Early entomological art: the colour plates of Snellen van Vollenhoven

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Notes are given on the development of plates in the *Tijdschrift voor Entomologie* throughout its 150 years of existence. I focus on the drawings by the first editor and chief contributor in the first decades, S. C. Snellen van Vollenhoven. His original drawings were studied and compared with the printed plates to illustrate the interaction between scientist and artist. Some plates and their corresponding originals are reproduced in colour.

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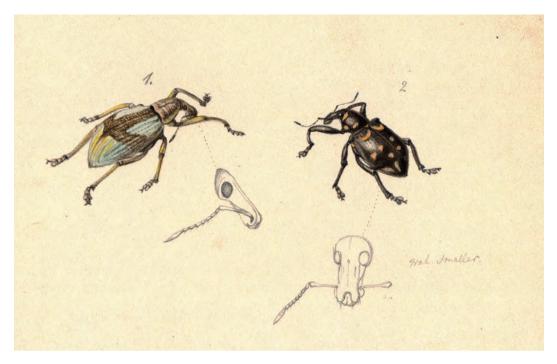
Introduction

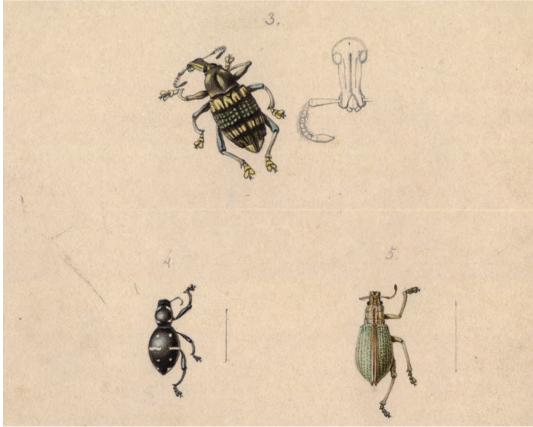
The plates illustrating the articles in the *Tijdschrift voor Entomologie* over the 150 years of its existence are worth further examination. They show a progression of style, interpretation, finesse, and presentation that is fascinating both for science-historical reasons and from a cultural-historical point of view. Some trends that can be discerned, and which, of course, reflect the general specialisation of the sciences and their separation from arts over the past three centuries, is that the plates become more rigid, less artistic, more 'scientific' over time.

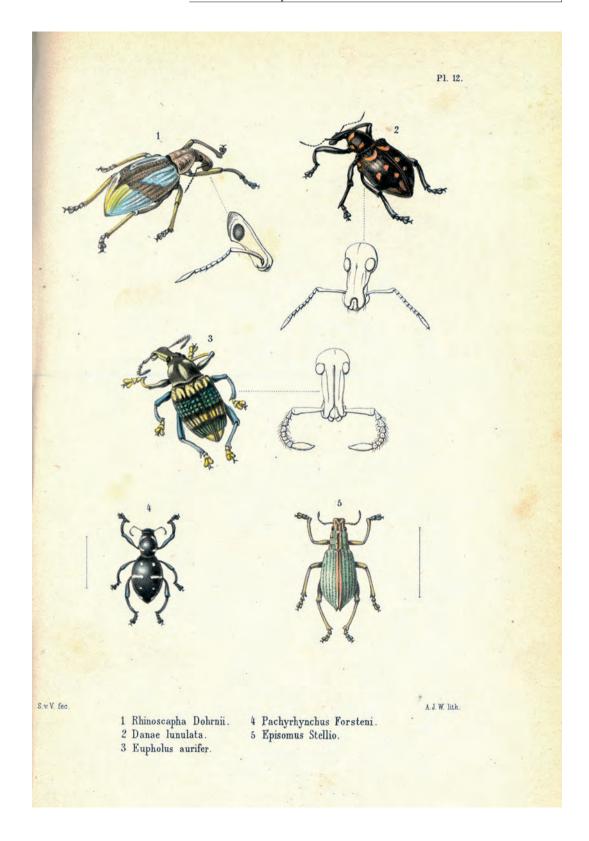
In the 1850's and 1860's, many of the plates adorning the articles show scenes from the life-history of butterflies, moths, sawflies, and others. The insects are depicted in the midst of their activities, with adults alighting on twigs, larvae eating away at a leaf, a pupa suspended from a branch... Although details of the eggs or particular morphological features are now and then shown enlarged with scale bars added, the realism of the plates was enhanced even further by depicting everything life-size whenever possible. Towards the end of the 19th century, these "scenes from insect life" are more and more replaced by arrangements of geometrically placed, identically depicted individuals. The plates of Diptera by van der Wulp in the 1890's are tightly and orderly arranged habitus-drawings. In the 20th century this trend of departure from 'artistic' illustration continues, with the increase of the use of photographs, micrographs, and line-drawings of morphological details.

I have chosen to reproduce some of the plates of one of TvE's most prolific authors (see also the article by Huijbregts & Van Nieukerken on p. 245-262 of this issue), Samuel Constant Snellen van Vollenhoven (1816–1880). In the first decades of its existence, Snellen van Vollenhoven was its editor and personally prepared the majority of the plates. His original drawings are still held in boxes in the library of the Netherlands Entomological Society (in the case of the earliest drawings, they are still in Snellen van Vollenhoven's original folder, marked *Konstboek* ["book of art"]) and offer a fascinating insight into the way he worked.

Not having the present-day advantage of photographic reduction, he drew his work in the same scale as they were to be printed. The result can be seen in, for example, the drawings of weevils on p. 264. Hand-coloured pencil drawings were prepared on pieces of cardboard or drawing paper and submitted, often with scribbled directions, to the artist who was to prepare the plates. In the beetle plates shown here (all from Volume 7, Snellen van Vollenhoven 1864), the plates were prepared as lithographs (apparently hand-coloured, although chromolithography was already available at the time), but in other volumes







from that period (possibly depending on the printer, which was changed rather frequently during the first years of the journal's existence), gravures were made (see below).

The plate on p. 265 shows the end result. The lithographer ('A.J.W. lith.' in the bottom right-hand corner) has rendered Snellen van Vollenhoven's sketchy drawing ('S.v.V. fec.' [Snellen van Vollenhoven fecit] in the bottom left-hand corner) in more tightly drawn lines, corrected asymmetries, and added a matching antenna or leg here and there where only one was shown in the original. In the Konstbook, proofs are sometimes present that show the intermediate stages, with Snellen van Vollenhoven's remarks to the artist to change the coloration of an abdomen, to make an antenna a bit longer, or a pronotal angle a bit rounder. The buprestids of the original drawings on p. 266 have also been provided with matching legs on the left, although the entomologist apparently did not always have a last check of the proofs: The antennae of Chalcophora amabilis Snellen van Vollenhoven, 1864 (now Nipponobuprestis amabilis), which have the correct number of 11 articles in Snellen van Vollenhoven's drawings, have been given 12 articles by the artist, and the pale spots on its elytra are shown in dark green.

In a slightly later example, of the life stages in the sawfly *Cimbex lucorum* (now *Trichiosoma lucorum* (Linnaeus, 1758)) on birch, the entomologist made many separate drawings, with notes ("slightly narrower, as in *C. Betulae*") (see page 318), which were duly redrawn and assembled on (in this case, from Volume 11, Snellen van Vollenhoven 1868) a hand-coloured gravure (page 244).

Many of the specimens illustrated by Snellen van Vollenhoven are types, and can still be checked in the National Museum for Natural History, Naturalis (see Krikken et al. 1981).

References

Krikken, J., C. van Achterberg, P.H. van Doesburg, R. de Jong & K.W.R. Zwart, 1981. Samuel Constant Snellen van Vollenhoven (1816–1880) and his entomological work. – Tijdschrift voor Entomologie 124 (6): 235–268.

Snellen van Vollenhoven, S.C., 1864. Description de quelques espèces de coléoptères. – Tijdschrift voor Entomologie 7: 145–170, pls 9–12.

Snellen van Vollenhoven, S.C., 1868. De inlandsche bladwespen in hare gedaanteverwisseling en levenswijze beschreven. 14. – Tijdschrift voor Entomologie 11: 197–209, pls 8-10.

Explanation of plates

On page 244

Trichiosoma lucorum (Linnaeus, 1758) (Hymenoptera: Cimbicidae). Hand coloured plate 8 in volume 11, showing life history (as Cimbex lucorum) on a branch of birch (Betula). – 1, Almost mature larva; 2, enlarged head of larva; 3, enlarged spiracle; 4, cocoon, spun between leaves; 5, flying adult; 6, resting adult; 7, hind tibia and tarsus of male, enlarged; 8, enlarged antenna.

On page 264-265

Coleoptera, Buprestidae, all named by Snellen van Vollenhoven (1864). Left original drawings by Snellen van Vollenhoven, right hand coloured plate 11 from volume 7 (1864). Species from Indonesia and Japan.

1, 2, Catoxantha hemixantha from Banka (currently Megaloxantha hemixantha); 3, Chrysochroa ludekingii from Sumatra; 4, Chalcophora pyrostictica from Sumatra, currently Chrysodema pyrostictica; 5, Chalcophora amabilis from Japan, currently Nipponobuprestis amabilis.

On page 266-267

Coleoptera, Curculionidae, all named by Snellen van Vollenhoven (1864). Left original drawings by Snellen van Vollenhoven, right hand coloured plate 12 from volume 7 (1864). Species from Indonesia. 1, Rhinoscapha dohrnii, from Morotai; 2, Danae lunulata, currently Rhinoscapha lunulata, from Morotai; 3, Eupholus aurifer, from Seram (Ceram); 4, Pachyrhynchus forstenii, from Ternate, Halmaheira and Sumatra; 5, Episomus stellio, from Sumatra.

On page 318

Trichiosoma lucorum (Linnaeus, 1758). Original drawings for Plate 8 in volume 11, illustrated on page 244. See above for details.

