Thomas Horsfield’s “Zoological Researches on Java and neighbouring islands”: plate numbers and dates of publication

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ABSTRACT: Horsfield’s book appeared in 8 parts for which dates of publication were thought to be known, but neither the pages nor the plates were numbered. Horsfield provided a binding plan and indicated in which part each plate was published, but he did not provide plate numbers. Using Horsfield’s plan a reader might consider any of three systems for using numbers to cite the plates. However, Oberholser (1921) provided a set of plate numbers based on the systematic arrangement of the taxa; this, Horsfield’s arrangement, was to be used for binding the text and plates. Thus the numbering was not to be governed by publication sequence. Oberholser treated the combined list and applied numbers first to the mammals and then to the birds. This paper examines his list of plates and suggests one correction creating a plate with a bis number to avoid confusion. In preparing this report five examples of this book have been examined, in two of these the original wrappers are present. As might be expected the sets differ somewhat but in general set out to follow Horsfield’s proposed binding plan. The dates of publication of the parts reported here are not those originally reported, but instead are based on the scholarly introduction written for a facsimile edition published in 1990 in Singapore. Oberholser (1921) missed plate 72 but was otherwise accurate. One of Horsfield’s early plates seems to have appeared with part I not part II.

KEYWORDS: Thomas Horsfield, Harry Church Oberholser, John Bastin, Java, wrappers, parts contents, dates of publication, mammals, birds, plate numbering, pagination.

DATES OF PUBLICATION:

Around the time of the First World War Gregory Mathews and Charles Richmond were sharing information on dates of publication. Evidence suggests that Charles Sherborn was involved in this sharing, which clearly included information on Horsfield’s Zoological Researches. Mathews (1919: 473, 475) acknowledged Richmond’s help, and Sherborn (1922: lxix) published exactly the same dates:

|------------------|------------------|------------------|------------------|

There are dates on the plates, and Mathews (1919: 475) reported that “The dates on the plates are about right”. In fact, small differences are only apparent in part 1 (all eight plates are dated July 2, 1821) and in part 3 (two plates are dated January not February).

Bastin (1990) found evidence leading him to publish the following revised dates:

|------------------|------------------|------------------|------------------|
Wells & Dickinson (2010) made these corrections more widely known in an article correcting the source publication of the genus-group name *Calyptomena* (long assigned to Raffles, 1822, as in Peters (1951: 12 and widely followed). In that paper Wells & Dickinson mentioned the findings of Oberholser (1921), which are discussed below.

THE STRUCTURE OF THE WORK:

When published, the plates lacked plate numbers and the pages were not numbered. The binding instructions came along with a *General Catalogue of Javanese Birds arranged in the Museum of the Honorable East India Company*. This catalogue had been read to the Linnean Society of London on 18 April 1820. It was published in the *Transactions of the Linnean Society, 13: 133-200* in 1822, but not before November according to Raphael (1970). That Horsfield included the *General Catalogue* in part 8 is evidenced by a reviewer (Anon., 1825: 137).

The instructions for binding were provided in two parts. First, one page lists all the plates of mammals (32) in a left hand column and in the right hand column all the bird plates (32, which despite two plates for *Irena puella*, depicted 33 species because two plates – nos. 38 and 42 – each illustrated two species).

Each list is in systematic order. In the five lines of text above these columns Horsfield wrote “The Plates of Illustration should be bound, in the order of publication at the end of the Volume.” Here Horsfield was referring not, as one might suppose, to all the plates but only to the extra plate inserted in each part: these had, or should have had, the following titles:

I. Explanation of the plate of illustrations to the first number of zoological researches in Java.

II. Explanation of the plate of illustrations to the second number of zoological researches in Java.

III. Explanation of the plate of illustrations to the third number of zoological researches in Java.

IV. Explanation of the plate of illustrations to the four number of zoological researches in Java.

V. Explanation of the plate of illustrations to the fifth number of zoological researches in Java.

VI. Explanation of the plate of illustrations to the sixth number of zoological researches in Java.

VII. Explanation of the plate of illustrations to the seventh number of zoological researches in Java.

VIII. [Explanation of the plate of illustrations to the eighth number of zoological researches in Java]. But in fact this plate is actually used to provide more details solely about *Cheiromeles torquatus*.

The second part of the binding instructions lists the contents of each of the eight parts: for each Horsfield listed four mammals and four birds – with three exceptions. Part III included a plate depicting two species of *Timalia* and Part VII included a plate showing two species of *Muscicapa*. The third exception relates to Part I; here the four plates of birds depicted
just three species. There is a two-line corrigendum at the foot of this page.

We have been able to obtain details of how three different sets have been bound and two others, available on the Biodiversity Heritage Library (BHL), have also been examined. We had noticed that in one of the sets on BHL the plate depicting the two species of Muscicapa had been annotated as plate 39 and we had wondered if this was correct. As both plates and pages lacked numbers it seemed likely there would be variation in how sets were bound.

When we began to compile the data for comparison the library at the American Museum of Natural History proved to have copy of a handwritten list that seems to have been prepared by someone trying to make sure the binding instructions were clear.\(^1\) With this was a separate of the review by Oberholser (1921). Oberholser stated that there were 71 plates\(^2\) and he provided numbers for them. He also thought that these instructions were issued “with Part 8, or subsequent thereto”. Oberholser reported that the numbers of the plates of the mammals have been “correctly cited”, but that “most of the birds have been commonly quoted wrong”. He referred, specifically, to the plate including Muscicapa hirundinacea – which shares its plate with a depiction of Muscicapa banyumas – and mentions it being cited as pl. 39 instead of pl. 38 as seen,\(^3\) and mentioned above, in one of the two sets made available by the Biodiversity Heritage Library (the Singapore National Library set),\(^4\) with a knock-on effect relating to plates 39 to 64. To Oberholser’s list (p. 165) it is necessary to add “72. Details for Cheiromeles torquatus” which is Horsfield’s last of his “Plates of Illustration”.

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\(^1\) This list was probably made at the American Museum of Natural History, New York where it was based on Oberholser (1921) and applied to the New York set (examined here) which must have been awaiting binding which was done in 1934.

\(^2\) There are in fact 72, as given in the Catalogue of the Library of the British Museum (Natural History), vol. 2, p. 876. Apparently, Oberholser did not notice that the eighth part did have an equivalent “plate of illustrations”; but Horsfield used it to give more details of Cheiromeles toquatus – this being plate 72 if counted as a “plate of Illustrations”.

\(^3\) When plate 72 is bound in alongside plate 5 which it complements – leading us to treat it as plate 5 bis – the effect is to increase the number of each succeeding plate by one. Hence 39 not 38.

\(^4\) The copy scanned from that of the Singapore National Library shows that the Radcliffe Library in Oxford had two copies and disposed of this which came into the possession of Carl Gibson Hill (1911-1963) probably during his time at the Raffles Museum in Singapore (now embodied in the Singapore National University). Gibson-Hill’s library was obtained by Lok Wan Tho and, on the latter’s death, the volume shows that the collection was presented by his mother to the Singapore National Library.
**Table II.** The plate contents as listed by Oberholser (1921); no. 72 (5 bis) here added.

<table>
<thead>
<tr>
<th>Mammals</th>
<th>Birds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Simia syndactyla</td>
<td>33. Falco ichthyaetus</td>
</tr>
<tr>
<td>2. Semnopithecus maurus</td>
<td>34. Falco caerulescens</td>
</tr>
<tr>
<td>3. Semnopithecus pyrrhus</td>
<td>35. Falco limnaeus</td>
</tr>
<tr>
<td>4. Tarsius bancanus</td>
<td>36. Strix badia</td>
</tr>
<tr>
<td>5. Cheiromeles torquatus</td>
<td>37. Podargus javanensis</td>
</tr>
<tr>
<td>6. Nyctomimus tenuis</td>
<td>38. Muscicapa banyumas, Muscicapa hirundinacea</td>
</tr>
<tr>
<td>8. Rhinolophus nobilis</td>
<td>40. Turdus varius</td>
</tr>
<tr>
<td>9. Vespertilio temminckii</td>
<td>41. Turdus cyaneus</td>
</tr>
<tr>
<td>10. Pteropus javanicus</td>
<td>42. Timalia pileata, Timalia gularis</td>
</tr>
<tr>
<td>11. Pteropus rostratus</td>
<td>43. Iora scapularis</td>
</tr>
<tr>
<td>12. Tupaia javanaica</td>
<td>44. Oriolus xanthonotus</td>
</tr>
<tr>
<td>13. Tupaia tana</td>
<td>45. Irena puella, male</td>
</tr>
<tr>
<td>14. Ursus malayanus</td>
<td>46. Irena puella, female</td>
</tr>
<tr>
<td>15. Gulo orientalis</td>
<td>47. Motacilla speciosa</td>
</tr>
<tr>
<td>17. Viverra musanga</td>
<td>49. Phrenotrix temia</td>
</tr>
<tr>
<td>18. Viverra rase</td>
<td>50. Pomatorhinus montanus</td>
</tr>
<tr>
<td>19. Mangusta javanica</td>
<td>51. Prinia familiaris</td>
</tr>
<tr>
<td>20. Lutra leptonyx</td>
<td>52. Calyptomenia viridis</td>
</tr>
<tr>
<td>21. Felis javanensis</td>
<td>53. Eurylaimus javanicus</td>
</tr>
<tr>
<td>22. Felis sumatrana</td>
<td>54. Alcedo biru</td>
</tr>
<tr>
<td>23. Felis gracilis</td>
<td>55. Dacelo pulchella</td>
</tr>
<tr>
<td>24. Mus setifer</td>
<td>56. Phoenicophaus javanicus</td>
</tr>
<tr>
<td>25. Sciurus insignis</td>
<td>57. Cuculus lugubris</td>
</tr>
<tr>
<td>26. Sciurus plantani</td>
<td>58. Cuculus xanthorhynchus</td>
</tr>
<tr>
<td>27. Sciurus bicolor</td>
<td>59. Centropus philippensis</td>
</tr>
<tr>
<td>28. Pteromys genibarbis</td>
<td>60. Perdix personata</td>
</tr>
<tr>
<td>29. Pteromys lepidus</td>
<td>61. Ardea speciosa</td>
</tr>
<tr>
<td>30. Rhinoceros sondaicus</td>
<td>62. Scolopax saturata</td>
</tr>
<tr>
<td>31. Tapirus malayanus</td>
<td>63. Parra superciliosa</td>
</tr>
<tr>
<td>32. Cervus muntjak</td>
<td>64. Anas arcuata</td>
</tr>
</tbody>
</table>

65. illustrations to the first number
66. illustrations to the second number
67. illustrations to the third number
68. illustrations to the fourth number
69. illustrations to the fifth number
70. illustrations to the sixth number
71. illustrations to the seventh number
72. details for Cheiromeles torquatus (better treated as 5 bis)
It is, of course, important for anyone citing the *Zoological Researches on Java* to realize that Horsfield’s binding sequence established that the eight plates in Part I were not to be numbered 1 to 8.

By April 1824, when Horsfield completed the publication of his *Zoological Researches* four years had passed, and during this period the *Nouveau Recueil de Planches Coloriées d’Oiseaux* (hereafter the ‘*Planches Coloriées*’) of Temmink & Laugier had been launched and about 40 parts published, starting from August 1820 (see Dickinson, 2001); and names given to the species depicted in the *Planches Coloriées* in some cases beat Horsfield’s *Catalogue* to print. Horsfield was aware of this and the 1824 version of the *Catalogue* – which accompanied the eighth part of the *Zoological Researches* – included a second column in his list of birds in the museum in which he gave the names used in the *Planches Coloriées* that he thought were prior names and thus senior synonyms. In fact, the name *Musciicapa hirundinacea* Horsfield, 1824 (dating from January), potentially has about four months’ precedence over the same name as used by Temminck (1824) in about June (see Dickinson 2012: 47) – unless Temminck’s name is accepted from the wrapper which in March 1822 accompanied the plates for livraison 20 of the *Planches Coloriées*.  

**REASONS FOR THIS STUDY:**

When considering the need to publish this paper given the existence of the report by Oberholser (1921) we examined the sequence of the pages and plates in five copies looking for inconsistent binding. Those of the American Museum of Natural History, the Naturhistorisches Museum Wien, the Balfour and Newton Library at the University of Cambridge, plus the two made available by the Biodiversity Heritage Library – one being that of the Smithsonian Institution, Washington DC and, the other, that of the National Library of Singapore.

**RESULTS:**

Our comparison between examples of this work have shown that there are indeed some small differences between the sets, but the plate numbers suggested by Oberholser (1921) are helpful and only incomplete in ignoring the extra plate from part 8 (which was actually a plate providing detailed drawings of *Cheiromelas torquatus* which ought perhaps to have been numbered 72. However, it is usually bound with plate 5 and is better treated as plate 5 *bis*. This treatment allows all the other plate numbers put forward by Oberholser (1921) to be retained. ¹ The remaining differences between sets relates solely to the sequencing in which the plates and texts were bound (we have not examined a set which treats all the mammals before the birds or vice versa) – whether a plate was bound before its text pages or after them is inconsistent. An exception to this is the set belonging to the National Library of Singapore in which the plates are through numbered treating 5 *bis* as 6 and so on, however

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⁵ As it has been until now, but this is being re-considered and an ICZN ruling sought.

⁶ In the set of this work displayed by the Biodiversity Heritage Library and identified as being the set held by the National Library of Singapore – and perhaps the basis for the 1990 facsimile edition– the plate depicting *Musciicapa banyumas* and *Musciicapa hirundinacea* has been hand numbered 39 which has arisen by counting the second *Cheiromelas torquatus* plate (72) as plate 6 (and all numbers from there on are one greater than those suggested by Oberholser (1921), where the plate is numbered 38 and not 39. We recommend Oberholser’s list be treated as appropriate and that plate 5 *bis* be recognized as such.
the plates for *Rhinoceros sondaicus* and *Tapirus malayanus* are missing. After the back cover
the plates are displayed again, if these are not duplicated images (as we suppose) then note
that these again lack *Rhinoceros sondaicus* and *Tapirus malayanus*.

We have also checked the 1990 facsimile edition and only by doing so did we notice that
plate 60 (59 in Oberholser’s list) names its subject as *Centropus bubutus* while the associated
text titles it *Centropus philippensis var. javanicus*. This prompts a number of nomenclatural
comments which we provide in Appendix I (below).

Aves Press, publishers of Zoological Bibliography, who have agreed to consider this
document for publication, have offered to make available PDFs of Tables I and II alongside the
PDF of the paper itself on the Aves Press website. This is intended to allow libraries to place
either or both of these tables with their copy of this work.

**ACKNOWLEDGEMENTS**

Partly as an outcome of an appeal to the ornithological community to help us to locate
sets with wrappers Leslie Overstreet kindly provided us with an extract of the OCLC
(originally Ohio College Library Center) listing of 64 holdings of this work, and from this it
was clear that the University of Guelph, Ontario, Canada had such a set, we believe it to be
unbound but with the original content in each wrapper, but we have not been able to verify
the content of each wrapper. Our appeal was also answered by Andrea Kourgli of the
Naturhistorisches Museum Wien, who found no wrappers in the set in that museum’s
library. Knowing of a strong relationship between Charles Davies Sherborn and Alfred
Newton (see Sherborn, 1898), and the fact that Sherborn might have checked a set in what is
now the Balfour and Newton Library at the University of Cambridge Zoology Department,
we asked Jane Acred and she confirmed the library holding was indeed of a volume with the
wrappers bound in. Jane has kindly assisted with our comparison between sets of this work.
Brian Gill in Auckland, New Zealand offered to check a copy held in a library there. We are
most grateful to all these friends. In connection with the appendix we thank Patrick Boussès
and Justin Jansen for comments relating to the topic covered. We also thank David Wells for
his helpful corrections to and suggestions on the manuscript.

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University Press, Singapore.


Cuvier, G., 1817. Le règne animal distribué d’après son organisation, pour servir de base à l’histoire naturelle des

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7 Horsfield’s use of *javanicus* in the name *Centropus philippensis var. javanicus* did not get listed by Sherborn
(1927: 3281) but is listed by Shelley (1891: 343). See Appendix to this paper.


Raphael, S., 1970. The publication dates of the Transactions of the Linnean Society, Series I, 1791-1875. – Biological Journal of the Linnean Society, 2: 61-76.


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APPENDIX I:  
THE NAME CENTROPUS PHILIPPENSIS AND ITS FATE

Horsfield (1821) named the coucal of Java Centropus bubutus in his basic listing in the Transactions of the Linnean Society of London of the birds of Java; this preceded his illustrated detailed report which provided half the content of Zoological Researches. Soon after that, when examining other publications that might assist his work, he found that Cuvier (1817: 425-426) had discussed the coucals – genus Centropus – and in footnote 1 to page 426 he listed the name philippensis Nob., associated with plate “884” from the Planches Enluminées of Daubenton (a plate incorporated in the Histoire Naturelle des Oiseaux of Buffon). Unfortunately, 884 was an error for 824. This can be determined from the report by Boddaert (1783) of his examination of all Daubenton’s plates, and Boddaert linked plate 824 (which was published about 1777) with plate 295 in that he considered the birds belonged to the same genus.\(^8\)

So Cuvier’s name given as Cuculus philippensis (although Cuvier implied recognition of Centropus as at least a subgenus if not intending all the species listed in his footnote to be members of genus Centropus) dates from 1817. The name must surely rest on the depiction of the bird in plate 824 being the holotype; and presumably the picture was drawn and coloured before 1778. That strongly suggests collection in the Philippines by Pierre Sonnerat (1748-1814) who visited Luzon, Panay and Mindanao between September 1771 and 1772 (see Dickinson et al., 1991: 78). The Museum National d’Histoire Naturelle (MNHN) dates from 1793 when Louis Dufresne became the staff taxidermist (see Jansen, 2015). Dufresne (1803) published information on the use of arsenical soap and only when his use of that started did specimens have a reasonable chance of a long future in the collections.

Voisin & Voisin (1999: 400) listed specimens that might have been the basis for the use of the name Cuculus philippensis by Lesson (1828: 619; 1830: 135) but the two specimens they discussed were not from the Philippines being said to have been collected by Duvaucel and/or Diard: the labels on the Javan specimen associates this with both men while the labels on the Sumatran bird refer to Diard alone. The Voisins wrote “Cuvier n’a jamais non plus décrit ce taxon, et les deux spécimens ci-dessus n’ont probablement d’autre mérite que de lui avoir peut-être servi lors de ses cours.”\(^9\) While Cuvier could indeed have exhibited these specimens in his lessons the Voisin’s missed Cuvier’s valid introduction of the name in 1817. Lesson (1830) used the name in his Traité d’Ornithologie (p. 135) not claiming it as his name; he could have been following Horsfield (1823 – text to plate 59) who made clear in the text pages for that plate that he took the name from Cuculus philippensis Cuvier and that although he had earlier named the Java form bubutus he now doubted that it was distinct from philippensis. Usage by Lesson (1828: 619) suggests that Lesson just attributed the new combination to himself a device which was widely practiced in the early 19th century. On the whole the evidence that Lesson introduced this name is insufficient and it should not be considered as a junior homonym.

The first serious loss of precedence by Cuvier’s name came with Shelley (1891: 343) where one finds philippensis var. javanica Horsfield, 1824, placed in the synonymy of Centropus sinensis with bubutus listed as senior to it. No detailed search of the literature has

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\(^8\) Lesson (1830: 135) mentioned that Buffon called this ‘Coucou des Philippines’.

\(^9\) Trans. ECD “Neither did Cuvier describe this taxon and these two specimens [listed] below probably only merit association with Cuvier’s potential exhibition of then in his lectures”.

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been made to find usage of it as valid since 1899 but this seems extremely unlikely. So we judge this name to be disused. We would call it a *nomen oblitum* if the requirements of Art. 23.9 of the Code (ICZN, 1999) allowed us to do so, but we cannot justify the time to do this as there is, as far as we know, no suggestion that precedence should be reversed. And, incidentally, Mees (1971) provided the Philippine form with name *philippinensis* (note the extra syllable) and it is very likely that he knew of the original abandoned name.