Twelve Wallace Myths

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Summary: Alfred Russel Wallace's (1823-1913) bicentennial year is a good time to take stock. In this presentation I discuss twelve Wallace-related issues that I feel have been poorly taken up. These range from the biological to the biographical, including subjects such as social criticism, human evolution, autobiographical memory, natural selection, national affinities, spiritualism, and wokeism.

An initial warning: the author of this presentation is 'aggressively pro-Wallace'. What this means in practice is that I consider it important to seek out what it was that Wallace actually thought, and why – as opposed to merely falling in line with prior agendas. There are, unfortunately, many who wish to tear the man down, and still more who, while professing to be Wallace supporters, perhaps are sometimes more in denial than they would care to admit. So here are twelve Wallace-related issues that I feel people have often not gotten fully to the bottom of.

My plan is straightforward: to proceed directly through the twelve subjects, divided into two lots of six. After the first six are presented, I will stop for questions, and then move on to the last six subjects. A few summary comments will then be offered, and a second set of questions solicited. There is no need for much further introduction, apart from offering the obvious disclaimer that these twelve statements represent my considered opinion after more than forty years of studying Wallace's life and writings. I have written fairly extensively on almost all of these subjects, and invite those interested to investigate further.

Subjects One Through Six

[1] *Was Wallace 'Welsh'?* This polarizing subject would be of relatively little importance were it not for the fact that Wallace is fairly famous, and national prides have come into play. A dispassionate look at the matter (I am a thirteenth generation American, with both English and Welsh ancestry) must arrive at the conclusion that Wallace was predominantly an Englishman. The main complications are (1) his place of birth, a small town near the center of Monmouthshire, and (2) the fact that he worked in South Wales as a surveyor during the better portion of his late teens and early twenties.

The name, ownership, and administration of this region has a complicated recent history. Originally known as Gwent, a county in Wales, by the time of Wallace's birth it had taken on the county name Monmouthshire and was partially under English

administration, including the mandated use of English in official transaction documents. Much later, in 1974, the name Gwent was reinstated and administration duties returned to Wales, but in 1996 this status was abolished and it again became Monmouthshire (Wikipedia describes Gwent as “a preserved county and former local government county in southeast Wales”). Geopolitically, therefore, the status of Wallace’s place of birth is somewhat ambiguous.

More importantly, Wallace’s immediate family was thoroughly English going back at least several generations: his mother was of long-term English descent; his father probably was too (Wallace accepted that his father's ancestry ultimately traced back to Scotland, but this likely involved many generations). The couple had moved from St. George's, Southwark, to the small town of Usk about 1820, and Wallace himself was born in Usk in 1823 (the only one of the Wallaces’ nine children born there). His autobiography *My Life* makes it clear, moreover, that he and his family felt like, and were made to feel like, outsiders there. In 1828 or possibly early 1829, when he was just five or six, the family moved back over to England, to the town of Hertford. Father, mother and children never returned to Wales to live as a family during the children's adolescent years. Wallace did however later work in Wales for two three-year periods, 1840-1843 and 1845-1848, during the time he was employed as a journeyman surveyor.

It should be emphasized that Wallace himself never expressed any nationalistic Welsh attachment: while several times drawing attention to his ancestral connections with the Scots and always referring to himself unequivocally as English, he never once referred to himself as a Welshman, including always naming his place of birth as “Monmouthshire,” not “Gwent.” Further, his contemporaries just about always referred to him as an Englishman. The final straw is, it is on record that late in life he *declined* the offer of an honorary doctorate from the University of Wales – years after having already accepted ones from Dublin and Oxford. This is not exactly what one would expect of a person who felt elemental ties to the region. To summarize: it would be rational to consider Wallace in some sense “Welsh” were any of the following true: (1) that either of his parents had any substantial and/or reasonably recent Welsh heritage (2) Wallace had grown to adulthood there (*i.e.*, without moving back to England for over ten years first, starting at the age of five or so) (3) his parents had remained in Wales permanently instead of moving back to England (4) Wallace had *voluntarily* moved back to Wales during his teen years or adulthood and then remained there (i.e., as opposed to first being dragged along by his older brother to work there, or later tying up that brother's affairs after he died), (5) Wallace had settled in Wales permanently after his return from the Malay Archipelago in 1862 (6) Wallace had referred to himself as a Welshman, and (7) perhaps, even, had Gwent always been unambiguously Welsh and continuously referred to by that name. However, none of these *are* true. Perhaps he can most conservatively be referred to as “an Englishman born in Wales,” or, simply, “British.”

[2] *Was Wallace searching for an explanation of evolution in his early travels?* Perhaps the most egregious Wallace myth is the one, invented not so long ago, that

Wallace's discovery of natural selection was entirely serendipitous, occasioned when he encountered some puzzling coloration details among tiger beetles while in the field in early 1858. It has been noted that no Wallace publications or personal letters have been found that specifically indicate at least one of his reasons for journeying to the tropics was to examine possible mechanisms behind evolution. As far as it goes this is true, but first one must ask, why we would expect him to have communicated this to anyone at that point? Family members would not have cared, and professionals would have viewed such aspirations, coming from a total amateur, presumptuous in the highest degree (and remember the negative response he actually did receive a few years later when he started writing on 'philosophical' subjects). And what if he failed to make any progress?: surely this would make him an object of derision among the armchair set.

But beyond this, there is good evidence after all of his early intentions in this direction. His *Species Notebooks* are filled with entries leaning in the direction of the transmutation hypothesis, and it is clear that he was enamored with the notion of evolution from his very first reading of *Vestiges of the Natural History of Creation* in 1845. Then there are his words to Henry Bates in a personal letter dated 11 October 1847: "I begin to feel rather dissatisfied with a mere local collection – little is to be learnt by it. I should like to take some one family, to study thoroughly – principally with a view to the theory of the origin of species." Further, in February 1855 he wrote "The great increase of our knowledge within the last twenty years, both of the present and past history of the organic world, has accumulated a body of facts which should afford a sufficient foundation for a comprehensive law embracing and explaining them all, and giving a direction to new researches. It is about ten years since the idea of such a law suggested itself to the writer of this paper, and he has since taken every opportunity of testing it by all the newly ascertained facts with which he has become acquainted, or has been able to observe himself. These have all served to convince him of the correctness of his hypothesis."

Further, less direct, kinds of evidence might also be brought up, but these quotes alone tell the tale. As far as the tiger beetles go, he never later identifies them as any sort of key to his coming up with the theory of natural selection – to be sure, the episode was probably an important one in triggering his final thought process, but his lack of later referral to it suggests that it was only the final clue drawing together years of concerted attention.

This is a myth that needs to be permanently laid to rest. To defend it is to defend the notion that just because Wallace did not go into the field with a *specific* mechanism for evolution in mind to investigate, that he cannot be credited with the effort of searching for one, and ultimately being successful. This is a restriction that cannot be allowed.

[3] *Was Wallace's 1858 Ternate communication with Darwin sent in March of that year, or April?* In attempting to answer this question, we must first acknowledge that, given the state of available evidence, it is impossible to offer a fully conclusive

verdict. However, in my opinion the evidence that *is* available clearly favors the March date.

Unfortunately, discussion surrounding this matter has been severely compromised by parties who, on the one hand, wish to discredit Darwin as having possibly stolen ideas from Wallace's work, or, on the other, seek to minimize Wallace's importance in the matter altogether. Meanwhile, the evidence that does exist has been but poorly contextualized. First, there is the matter of the transport of the Wallace letter and essay to Darwin. Considerable efforts have been put into detailing the routes of the mail delivery ships from that time, but all of this is to no avail, because what was delivered to Darwin was a mail packet, not a ship! There is no way of knowing whether individual letters might have been delayed for various periods, as the mail pouches carrying them would have been hand-sorted at least three times along the way. But we *do* know that a letter mailed out in the March batch *could* have reached England in early June, because one *did*: a Wallace letter to Frederick Bates (brother of Henry Walter). It appears possible that one sent in April could also have arrived in time, but we have no exemplars.

Wallace himself later stated in print – six times, and not always in the same phrasing – how his packet was sent out only a few days after he wrote 'On the Tendency…', but despite this consistency, complaints have been raised that perhaps Wallace's memory was bad, and what he remembered as "a few days" was actually a month or more. This seems inherently improbable. All agree that the essay itself was written out in latest February 1858 or earliest March (and a copy made on the spot), but a point of contention is whether it was done in time to be sent out in March. Here the plot thickens, as it appears an incoming letter from Darwin arrived on that mail delivery date, and some have questioned whether Wallace would have had time to turn around an outgoing response on the same day. Moreover, it has been pointed out that Wallace himself stated he was not in the habit of doing so. But the story grows more complicated when one learns that the Darwin letter contained comments about Charles Lyell's appreciation of Wallace's work that might have supplied him with more reason to write to begin with.

This brings us to a crucial piece of evidence. Scholar Peter Raby, in his 2001 Wallace biography, noted how Wallace stated in 1905 that "I asked [Darwin] if he thought it sufficiently important to show it to Sir Charles Lyell, who had thought so highly of my former paper." Raby claims these words as proof of Wallace's knowledge of Lyell's support at that juncture. John van Wyhe and others have jumped at this connection, using it as an argument that Wallace must have had to wait a month before sending out his reply and essay.

But a closer look suggests an entirely different conclusion. Wallace's remark appeared in his autobiography *My Life*, at a point in the text in which Lyell's name had not been mentioned for several pages. I believe Wallace is actually simply trying to remind his 1905 readers of Lyell's part in the overall story. 'Don't believe it? Consider, then, the fact that later in 1858, after receiving word of the presentation of

his essay, Wallace wrote a letter to his mother in which he used the same “thought so highly” phrase to describe what had transpired. Wallace doubtlessly had access to many of his old letters, including this one, while putting together his autobiography, and simply re-applied the tell-tale wording.

This seems either not to have occurred to, or been seen as argumentatively useful to, either side of the “did Darwin steal from Wallace?” camps. James Costa and I have both argued that Wallace had perfectly good reasons for trying to contact Lyell at that point (concerning biogeographical theory), so the “response” theory to Darwin’s letter is a weak one – not to mention the fact that neither Wallace nor Darwin nor the latter’s circle ever later described Wallace’s communication as a “response.” Wallace most likely finished off his essay in early March 1858, wrote up a cover letter nearly right away, and deposited the lot in the outgoing mail slot a day or two before the mail ship actually arrived. On reading the incoming Darwin letter he would have recognized no need to do anything further at that point.

It is still possible that, even so, it was another month before he mailed the packet; moreover, we also need to consider the range of possible reactions by Darwin, and whether it arrived in early, or late, June. I have written on this as well, but we needn’t explore that at the moment.

[4] *The so-called ‘co-authorship’ of the 1858 Linnean presentation.* Once Darwin, Hooker, and Lyell had Wallace’s Ternate essay in their hands, it was immediately apparent that something had to be done. Surely, this was a threat to Darwin’s priority on the subject, yet the group was not insensitive to Wallace’s situation as well. What they came up with, rather quickly, was actually not such a terribly bad way of dealing with the problem, yet it may have had more implications than anyone can imagine, even now.

A special meeting of the Linnean Society had been scheduled for 1 July 1858, so Hooker and Lyell arranged to have Wallace’s essay and two unpublished Darwin writings presented during it. The so-called ‘joint paper’ was given an overall title and read before the members, shortly thereafter being set to print.

On the positive side, this saw to it that Wallace would not be ignored, and indeed it provided a solid foundation for his eventual fame and successes. He remained thankful for the rest of his life. Darwin, meanwhile, had had his priority protected.

Over the years, however, various objections have been raised regarding Wallace’s overall treatment in the matter. Surely, as the initiating work, ‘On the Tendency…’ should have led in the trio of pieces, but instead it was placed third, behind the Darwin excerpts. Further, Wallace had not even requested that the essay be considered for publication, and when it was, he was not asked first for his permission to do so. And could he have been happy about Hooker/Lyell’s untrue and evasive statement in their introduction to it that “both authors having now unreservedly placed their papers in our hands…”?

But there is another problem, potentially more significant than any of these, or even the outside possibility that Darwin's handling of the manuscript involved intellectual theft. A leading hint in this direction is Wallace's complaint, made no fewer than five times *in print* over the next forty years, how he had never been allowed to review proofs of the work before it reached the public ear. Doesn't it strike anyone else how strange these remarks are, concerning the celebrity of the paper?

In fact, an inadvertent conspiracy was launched the day the original Darwin/Wallace contribution entered into the literature. In my *Alfred Russel Wallace Notes* No. 20 I take up this subject in some detail, pointing out that the frequent referral to it as a 'co-authored' piece is entirely inaccurate, as "implicit in the concept of 'co-authorship' are the notions that each of the listed authors of a particular work: (1) are aware of its entire content (2) have contributed something significant to same, and (3) are specifically desirous of being identified as one of its creators… In the present instance, none of these three conditions holds. In fact, they can hardly hold less: (1) Wallace knew nothing of Darwin's development of the natural selection concept or of the existence of his extracts (2) neither party contributed anything to the other's writings or used those writings to bolster their own, and (3) in the case of Wallace, he was neither seeking a direct route to publication, nor was even consulted before his contribution reached print." In that note I conclude: "What we should call the Darwin-Wallace contribution is not clear, but it certainly is not a 'co'-anything."

By referring to the 1858 manuscripts as a 'co-publication' we are possibly committing the error of thinking that their authors were more similar in their overall appraisals of evolutionary process than they really were at that point. This leads us to subject number five.

[5] *Just how similar were Wallace's and Darwin's views in 1858 as regards the evolution of humankind's advanced mental abilities?* As just implied, we really don't know the full extent of Wallace's thinking on evolutionary trajectories at that point, as he was possibly forestalled from stating his full position when his paper was prematurely published. There are a lot of questions here, as Wallace had been giving thought to human social evolution questions as early as 1837, the year he had been shipped off to London to join his older brother John as an apprentice. John had become involved in an Owenist group, and there was much talk in such 'freethought' circles as to how society might engineer itself in new directions. A lot of this talk revolved around the goals of institutions; Owen himself was an advocate of collectivism and self-improvement, and took a moral stance on the treatment of labor that Wallace immediately was attracted to. The writings of Thomas Paine and Owen's son Robert Dale also commanded his attention, especially as these related to the roles of political and religious freedom in moving society ahead.

It should therefore not be surprising that Wallace took such a positive view of *Vestiges of the Natural History of Creation* when he read it in 1844 or 45. Not only did this work argue for the existence of a full-blown process of biological evolution, but it also imagined a future emergence of almost god-like human beings. Of

course, it was a bit short on explaining how this was going to happen, but that just made the matter more interesting. Around the same time Wallace was exposed to mesmerism, a practice academics of the time had relegated to the category of hoax. But Wallace himself, on trying it out, found himself more than able of producing most of the same effects. It appeared human beings really might have capabilities that looked forward to a glowing future.

Wallace did not suddenly give up on any of these ideas upon thinking out his 'steam engine governor' model of natural selection in 1858. Indeed, he eventually came back to all of them to one degree or another, one of the most striking instances being his final words in the 1864 presentation on human races: "mankind will have at length discovered that it was only required of them to develope the capacities of their higher nature, in order to convert this earth, which had so long been the theatre of their unbridled passions, and the scene of unimaginable misery, into as bright a paradise as ever haunted the dreams of seer or poet." God-like, indeed.

In sum, while Wallace's path to natural selection eventually caused him to converge in 1858 toward Darwin's position, it is clear that his thoughts on evolution in general extended far beyond the origins of plants and lower animals. In one of his last interviews he was recorded as stating: "My argument has always been that the mind and the spirit, while being influenced by the struggle for existence, have not originated through natural selection."

[6] *Did Wallace reverse himself in the 1860s on the applicability of natural selection?* This is the final step in a progression beginning with items four and five. It has been apparent since that time that some of Wallace's thoughts on the evolution of humankind changed in the late 1860s. By 1869 he was ready to state publicly his belief that natural selection in of itself was unable to sustain an evolutionary progression into the realms of higher consciousness. For the latter to happen, he postulated, a new set of influences had to be involved, and he was ready to suggest that spiritualism (or at least something much like it) held the key.

Ever since, observers have assumed that in these 1860s Wallace gave up on his original theory, replacing it with a new version in which spiritualism played a centrally important role. The apology offered for his alleged disillusionment is that he *now* believed natural selection was incapable of explaining many of the higher human functions, and was suggesting a new source of direction that could.

This is almost, but not quite, true. It has been my position for many years that Wallace's basic positions on natural selection, announced first in 1858, in fact never changed, and that the revisions stated in the late 1860s amounted to 'add-ons,' rather than reversals. Ultimately, the reason for this is that as of 1858, he *already* did not believe that the natural selection model he introduced could account for the so-called 'higher attributes' of humankind, and that he had been searching for an appropriate explanation for them for some ten years.

I have been advocating for this interpretation for some thirty years or more at this point, and just this past week published a lengthy summary of the evidence for it as item Number 28 in my *Alfred Russel Wallace Notes* series. In that essay I bring up more than thirty-five points to this end, ranging from the obvious, to the not-so. To list these here is not possible, considering the time allowed, as even the brief treatment of those thirty-five in Number 28 required nearly fifteen thousand words. Still, I invite those with an open mind to take a look for themselves.

I will mention here, however, that I feel this interpretation is the only one that will satisfactorily frame the entire scope of Wallace's intellectual journey. Note that I am not necessarily saying that I feel his conclusions on this score, involving spiritualism specifically, are on target, but instead, simply, that he may well be correct in his vision of the overall evolutionary trajectory involved. But to get into that subject now is beyond the scope of present concerns.

Review of Subjects

To review, the first six subjects entertained here have been: (1) Was Wallace Welsh? (2) Was Wallace searching for an explanation of evolution in his early travels? (3) Was Wallace's 1858 Ternate communication with Darwin sent in March of that year, or April? (4) The so-called 'co-authorship' of the 1858 Linnean presentation. (5) Just how similar were Wallace's and Darwin's views in 1858 as regards the evolution of humans' advanced mental abilities? (6) Did Wallace reverse himself in the 1860s on the applicability of natural selection?

Audience Questions

Subjects Seven through Twelve

[7] *Is it true that Wallace tended to put more emphasis on environmental regulation of natural selection than on competitive, inter-organism, relations?* No, it isn't. I recently took another look at this question in my *Alfred Russel Wallace Notes* No. 25 analysis. The supposition that Darwin more heavily favored a biological competition form of natural selection than Wallace did may be traced in good part to Wallace's fairly heavy usage of the word 'physical' in the 1858 Ternate essay, and to his previous attention to possible geological and climatological influences on organic change. In the 1858 work, he uses the following phrases in making his point: "so long as a country remains physically unchanged," "let some alteration of physical conditions occur," "and under adverse physical conditions," and "a change of physical conditions in the district." Somewhat oddly, however (and unlike their frequent application in the 'Sarawak Law' essay of three years earlier), the words 'climate' and 'geological' appear only a total of two times in 'On the Tendency…', and not in a related context. What are we to make of this?

As it turns out, at that time use of the word 'physical,' especially in a natural history/geographical context, was largely restricted to differentiating between 'natural science' and 'human society' kinds of subjects: that is, between, say, 'geology' and 'economics', or 'ethnography' and 'law'. Wallace fairly strictly observed this custom,

and in fact in the 1858 essay itself explains quite clearly what he means by 'physical conditions': "Now, let some alteration of physical conditions occur in the district – a long period of drought, a destruction of vegetation by locusts, the irruption of some new carnivorous animal seeking 'pastures new' – any change in fact tending to render existence more difficult to the species in question, and tasking its utmost powers to avoid complete extermination; it is evident that, of all the individuals composing the species, those forming the least numerous and most feebly organized variety would suffer first, and, were the pressure severe, must soon become extinct."

Thus, whereas now we usually associate the word 'physical' with the sciences of the inorganic, that was not the prevalent usage in the first half of the nineteenth century. In the aforementioned *Alfred Russel Wallace Notes* No. 25, I document this fact by (1) pointing out how just about every text of the time with the title 'Physical Geography' included chapters on animals and plants (and in fact this is still true, a holdover) and (2) showing how Wallace did the same thing in his own writings.

It is therefore a myth that Wallace's post-1858 position on this was much, if any, different from Darwin's. It is especially surprising that this had not been pointed out before, as most of Wallace's most famous later contributions to natural selection theory (for example, to protective coloration) focused more on the way individual organisms interacted, than on the way these were favored or not favored by climate or other inorganic forces (as was later true of the Neo-Lamarckians).

[8] *Is it reasonable to accuse Wallace of having a 'bad memory'?* It has been suggested, especially by historian John van Wyhe, that Wallace's memory might have been so bad that we can hardly trust his reports on a good portion of the events of his early life. But this 'doddering old Wallace' theory ignores something important.

It should first be admitted that quite a few date and place and name errors can indeed be found throughout Wallace's oeuvre; I have found quite a number myself. Here, however, I think we can cut him a little slack: that years later he might have frequently forgotten exact dates or names connected to isolated events or places seems relatively unimportant, especially inasmuch as fact-checking was not nearly as easy then as it is today.

What is more important is that those who have criticized Wallace's accounts have failed to point out that there are two main components of autobiographical memory, as is emphasized in a Wikipedia article on the subject: "Autobiographical memory is a memory consisting of episodes recollected from an individual's life, based on a combination of episodic (personal experiences and specific objects, people and events experienced at particular time and place) and semantic (general knowledge and facts about the world) memory." The long and short of it here is that a strength or weakness in one or the other component does not necessarily produce the same in the other.

In point of fact, and despite Wallace's frequent inability to recall individual names and dates, his memory as to the 'content' of events and settings was, by all accounts, excellent. Many friends, acquaintances, and reviewers of his works attested to this (see referrals in my *Alfred Russel Wallace Notes* No. 12). In his autobiography he concluded a section on his memory by writing: "In the year 1883, when for the first time since my childhood I revisited, with my wife and two children, the scenes of my infancy, I obtained a striking proof of the accuracy of my memory of those scenes and objects. Although the town of Usk had grown considerably on the north side towards the railway, yet, to my surprise and delight, I found that no change whatever had occurred on our side of the river, where, between the bridge and Llanbadock, not a new house had been built, and our cottage and garden, the path up to the front door, and the steep woody bank behind it, remained exactly as pictured in my memory. Even the quarry appeared to have been very little enlarged, and the great flat stones were still in the river exactly as when I had stood upon them with my brother and sisters sixty years before. The one change I noted here was that the well-remembered stone stile into the village churchyard had been replaced by a wooden one. We also visited the ruined castle, ascended the winding stair, and walked round the top wall, and everything seemed to me exactly as I knew it of old, and neither smaller nor larger than my memory had so long pictured it."

Beyond this, even some events that Wallace recalled as having taken place, but that were later attributed by others to fabrications of bad memory, have later independently been shown to have actually taken place. There are of course only so many such situations that later can be verified, but the moral is that we need proof of such allegations, not the spreading of too-convenient assumptions.

[9] *Did Wallace treat native peoples poorly, either as a field worker or writer?* In recent years there has been an unfortunate increase in the tendency to paint everyone in history with the same brush, evidence to the contrary notwithstanding. And, regrettably, white nineteenth century naturalists, as a group, have not been immune to such abuse.

Wallace, ranking among the biggest names in this respect, has for some become a tempting target for such treatment. I have seen some perfectly awful things said of him, especially in the popular press. In one such writing, a quote of his concerning one spectacularly disgusting treatment of Australian aborigines he had heard of and described was reformulated in such a manner as to make the reader think that Wallace himself had been guilty of the atrocity! In other instances, he is simply tarred with the same brush as other travelers of the period, many of whom were admittedly guilty of various kinds of dubious behaviors.

He has also been accused of underplaying the importance of native collectors to his results on many occasions. The implication is sometimes that these individuals deserve something like almost equal credit for the net results. While it is certainly true that he never could have produced the same volume of specimens had he been

forced to do it all himself, their contributions to his efforts were mainly as employees, not as initiators, as George Beccaloni has pointed out.

More importantly, it seems, Wallace appears to have possessed a native decency that facilitated his collection efforts over a twelve year span. There were, of course, numerous instances of his not being able to convince native workers to do what he wanted them to do, but there is no evidence that he was routinely unfair or disrespectful to them. Some worked for him for years, and his closest assistant, a young man named Ali, even reportedly took on Wallace's name – as 'Ali Wallace' – in his own later years.

This is borne out by Wallace's many published accounts of native behavior. Some of these accounts display a level of amusement at unfamiliar habits, but these observations almost never descend into outright indignation – for example, in his discussion of the "running amok" phenomenon in an 1856 letter from the field. On the other hand, a concerted effort could pull up dozens of genuine statements of admiration and positive evaluation, extending from his field days all the way to the end of his career. The simplest and most representative of the lot comes from an 1855 letter he sent home from Sarawak: "The more I see of uncivilized people, the better I think of human nature on the whole, and the essential differences between so-called civilized and savage man seem to disappear."

[10] *Was Wallace at heart a theist, or a Christian*? I am in the process of writing up a more detailed reply to this question, but for the moment some brief points can be offered up. First, regarding the Christian association…

I have received enquiries from people who seem to feel that Wallace should be regarded as an antidote to Darwin's agnosticism (or even atheism) – that is, that the hard-line author of *The Origin of Species* was alone in his treatment of evolution as a basically secular process that was in no need of Godly powers to move itself along. Sometimes one gets the sense that, viewed in this light, Wallace may be regarded as an alternative authority, one who might be said to present a challenge to this Godless position. There are three main reasons for such a view having been taken.

First, it is true that Wallace was raised amidst a not atypical Church of England home environment. But his parents were not avid followers, and he himself quickly lost interest in both God and religion while still in his teens. Consider this quote from his 1905 autobiography: "…what little religious belief I had very quickly vanished under the influence of philosophical or scientific scepticism. This came first upon me when I spent a month or two in London [in 1837] with my brother John...; and during the seven years I lived with my brother William, though the subject of religion was not often mentioned, there was a pervading spirit of scepticism, or freethought as it was then called, which strengthened and confirmed my doubts as to the truth or value of all ordinary religious teaching. ……by the time I came of age I was absolutely non-religious, I cared and thought nothing about it, and could be best described by the modern term 'agnostic.'" If after reading such a statement one still

feels unsure on this matter, I suggest taking the time to read through Wallace's many similar statements, made over the full span of his career, condemning much of organized religion and its various institutions, dogmas, and hypocrisies.

But many do not know of this. Instead they point to his adoption of spiritualism around 1866, mistaking its hypernaturalism (or even scientism) for some kind of theistic association. In point of fact, many spiritualists, especially the early ones, regarded the so-called 'Spirit Realm' and its denizens as part of the natural world, having no more use for theistic concepts of God or the dogmas of institutional religion than Wallace did.

Further, many observers are content to characterize Wallace's worldview of a directional evolution as a simplistic form of teleology in which an omnipotent God-figure dispenses first causes as initiating acts. But the notion of God-originated first causes was anathema to Wallace, who instead postulated a cosmological progression more closely akin to the Aristotelian doctrine of final causes. Thus, there was something in the constitution of existence which caused a general tendency to evolve toward more complex and self-aware systems; it should therefore not be surprising that he is sometimes considered to be one of the fathers of the Anthropic Principle in astronomy. Still others have identified this tendency to self-invent with what has been termed 'teleonomy', which Wikipedia defines as "the quality of apparent purposefulness and of goal-directedness of structures and functions in living organisms brought about by natural processes like natural selection. …Teleonomy is sometimes contrasted with teleology, where the latter is understood as a purposeful goal-directedness brought about through human or divine intention. Teleonomy is thought to derive from evolutionary history, adaptation for reproductive success, and/or the operation of a program."

In short, any attempt to associate Wallace with theism or institutional religion is simply misguided.

[11] *Is it true that his séance experiences were what caused Wallace to adopt spiritualism?* The full answer to this is 'no' – but that doesn't mean that he felt they were inconsistent with his decision. He seems to have believed that even if only a few mediums were providing genuine ties to the Great Beyond, this was enough to support their efforts in general. I personally feel he was wrong to be this generous, especially as I believe that most if not all séance 'performances' are fraudulent. But to summarily dismiss spiritualism (or its cousin theosophy) on this basis alone is premature. To state the obvious first, there are a lot of strange things going on in this world, and the existence of an aspatial milieu, incredible as it may seem, has not been disproved outright. More than this, however, spiritualism in particular was viewed as operating through preconscious and semi-conscious communication between 'spirits' and the human mind, especially in the form of dreams, premonitions, and emotional urges. And in Wallace's own time not all critics of the spiritualism concept were as quick to deny a role to the latter as they were séance phenomena (Frank Podmore, for one).

In any case, Wallace's real reason for adopting spiritualism likely had little if any connection to a desire to communicate with dead relatives, or entertain himself by watching disembodied hands play accordions in dimly-lit parlors. In the middle of 1865, on the advice of his sister, he began to investigate the spiritualism literature, and attend seances and lectures on the subject. At the same time, he ceased just about all scientific work. This went on for a whole year, by the end of which he had convinced himself that the subject was deserving of more serious attention.

His intellectual journey toward this end had actually begun in 1858 or earlier, and the premature publication of his 'On the Tendency…', which had provided no basis for an understanding of the evolution of the higher human attributes, or their relation to social evolution. It is not well known that just after his famous paper on the evolution of human races was delivered in the Spring of 1864 (and the equally famous paper on papilionid butterflies just two weeks later), he published a series of short essays and commentaries on the kinds of moral inertias that would be required to bring people to a higher state of societal consciousness. Just weeks after the last of these appeared in mid-1865 he began his 'time-out' period of study of spiritualism.

In late 1865 he attended the first in a series of lectures by the spiritualist trance-speaker Emma Hardinge, and her views helped him to conclude that spiritualism – including both its moral teachings and the supposed manner of operation of the so-called 'Spirit Realm' – provided an explanation for how humankind's higher attributes might themselves evolve in a manner superseding the physical world reality dominated by natural selection. As he put it in his first published writing on spiritualism, *The Scientific Aspect of the Supernatural*: "Now here again we have a striking supplement to the doctrines of modern science. The organic world has been carried on to a high state of development, and has been ever kept in harmony with the forces of external nature, by the grand law of 'survival of the fittest' acting upon ever varying organisations. In the spiritual world, the law of the 'progression of the fittest' takes its place, and carries on in unbroken continuity that development of the human mind which has been commenced here."

My interpretation of all this is that Wallace had recognized in spiritualism a process through which people could evolve as a social mass: simply, the scenarios/messages delivered through dreams, premonitions, conscience, etc., made it possible for people to reflect further upon their past actions, making adjustments to them in the future accordingly. That he would have recognized the superiority of such a form of learning over mere efforts at inculcation is evident from words in a letter he sent to his friend George Rolleston in late September 1865, just several weeks before attending the Hardinge lecture:

> …I look upon the doctrine of future rewards and punishments as a motive to action to be radically bad, and as bad for savages as for civilized men. I look upon it, above all, as a bad preparation for a future state. I believe that the *only way* to teach and to civilize, whether children or savages, is through the influence of love and sympathy; and the great thing to teach them is to have the most absolute respect for the rights

> of others, and to accustom them to receive pleasure from the happiness of others. After this education of habit, they should be taught the great laws of the universe and of the human mind, and the precepts of morality must be placed on their only sure foundation – the conviction that they alone can guide mankind to the truest and most widespread happiness. I cannot see that the teaching of all this can be furthered by the dogmas of any religion, and I do not believe that those dogmas really have any effect in advancing morality in one case out of a thousand.

In short, Wallace's real reason for adopting spiritualism was that it seemed to provide an explanation for natural processes he believed could not be accounted for through a Darwinian brand of natural selection.

[12] *Was Wallace unequivocally a liberal?* Wallace did describe himself on several occasions as being a liberal, and it is clear that, generally speaking, his actions support this verdict. But the overall situation was just a bit more complicated than that.

First, his opinions on the questions of the day did not extend to advocacy of extreme or violent acts. Thus he was not a radical, believing instead that collective action and the vote should be the main vehicles for political and social change. And, although he was a big supporter of unionization, he felt that labor strikes were often counterproductive: he argued that in their place, workers should set aside part of their wages into funds that could be used to buy out control of the companies that employed them.

Nor was he an advocate of government spending on matters that he felt did not serve the population as a whole. For example, and perhaps most surprisingly, he did not favor the use of public funds to support many kinds of scientific study or technical education. In 1869 he wrote:

> …The broad principle I go upon is this, – that the State has no moral right to apply funds raised by the taxation of all its members to any purpose which is not directly available for the benefit of all. As it has no right to give class preferences in legislation, so it has no right to give class preferences in the expenditure of public money. If we follow this principle, national education is not forbidden, whether given in schools supported by the State, or in museums, or galleries, or gardens, fairly distributed over the whole kingdom, and so regulated as to be equally available for instruction and amusement of all classes of the community. But here a line must be drawn. The schools, the museums, the galleries, the gardens, must all alike be *popular* (that is, adapted for and capable of being fully used and enjoyed by the people at large), and must be developed by means of public money to such an extent only as is needful for the highest attainable *popular* instruction and benefit. All beyond this should be left to private munificence, to societies, or to the classes benefited, to supply.

He goes on to state that: "schools of art or of science, or for technical education, should be supported by the parties who are directly interested in them or benefited by them," and to decry government assistance to what he feels would be better promoted through private forms of endowment.

It is this kind of reluctance which probably explains his rejection of Marxian forms of socialism. Despite adopting many elements of Owenist thought in his teens, later in life he confessed to having doubts that human society could switch over to a full-blown form of socialism without imposing unacceptable levels of personal control over the lives of individuals. His mind was finally changed when in 1889, more than forty years later, he read Edward Bellamy's *Looking Backward*, a very popular novel that outlined how society might convert itself from capitalism to socialism. From that point on, his primary approach to the question was to urge workers to vote for candidates who were supporting a sharing of the wealth.

Beyond this, Wallace the individual has usually been characterized as a personally rather conservative fellow who was not attracted to any kind of excesses, and who spoke favorably of traditional human institutions such as marriage. Overall, I view him as what might be termed a 'libertarian socialist' (– or 'socialist libertarian'!), rather in the mold of Noam Chomsky, another famous public intellectual whose orientation is difficult to pigeonhole.

Conclusion

In my opinion, efforts to place Wallace into the overall stream of intellectual history are being complicated by three problems.

First, the trend within the history of science field is to focus mostly on creating a more realistic sociology of science; that is, understanding how social trends both influence scientific endeavor, and are influenced by it. This assumes, however, a passably complete understanding of any given individual's body of work, and what he or she was trying to accomplish. For someone as intellectually diverse – and aberrant – as Wallace, this is putting the cart before the horse.

Second, Wallace has become the target of several groups who either wish to tear him down, use him to support some outside agenda, or try to smooth over what they feel to be elements of his worldview that are inconvenient for their own.

Third, and perhaps most important, too much attention has been given to the sensationalism of some of Wallace's conclusions, at the expense of rooting out what it was that he was trying to accomplish by looking into such matters. The most obvious example is his attraction to spiritualism, but other examples can be found (for instance, his advocacy for land nationalism, which now may have no feasible *general* application, yet still might have some relevance to future land conservancy efforts). Wallace was known in his time as a great reasoner and marshaller of evidence, yet he does not quite receive the respect he should be getting for his efforts.

Second Review of Subjects

In final review, the last six subjects entertained here have been: (7) Did Wallace really tend to put more emphasis on environmental regulation of natural selection than on competitive, inter-organism, relations? (8) Is it reasonable to accuse Wallace

of having a ‘bad memory’? (9) Did Wallace treat native peoples poorly, either as a field worker or writer? (10) Was Wallace at heart a theist, or a Christian? (11) Is it true that his séance experiences were what caused Wallace to adopt spiritualism? (12) Was Wallace unequivocally a liberal?

Audience Questions

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