Alfred Russel Wallace Notes 31. Wallace's Personal Copy of "Life of Alexander von Humboldt."

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Summary: Alfred Russel Wallace owned a personal copy of the two-volume 1873 English edition of the *Life of Alexander von Humboldt*, now held by the library of the Linnean Society of London. Each volume is highly annotated, and the nature of these notes, and their several-directioned importance, is here discussed. *Key words:* Alfred Russel Wallace, Alexander von Humboldt, biography, annotations, indexing, shorthand, biographical memory

After Alfred Russel Wallace died in late 1913 his personal library was broken up, with some of it committed to the collections of the Linnean Society of London (most of the rest, on non-scientific subjects, went to Oxford, more recently ending up in Edinburgh). Among those items donated was an 1873 two-volume work entitled *Life of Alexander von Humboldt*, edited by Karl Bruhns. This was the first major biography of the great German geographer (who died in 1859) to appear in English, though according to its Translators' Preface, it was "deemed advisable to omit the third volume [of the original German edition], devoted to a critical investigation of Humboldt's scientific labours, since these are given with sufficient minuteness for the general reader in the biographical portion; nor has it been thought desirable to include the last section of the second volume, consisting of an elaborate catalogue of his voluminous works." This perhaps would not have pleased Wallace, but as he neither spoke nor read German, the matter may have been moot.

We don't know when Wallace obtained his copy – but more than likely it was not so long after the translation first came out. Perhaps he was sent a complimentary copy in exchange for doing a book review, but apparently he never wrote one (though during this general period he was turning out many of these). Still, of the more than one hundred he did write over his career, not one of these was of a biographical or autobiographical work – this form of literature seems not to have been among his favorite genres. He did not entirely eschew biographies from his reading list, but in relative terms they probably appeared less frequently on his menu than on those of today's average readers. The books that he did review usually explored some element of natural history, or a sociopolitical subject. At the same time, however, he was also an avid reader of novels (and even poetry), but did almost no reviews of these forms of literature either.

Nevertheless, he did own this work, and in fact took the time to go through it thoroughly, as well over fifty percent of its total of 859 pages contain pencil annotations of one sort or another. As this, his level of attention to a biography, initially does not quite seem to add up, I would like to extend a few observations that may provide a fuller context. We can approach the subject from two angles: (1) how in a technical sense he approached

the art of familiarizing himself with content, and (2) what actual topics within the text seemed to attract his attention most, and why.

Wallace as a Content Reviewer

The ordinary reader usually approaches the effort of reading by... just sitting down and reading. Wallace was, however, a *professional* reader: an intellectual who gained much of his perspective through extensive critical evaluations of the thoughts of others (and thus his reputation as one of that period's foremost 'marshallers' of evidence). Part of this process was the mere choice of which particular works to read: there are only so many hours in the day, after all. We should perhaps therefore first ask ourselves why Wallace, possibly with no incentive for reward (*e.g.* free book copy in exchange for a review), would choose to dive into a book of 859 pages.

The answer in this instance seems fairly straightforward. I have argued in the past (Smith 2013, 2016a) that Humboldt may have represented Wallace's single most important philosophical influence; overall his name comes up in at least twenty-four of Wallace's writings (and four interviews), seventeen of these appearing after 1873. As one of Wallace's weightiest intellectual influences, reading up on Humboldt's life story surely would have been of great interest to him – enough to make him disregard the considerable cost of the work: at the time it sold for a hefty thirty-six shillings, an amount equal to nearly two hundred and fifty dollars in today's numbers. In 1873 Wallace, unemployed, the father of three young children, and challenged by bad investments and the legal costs of his battle with the libeling flat-earther John Hampden (Garwood 2007), might have needed some real incentive to absorb such an expense.

In any case, Wallace did obtain a copy, and the way he devoted himself to its perusal is quite interesting, perhaps more so than the actual content of his annotations to the text. It should first be explained that Wallace's notations in the work are quite unlike the kind of ruminating that characterizes his field notebooks during his time in the Malay Archipelago. The latter (Costa 2013) are filled with various kinds of references, questions, and thoughts approaching a personal diary-like format. In the 1873 volumes, Wallace largely refrained from penciling down any kind of evaluative remarks, instead marking them up, primarily in the margins, in a manner suggesting he intended to use the volumes as a reference work. Many paragraphs, apparently viewed as of greater than just ordinary interest, are flagged with simple tick marks, lines of emphasis, double lines of emphasis, or '+' marks; to many are added one to a few words of summary. The overall impression one gets is that Wallace is creating a quick index to the text.

This impression is solidified when one reaches the ends of each volume, where the several blank pages present are filled with many of these summary words, creating a list that actually *is* an index. And it is not as though the two-volume set doesn't already have an index, a quite detailed one at that (extending through thirty pages, and to more than fifteen hundred main entries). Wallace seems to have felt a need to collect the notes he had made on individual pages into a single list for future reference.

Again, the notes on each page are invariably summaries of, or headings for, many of the points made in the main text, and little more. Therefore, most of the annotations, even those just involving tick marks or emphasis lines, seem almost like a shorthand pencil outline of the work; *i.e.*, of those parts of the book that had more than a passing interest for Wallace. On more than 175 pages Wallace places a '+' (or possibly in some instances an 'x'; it's sometimes hard to tell) at the top of the page (and/or sometimes in the margin), but only about one half of these pages are later targeted by remarks listed in the 'Wallace index'.

Regarding the last, Wallace commits his 'entries' approximately, but not completely, according to the order of their page entry; *i.e.*, there is no attempt at alphabetization (which wouldn't have been very useful anyway, as the 'entries' are mostly in sentence/phrase format). For some reason, the six pages of the first volume and four in the second are individually somewhat randomly ordered: for example, the entries on the fourth page of six in the first volume are to pages 132 to 244, whereas those on the following fifth page are directed to pages 26 to 90 (though the first three entries on the latter are actually directed to pages 133, 80 and 90). This suggests that Wallace compiled his 'indexes' after all or most of the page-by-page annotations had been completed (as opposed to annotating each page and simultaneously adding these to the end indexes). The ten 'Wallace index' pages appear to have been compiled largely at once, as there is no evidence of 'squeezing in' later out-of-order entries (as with the 133-80-90 example mentioned above). Appendices 1 and 2 at the end of this work provide transcriptions of these ten pages of indexing.

This is not at all the most remarkable characteristic of the annotation style, however. Scattered throughout the margins of both volumes are 115+ referrals to other page numbers in the volume that in some manner treat the same subject as the one flagged (and, the flag is back and forth: for example a flag at page 46 to something on page 42 also usually appears as a flag at page 42 to page 46. Again, about half of the pages with such cross-listings are represented with entries in the 'Wallace index.' Most of these 'two-way' links are to pages that are not terribly far apart from one another (thus, and for example, there are few two-way links between subjects on text pages as remote from one another as, say, numbers 32 and 338). The breakdown: difference of 0 to 10 (pages): 36%, difference of 11 to 20: 16%, difference of 21 to 50: 17%, difference of greater than 50: 30%.

This manner of cross-listing suggests that Wallace was able to remember the content of earlier-read pages with an ability far surpassing that of the average person. I suggest the following as his likely overall approach to this 'indexing' problem.

First, of course, he opened his volumes, began to read and, page by page, committed his descriptive pencil annotations to their margins. As he went along, he recalled earlier statements in the text that bore on the one he was now reading, and cross-listed these pages in the margins of both the page with the new remark, and of that with the earlier one. As to when the '+'/'x' marks were added, two possibilities seem most likely: (a) he entered these at the same time as the other annotations, or (b) these were added in a later, separate, go-through of the text (to isolate the most interesting items). The annotations were then reviewed and collated into their own index at the ends of the volumes. Yes, other possible and even more complicated construction scenarios can be imagined, but let us move on.

Some Content Highlights

Apart from what the indexing approach itself suggests about Wallace – and the fact that almost all the annotations feature identification rather than analysis – there are yet a few interesting points that may be taken from his particular notices in the two volumes. Following are some connections I feel I can make between the annotations and Wallace's wide array of interests (in these, the Wallace annotations themselves are put in italics, quotations from Humboldt himself in the book (mostly from personal letters) within double quote marks, quotations from the text by the book's editors within square brackets, and my own remarks unenclosed and in regular font):

- Vol. 1 p. 82: Fantastic opinions of the Pyramids; Origin of Pyramids &c.? —Wallace later wrote on the pyramids of Egypt (especially in Wallace 1877), and in a manner suggesting he was in awe of the level of precision of their construction.
- Vol. 1 p. 89: *Freedom of thought* "Dogmatic theism is in my eyes far more dangerous than all the absurdities of the more positive system of faith, for even when it keeps the word in the scabbard it commits spiritual slaughter upon reason." —A matter that was never far from Wallace's thoughts.
- Vol. 1 p. 121: *Humboldt 1769 Born 1792 Entd. official employ 23rd year —*One of Wallace's numerous efforts (see below) to inculcate a chronological scale.
- Vol. 1 p. 133: *Will power* "I possess a certain amount of vanity, and am willing to confess it; but I know the power of my own will, and I feel that whatever I set myself to do, I shall do well." —Wallace double-ticks this comment. Consider Wallace's similar remarks about himself in his autobiography My Life (1905).
- Vol. 1 p. 135: Care for workmen at Steben —Wallace double-ticks the editors' treatment of Humboldt's attempts at improving the lives of the miners working for him at that time (1793). Compare with Wallace's appreciations of Robert Owen's labor management theories in My Life, and elsewhere.
- Vol. 1 pp. 182-186: Life? His Essay in the 'Horen' on Life Principle of Life His View of Life Humboldt's Essay —Wallace demonstrates an interest in the 'What is life' question, as discussed by Humboldt from the chemist's point of view.
- Vol. 1 pp. 190-193: The vision of a poet and a scientist compared Schiller's conceit Greek poetry Schiller on abandoning self to Nature Poet v. Scientist —Wallace follows a several page discussion on the relation of imagination, idealism, etc. to science. Note his early use of the term 'scientist' here (see Wallace 1894).
- Vol. 1 p. 194: *Truth v. Freedom* —Wallace apparently is impressed with Schiller's line "Imperious truth impedes free thought".
- Vol. 1 p. 197: His method of Study of Science Facts v. theories —Wallace takes interest in Humboldt's nod to Baconian methodology: [He followed Bacon's precept...that nature should first be observed, and as many of her phenomena as possible collated.] Note Wallace's later comments as to "his personal opinions" not being of any value (Wallace 1885, p. 14).

- Vol. 1 pp. 200-201: Kant: object of reason & experience Nature, a conscious intelligence Nature an intelligence —Wallace sems to be intently following along with the editors' discussion of Kant, Schiller, Fichte & Schelling.
- Vol. 1 pp. 202-206: *Philosophy v. Science Philosophy run mad Science Science & truth —*Wallace continues to track the editors' discussion of the relation of science to the philosophies of Schiller, Humboldt, Schelling, Hegel, etc.
- Vol. 1 p. 256: for Unity in Nature [...no detail should be neglected, and no circumstance thought too trivial to be recorded. For little service can be rendered to the advancement of science when the observer is too deeply engrossed with the grandeur of general ideas to stoop to the consideration of individual facts.] Note Wallace's adoption of this perspective in Wallace (1866) (concerning his prescription for the emerging field of anthropology).
 - Vol. 1 p. 257: memory —Wallace marks the text's mention of H's [astounding memory].
- Vol. 1 pp. 357, 363: Aspects of Nature —Wallace flags the discussion of this Humboldt book, first published in German in 1807 and French in 1808, but not seen by Wallace (in English translation) until at least the late 1840s.
- Vol. 1 p. 359: the one Spirit in nature —Wallace ticks a long section of a Humboldt letter: "I have been constrained to admit that...there is but One Spirit animating the whole of Nature from pole to pole but one Life infused into stones, plants, and animals, and even into man himself." This became, in essence, Wallace's position as well.
- Vol. 2 p. 99: Value of investigation compared with collector —Wallace triple-ticks a passage describing a portion of a Humboldt lecture differentiating between [the mere collector] and [the scientific investigator]. 'Struck a chord?
- Vol. 2 p.105: Berlin Court dull, ignorant the stupid Court —Humboldt is described as being something less than impressed with the intellectual capabilities of the court in Berlin, an opinion Wallace probably had a good laugh over.
- Vol. 2 p. 111: *Nature's influence on mind* —Wallace underlines a section of the text describing how, [in the delineation of Nature H. had attempted in Paris he had been unable to represent her apart from the reflective influence she exerts upon the mind]. In 1884 Wallace (Allingham & Radford 1907, p. 330) noted how he never visualized the things he thought of; rather, "my mind has only thoughts".
- Vol. 2 pp. 113-120: Wallace marks up the section describing Humboldt's lectures on 'Cosmos' that later evolved into his book series of the same name. This progression later became the model for Wallace's 1889 book <u>Darwinism</u>, which itself began as a series of lectures delivered in the United States in 1886.
- Vol. 2 p. 144: *Alleviation is a method of cure* —Wallace slightly misquotes deliberately? from a Humboldt letter: "Alleviation is a measure of cure."
- Vol. 2 p. 189: *on final cause* —Wallace flags a portion of the text reading: [the views brought forward... in which the course of history is represented as the endeavour to embody an idea in action suggest nothing more than that to men of thought a final cause

is as inevitably to be deduced from the events of history as from the phenomena of nature, a necessity proved by Kant, and on this question Alexander von Humboldt from his own point of view must have been in agreement with his brother {i.e., Wilhelm, 1767-1835}.] Wallace's own philosophy of nature is heavily indebted to the notion of final causation.

- Vol. 2 pp. 212-214: *Comparative Geography value of Comparative Geography —* Wallace highlights portions of a section discussing Karl Ritter, a central figure in the field's development. Wallace was also strongly invested in this approach.
- Vol. 2 p. 238: obstinate result of narrow training —Wallace flags the text's discussion of King Wilhelm IV's resistance to liberalism; among Wallace's earliest writings is a fragment of a lecture he gave around 1843 on 'The Advantages of Varied Knowledge' (Wallace 1843/1905), and this remained a lifelong conviction for him.
- Vol. 2 pp. 249-254: Jews Slavery H. against slavery H's work to free slavery Work to free slaves H. strong against slavery —Wallace marks up a section on Humboldt's dislike of slavery, and his efforts to assist the Jewish people. Wallace was no fan of slavery or the mistreatment of the Jews, either.
- Vol. 2 pp. 310-311: the essential principle of "Cosmos" is unity in nature unity of nature based on scientific research —Wallace exhibits interest in H.'s approach with several ticks and comments.
- Vol. 2 pp. 323-326: Goethe favours verbs H. favours adjectives his ambition to employ striking language 2^{nd} fault: free use of participles 3^{rd} fault: multiplicity of thoughts in one sentence —Wallace notes and annotates the discussion of Humboldt's writing style, probably aware of some of his own deficiencies along the same lines.
- Vol. 2 pp. 327, 330: As a writer, H. not numbered among the 'Great': too studied, too elaborate H. better as a raconteur than a writer —Wallace making more notes on style.
- Vol. 2 p. 346: *the Prussian spirit anti-liberal* —Wallace lamenting the conditions surrounding Humboldt in Germany.
- Vol. 2 p. 362: *How H. consulted others & depended on them* —Wallace would have found this interesting, as he was well known for his wide-ranging correspondence, and knowledge and use of the professional literature.
- Vol. 2 p. 367: *His valuable method of keeping stock for reference* —More on keeping up with the literature.
- Vol. 2 pp. 371-372: mankind unintellectual: cannot appreciate science Prefer table turning —Wallace responding tongue-in-cheek to a story told in the text regarding spiritualism.
- Vol. 2 p. 414: [...in the philosophy of Spinosa, in which the unity of nature is preeminently maintained...] —Here Wallace would again have noted a mention of Spinoza, whose ideas on a number of subjects paralleled his own (Smith, *in prep.*). Spinoza also appears in his handwritten index, referring to comments made on him on page 112 of Volume One.

Discussion

Several matters extending beyond the 'nuts and bolts' offered above may be considered.

First, whatever one may think of Wallace in general, we should be impressed with the level of systemic investigation of content that is exhibited by this library artefact. I have not seen many of the books from his personal library, but those that I have are annotated in a roughly similar manner, though not to such an extent. The notion that Wallace was dilettantish or sloppy in his efforts to draw content from his various sources is one which is not substantiated by the reality faced in these Humboldt volumes, much less his widespread reputation as a master of evidence-based argumentation.

It has sometimes been suggested (see Blom 2003; Berry 2008; Armstrong 2019) that Wallace actually 'suffered' from an Autism Spectrum disorder, and his manner of treatment of this particular work, even at such a difficult time in his life (see above), seems to add some evidence for this speculation. There is a decided feeling to these annotations that Wallace was not merely personalizing the work, but in some sense deliberately paying respect to its subject, *per se*. But even if it turns out that Wallace really was a borderline obsessive in terms of his attention to detail, it is difficult to view this as some manner of deficiency in his intellectual character. Indeed, quite the opposite. And, it may be noted, Wallace certainly was not lacking in empathy or a sense of humor, qualities that autistic individuals are often short on.

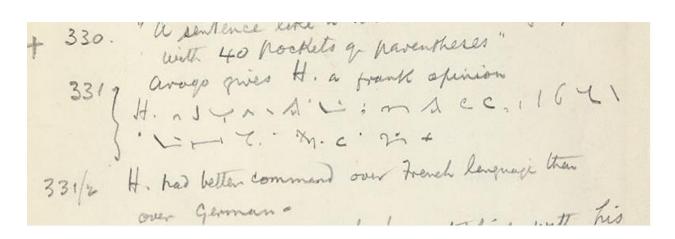
Perhaps more than anything else, however, these annotated volumes belie the criticisms of historians such as John van Wyhe who refuse to accept that Wallace's written memory of the events in his life was excellent, and can be relied upon (at least, in most instances). I have pointed out (Smith 2015, 2016, 2020; Smith *et al.* 2020) that such criticism neglects to inform the reader that self-biography features the input from two distinct elements of memory, one involving the events themselves, and another the ability of the subject to attach specific names and chronologies to those events. Wallace clearly had some problems with the second of these, as his writings after-the-fact often mistake names and dates. At the same time, however, his capacity for recalling the qualities of the associated events themselves was often marveled at in his own time (Smith 2020). Beccaloni (2020) discusses, for example, how his ability to discern species differences in the field was not only vital to his success as a collector, but critical to his progress as a philosophical naturalist as well.

In the present volumes, the differences in weakness of Wallace's levels of attention, and the way he dealt with them, are clearly visible. Many pages are marked with the date that the events described on them took place, even where the year is clearly marked in the text itself. Similarly, the names of individuals and places are often penciled into the margins, sometimes more than once, even when they are featured in the text and appear in the work's regular index. In this manner, some 71 dates and ages, 78 people's names, and 159 place names have been added as annotations to the first volume, and 104 dates and ages, 285 people's names, and 102 place names to the second. It is as though he were making a deliberate effort at self-inculcation; that is, to ensure he will later be able to connect the events described to particular people and places along the timeline of Humboldt's long life. The increase in the numbers of dates and people's names (and decrease in place names) in the second volume might be explained in part by Wallace's

already greater familiarity with the earlier half of Humboldt's life, which included his travels in the Americas, and his lesser interest in trying to commit to memory the details of Humboldt's later places of residence, as opposed to who he was interacting with.

Finally, an additional indication of Wallace's extensive memory was his facility at learning languages. He grew up knowing English, a little Welsh, and soon some French (his older sister *taught* French, and his colleague/travel-mate Bates also was fluent). Early school studies included Latin, which he maintained to a practicing degree, and upon traveling to South America he picked up Portuguese (and some of the native 'common' language, lingua geral, as well as a bit of Spanish). On moving over to the Malay Archipelago, he conquered Malay, and perhaps even some Dutch. A total of nine languages, at least. In his *My Life* (1905) he modestly downplays his talent for languages, writing at one point that he has: "a moderate faculty of language, which enables me to express my ideas and conclusions in writing". The reality, at least to the extent of his ability to retain the practicalities of usage, does not seem to match this appraisal. And don't forget all those native vocabularies he compiled for *Travels on the Amazon* and *The Malay Archipelago*, and his interest in the evolution of language itself, especially demonstrated in his working out of the 'mouth gesture' theory of word origins (Wallace 1881, 1895).

Here, we also find out for the first time that in addition he seems at some point to have learned a form of shorthand – which is, after all, a kind of language. An excerpt from the pages of his constructed 'index' looks like this:



The second portion of the referral here to page 331 is clearly in shorthand, but, after passing this sample around to various sets of eyes, I surmise it doesn't appear to fall in with any of the commonly known varieties (so, so far we don't know what he was actually saying here). Still, I understand that it is/was not a rare thing for individuals to create their own shorthand scripts, and for now, at least, that would have to be the going theory here. No one I have contacted has reported seeing other instances of Wallace employing stenographic technique, so this exemplar might be viewed by some as odd, but perhaps not. Apparently many mid-nineteenth century journalists learned the technique as a speedy way of taking notes, and Wallace himself did some turns at journalism in his earlier years (e.g. Wallace 1854a, 1854b, 1855). Further, this would have been an ideal way for him to record the essence of some of the many hundreds of papers he heard at the scores

of professional society meetings he attended in the 1850s, 60s, and 70s. Neither would such scribblings likely have survived through to the present day.

In conclusion, one can argue that Wallace's heavily annotated personal copy of *Life of Alexander von Humboldt* provides some insight into his manner of attacking sources, his diligence, his memory, his facility at languages, and, most of all, his respect for the memory of Alexander von Humboldt.

Acknowledgments

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Appendix 1. Wallace's Own Constructed Index for Volume One

As placed in spatial order on six blank pages at the end of the volume (though not necessarily penciled in in this exact page order when originally committed), with each individual entry preceded by its corresponding page number(s):

[p.] 357 "Aspects of Nature"; 359 "Physiognomy of Plants";

244 Scientific observations in Spain; 245 + Zones of vegetable life &c. – investigated; 245 King of Spain's permission for H. to visit So. Am.; 248-9 + Nine endowments of his character; 254/245 + So. America – desperate Spanish laws to keep foreigners from landing and against Spanish officials – do.; 255 English astronomers refused a landing; 248/255/256 H. endeavours to show Unity in Nature by scientific studies; 256 His equipment in scientific knowledge, & all up to date instruments; 256/7 His travels in America published in 33 vols Excellent memory – makes free use of others' discoveries, with acknowledgments; 259 Golfo de las Damas (between the Canaries & America); 261/2 Peak of Teneriffe; 264-6 At Cumana 4 months; 272 At Caracas 2½ months; 265 H. & Bonpland in ecstacies over magnificence of nature (Venezuela); 268 + Astronomical splendours; 271 Venus – the constellations – atmosphere ebb & flow; 269 man with milk; 273 milk from a tree – the Cow-tree; 298 Endiometer; 353 + At Florence – magnetic needle not used for fear of spoiling it;

160 Wieland's "Golden Mirror"; 166/174 Goethe student of Science — opposes Humboldt & others on volcanic theory of earth's crust; 172 His assumed lordship over Scientists; 175 His panegyric on Humboldt; 175 + Humboldt a rich cornucopia &c.; 155 + Brain good — but 25000 arms better; 187 His disposition (Humboldt); 188 Schiller's hard criticism on Alx v H.; 189 Korner defends H.; 189/190 Humboldt defends himself; 191 The conceit of a poet (Schiller) — who sees nature unscreened; 192-4 Schiller's "imagination" — without Science; 193 Goethe's satires on science; 197 Study of facts; 197 His "Universal Science"; 200 + Kant's object in reason — experience of truth; 201 + Nature an intelligence; 205 Philosophy run mad; 205/6 Science — the friend of truth; 207 + German sent to England to study chemistry; 208 Some chapters in "Cosmos"; 209 On diversity of intellectual gifts; 211-212 German mis-government & low corrupt life; 213-214 Hermann & Dorothea; 213-223 Sextant = its use — 225 — 229 — 267 — 270; 215 Fourcroy French physicist; 215/6 Studies in Dresden; 216-7 His property & income; 218-221 + Vienna = interesting stay there;

132 "Golden Frederick"; 158 Florin; 221 + Learned & eccentric Vienna professor Porth – one meal a day – his hat & clothes; 220 + Daily work of a Vienna doctor; 222 + Leopold von Buch – great geologist – curious manners; 223/4 At Salzburg = Experiments on Atmosphere – & other Scientific studies (5 months 228); 225 maps incorrectly made = deficient in scientific accuracy; 225-6-7 The rich, eccentric Lord Bristol, Bishop of Derry; 226-7 Egyptian Tour abandoned; 231 His lordship's arrest; 228 H. in Paris = 230; 234 He lectures at Paris; 228-9 political unrest; 230 Bonaparte's great Scientific Expedition to Egypt; 231 H. had to abandon both Lord Bristol's & Bonaparte's Egyptian tour, on a/c of French Revolution & French naval exped. to Egypt; 232 Paris the metropolis of the exact sciences 1798; 233 Savants at Paris = their work; 235/6 So. pole proposed expedition for 5 years: abandoned; 237 Fresh Egyptian tour – by H & Bonpland; 238 they reach Marseilles – abandoned; 240 H. on foot Cette to La Mancha, Spain; 240-1 East Coast Spain – profusion in nature 60 miles inland a desert; 242 magnetic constants; 243 Great credit given H. in Spain; 243 + Rabble in Valencia hoot at H.; 244 do. In Monserrat – & the moon

133 His will power; 90 His health 102 – 128 – 153 – 31 – 358; 81 Some self taught subjects; 26 Humboldt self taught in almost all the Sciences he shone in; 26 Music – A social calamity; 30 Late learners; 32 Climate on health; 34-35 Intellectual backwardness of Germany 18th Century = 156/45; 36-37 Berlin low morality; + 39 "The devil cooking atheists by burning in the Sun"; 44 Frankfort University – Poor Equipment – & town; 52/3 An affectionate letter to a friend Fickert; 53 Leaves Frankfort after 6 months – Goes to Berlin; 54 Greek letter without accents – Sancho Panza; + 55 Struggle between Greek church & Rome re language – Rome mon for Latin, & delayed intellectual progress; 56-7-8 Rapture over Botany; + 60 Moritz – on Aesthetic in Art – Caustic Notes; 61-62 First balloon – Blanchard 157; 66 List of some Studies; + 68 Beireis – an intellectual genius; + 82 Fantastic origin of Pyramids – & re Reformation; 83-84 Geo Forster – his great friend; 69 Enrolled at Gottingen April 1789 – age 20; 83 Leaves Gottingen March 1790 – [Age] 21; +84 Geo Forster – Anr. genius; 172 Goethe as the one sensible man; 86 "Sketches of

the Lower Rhine"; + 89 Darkness – as result Freedom of Thought; 91 "Journey of England – 1790" – his book;

92 "Geo Forster, At Home & Abroad"; 111 No official study of chemistry given; 207 in Germany in 1791 – they studied the French chemists; 110 1st Lecture in chemistry 1794 in Freiburg; 112 Spinoza; 119 Science stagnant – & tabood, officially – & 120 miserable salaries; 121/2 Dislike of praise; 125 His Excellent Report on Mines &c – age 23; 135 His care for workmen; 137 Brilliant Book "Flora Fribergensis"; 111 – 123 – 140; 139 Many studies at same time; 140 Salway; 158 Schoolmaster; 144 His love episode; 148 Striking personal appearance at Congress; 148 + A long word; 149 Galvani – Volta 183; 149 + Study – Nerves &c 184 – 194 – 195; 149-150 Experiments on his body & 151/2; 153 Authors fees – small – or none; 154 Political mission; 155 + A très-habile person &c; 159 Free to follow Science – like Bacon.

Appendix 2. Wallace's Own Constructed Index for Volume Two

As placed in spatial order on four blank pages at the end of the volume (though not necessarily penciled in in this order when originally committed), with each individual entry preceded by its corresponding page number(s):

[p.] 403 His short finances; 411 His funeral – Strange turbulence same night as the crowds in street "could only take place in Berlin"

150 H. knew most of the European languages – 378; 151 His liberal views; 155 He dislikes music; 164 They might have been written by anyone else &, what is worse, no one else could have written them otherwise; 183 Sarcasm, vanity, love of admiration of H.; 180 Interesting evening spent by H. with Agassiz; 198 H. detests England – but admired English Scientists; 219 Cinquecento period; 230 Influenza = that sensless definition of a pathologic X; 231 Nature & Revelation; 258 – The ennui, nausea, & incompatibility of Court life for H. tied to King Fk. Wm. IV and all through; 263 Parry (Polar Expedition) travelling Southward when he intended & thought he was going northward; 275 + Brugsch – explorer Egypt – helped & encouraged by H. letter to Brugsch from H. kissed & read like a morning & evening prayer; 287 "This intellectual Areopagus"; 288 Amusing criticism of H. on Voters of Order of Merit; 294 "Life as an equalization of conditions";

306 "Cosmos" as a work described – & follg. pages; 317 Aspects of Nature; 317 Examen Critique – said his best work; 316-319 Survey of nature – a chapter in Cosmos Vol 1; + 324/25 Goethe for verbs H. for adjectives; + 330 "A sentence like a Warsaw dressing-gown with 40 pockets of parentheses"; 331 Arago gives H. a frank opinion – [set out as about thirty shorthand characters]; 331/2 H. had better command over French language than over German; 334 An artist difficult to be satisfied with his own masterpiece 341; Working men honour Humboldt at Revolution time (1848); 358/359 Gt. changes in Science from 1800-1850 – H. finding – ditto; + 371 Faraday's despairing outcry on incompetence of mankind generally; 380 The chameleon – can look two ways at once, many clergymen have the same power; + 380 "I should compare his brain (H.s) to the fountain of Vancluse &c &c; 400 "between two friends, plus and minus"; 400 "An affectionate heart & slanderous tongue";

38 Study of Nature enables character; 27/39 Longevity of Humboldt's scientific friends; 55/56 Humboldt's course of daily life in Paris – Rose before 8 – went to institute study until 11/12 – Slight breakfast about 11 or 12 – Study until 7.0 pm, – 7 pm dinner – After dinner social life – 12 to 2 study; 58 Anecdote of the hat: Humboldt & Arago; 58 Another anecdote; 59/70 Paris as supreme for residence of Scientists – no other city of equal importance (1812); 80/78 The praise of Berlin – Germany – Germans; 86 H. the most distinguished savant of his day; 89 H. better known in Paris than in Berlin; 97 His pension from the King and Salary from the Academy 5000 thalers; 117 Arago will study German so as to read Humboldt's lectures; 123 The lady who wanted her sleeves to be wide as two diameters of Sirius; 123 Buckle on German intelligence; 124 "Aspects of Nature" written in popular style – 149 – 173 – 317; 48 University of Berlin founded 1809 – opened 1810; 142/145 Gauss – the greatest mathematical genius of the age – the first in Europe – Gauss – his great faith in "immortal life" beyond; 148 magnetism – "Kosmos" Vol. IV.

References

Allingham, Helen P., & Radford, Dollie, eds., 1907. William Allingham; A Diary. London: Macmillan & Co.

Armstrong, Patrick, 2019. Alfred Russel Wallace. London: Reaktion Books Ltd.

Beccaloni, George, 2020. Was Alfred Russel Wallace "the greatest field biologist of the nineteenth century"?

https://www.researchgate.net/publication/343834494 WAS ALFRED RUSSEL WALLACE THE GREATEST FIELD BIOLOGIST OF THE NINETEENTH CENTURY

Berry, Andrew, 2008. "Ardent beetle-hunters": Natural history, collecting, and the theory of evolution. In Charles H. Smith & George Beccaloni, eds., *Natural Selection and Beyond: The Intellectual Legacy of Alfred Russel Wallace* (Oxford, U.K.: Oxford University Press): 47-65.

Blom, Philipp, 2003. *To Have and to Hold: An Intimate History of Collectors and Collecting.* Woodstock NY: The Overlook Press.

Bruhns, Karl, ed., 1873. *Life of Alexander von Humboldt*. 2 vols. London: Longmans, Green, and Co.

Costa, James T., annotator, 2013. On the Organic Law of Change; A Facsimile Edition and Annotated Transcription of Alfred Russel Wallace's Species Notebook of 1855-1859. Cambridge MA: Harvard University Press.

Garwood, Christine, 2007. Flat Earth: The History of an Infamous Idea. London: Macmillan.

Humboldt, Alexander von, *Aspects of Nature*. Originally published in German in 1807 and in French in 1808; first English translations in 1849 by Sabine and in 1850 by Otté & Bohn.

Humboldt, Alexander von, *Cosmos/Kosmos*. Published in multiple volumes, editions, and languages beginning in 1844.

Smith, Charles H., 2013. Early Humboldtian influences on Alfred Russel Wallace's scheme of nature. https://people.wku.edu/charles.smith/essays/2013RoyalSocietyLecture.pdf

Smith, Charles H., 2015. Alfred Russel Wallace and the road to natural selection, 1844 to 1858. *Journal of the History of Biology* 48: 279-300.

Smith, Charles H., 2016a. Wallace and incipient structures: A world of 'more recondite' influences. In Indraneil Das & Andrew Alek Tuen, eds., *Naturalists, Explorers and Field Scientists in South-East Asia and Australasia* (Cham, Switzerland: Springer): 3-14.

Smith, Charles H., 2016b. Did Wallace's Ternate essay and letter on natural selection come as a reply to Darwin's letter of 22 December 1857? A brief review. *Biological Journal of the Linnean Society* 118: 421-425.

Smith, Charles H., 2020. *Alfred Russel Wallace Notes* 12: How good was Wallace's memory? 10 pp.

Smith, Charles H., *in prep. Alfred Russel Wallace Notes*. Wallace a theist? Part II. Wallace, Spinoza, and miracles.

Smith, Charles H., Beccaloni, George, Williams, James D., & Partridge, Derek, 2020. Discussion on 'A. R. Wallace in the light of historical method' by John van Wyhe. *Journal of the Royal Society of Western Australia* 103: 119-124.

Wallace, Alfred R., 1843/1905. The advantages of varied knowledge. in My Life, Vol. 1: 201-204.

Wallace, Alfred R., 1854a. Letters from the Eastern Archipelago. *The Literary Gazette and Journal of the Belles Lettres, Science, and Art* (London) no. 1961: 739.

Wallace, Alfred R., 1854b. letter [describing the vicinity of Malacca]. *The Literary Gazette and Journal of the Belles Lettres, Science, and Art* (London) no. 1978: 1077-1078.

Wallace, Alfred R., 1855. letter [concerning Wallace's collecting environs in Sarawak]. *The Literary Gazette and Journal of the Belles Lettres, Science, and Art* (London) no. 2003: 366.

Wallace, Alfred R., 1866. Address. In *Report of the British Association for the Advancement of Science* 36 (1866) (London: John Murray): 93-94.

Wallace, Alfred R., 1877. Address. In *Report of the British Association for the Advancement of Science* 46 (1876) (London: John Murray): 100-119.

Wallace, Alfred R., 1881. review [of Edward B. Tylor's *Anthropology; An Introduction to the Study of Man and Civilization*]. *Nature* 24: 242-245.

Wallace, Alfred R., 1885. President's Address. In *Report of the Land Nationalisation Society.* 1884-5. (London: Land Nationalisation Society): 5-15.

Wallace, Alfred R., 1889. *Darwinism; An Exposition of the Theory of Natural Selection With Some of Its Applications*. London & New York: Macmillan.

Wallace, Alfred R., 1894. The word "scientist." Science-Gossip 1 (n.s.): 242.

Wallace, Alfred R., 1895. The expressiveness of speech, or mouth-gesture as a factor in the origin of language. *Fortnightly Review* 58 (*n.s.*): 528-543.

Wallace, Alfred R., 1905. *My Life; A Record of Events and Opinions*. 2 vols. London: Chapman & Hall.

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