

## Alfred Russel Wallace and public engagement: alienating the enthusiast

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In an invited guest posting, *Alas, Poor Wallace*, historian of science, John van Wyhe (2013), <<http://teleskopos.wordpress.com/2013/08/07/poor-wallace/>> bemoans that during 2013 – the centenary of Wallace’s death – ‘*The Wallace “experts” most often interviewed ... are usually not historians of science, but scientists or enthusiasts*’ (van Wyhe, 2013). He suggests that such a lamentable practice would be unacceptable for other disciplines, and asks why this should be so for the ‘history of science’ (an assertion, in itself, that should not go unquestioned).<sup>1</sup> With the word ‘experts’ appearing in quotes, van Wyhe hints at the critical way in which he views the contributions from those commentators outside his own profession who have ventured into the debate.

BBC 2’s award-winning, two-part television series on Alfred Russel Wallace, *Bill Bailey’s Jungle Hero*,<sup>3</sup> takes a particular pasting, with van Wyhe (2013) making a number of (rather trivial) factual corrections to the programme’s narrative. It is important, of course, for any programme to be accurate. But to refer to the programme as presenting ‘... *a very inaccurate picture of Wallace, Darwin and the science of their time*’ (van Wyhe, 2013) is, I think, taking the matter too far – and is, indeed, itself, an inaccuracy. Might not ‘... *a largely accuracy picture, with a few errors having crept in*’ be a more factually correct appraisal? We can all get things wrong; scientists, enthusiasts and even, one might venture to suggest, John van Wyhe.

In case one is of the opinion that I have misinterpreted van Wyhe’s position – with perhaps his intention being to ensure only that historians of science are *included* in discussions (a stance with which few would disagree) – his postings elsewhere suggest otherwise. When promoting his own books on Wallace, van Wyhe’s disparaging tone becomes more explicit: ‘*Unfortunately Wallace’s admirers are not historians. But this doesn’t stop them from thinking they know better.*’ (van Wyhe, 2013b) – a astonishingly patronising stance. And, when discussing his work at the Hay Festival of Literature and the Arts in 2014, van Wyhe apprises his audience, ‘*Basically, all publications and talks and documentaries about Wallace are told from a particular perspective ...*’ No disagreement there; most would be. But the author then goes on to make the bold assertion that the particular perspective to which he refers is ‘... *not one of the historian but rather of the Wallace fans – the Wallace admirers*’ (van Wyhe, 2014). Hmm ... *All* works on Wallace (in whatever media) having been undertaken by ‘Wallace fans’; can that really be the case? Or is van Wyhe perhaps extending his argument, just a tad?

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<sup>1</sup> See later text.

<sup>3</sup> First transmitted 2013.

Either way, by having derided the contributions of enthusiasts (along with those of scientists), one can readily see where John van Wyhe is heading ... creating an enticing narrative for promoting a book: the people identified as ‘Wallace admirers’ have it all wrong. But – being an historian – John van Wyhe can bring to you, dear reader, the *true* record ... a revisionist tome. Umm ... I wonder how that holds up to scrutiny.

Let’s peek into van Wyhe’s world of scientists, ‘Wallace admirers’ and enthusiasts ... *Has* the time come for them all to cease their heresies, and graciously step aside, as van Wyhe implies?

### **On the involvement of scientists**

Barring those pesky scientists from commenting on historical aspects of their discipline might be a delightfully attractive option for some commentators. However, such a draconian move would present us with an immediate difficulty. As science is essentially a collaborative (albeit, between individuals, fiercely competitive at times) and a cumulative discipline (i.e. building on the work of others), reference to its forebears is unavoidable. Would either Darwin or Wallace have formulated their theory without having read Robert Chambers’ *Vestiges of the Natural History of Creation* or Thomas Malthus’s *Essay on the Principle of Population*? Probably not. From here, untangling the history of the subject from the subject itself becomes increasingly difficult. The study of evolution is perhaps a particularly apposite example; a study in which the historical record – given up by the earth itself – is, indeed, the subject. In a recent BBC interview, Richard Fortey, Professor of Palaeontology, mentioned that when describing his work to others, he often suggests – tongue in cheek, one suspects – that he is ‘... *a historian of several hundred millions of years.*’ (Fortey, 2014)

With regard to respecting – and building on – science’s intellectual heritage, Helge Kragh, (1987; p8), draws our attention to it being usual in the 18th and 19th centuries for scientists to include in their works a chapter (or two)<sup>4</sup> that summarised the history of their subject. Indeed, Darwin’s own chapter, ‘An Historical Sketch’, in later editions of *The Origin of Species* is an example of one scientist’s contribution to assist our understanding of the historical context of his work. In light of van Wyhe’s denigration of such contribution by scientists, the irony is that Darwin was criticised for *not* having included sufficient reference to the historical perspective in the early editions of his work (see Stott, 2012; p1–17).

Clearly, scientists are unable to withdraw from the debate. They may have a different perspective to that of an historian of science, but surely that should not automatically invalidate their contribution; it should simply make the story richer.

The UK broadcasting industry has its own proud heritage of making and commissioning science programmes, many dealing with historical aspects. Exploiting the then relatively recent introduction of colour to the nation’s television sets, the landmark 1973, BBC series,

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<sup>4</sup> Four chapters, in the case of Charles Lyell’s, *The Principles of Geology*.

*The Ascent of Man*, set the bar high. But was the choice of narrator, Jacob Bronowski, a scientist,<sup>5</sup> well-judged? The answer was to be found in the viewing figures, and in the programme's resounding success. When speaking of his own involvement in the programme, Bronowski opined (1974): '*... scientists who had a special talent for speaking simply and explicitly also had a great duty laid on them to do so. I am as proud of colleagues of mine who did that ... as I am of anything I have done.*' Seeing such opportunities – to open up the debate to a receptive lay audience – as a proud duty, undoubtedly Bronowski would have made short shrift of any nonsense that attempted to quell his own voice; as would have, over a century earlier, T. H. Huxley:<sup>6</sup> '*... I have not been one of those fortunate persons who are able to regard a popular lecture as a mere hors d'oeuvre unworthy of being ranked among the serious efforts of a philosopher; and who keep their fame as scientific hierophants unsullied by attempts ... to be understood of the people.*' (Huxley, 1894; pvii). In the sciences, that proud tradition of engaging with the public continues; with practicing scientists such as Professors Brian Cox, Alice Roberts, Jim Al-Khalili, Richard Fortey – among others – regularly gracing our TV screens.

### **On the involvement of historians**

Like scientists, historians of science are a mixed bunch; approaching their subject from various angles, with different aspects of the field coming under their attentive eye. Some may focus on the swathe of technical, epistemological and philosophical perspectives; some on life-histories of key players or of the theories themselves; others on the political, social and cultural impact. All such perspectives are valid; and often reflect the person's own background – in the sciences, in the humanities, or sometimes in both – and interests. The value of these contributions is unquestionable, whether specific to Wallace or more general in reach.

Through the media, historians of science – and indeed historians, who have a particular interest in science – have played an important role; particularly in sourcing material, providing interpretations and contextualising, either within a broader scientific and technological framework or within its social and cultural aspects. In the UK, Professor Simon Schaffer, is well known for deftly slotting into countless programmes, providing valuable scientific and social historical perspectives. Other names include, Dr Jim Enderby for his contribution to BBC Radio 4's 25-parter, *Plants: from Roots to Riches* (transmitted, 2014), and Professor Lisa Jardine for fronting the same broadcaster's radio series, *Seven Ages of Science* (transmitted, 2013).

### **On the involvement of 'enthusiasts'**

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<sup>5</sup> A mathematician trained in physics; although having many talents, including poetry.

<sup>6</sup> Himself following a tradition from the pre-Victorian era with Humphry Davy (for whom it became quite lucrative), and later – into the Victorian age – with Michael Faraday's public lectures at the.

In the month that Miss G. Tollett of Cavendish Square was checking though Charles Darwin's part-manuscript of *The Origin of Species*,<sup>7</sup> Alfred Russel Wallace, almost 8,000 miles across the globe, posted a letter from Ternate to an address not a ten-minute stroll from where Miss Tollett was assiduously engaged in her labours. In that letter, to his brother-in-law Thomas Sims, Wallace mused, '*So far from being angry at being called an Enthusiast it is my pride & glory to be worthy to be so called. Who ever did any thing good or great who was not an enthusiast?*' (Wallace to Sims, 1859).

Half a century on, and Wallace continued the theme. In 1908, on being awarded the Darwin-Wallace Medal, the octogenarian naturalist reflected on the characteristics that he and Darwin shared that might have proved significant in their formulating the theory whose anniversary was being celebrated. Wallace (1908) offered the following: '*First (and most important, as I believe), in early life both Darwin and myself became ardent beetle-hunters ... Again, both Darwin and myself had, what he terms "the mere passion of collecting," ... I should describe it rather as an intense interest in the mere variety of living things.*' Glimpses of Darwin's enthusiasm may be found in his autobiography; and it is there where we pick up his own reference to his '*mere passion for collecting*'. Of his early days – and of an experience one might associate more with Wallace than with Darwin – the naturalist wrote:

*'But no pursuit at Cambridge was followed with nearly so much eagerness or gave me so much pleasure as collecting beetles. It was the mere passion for collecting ... I will give a proof of my zeal: one day, on tearing off some old bark, I saw two rare beetles and seized one in each hand; then I saw a third and new kind, which I could not bear to lose, so that I popped the one which I held in my right hand into my mouth. Alas it ejected some intensely acrid fluid, which burnt my tongue so that I was forced to spit the beetle out, which was lost, as well as the third one.'* (Darwin, 1887)

Darwin's use of the words 'passion' and 'zeal' re-emphasises that for some – invariably not all – scientists (or eminent figures in any discipline, for that matter), a degree of enthusiasm for their subject shines through; and often pre-dates their scholarly attainments or professional qualifications. Enthusiasm *per se* will not be sufficient, of course, but it does provide a powerful driving force. Before their professional training – and let's hope during, and after – many burgeoning authorities would have been humble 'enthusiasts', revelling in the delight and wonder of their subject. Wallace, for one, wore that badge with pride; and saw the manifestation of his early enthusiasm as having played some part in the development of his theory.

And it is here, of course, where Wallace's argument exposes the flaw in van Wyhe's (2013) contention regarding the contribution of '*experts*', be they '*scientists or enthusiasts*'. Scientists can, of course, be enthusiasts (as can historians of science);

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<sup>7</sup> In letter Darwin to Murray (1859).

enthusiasts can also be experts. van Wyhe's construction, based on a number of false dichotomies, serves only to muddy the waters.

Ignoring his faltering logic ... van Wyhe's rather ungracious and unwelcoming hand to those outside his own profession might be doing himself a disservice. For within science itself, non specialists – many of whom would have been enthusiasts – have often played an important role; albeit one largely overlooked. Bernard Lightman, Professor of Humanities, draws our attention to this: '*... there were knowledgeable amateurs and journalist in the latter part of the nineteenth century, many prolific and wildly successful, who produced books aimed at the mass market. Seldom mentioned by scholars until very recently, these popularizers of science many have been more important than the Huxleys and Tyndalls in shaping the understanding of science in the minds of the reading public...*' (Lightman, 1997; p188).

### **Who answers when the media calls?**

Accepting the absurdity (or, at least, the limitations) of van Wyhe's constructions, whatever consilience might be amicably achieved by 'scientists', 'enthusiasts' and 'historians of science', is likely to be upturned as soon as the media swoops in, with programme makers searching for that alchemy that serves to engage and transfix an audience – skills that might be abundant in some presenters but notable only for their absence in others.

So, who might be best placed to radiate under the spotlight of the media? Scientists, historians of science, or enthusiasts? Well that all depends ... and it's for the programme makers to judge; based on who might be best placed to engage the target audience.

### **On errors of commission**

Whoever the choice of presenter, whatever the context, accuracy is important. But simple factual errors might sneak in to any endeavour. That's not good, of course; but it happens. And when the media is added to the mix, exactly who might be responsible for any factual slips or misinterpretations can be an issue of debate. In a thread flowing from van Wyhe's (2013) original posting, George Beccaloni (a scientist), who was historical consultant for the BBC 2 programme on Wallace, guides us through the sometimes tortuous process of trying to achieve academic and historical rigor within the context of a popular programme (Beccaloni, 2013).<sup>8</sup> Rebekah Higgitt (an historian of science), reflects how her own experience had mirrored those '*... rather frustrating lines*' (Higgitt, 2013). Another presenter disclosed how she became a bit shouty during the process of making the series with which she was involved (Jardine, 2013). However frustrating it might be for the presenter or the expert consultant, the programme-maker has the ultimate call. Higgitt (2013), arguing the case for having a (professional) 'expert' (an historian of science, in the case of the Wallace programme) on such programmes, suggests that such a person '*... just*

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<sup>8</sup> For instance, Beccaloni records his attempts to correct two of the errors that van Wyhe points out.

wouldn't let the erroneous script pass their lips'. Well that may or may not be true, although it does invest in professionals an omniscience (which may or may not be warranted).<sup>9</sup> But errors might intrude after the presenter's work is done.

### **On errors of omission**

Even if one were to accept the bold claim that an error could never pass a professional expert's lips, there are 'errors' of a different kind – errors of omission; when something crucial to the debate *has not* been referred to. These are more insidious than errors of commission; as such omissions may themselves allow myths to perpetuate.

Darwin's own view of Wallace's contribution to the theory of natural selection was clear: *'I do not think your share in the theory will be overlooked by the real judges ...'*<sup>10</sup> At least in the short term, he was right; and as late as 1916, the names of Darwin and Wallace were still seen as *'... inseparable even by the scythe of time'* (Marchant, 1916; p4). Exactly how the scythe of time eventually sliced down Wallace, is a matter of debate. But it is only the *telling* of the story of Wallace's contribution that has not served Wallace well; the *facts* were *always* there (at times ignored; at other times to see resurgence). For the historian, the source material has remained the same; it is its *use* and *interpretation* that have changed over time. Within this context, there is a view that *'It is historians – particularly Darwin scholars – not Darwin himself who have eclipsed Wallace ...'* (Endersby, 2003). Coming from an historian of science, such a view obviously needs to be taken seriously. Simply by not telling Wallace's story, another story develops.

Listeners to Lisa Jardine's recent Radio 4's series were taken for a delightful spin through the *Seven Ages of Science* (BBC, 2013). In the episode that discussed evolution, Darwin was mentioned; but surprisingly – particularly so, with the attention being given to Wallace during the centenary celebrations – no reference was made to Wallace.<sup>11</sup> This was in marked contrast to her father's (Jacob Bronowski) earlier romp through science. In *The Ascent of Man*, Bronowski devoted considerable air-time to the Victorian naturalist. The relevant episode (*The Ladder of Creation*) in the 1974 series, opened with the narrative *'The theory of evolution by natural selection was put forward in the 1850s independently by two men. One was Charles Darwin; the other was Alfred Russel Wallace.'* This represented the facts fairly ... including Bronowski's reference to Wallace as *'... the forgotten and yet the vital character ...'* of the remarkable story (Bronowski, 1973; p293). With Jardine's series, we are simply unaware of whether Wallace's contribution was simply unknown to the programme-makers (which raises one set of issues) or whether its omission was a conscious decision (which raises another set).

Here, we begin to see the problem: even if we were confident in Higgitt's (2013) assertion that a (professional) expert would never allow an error to pass his or her lips (but don't be

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<sup>9</sup> Often there will be a team of researches diligently sourcing material.

<sup>10</sup> Darwin to Wallace, 13 November 1859b.

<sup>11</sup> Episode: *The Age of Inspiration*.

too swayed by that view; it might, itself, be erroneous), this still doesn't control for serious omissions.

## Conclusions

Where is all this leading?

### 1. Aunt Sallies and straw men

van Wyhe seems to have developed a rather peculiar narrative around an odd construction of what he sees as a group of 'Wallace admirers'<sup>12</sup> i.e. with their all coming from a common stock, all with supposedly homogenous views on Wallace, and all with a common agenda. During his Hay Festival promotional talk, the author suggested that he was '*... actually being attacked by these Wallace fans for ... attacking their hero*'. This is where van Wyhe's construction becomes particularly damaging: lumping together many disparate voices, and then suggesting that they all have a common agenda of protecting 'their hero' (under van Wyhe's construction), reduces the debate to a very crude level. In reality, there will be a host of people – scientists, writers, artists, social commentators – with academic or non academic backgrounds who, having bumped into Wallace along their own life-path, wish to find out more. There will be people who simply wish to uncover the story, by working with the best evidence. Those people will turn to scholars for reliable information and source material. Those people will be surprised that their motives for engaging in their study are being judged, and grossly misrepresented by some of those very authorities to whom they turn for information and guidance. Many of those people will be astonished at being publicly derided for their enthusiasm.<sup>13</sup> Working with van Wyhe's narrative ('Wallace admirers' = 'think that that know better'; and the corollary, historians = obviously, do know better), it becomes easy to glibly dismiss all non-historians as having nothing of value to contribute ... with such a conceptualisation, those irritating 'others' can be instantly excluded from the debate. It is here where van Wyhe seems to be advocating a very dangerous priestcraft. By dismissing people for what they are (or what others have deemed them to be), rather than for what they have to say, the scholar will also be doing himself a great disservice. By all means, counter any false arguments with evidence; but do not allow false attributions and stereotyping to get in the way.

Armed with a 1930's copy of Robert H. Thouless's book, *Straight and Crooked Thinking*, the student of logic, could pass a wet afternoon delighting in ticking off, from the Appendix on *Thirty-four Dishonest Tricks Which are Commonly used in Argument*, the examples of false logic in some of van Wyhe's assertions<sup>14</sup> ... Faulty distribution (asserting that because *some* members of a group have suggested something, *all* of them

<sup>12</sup> Elsewhere, van Wyhe uses the terms 'Wallace enthusiasts' or 'Wallace fans'.

<sup>13</sup> The one group that van Wyhe resolutely excludes from his construction of 'Wallace admirers' is, of course, historians: '*... Wallace's admirers are not historians*' (van Wyhe, 2013b). Unfearful of how refutation works within a scientific context, this is a very bold claim indeed; to which historians may wish to respond.

<sup>14</sup> Other titles are available from all good bookstores: Bennett's (2014) *Logically Fallacious* will also do an admirable job.

have); and *ad hominen* (attacking the person/group rather than the argument); being just two ... other such examples can be found between the book's dusty covers; depending on how long the rain lasts.

It is easy to construct a false narrative by grubbing around for numerous erroneous statements from disparate sources, combining them, and then attributing the toxic amalgam to a falsely constructed group. It is easy; but profoundly wrong. It is easy to personalise an argument, and then deride the person or the group. It is easy; but profoundly wrong. The debate deserves better.

Misunderstandings of Wallace's life and work do exist; of course they can be found. However frustrating these misunderstandings might be, they are not fatal. The fatal error to the intellectual pursuit is the lumping of these disparate misunderstandings together to make a false construction; and then to denigrate its supposed members. One simply cannot construct a false narrative only to deconstruct it. Well actually, one can (and people often do); but it's jolly bad form. In the UK, an argument set up only to be easily knocked down is known as an 'Aunt Sally'.<sup>15</sup>

## 2. Raising the tone of the debate

Many learned institutions actively promote and fund initiatives that engage and inspire the general public and non specialists; continuing the tradition referred to above. The question is, how to deal with people whom you might prefer not to invite to the table; people who challenge the received wisdom, rather than being passive recipients?

Having established that there are many people enthusiastic to learn more about Wallace; and that not everyone will always get things right, how do we address misunderstandings and misinterpretations? Rather than magisterially dismissing them because of their caste, why not simply correct the errors; and engage in a more respectful exchange? Some authorities do this in a neutral way; not by grouping people and applying stereotypes, but simply by documenting the errors and correcting them. Exemplars of such an approach can be found in the 'Misinformation Alert!' section on Charles Smith's website, *The Wallace Page* <<http://people.wku.edu/charles.smith/index1.htm>> or the 'FAQs, myths & misconceptions' section on George Beccaloni's *Alfred Russel Wallace Website* <<http://wallacefund.info/faqs-myths-misconceptions>>. This approach seems both reasonable and respectful, rather than attributing errors to 'admiring amateurs' (van Wyhe, 2013); which is likely to get up their nose – not really an approach conducive to public engagement.

van Wyhe criticises errors made by 'admiring amateurs' (justifiably, in some cases; unjustifiably, in others). But it would be wrong to think that van Wyhe had the monopoly on truth. In a review of van Wyhe's book, *Dispelling the Darkness: Voyage in the Malay Archipelago and the Discovery of Evolution by Wallace and Darwin*, Costa and Beccaloni

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<sup>15</sup> The name is probably derived from a fairground attraction, whereby objects are thrown at a model with the aim of knocking it down.



(2014), although respectfully pointing out some of the book's qualities, also highlight a number of factual errors in the text. This is done not in a way that then chastises all historians of science (that would be foolish, of course), or by way of marshalling the panoply of errors made by everyone else in order to construct a conspiracy theory (which would be equally foolish). The reviewers merely point out where John van Wyhe has got it wrong (frustratingly so, in some instances); simply by presenting factual evidence. This is, again, a more respectful, and ultimately a more scholarly approach from which we – scientists, historians of science, and enthusiasts, alike – can all learn.

### 3. Can 'Wallace admirers' make *any* useful contribution?

Although van Wyhe disparages 'Wallace admirers'; they do seem, on occasions, to have their uses for him. van Wyhe seemed only too willing to invite one self-confessed 'Wallace admirer', Sir David Attenborough,<sup>16</sup> to write a Foreword to his book *Alfred Russel Wallace: Letters from the Malay Archipelago*.<sup>17</sup> Of course, one may assume that van Wyhe did not mean to so denigrate his patron; but that simply leads us back to van Wyhe's false dichotomies between the respective parties, and his unsound, damaging constructions.

Sadly, under van Wyhe's constructed narrative, one is left with the feeling that to criticise any of his constructions, or even admire Wallace for his accomplishments or character is simply to be branded – and therefore dismissed – as a mere 'Wallace admirer' or an 'enthusiast'. It *is* legitimate to ask why Wallace's name had been forgotten (and, in some instances, continues to be ignored) – particularly when the primary source material is unambiguous – without being magisterially and dishonourably dismissed by the scholarly elite. Surely that's not what public engagement should be about; is it?

... I really must look up Huxley's word, '*hierophants*.'<sup>18</sup>

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<sup>16</sup> Sir David Attenborough's opinion, along with that of many others, is that '*For me there is no more admirable character in the history of science*' (Attenborough, 2011).

<sup>17</sup> van Wyhe & Rookmaaker (eds) (2013).

<sup>18</sup> Huxley (1894; pvii) – see page 2.

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