Temminck, "Catalogue Cabinet Temminck."

⁶⁰ Georges Louis Leclerc Buffon, "Plan de l'ouvrage," in *Histoire naturelle des oiseaux*, vol. 1 (Paris: Imprimerie royale, 1770), xxxv.

⁶¹ Temminck, "Catalogue Cabinet Temminck."

⁶² Coenraad Jacob Temminck, "Préface," in *Catalogue Systématique du Cabinet d'Ornithologie et de la collection de Quadrumanes* (Amsterdam: C. Sepp Jansz., 1807), iii.

and re-arranged the groups, abandoning Buffon's families and deciding instead to follow Latham, Illiger, Vieillot, Levaillant, Sonnini, Audubert and Edwards.⁶³ The species, each with its unique catalogue number, were listed by their French and Latin names. The manuscript catalogue included 839 species, but the finished new catalogue closes with number 1072. After each species entry, Temminck listed the references to the original descriptions and illustrations, as well as other publications. By the end of 1806, Temminck had finished the catalogue and the booklet, entitled *Catalogue Systématique du Cabinet d'Ornithologie et de la collection de Quadrumanes avec une courte description des oiseaux non-décrits suivis: d'une nôte d'oiseaux doubles et de quelques autres objets d'histoire naturelle offerts en échange*, appeared in Amsterdam in 1807.⁶⁴

This new, improved *Catalogue* was not only a list of the specimens of his collection, but it included descriptions of a few species that were new for Temminck. But, at that time, his primary objective was more mundane—publicity. He wished to let amateurs, collectors of Natural History and European museum directors know, firstly, what specimens were exhibited in his cabinet and, secondly, which of his specimens were available for exchange.⁶⁵ He sought to increase his collection not by obtaining more specimens, but by obtaining new species. For this, he offered in exchange his duplicates, listed in an appendix at the end of the *Catalogue*, for species he did not possess.⁶⁶ He certainly succeeded in this. In 1810, Temminck explained to the German entomologist and zoologist Karl Illiger how his collection has been enriched by exchange after the publication of his *Catalogue*, thanks to the network he had been building and the trips he made around Europe. Unfortunately, he lost two important shipments of birds, one from Africa and the other from Celebes and Java, as the American ships that carried them were wrecked at sea.⁶⁷ Publishing a catalogue of his collections was, it seemed, yielding fruits.

The species new to Temminck were marked with an asterisk after their catalogue number and described in the special section *Caractères physiques des oiseaux non-décrits*, at the end of the book. Although he was following Linnaean principles in the catalogues, for some reason Temminck described the new species without giving them a Latin

⁶³ Temminck, *Catalogue Systématique*, v-vi.

⁶⁴ Jansen, "An Unpublished "Catalogue du Cabinet de C. J. Temminck" (c. 1803–1804)"; Stresemann, "Analyse."

⁶⁵ Temminck, *Catalogue Systématique*, iii.

⁶⁶ Temminck, *Catalogue Systématique*, iv; Coenraad Jacob Temminck, "Note des Oiseaux doubles et de quelques autres objets d'Histoire Naturelle offerts en échange," in *Catalogue Systématique*.

⁶⁷ Coenraad Jacob Temminck to Johann Karl Wilhelm Illiger, 4 May 1810, Zoologische Museums der Humboldt-Universität Archives; Stresemann, "Briefwechsel von Temminck mit Hoffmannsegg und Illiger," 225.

binomial. With a few exceptions, most of Temminck's new species received only a French name. Why exactly he decided to do so, remains a mystery. Perhaps Temminck lacked the confidence at the time, or perhaps he planned to describe them later on—after confirmation from his peers. Whatever the reason, it was a naive thing to do: Louis Pierre Vieillot later did give the birds Latin names without acknowledging Temminck's names and effectively appropriating them. This started an hostility between them that culminated in 1817 with Temminck's sharp critique of Vieillot's work and thefts.

An example of what happened concerns a specimen of a cuckoo from Java that Temminck had in his collection, number 380, for which he could not find a reference in the existing literature. He decided to describe it as a new species in his new version of the catalogue, and named it *Coucou roux à bec rouge*, in French. And that was that, for a while. Ten years later, Vieillot described the same bird as a new species and gave it a proper Latin binomial: *Cuculus melanogaster*. The characters he used are the same as Temminck's, as was the place of origin of the new species, Java. However, the locality was erroneous, as this particular species occurs in Central and South America—a detail that led Temminck to miss previous descriptions of the cuckoo and that had also escaped Vieillot.⁶⁸ In fact, the cuckoo had been known to naturalists for almost half a century. It had been described before by Brisson as *Cuculus Cayanensis*, by Buffon as the *Coucou de Cayenne*, by Gmelin as *Cuculus cayanus* and by Latham as *Cayenne Cuckow*.⁶⁹ Probably, the erroneous locality for specimen no. 380 had misled Temminck in identifying the bird, an error that Vieillot simply duplicated. Vieillot's description was too similar to Temminck's to be a coincidence, and Temminck was quick to respond in 1817, sparing neither examples nor adjectives, in a booklet with the long and telling title *Observations sur la classification méthodique des oiseaux: et remarques sur l'Analyse d'une Nouvelle Ornithologie Élémentaire par L. P. Vieillot, auteur de divers ouvrages d'ornithologie, et*

⁶⁸ Gustav Hartlaub, "A Systematic Index to a Series of Descriptions of Birds, Published by C. J. Temminck in his 'Catalogue Systématique du Cabinet d'Ornithologie, etc.', of the year 1807," ed. William Jardine, vol. 2 (Edinburgh: W. H. Lizars, 1849), 1-7; Temminck, *Catalogue Systématique*, 58, 208; Louis Pierre Vieillot, "Le Coucou a ventre noir," in *Nouveau Dictionnaire d'Histoire Naturelle, appliquée aux arts, à l'agriculture, à l'économie rurale et domestique, à La médecine, etc. Par une société de naturalistes et d'agriculteurs*, ed. Charles Sigisbert Sonini (Paris: Deterville, 1817), 236-37. Van den Hoek Ostende, Dekker, and Keijl (in "Type-specimens of Birds, Non-Passerines," 147) are sure of the fact that Vieillot's description was based on Temminck's description, and therefore, on Temminck's specimen no. 380 (now RMNH.AVES.88261).

⁶⁹ Mathurin-Jacques Brisson, *Ornithologie, ou, Méthode contenant la division des oiseaux en ordres, sections, genres, especes & leurs variétés*, vol. 4 (Paris: J.-B. Bauche, 1760), 122, pl. VIII; Georges Louis Leclerc Buffon, *Histoire naturelle des oiseaux*, vol. 12 (Paris: Imprimerie royale, 1780), 81; Georges Louis Leclerc Buffon, Edme-Louis Daubenton, and Francois Nicolas Martinet, *Planches enluminées d'histoire naturelle*, vol. 3 (Paris: s.n.), pl. 211; John Latham, *A General Synopsis of Birds*, vol. 1 (London: Benj. White, 1781), 542; this species was also described by Carolus Linnaeus, *Caroli a Linné. Systema naturae per regna tria naturae: secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis*, 13 ed., vol. 1 (Leipzig: Georg. Emanuel. Beer, 1788), 428.

un des collaborateurs du Nouveau dictionnaire d'histoire naturelle. As we will see in the following chapters, these discussions on priority and nomenclature played a central role in the evolution of zoological classification, its standardization and its democratization.

The case of the cuckoo was, unfortunately for Temminck, not an isolated one. Without a proper Latin binomial, Temminck's descriptions were not valid according to the generally accepted rules at the time, and other ornithologists who did follow the Linnaean nomenclature rules soon became the authors of these new species. Some of them may have been unaware of Temminck's catalogue, while others proceeded on the sly without a reference to Temminck. This was a lesson Temminck did not forget—and that haunted him for a long time.



FIGURE 1.4. Temminck's specimen no. 380, *Coccyzus coromandus*.

The manuscript catalogue and the notebooks Temminck wrote while preparing the final version of the *Catalogue Systématique* are testimonies of the evolution of Temminck's thought. One can follow the process that started with numbering collection objects and culminated in systematics. The main engine driving Temminck's pursuit of expertise was his cabinet. Arranging it, cataloguing the specimens, grouping males, females and juveniles by species and placing related species in the same group fueled his interest in systematics. By classifying instead of travelling, as Levaillant did, his thoughts were necessarily directed towards naming, ordering and arranging. Describing new species was a natural consequence of ordering, as he encountered species not mentioned in other works. All of Temminck's career after this point was directed

towards a better understanding of the methods and concepts of systematics. Encountering such a number of undescribed species was, together with the contrast between his knowledge and what was available in the form of publications, the main reason behind Temminck's desire to turn from collecting to publishing.

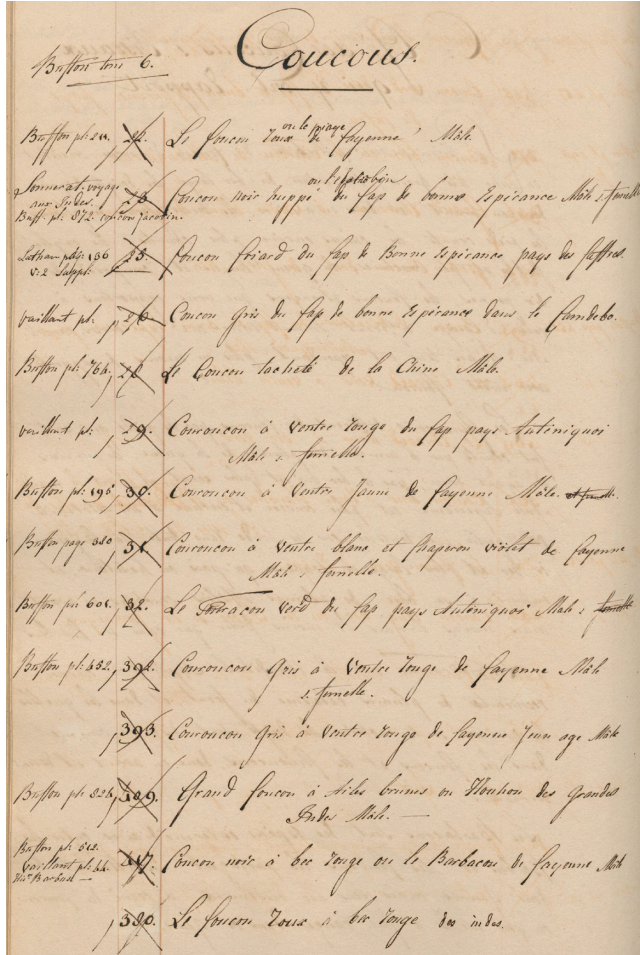


FIGURE 1.5. Temminck's first manuscript catalogue. Temminck could not find the species 380 (*Le Coucou Roux à bec rouge*) and 393 (*Coucou Gris à ventre rouge*) in the works known to him.

The exercise of ordering, naming and browsing through the existing literature led Temminck to the conclusion that one of his favorite groups of birds was in need of serious revamping. In 1804, influenced by what he had learned from Meyer and Leisler, Temminck started working on a monograph on the gallinaceous birds (game birds, fowl and poultry). He already announced it in the *Catalogue Systématique*: "its title will be

Histoire générale et complète [sic] *des Gallinacés* [...] and in it, the Amateurs will find about eighty new species, most of them never mentioned before by any other author.”⁷⁰ By 1806, the Swiss–French natural history painter Jean-Gabriel Prêtre, Levaillant’s friend, had made some of the plates for this work.⁷¹ Prêtre had worked for Vieillot, illustrating his *Histoire naturelle des oiseaux de l’Amérique septentrionale* (1807) and his *Histoire naturelle des plus beaux oiseaux chanteurs de la zone torride* (1805–1809), and it was probably Levaillant who introduced him to Temminck. The artist’s credentials were more than satisfactory: Prêtre was, besides Levaillant’s friend and collaborator, one of the natural history illustrators officially employed at the the Muséum National d’Histoire Naturelle in Paris.

In order to produce the monograph, Temminck traveled to Paris to meet Prêtre, accompanied by his wife Caatje. They arrived on June 29, 1807 and stayed there for a month.⁷² Between visits to the Panthéon, the “museum Napoleon” and the opera, Temminck met two of his father’s friends, Levaillant and Leschenault de la Tour. The latter made bird skins and notes from his voyage to Java available to Temminck for his planned book.⁷³ Levaillant thought that Temminck was the best suited person to take on a monograph on fowl, so he left the treatment of several beautiful species yet to be described to Temminck, someone who would spare no effort in the work.⁷⁴ Temminck had indeed collected as many specimens as he could for his cabinet and had travelled across Europe to visit as many collections as possible. This careful comparison of numerous specimens before publishing was, in Levaillant’s view, what made Temminck the right person to write a monograph on fowl.⁷⁵ As will become clear later on, Levaillant was right, and Temminck’s attention to minute detail would turn out to be his greatest strength.

Temminck and Caatje also visited the the Muséum National d’Histoire Naturelle, where Temminck could discuss the work on the plates with Prêtre. Also working in

⁷⁰ Temminck, *Catalogue Systématique*, vi. I believe Temminck here used the word *Amateurs* in the sense of “enthusiasts,” and not in the modern sense of dilettante or non-professional.

⁷¹ Stresemann, *Ornithology from Aristotle to the Present*, 116.

⁷² Van Lynden-de Bruïne (1922–2016), great-great grandchild of Coenraad J. Temminck, transcribed of the diaries of Temminck’s first wife, Dionisia Catharina Cau, and published them in 2001, *In vogelvlucht door Europa: de reisjournalen van Dionysia Catharina Temminck-Cau, 1807–1824*. These captivating diaries were written between 1807 and 1819 when the couple travelled through Europe on several occasions. The original diaries are in the Temminck Family archives, A. M. van Lynden-de Bruïne private collection.

⁷³ Coenraad Jacob Temminck, “Introduction,” in *Histoire naturelle générale des pigeons et des gallinacés*, vol. 1, 12. Leschenault de la Tour’s birds were listed in Temminck’s *Catalogue Systématique*. See Stresemann, “Analyse.”

⁷⁴ François Levaillant, *Histoire naturelle des oiseaux d’Afrique*, vol. 6 (Paris: J. J. Fuchs, 1808), 118.

⁷⁵ Levaillant, *Histoire naturelle des oiseaux d’Afrique*, vol. 6, 118–19.

Paris was Mlle Pauline de Courcelles, a gifted aquarellist and disciple of Jacques Barraband who had illustrated several of Levaillant's books. Somehow, Temminck and de Courcelles met, and after this meeting Temminck's plans changed from publishing a two-volume monograph on gallinaceous birds to a work on the natural history of pigeons and gallinaceous birds, in a new collaboration between Temminck and de Courcelles.⁷⁶ Confident in his new partner, Temminck went on a tour to Switzerland and Italy before returning to the Netherlands, leaving de Courcelles supervising the engravings and printing of the part dedicated to pigeons. The first volume was dedicated to king Louis Napoleon and it included a *rapport* by Georges Cuvier and the Comte de Lacépède dated June 15, 1807. It is a letter of commendation, in which the famous naturalists testify to the artistic and technical quality of the plates by de Courcelles. The first installments appeared in 1808, but they were not exactly what Temminck had expected. After three years, the partnership broke amidst allegations of theft and piracy.

Between 1808 and 1811, fifteen installments on pigeons were published. While the Temmincks travelled, Pauline de Courcelles altered the installments of the *Histoire des Pigeons* in such a way that she appeared to be the sole author. De Courcelles—now married and named Mme Knip—had removed the index, Temminck's dedication to king Louis Napoleon and by the ninth installment about forty pages of text. She also gave the work a new title, *Les Pigeons par Madame Knip, née Pauline de Courcelles, premier peintre d'histoire naturelle de S. M. L'Impératrice-Reine Marie Louise, le texte par C. J. Themminck*. That Temminck's name appeared misspelled on the title page added insult to injury. Knip arranged that Temminck received a few copies with the original text and unaltered title, ensuring his ignorance of the theft while presenting her own version to the queen Marie Louise. As a result, two different sets of plates appeared: the one authored by Knip, and the original as intended by Temminck with the complete text and his index, the *Histoire naturelle générale des pigeons, par C. J. Temminck*. Of this second set, only twelve copies were printed.⁷⁷ Temminck discovered Knip's stunt when he travelled

⁷⁶ According to Stresemann, de Courcelles persuaded Temminck to work on pigeons, as she had some plates already made (Stresemann, *Ornithology from Aristotle to the Present*, 117). However, Dickinson et al. affirm that "Temminck recruited Mlle. Pauline de Courcelles to execute the paintings he needed for his work"; see Edward C. Dickinson, David Normand, Leslie K. Overstreet et al., "Histoire naturelle des pigeons or Les Pigeons: Coenraad Jacob Temminck versus Pauline Knip," *Archives of Natural History* 37 (2010): 208. However, as Temminck already announced a book on gallinaceous birds only, meeting de Courcelles in Paris did certainly affect Temminck's intentions. As Stresemann put it, pigeons interfered.

⁷⁷ The twelve copies from the original work included eight sets that de Courcelles herself sent to Temminck, plus four other copies. On the remaining copy from Temminck's own collection, kept at the Naturalis Biodiversity Center, the first page is entitled *Histoire naturelle des pigeons et gallinacés*, without date, and the second page reads *Histoire des Pigeons*, 1808. In the work Temminck included an *Introduction*

to Paris to prepare the next two volumes on gallinaceous birds, somewhere in 1811 or 1812. He was understandably infuriated. He tried to expose the deception and unmask the “ingrate” artist, with no luck. After all, Knip enjoyed the patronage of the queen:

All means I employed to appeal against such an arbitrary act were without effect, and my voice could not rise against an intrigue supported by powerful protectors; the journalists refrained from placing my claims in their papers; even my response to the article by the new author in these newspapers was banned.⁷⁸

With this, the collaboration ended. Temminck adopted a defensive strategy, writing to his friends and contacts and informing them of what had happened. If anyone wanted to purchase the Pigeons “en grand format,” he could provide the original fifteen installments—at the exorbitant price of forty francs each—without the arbitrary changes of the other edition. Temminck admitted his defeat and, reluctantly, his naiveté: “the annoyance I have earned as a reward for my disinterestedness towards the Publishers must be placed among the familiar events of the day.”⁷⁹ The trick earned Mme Knip the patronage of the Impératrice-reine Marie Louise and the title of *premier peintre*—much in the same way as Temminck’s dedication of the same work to Louis Napoleon had helped him win his monarch’s favors.

Temminck picked up his original idea of a monograph on fowl, combined it with what he had already written on pigeons and published the *Histoire naturelle générale des pigeons et des gallinacés*, which appeared between 1813 and 1815. It was a much more modest work than he had intended originally, in three volumes (the first one with the original text on pigeons) and with merely eleven engraved plates of anatomical features. Temminck did not include drawings of specimens, possibly because he wished to publish as quickly as possible. Quite unexpectedly, the conflict with Madame Knip actually worked to Temminck’s advantage.

In the end, these three volumes were published in octavo without colored plates, cheaper and much more accessible to naturalists than the luxurious and costly folio books. Karl Illiger, director of the Zoological Museum in Berlin since 1810, tried to mitigate Temminck’s frustration with the more humble re-edition of the Pigeons: “You must have been so annoyed [with what happened] that you had it reprinted. Anyway, I congratulate ourselves, poor ornithologists, to whom a sumptuous publication is out of

to both groups of birds, which re-appeared in 1813 on the *Histoire naturelle des pigeons et gallinacés*. See Dickinson, David, Overstreet et al., “Coenraad Jacob Temminck versus Pauline Knip” and Temminck’s own version of the episode in Temminck, “Pigeons et gallinacés,” vol. 3, 640-42.

⁷⁸ Temminck, “Pigeons et gallinacés,” vol. 3, 641, 43.

⁷⁹ Temminck to Johann Centurius von Hoffmannsegg, 29 July 1812, Zoologische Museums der Humboldt-Universität Archives; Stresemann, “Briefwechsel von Temminck mit Hoffmannsegg und Illiger,” 258.

bounds, that as a result your undoubtedly valuable remarks on an interesting class [of birds] will now be accessible.”⁸⁰ Indeed, the new monograph was received with great enthusiasm amongst naturalists and secured Temminck a reputation as an ornithologist.

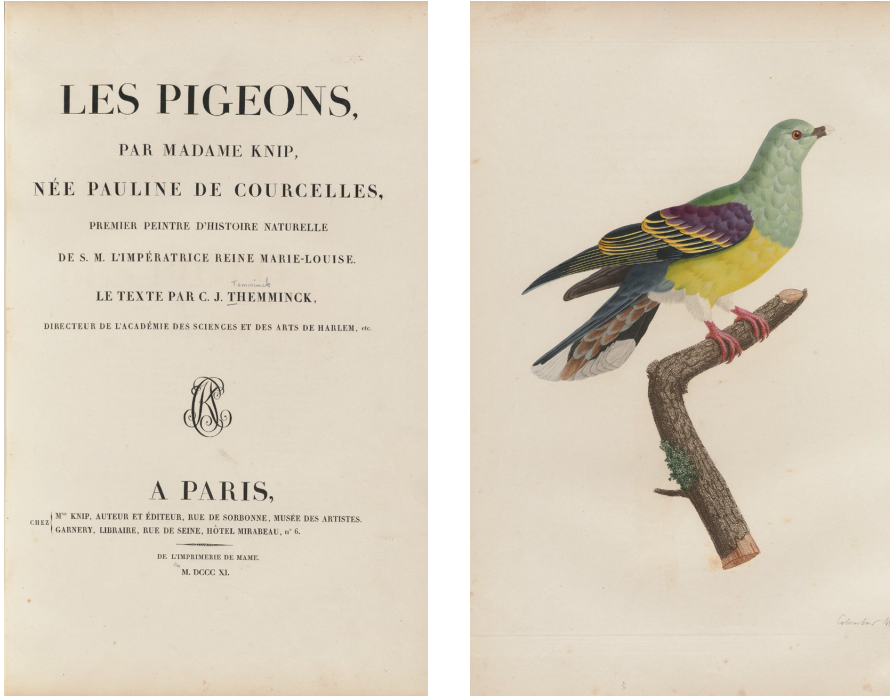


FIGURE 1.6. Title page and plate no. 8 of Pauline de Courcelles' edition of Temminck's monograph on pigeons, *Les Pigeons par Madame Knip* (1811).

The first monographs

After 1813, with the publication of the *Histoire naturelle des pigeons et gallinacés*, Temminck's name began to figure next to Linnaeus', Cuvier's and Brisson's.⁸¹ His peers agreed on praising Temminck's accurate definitions of genera, the clear treatment of the species and the unravelling of the synonymy, as the greatest merits of his work. The English naturalist William Swainson, for example, wrote in 1836: "M. Temminck's Monographs of the *Gallinaceous* Birds are clear and masterly, and should be taken as a pattern for all such dissertations. The description of the species, while they are free from

⁸⁰ Johann Karl Wilhelm Illiger to Temminck, 14 September 1812, Museum für Naturkunde Berlin Archives; Stresemann, "Briefwechsel von Temminck mit Hoffmannsegg und Illiger," 260.

⁸¹ Farber, *Emergence of Ornithology*, 85-86.

the turgidity above alluded to, are scientific and accurate, while, in the *Synopsis*, each is technically characterized by a short specific diagnosis in Latin.”⁸²

To define and classify species was actually Temminck’s only purpose in tackling such a project, although the introductory sections of the monograph are full of pious dedications and the pursuit of enlightenment through the observation of nature. Temminck also made numerous utilitarian remarks about pigeons and fowl.⁸³ In this, he was following the tradition of earlier works on natural history. Moral and aesthetic comments would remain a fundamental justification for writing natural history books until the second half of the nineteenth century.⁸⁴ Judging from Temminck’s previous work and from his general disinclination for philosophical quests, however, the introduction seemed to be more an attempt to justify his particular interest in describing and classifying birds. Towards the end of the general introduction, after almost twenty pages of discourse, Temminck specifically stated that the prevailing disorder in these groups of birds needed to be revised, the genera needed to be reconsidered and the nomenclature disentangled. He did so with such a rigor and accuracy, miles away from the *Catalogue Systématique* and spurred by the lessons he took from Vieillot’s plagiarism and Knip’s theft, that Temminck’s reputation took a giant leap forward, from cabinet owner to skilled ornithologist.

The second volume of this first monograph, the *Histoire naturelle des gallinacés*, was published in 1815, almost simultaneously with Temminck’s following work entitled *Manuel d’ornithologie, ou tableau systématique des oiseaux qui se trouvent en Europe; précédé d’une analyse du système général d’ornithologie, et suivi d’une table alphabétique des espèces*. Inspired by previous books of ornithologists like John Latham, Karl Illiger and most of all, by Meyer and Wolf’s *Naturgeschichte der Vögel Deutschlands* (1805) and *Taschenbuch der deutschen Vögelkunde* (1810), Temminck had worked for years on this handbook of European birds.⁸⁵ The *Manuel d’ornithologie* was the first comprehensive treatise of the avifauna of Europe. In it Temminck included all known species and descriptions of new ones, revised the synonymy and provided extensive references. Each species treatment was based only on actual specimens, all seen by him between 1807 and 1815 while travelling around Europe. These travels, as we will see below, had provided him with the information he required for this book, as well as with extremely useful contacts, some of whom would turn into lifelong friends.

⁸² William Swainson, *On the Natural History and Classification of Birds*, vol. 1, 205-06.

⁸³ Temminck, “Introduction,” *Pigeons et gallinacés*, vol. 1, 3-16.

⁸⁴ Farber, *Emergence of Ornithology*, 137.

⁸⁵ Temminck, “Introduction,” *Manuel d’ornithologie*, 2 ed., vol. 1, viii.

The book was finished towards the end of 1814.⁸⁶ Temminck complained that, although many excellent works have been devoted to ornithology, none covered all European birds. During this period, the mania for exotic animals had led to numerous treatises on new species in detriment to the knowledge on European faunas. Levaillant also complained—not without irony, as he himself worked almost exclusively on tropical birds—about the way French naturalists had ignored their local avifauna and preferred exotic ornithology.⁸⁷ Temminck pointed out to the reader that European species seemed to be forgotten by naturalists:

One goes to search in the regions of the torrid zone or to the ice of the poles to add to the numerous species already known, by means of which one augments the nomenclature catalogues without any goals useful to science. They are sterile acquisitions, that amateur curiosity collectors may esteem, but which will be, for a long time, foreign to the domain of science.⁸⁸

Realizing that a complete treatise on European birds was still to be written, Temminck had decided to produce one because it would be of interest to amateurs and collectors and, he therefore provided “not only concise and precise descriptions of each species, but also of each variety, both sexual and age variations, as well as those that are accidental.”⁸⁹ By the time Temminck wrote the *Avant-propos*, he had abandoned the aesthetic remarks of 1813. There were no religious dedications, no attempts to convince the reader of any moral gain from the study of nature. The description of the European birds was, in itself and by itself, sufficiently useful without needing any utilitarian or spiritual justification. In the *Avant-propos* Temminck substituted all aesthetic remarks by explanations of his views on nomenclature, the need to examine seasonal and age-related variation in birds and the need of reviewing existing genera, followed by an *Index Systématique* summarizing his classification system. Systematics was, it seems, coming of age.

Both monographs were enthusiastically received in continental Europe and in Britain, becoming in a few years reference works in ornithology. They were particularly praised for the accurate and exhaustive synonyms list, and Temminck’s treatment of genera and his ability to delimit both genera and species with consistent use of characters formed a basis for other naturalists to build upon. According to William Swainson, “The best and *neatest* generic definitions are those of Temminck’s *Manuel*: the

⁸⁶ Temminck, “Dédication,” *Manuel d’ornithologie*, 1 ed.

⁸⁷ Stresemann, *Ornithology from Aristotle to the Present*, 296.

⁸⁸ Temminck, “Introduction,” *Manuel d’ornithologie*, 2 ed., vol. 1, i-ii; translated in Farber, *Emergence of Ornithology*, 85.

⁸⁹ Temminck, “Introduction,” *Manuel d’ornithologie*, 2 ed., vol. 1, viii.

most verbose and over-labored, those of the *Species Avium* [Wagler's]. Even those of Illiger are too tedious."⁹⁰ The *Histoire naturelle des pigeons et gallinacés* and the *Manuel d'ornithologie* were routinely cited as references in practically every ensuing ornithological treatise of the following decades.⁹¹

Interestingly, in the *Avant-propos* of the *Manuel* Temminck had made a distinction between those "studying ornithology" and the "amateurs."⁹² The remark is a reflection of the transition taking place during the first two decades of the nineteenth century: luxurious, fashionable books were still very much in vogue while monographs and more specialist works started to appear. Yet Temminck's monographs were not written to answer philosophical questions, such as searching for the laws governing nature. They were born out of the necessity of arranging and ordering a catalogue of the gallinaceous birds, or in the case of the *Manuel d'ornithologie*, to complete existing regional avifauna's. His goal seemed to be, at this stage of his career, to achieve exhaustive and integrated knowledge of birds—the same goal he already pursued with his manuscript catalogue.

Temminck's monographs were, in fact, a continuation of the traditional encyclopedic works, while he recognized the impossibility of including all birds in one work. As both publications and species names quickly multiplied, systematic arrangements differed from each other and the nomenclature became more and more complex to follow. The need arose for works that provided a good overview of existing names, compared published systems, carefully described species with no room for misinterpretation, with accurate illustrations made from real specimens. This gave rise to methodical questions, such as the definition of a genus, the best characters to use for a family or even the pursuit of a natural classification, which led naturalists into the philosophy of natural history.⁹³ Between 1800 and 1815, by cataloguing his cabinet, listing synonyms and creating new genera, Temminck joined those giving birth to the systematic arrangement of birds, or what we would now call taxonomists.

⁹⁰ Swainson, *Natural History and Classification of Birds*, vol. 1, 246.

⁹¹ Examples of ornithological works based on Temminck's classifications are John Gould, *The Birds of Europe*, 5 vols. (London: R. and J. E. Taylor, 1837); William Jardine, *The Natural History of Game-birds* (Edinburgh: W. H. Lizars, 1834); John Latham, *A General History of Birds*, 10 vols. (Winchester: Jacob and Johnson, 1821–1828); Johann Andreas Naumann and Johann Friedrich Naumann, *Johann Andreas Naumann's Naturgeschichte der Vögel Deutschlands, nach einigen Erfahrungen entworfen* (Leipzig: G. Fleischer, 1820); William Swainson, *Zoological Illustrations, or, Original Figures and Descriptions of New, Rare, or Interesting Animals: Selected Chiefly from the Classes of Ornithology, Entomology, and Conchology, and Arranged on the Principles of Cuvier and other Modern Zoologists* (London: Baldwin, Cradock, and Joy, 1820).

⁹² Temminck, "Introduction," *Manuel d'ornithologie*, 2 ed., vol. 1, viii.

⁹³ See for example Farber, *Emergence of Ornithology*, chapter 8.

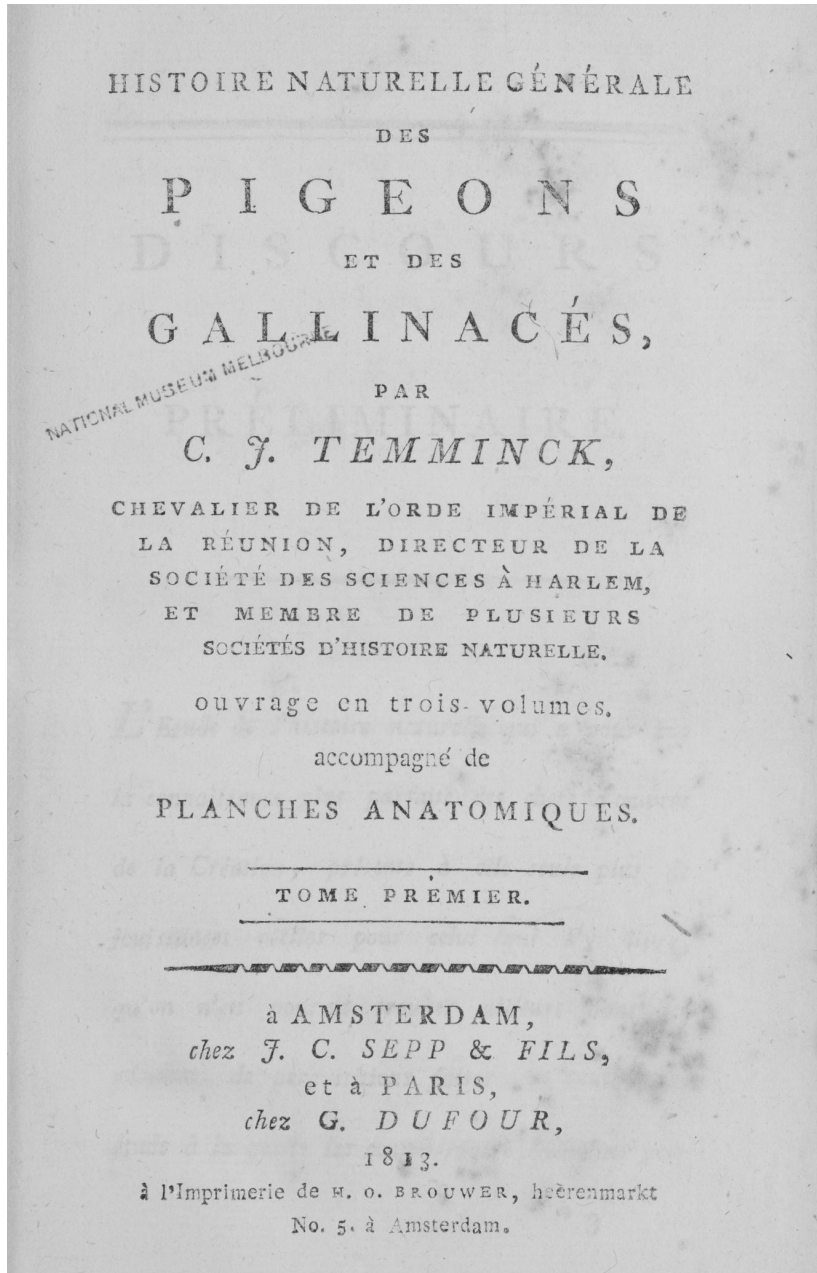


FIGURE 1.7. Title page of Temminck's *Histoire naturelle générale des pigeons et des gallinacés* (1813).