

The prominent absence of Alfred Russel Wallace at the Darwin anniversaries in Germany in 1909, 1959 and 2009

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Abstract It is well known that the contribution of Alfred Russell Wallace (1823–1913) to the development of the “Darwinian” principle of natural selection has often been neglected. Here we focus on how the three anniversaries to celebrate the origin of the Darwin–Wallace theory in Germany in 1909, in 1959 in the divided country, as well as in 2009, have represented Charles Robert Darwin’s and Alfred Russell Wallace’s contributions. We have analyzed books and proceedings volumes related to these anniversaries, and the main result is that Wallace was almost always ignored, or only mentioned in passing. In 1909, Ernst Haeckel gave a talk in Jena, later published under the title *The worldview of Darwin and Lamarck* (Das Weltbild von Darwin und Lamarck), but not as the Darwin–Wallace concept. Haeckel mentions Wallace only once. In two important proceedings volumes from the 1959 anniversaries, Wallace was ignored. The only fair treatment of Wallace is given in another book, a collection of documents edited by Gerhard Heberer, for which the author selected nine key documents and reprinted excerpts (1959). Three of them were articles by Wallace, including the Sarawak- and Ternate-papers of 1855 and 1858, respectively. An analysis of the dominant themes during the celebrations of

2009 shows that none of the six topics had much to do with Wallace and his work. Thus, the tendency to exclude Alfred Russell Wallace is an international phenomenon, and largely attributable to the “Darwin industry”.

Keywords Evolution · Haeckel · Darwin · Lamarck · Reception

Introduction

A reception history of the early publications on the Darwinian theory of natural selection, specifically the Darwin–Wallace papers of 1858, has not yet been written. This is partly due to the dominance of the so-called “Darwin industry”, which was established at the beginning of the twentieth century and often takes a rather biased view that tends to exclude the work of Darwin’s contemporaries: “The term does not refer to the sheer bulk of Darwin scholarship, although the 525 titles on Darwin’s career and on the impact of his work listed in the *Critical Bibliography* since the Darwin Centennial in 1959 certainly qualify this as a major area of historical research. More exactly, the ‘Darwin Industry’ is a self-styled reference coined by a select group of scholars who have in recent years concentrated their efforts on utilizing the vast resources of Darwin’s unpublished notebooks and correspondence in order to illuminate individual episodes in his intellectual development as well as certain aspects of the relationship of his work to the wider social, political, and intellectual contexts of Victorian Britain” (Lenoir 1987, p. 115).

Thus, while the study of Charles Darwin (1809–1882) and his work, in the form of the “Darwin industry” still flourishes, contemporaries such as Thomas Henry Huxley (1825–1895), Ernst Haeckel (1834–1919), and Alfred

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Russel Wallace (1823–1913) are given much less attention. Although the parallels between the mechanisms of evolution developed by Darwin and Wallace (hereafter called the Darwin–Wallace principle of natural selection) are often appreciated in both Darwin biographies and scientific papers (De Beer 1958; Brackman 1980; Kottler 1985; Kutschera 2003, 2008, 2009; Glaubrecht 2013; Hossfeld and Olsson 2009), an imbalance prevails in the historical and biographical treatment of the two scientists. The conditions for a comprehensive account of the early history of evolutionary biology (and thus also the biographies of individual protagonists) have improved significantly lately.

Thus, Wallace's life and work have been documented (Desmond and Moore 1995; Moore 2006). For Ernst Haeckel, a comprehensive catalogue of the 42,000 letters in the Haeckel correspondence has been published (Hossfeld and Breidbach 2005, 2006), and forms the basis for a comprehensive edition project, funded by the Leopoldina Academy. Nevertheless, a history of the Darwin–Wallace theory regarding its “denial”, “re-discovery”, “acceptance” or even “ideology”, as has been written for Mendel's laws, is still a desideratum (Iltis 1921; Nachtsheim 1951; Barthelmess 1952; Jahn 1957, 1958; Stubbe 1965; Orel 1996; Simunek et al. 2010). This open question is the topic of the analysis presented here.

Darwinism and ideology

There is also a political component in the reception of the Darwin–Wallace theory that should not be forgotten. On the one hand, Darwinism—after the misuse of evolutionary biology in the Nazi era (1933–1945)—was only slowly and reluctantly accepted in Germany after World War II. Not only in German public life, but also in schools and universities, the Modern Synthesis was only slowly included in the curricula. On the other hand, Darwinism, or what posed as Darwinism in the Soviet Union and associated countries, underwent politically motivated changes and emerged as “creative Darwinism” or “Michurinism”, better known as “Lysenkoism” in the 1950s (Graham 1993; Joravsky 1970; Regelman 1980; Soyfer 1994; Hossfeld and Olsson 2002). This ambivalent relationship lasted approximately until the “Darwin year” 1959, when ideological resistance to evolutionary biology (and “biological anthropology”) had started to wane. Only from then, and onwards, do we have a broad reception of the Darwin–Wallace principle of natural selection (Reif 2000; Hossfeld and Brömer 2001; Kutschera 2003, 2008, 2009; Hossfeld 2005; Kaasch et al. 2006; Mayr 1982, 1991). In the next section, we analyse if, and how, Wallace and his work is covered in important German publications that emanated from the Darwin anniversaries in 1909, 1959 and 2009.

Ernst Haeckel's Jena lecture of 1909

The first, and perhaps most important anniversary celebration in 1909 in Germany did not have the high profile in public life that would be significant for later anniversaries (Browne 2008; Baker 2008), although the merits of Darwin's work were appreciated. Therefore, it is hardly surprising that the main speaker, Ernst Haeckel, in his talk with the title “The worldview of Darwin and Lamarck”, held on February 12, 1909 in Jena, mentions Alfred R. Wallace only once (on p. 23) in the 39-page publication (Fig. 1) that emanated from the lecture (Hossfeld and Olsson 2009). Haeckel was not unaware of Wallace's work, he had many of Wallace's books in his library (for instance, *The Malay Archipelago* in both English, and in a German translation). Around 1900 it was common in biology to talk about the “Lamarck–Darwin theory” and not of the “Darwin–Wallace principle of natural selection”, as the theory that had solved one of the “Riddles of the Universe”, the transformation of species (Haeckel 1909, p. 6; Kutschera 2008). Although Haeckel, and also

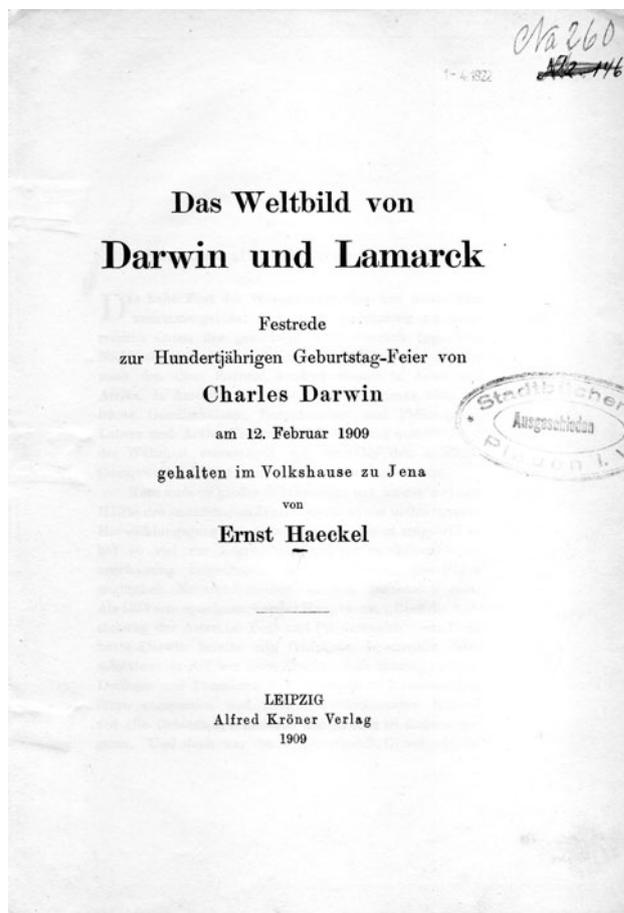


Fig. 1 Ernst Haeckel (1909) *Das Weltbild von Darwin und Lamarck* (The worldview of Darwin and Lamarck) (Bildarchiv Uwe Hossfeld)

Francis Darwin (1909) and some other authors (e.g. Geikie 1909) published on the scientific achievements of Charles Darwin in 1909, this first anniversary received relatively little attention.

The Darwin year 1959

In 1959, the 150th anniversary of Charles Darwin's birth and the 100th anniversary of the publication of his book *On the Origin of Species* were celebrated, and important anthologies were published in several countries (including the US, the UK, Australia and Germany, e.g. Tax 1960; Barnett 1962; Leeper 1962). These publications had a great influence on the reconstruction of the history of evolutionary biology, because, in addition to strengthening the Synthetic Theory (the "second Darwinian revolution") they offered a good overview of the "state of the art" of evolutionary biology to a wider audience. The two German anniversary volumes, however, remained relatively unknown and had little influence (Heberer and Schwanitz 1960; Schwarz 1960). This observation also applies to the second edition of *Die Evolution der Organismen*, edited by

Heberer (1959a), which, in contrast to the first edition (1943), passed relatively unnoticed internationally (Hossfeld 2005).

As mentioned above, two German anniversary volumes were published: In the FRG (West Germany) the paleo-anthropologist Gerhard Heberer (1901–1973) and the botanist Franz Schwanitz (1907–1983) edited *A century of evolutionary research (Hundert Jahre Evolutionsforschung)*, Gustav Fischer Verlag, Stuttgart, Heberer and Schwanitz 1960, Fig. 2), while in the GDR (East Germany) the botanist Otto Schwarz (1900–1981) edited the proceedings from a workshop on evolution (*Arbeitstagung zu Fragen der Evolution*, Gustav Fischer Verlag, Jena, Schwarz 1960, Fig. 3).

The book edited by Heberer and Schwanitz contained 17 articles written by 16 authors. Except for Theodosius Dobzhansky (1900–1975, New York) and Julian Huxley (1887–1975, London) all authors were Germans. It is striking that the famous evolutionary biologist Bernhard Rensch (1900–1990) is missing among the authors, while Walter Zimmermann (1892–1980), Robert Mertens (1894–1975) and Wilhelm Ludwig (1901–1959) all contributed to the book. The two editors wrote only about their

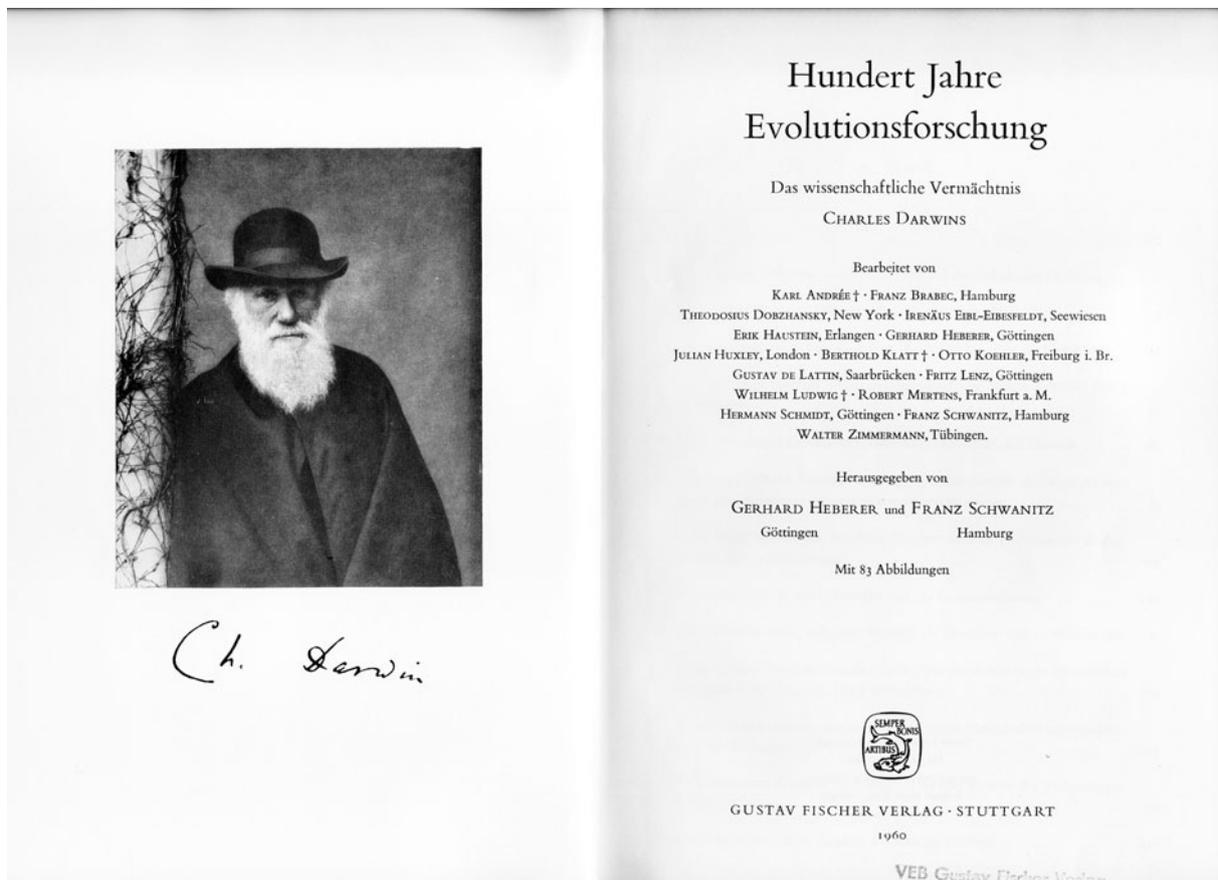


Fig. 2 Heberer and Schwanitz (1960) *Hundert Jahre Evolutionsforschung* (Bildarchiv Uwe Hossfeld)

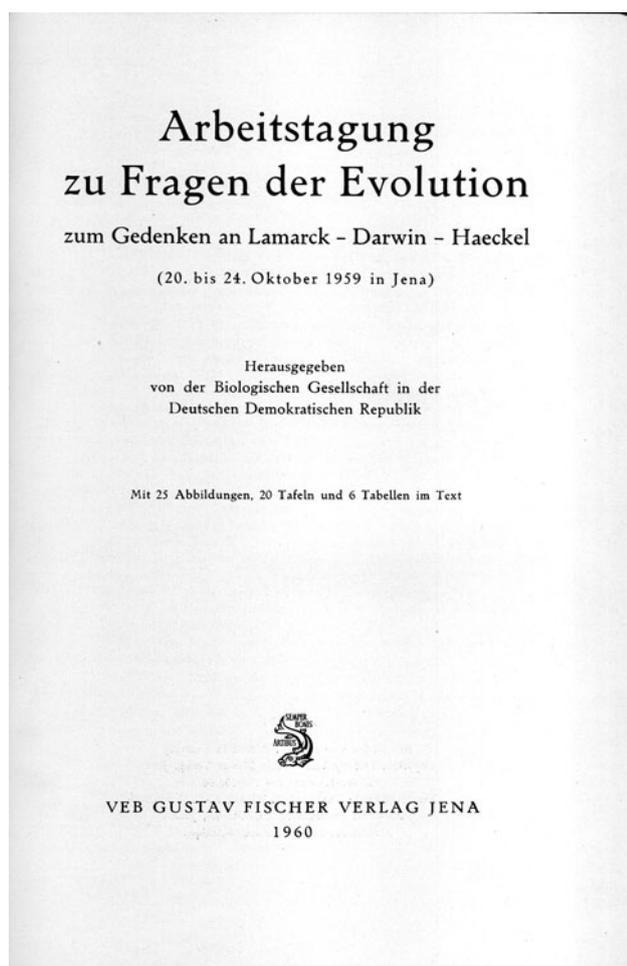


Fig. 3 Schwarz (1960) *Arbeitstagung zu Fragen der Evolution* (Bildarchiv Uwe Hossfeld)

own work in relation to Charles Darwin (Heberer and Schwanitz 1960). They wanted to celebrate the work of Darwin and its fundamental importance for modern research, and thereby evaluated the validity of Darwin's work in the light of contemporary evolutionary biology. It is nevertheless remarkable that no single author in the book wrote anything about the life and work of Alfred R. Wallace (Fig. 4).

On April 10, 1959, the “*Biological Society in the GDR*” (Biologische Gesellschaft in der DDR) was founded at the Humboldt University in Berlin, an organization that had a large influence on the development of biological research in the GDR in coming decades. The 192 founding members elected the Jena botanist and former Rector of the University of Jena, Otto Schwarz, as its first president (to serve until October 1, 1963). The society was first assigned to the ministry of higher education (Hoch- und Fachschulwesen) and later, from July 1, 1969 to the *German Academy of Sciences* in (East) Berlin (Hossfeld 2007, pp. 1067–1085). In 1959, Otto Schwarz organized a workshop on evolution.

It was held in Jena from October 20 until October 24, 1959, and was the first meeting of the society. In addition to celebrating the centennial of the publication of Darwin's *Origin of Species*, the society had three other anniversaries in mind: the publication of Lamarck's *Philosophie Zoologique* 150 years earlier, of Haeckel's *The Riddles of the Universe* 60 years earlier and the 40th anniversary of Ernst Haeckel's death. In his preface, Otto Schwarz stated that the main goal of the workshop was to examine the “viability and fertility of Darwinism” in various fields and its confrontation with “the world view of dialectical and historical materialism [...], which does not mean that every speaker must adhere to Marxism” (Schwarz 1960, p. V). The anthology that emanated from the workshop (*Arbeitstagung zu Fragen der Evolution*) contains 20 essays by 20 authors from the GDR, the FRG, Czechoslovakia, Hungary, Romania, and the USSR. It is a balanced mix of papers from theoretical, historical, and biological perspectives (always with reference to Darwin). At the time, Lysenkoism still had its supporters in the Soviet Union, and these ideas were presented at the workshop as well, and printed without comment in the proceedings. In this volume, Alfred R. Wallace is not mentioned a single time.

Darwin and Wallace in two edited volumes in 1959

Gerhard Heberer also edited a collection of documents, *Dokumente zur Begründung der Abstammungslehre vor 100 Jahren 1858/59–1958/59*. This is perhaps the most original contribution, and it also addresses Darwin's relationship with Wallace. With reference to earlier publications, Heberer selected nine key documents and had excerpts from them reprinted. Heberer himself wrote an introduction that is well worth reading. The documents are: (1) Charles Darwin, “Excerpts from the first notebook, written from July 1837 to February 1838”; (2) Charles Darwin, “Contents of the sketch of his theory from 1844”; (3) “Letter of Messrs. Charles Lyell and Josh. D. Hooker to the Linnean Society, London, from 30 June 1858”; (4) Charles Darwin, “Abstract of a letter to from C. Darwin, Esq. to Prof. Asa Gray, Boston, USA, September 5, 1857”; (5) Charles Darwin, “Extract from an unpublished work on species”; (6) Alfred Russel Wallace, “On the tendency of varieties to depart indefinitely from the original type” (Ternate-essay, 1858); (7) Alfred Russel Wallace, “On the law which has regulated the introduction of new species” (Sarawak-paper, 1855); (8) Charles Darwin, “Introduction, table of contents and conclusions from the main work *On the Origin of Species...* from 1844”; (9) Alfred Russel Wallace, “Note on the passages of Malthus's *Principles of Population* which suggested the idea of natural selection to Darwin and myself”.

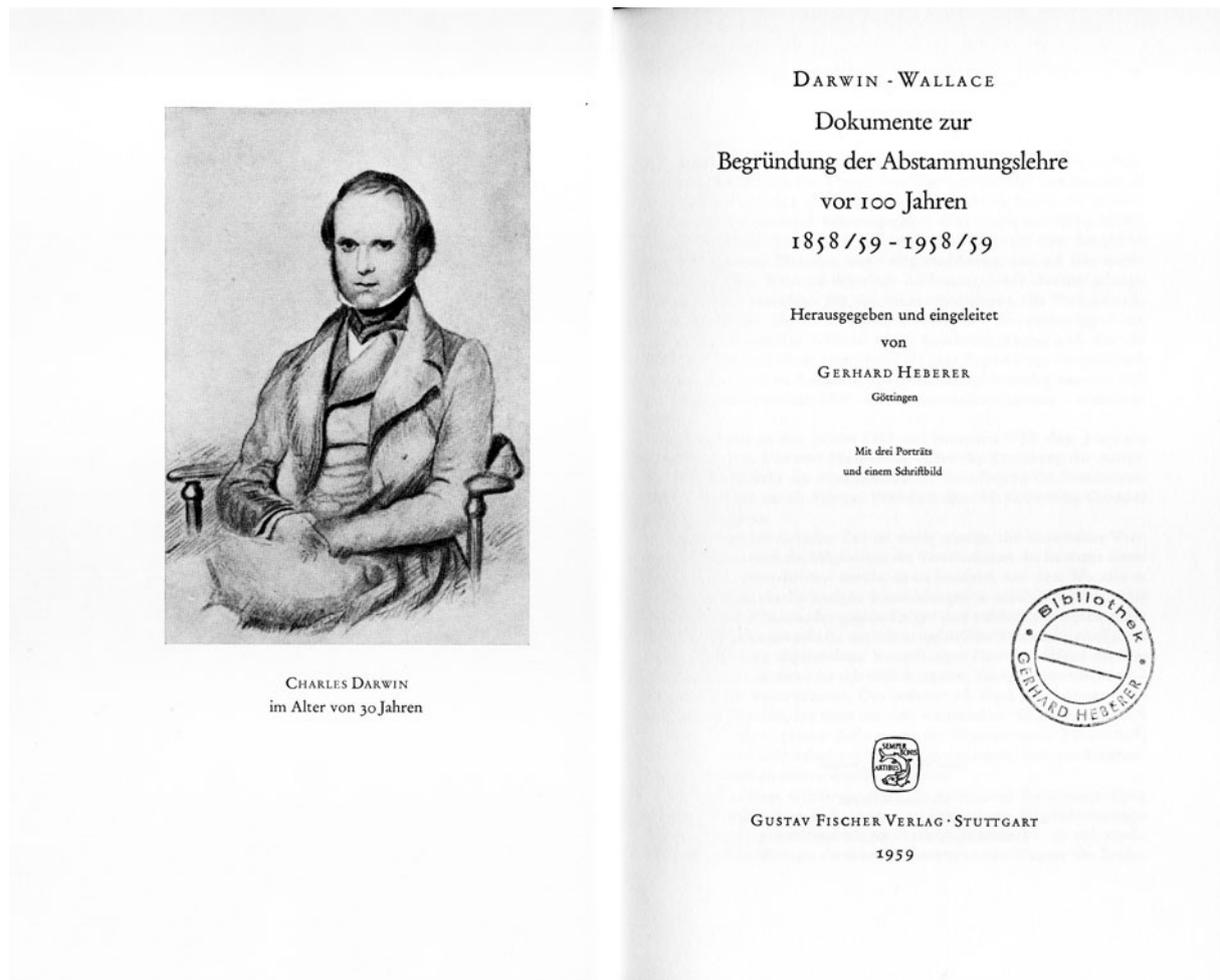


Fig. 4 Heberer (Heberer 1959b) *Dokumente zur Begründung der Abstammungslehre vor 100 Jahren 1858/59–1958/59* (Bildarchiv Uwe Hossfeld)

In 2009, we edited and commented on a selection of new translations of a similar collection of original texts as in Heberer's book (Hossfeld and Olsson 2009). In addition, our selection of texts for the 2009 book also included excerpts from Charles Darwin's letters to the botanist John Stevens Henslow (1796–1861), and four additional texts by Darwin on geology and evolution which had not previously been published in German translations. These early documents accentuate the close similarity between Darwin's and Wallace's ideas. Unlimited variability and the struggle for existence form the basis for their theory of evolution by natural selection. Differences were obvious in the interpretation of human evolution and the role of sexual selection, to which Darwin attributed great weight, whereas Wallace considered it relatively unimportant. Specifically, Wallace did not believe that female choice was an important factor contributing to the evolution of male ornaments (Wallace 1889).

The Darwin year 2009: A. R. Wallace is still largely ignored

In the third "Darwin Year", after 1909 and 1959, both the international scientific community and the general press celebrated Darwin thoroughly (Burkhardt 2008; Engels and Glick 2009; Dupré 2009; Ruse and Richards 2009; Kitcher 2009; Sarasin 2009; for details see Hossfeld 2009).

What were the trends in the literature in 2009, in comparison to 1909 and 1959? An analysis (Hossfeld 2009) led to the result that six topics were of special importance: (1) Charles Darwin's life; (2) The Beagle voyage; (3) Darwin in books for children; (4) Darwin and philosophy (or humanities in general); (5) Darwin and general (european) biology; (6) Re-publication of important books as (sometimes annotated) reprints.

The special importance of the Internet as a platform for the promotion of the Darwin anniversary in 2009 also

deserves to be mentioned, as, of course, nothing similar existed in the earlier anniversaries.

In 2000, the German palaeontologist Wolf-Ernst Reif (Reif 2000) pointed to the importance of such anthologies, commemorative publications and reprints in the history of the reception of the Darwin–Wallace theory. They represent popular science to a lay audience that would not read technical books and papers on evolution, and give an overview of the modern theory of evolution, an appreciation of Darwin’s accomplishments (stressing that he was basically right), and also demonstrate how the theory of evolution has been important for the development of different branches of the biological sciences. However, an analysis of the recent literature on evolution and on Darwin shows that the tendency to exclude Alfred Russel Wallace and his work has continued in this type of historiography.

We conclude that the “Darwin industry” still dominates that scene, and it is too early to speak of a “Wallace industry”. However, there is hope for the future that both Wallace and other important pioneers in evolutionary biology may receive more attention from historians of biology.

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