

Zephyr's wings: Tiepolo's imagination or the antlion *Pseudimares* Kimmins, 1933 (Neuroptera, Myrmeleontidae) as his model?

Rinaldo Nicoli Aldini¹ & Roberto A. Pantaleoni^{2,3}

¹Istituto di Entomologia e Patologia vegetale, Facoltà di Agraria, Università Cattolica del Sacro Cuore, via Emilia Parmense 84, 29122 Piacenza, Italy; e-mail: rinaldo.nicoli@unicatt.it

²Dipartimento di Agraria, Entomologia, Università degli Studi di Sassari, Via Enrico de Nicola, 07100 Sassari, Italy; e-mail: pantaleo@uniss.it

³Istituto per lo Studio degli Ecosistemi, Consiglio Nazionale delle Ricerche (ISE-CNR), Traversa la Crucca 3, Regione Balduina, 07100 Li Punti (SS), Italy; e-mail: r.pantaleoni@ise.cnr.it

ABSTRACT

When Giambattista Tiepolo, in his painting 'Triumph of Zephyr and Flora', gave Zephyr dragonfly-like wings with eyespots, was he inspired by pure imagination or did he have an insect he had previously seen in mind: the rare and astonishing *Pseudimares*? It is impossible to be sure. The authors of the present note point out the innovatory characteristic of the pictorial arrangement adopted by Tiepolo for the wings, compared with stylistic elements which were fashionable before and during his epoch, and suggest the reasons why we cannot rule out that the artist could have been inspired by a model, a specimen of *Pseudimares*, two centuries before the scientific discovery of this very rare antlion, at present only known from Iran and Morocco. A short account is provided on the bio-ecological significance of the eyespots found on insect wings.

KEY WORDS

Giambattista Tiepolo; XVIII century; fine arts; science; Neuroptera; antlions; eyespots.

Received 24.05.2012; accepted 26.06.2012; printed 30.06.2012

By "wonder" I mean the power of the object displayed to stop the viewer in his tracks, to convey an arresting sense of uniqueness, to evoke an exalted attention (Greenblatt, 1990: 20).

INTRODUCTION

In the third decade of the XVIII century, Giambattista Tiepolo (Venice, March 5, 1696 - Madrid, March 27, 1770) painted his 'Triumph of Zephyr and Flora' (Fig. 1), a large (225 x 395 cm) oil painting nowadays housed at the Ca' Rezzonico Mu-

seum, Venice. In this work the artist did not adopt a canonical representation of Zephyr.

Indeed, he did not paint Zephyr with the traditional bird wings found in the reference iconological manual of his epoch, the Cesare Ripa's *Iconologia* (published in a great many editions; as examples we cite the second edition, which was the first to be illustrated, and a late posthumous edition in German: Ripa, 1603, 1704) (Fig. 2) (Ashton, 1978).

Tiepolo did not even use butterfly wings, the other symbolic image had been adopted since antiquity for certain winged personifications (Ronchetti, 1922: 986) (1).

(1) It seems fitting to mention Psyche, a mythical character, but first and foremost a word which in ancient Greek indicated both the spirit of life, the soul, and the butterfly (or moth), which recalls the first meaning, with its metamorphosis and flying away.



1



2



3



Figure 1. Giambattista Tiepolo, 'Triumph of Zephyr and Flora' (Ca' Rezzonico Museum, Venice, Italy).

Figure 2. Some stylistic canons from a posthumous *Iconologia* by C. Ripa (1704). Zephyr, the West Wind, is represented (with bird wings) in picture no. 12. The other three Winds are to be found in pictures no. 11 (East), 13 (South) and 14 (North). Figure 3. The nymphalid *Inachis io* (Linnaeus, 1758) offers one of the most common examples of eyespots on the dorsal surface of the wings (left figure) whilst the ventral surface (right figure), uniformly blackish-brown, disguises the butterfly settled with folded wings on tree-bark and rock (photos by Paolo Mazzei).



Figure 4. Tiepolo's Zephyr and a *Pseudimares*: a close-up comparison of their wings; actual length of the antlion wing approx. 5 cm (the photo of antlion by Gabriel Martínez del Mármol Marín).

A late example of this is to be found in 'Flora and Zephyr' (1875) painted by the French William-Adolphe Bouguereau.

Eyespots and sense of wonder

The Venetian artist made his choice in order to foment a sense of wonder in the observer, giving

Zephyr four dragonfly-like wings, each with a very large apical eyespot (2).

Barcham (1996), one of the principal Tiepolo scholars, outlines the pictorial enchantment of the wings but he does not relate this to biological considerations, which would almost certainly have been alien to him. Eyespots, particularly on the wings, are widespread mainly among Lepidoptera.

(2) The idea of painting Zephyr with delicate, membranous dragonfly-like wings seemed to be the most suitable pictorial arrangement to evoke a light breeze, harbinger of Spring. Probably for this reason the choice of dragonfly wings was followed also in the nineteenth century by a painter from Cremona, Gallo Gallina; this artist, when he frescoed 'Zephyr abducts Flora' (1832) in the Ala-Ponzone palace of his native town, gave Zephyr graceful, uniformly dark-bluish damselfly-wings (see Magri, 2004), clearly inspired by a common calopterygid.

Such spots signal astonishment, amazement, instinct to flee. One of the main hypothesized functions of eyespots is that they deter predators (particularly insectivorous birds) by intimidation, preventing the latter from initiating an attack.

Most discussions of eyespots functioning as intimidation devices generally argue that they function by resembling the eyes of the predators' enemies (Fig. 3), although some recent investigations also present other aspects (Stevens, 2005; Vallin et al., 2005; Stevens et al., 2008a, b). On the other hand, neither dragonflies (Anisoptera) nor damselflies (Zygoptera) with eyespots on their wings seem to exist (A. Tabarroni, in litteris).

Zephyr's wings are, therefore, astonishing and peculiar, corresponding perfectly to the definition of "wonder" as proposed by Greenblatt (1990).

Imagination or inspiration?

We do not know what guided Tiepolo's genius when he created such a daring hybrid between a butterfly (or moth), and a dragonfly (or damselfly). Certain commentators assert it was pure imagination (Chiappini & Veneziani, 2003), another (Magri, 2004) thinks that the wings were simply 'stolen' from a dragonfly, but this is not what the neuropterologist Monserrat (2010) believes: he finds a "surprising or casual" similarity with the adult antlion *Pseudimares* (Neuroptera Myrmeleontidae). Only two very rare species are presently known as belonging to this spectacular genus, one found in southern Iran (Kimmins, 1933), the other in Morocco (Aspöck & Aspöck, 2009). The very limited information available on both species, probably living in oases, is summarized by Pantaleoni et al. (2012).

The similarity between the pattern of Zephyr's wings and that of *Pseudimares* is not superficial, as the close-up comparison demonstrates (Fig. 4). If Tiepolo drew only on his imagination for his representation of Zephyr's wings, we are confronted with a very surprising coincidence. But is the hypothesis that the Venetian artist could have observed a *Pseudimares* at all feasible?

Giambattista Tiepolo spent his life principally in the Venice Republic, a seafaring state with a dense network of mercantile exchanges throughout the Mediterranean Sea. He himself was the son of a "mercante di negozi da nave" [merchant trading by ship] (Pallucchini, 1968).

In the late sixteenth century and through the seventeenth century Europe witnessed the spread of the 'Wunderkammern' rich in exotic finds, the forerunners of natural history museums (Westerhoff, 2001). Furthermore, of the European towns, Venice, together with for instance Amsterdam, during his epoch was characterized by a high patrician culture, with a strong interest in art and science (Burke, 1973). We therefore cannot exclude that the Master had the opportunity, for one reason or another, to see a specimen of this remarkable antlion, later being inspired by it.

There is no sure proof in favour of either of the two hypotheses: that of a fortuitous resemblance or that of an inspiring model, in the latter case simply recalled from memory by Tiepolo. However, both hypotheses contain an element of the extraordinary, thus exciting a sense of wonder, at least on the part of the authors of this note.

The former because it would indicate a nearly perfect coincidence between the imagery of a great painter and the true world. The latter because of the amazing trace an unusual and wonderful living being could have left behind, two hundred years before its official discovery and first description.

REFERENCES

- Ashton M., 1978. Allegory, Fact, and Meaning in Giambattista Tiepolo's Four Continents in Würzburg. *The Art Bulletin*, 60: 109-125.
- Aspöck, H. & Aspöck, U., 2009. Wiederentdeckung des mysteriösen Genus *Pseudimares* Kimmins, 1933, und Beschreibung einer neuen Art aus Marokko, *Pseudimares aphrodite* n. sp. (Neuroptera, Myrmeleontidae). *Entomologische Nachrichten und Berichte*, 53: 41-46.
- Barcham W. L., 1996. 13. Trionfo di Zefiro e Flora. In: AA. VV., 1996. Giambattista Tiepolo 1696-1996. Skira Editore, Milano, 118-121.
- Burke P., 1973. Patrician Culture: Venice and Amsterdam in the Seventeenth Century. *Transactions of the Royal Historical Society, Fifth Series*, 23: 135-152.
- Chiappini E. & Veneziani M., 2003. Gli insetti nell'arte figurativa italiana. In: Chiappini E. & Cravedi P., 2003. *Insetti e patrimonio artistico*. [Atti della Giornata di studio tenutasi a Piacenza il 24 ottobre 2003. Università Cattolica del Sacro Cuore, Sede di Piacenza-Cremona]. Tipolito Farnese, Piacenza, 9-43.

- Greenblatt S., 1990. Resonance and Wonder. *Bulletin of the American Academy of Arts and Sciences*, 43: 11-34.
- Kimmins D. E., 1933. A new genus and species of the family Myrmeleonidae. *Annals and Magazine of Natural History*, (10)11: 244-246 + pl. VI.
- Magri F., 2004. L'arte di essere insetto, ovvero: gli insetti nell'arte. Una chiacchierata sull'arte di rappresentare gli insetti. Chi sono e cosa ci raccontano gli insetti nel linguaggio degli artisti cremonesi, italiani e stranieri di ogni epoca. *Tipografia Fantigrafica*, Cremona, 223 pp.
- Monserrat V., 2010. Los Neurópteros (Insecta: Neuroptera) en el arte. *Boletín de la Sociedad Entomológica Aragonesa*, 46: 635-660.
- Pallucchini A., 1968. Analisi dell'opera pittorica di Giambattista Tiepolo. In: Piovene G. & Pallucchini A., 1968. *L'opera completa di Giambattista Tiepolo*. Rizzoli Editore, Milano, 81-139.
- Pantaleoni R. A., del Mármol Marín G. M. & Vigara R. L., 2012. Second record of *Pseudimares aphrodite* H. Aspöck et U. Aspöck, 2009 (Neuroptera, Myrmeleontidae). *Biodiversity Journal*, 3: 129-131.
- Ripa C., 1603. *Iconologia ovvero descrizione di diverse imagini cavate dall'antichità et di propria invention. Trovate et dichiarate da Cesare Ripa perugino, Cavaliere de Santi Maurizio et Lázaro. Di nuovo rivista et dal medesimo ampliata di 400 et più Imagini. et di figure d'intaglio adornata. Opera non meno utile che necessaria a Poeti, Pittori, Scultori et altri, per rappresentare le Virtù, Vitii, Affetti, et Passioni humane*. Appresso Lepido Facii, Roma, 545 pp.
- Ripa C., 1704. *Der Kunst-Göttin Minerva Liebreiche Entdeckung Wie die Virtuosi alle Tugenden und Laster und was die vier Elementa begreifen sambt allen Künsten und Wissenschaften der Welt Kunst-mässig und Hieroglyphisch vorstellen sollen damit die bißherige ignorante Fehler verhütet und die Zeichen- und Mahlerey-Künste in höhern Aufnahm mögen gebracht werden*. Aus Unkosten Kroniger und Göbels Erben, Augsburg, 298 pp.
- Ronchetti G., 1922. *Dizionario illustrato dei Simboli*. Ulrico Hoepli Editore-libraio della Real Casa, Milano, 1009 pp. + 91 pls.
- Stevens M., 2005. The role of eyespots as anti-predator mechanisms, principally demonstrated in the Lepidoptera. *Biological Reviews*, 80: 573-588.
- Stevens M., Hardman C.J. & Stubbins C. L., 2008a. Conspicuousness, not eye mimicry, makes "eyespot" effective antipredator signals. *Behavioral Ecology*, 19: 525-531.
- Stevens M., Stubbins C. L. & Hardman C. J., 2008b. The anti-predator function of 'eyespot' on camouflaged and conspicuous prey. *Behavioral Ecology and Sociobiology*, 62: 1787-1793.
- Vallin A., Jakobsson S., Lind J. & Wiklund C., 2005. Prey survival by predator intimidation: an experimental study of peacock butterfly defence against blue tits. *Proceedings of the Royal Society B Biological Sciences*, 272: 1203-1207.
- Westerhoff J. C., 2001. A World of Signs: Baroque Pansemioticism, the Polyhistor and the Early Modern Wunderkammer. *Journal of the History of Ideas*, 62: 633-650.