
RESEARCH PAPER

Capturing the Material Invisible: OGS Crawford, Ghosts, and the Stonehenge Avenue

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Why do archaeologists excavate? What should we expect from archaeological archives? OGS Crawford's discovery and excavation of the course of the Stonehenge Avenue in the summer of 1923 – perhaps the first time that a cropmark was identified on an aerial photograph and the first such site to be excavated, and moreover a discovery that had considerable impact on the understanding of Stonehenge's construction and its relationship with the wider landscape – has left virtually no material trace within the relevant archives. This paper aims to offer an explanation for that absence, and to shed some light on Crawford's belief that his excavations were unlikely to yield 'tangible results'.

Introduction

In the summer of 1923, OGS Crawford (**Fig. 1**), Archaeology Officer for the Ordnance Survey, was inspecting glass negatives – vertical aerial views taken in the course of military training flights – at RAF Old Sarum, near Salisbury in Wiltshire, when he observed on some of them the faint traces of two roughly parallel lines a short distance east of Stonehenge. His suggestion that they represented the 'lost' course of the Stonehenge Avenue had considerable repercussions both for the fledgling discipline of aerial archaeology and for the understanding of Stonehenge and its landscape. Shortly after making the discovery, he wrote an article for the *Observer* newspaper (Crawford 1923a) which brought the potential of the airborne camera as a medium for bringing to light the lost and otherwise invisible traces of the past to worldwide attention.

The response to the discovery led to Crawford cutting a series of trenches across both of the Avenue's flanking ditches. Much to the frustration of subsequent generations of prehistorians, Crawford never published any detailed observations of what he uncovered in those trenches. No measured plans or sections seem to have been drawn. No site archive was created. On-site recording appears to have been considered unnecessary. Instead, a small group of experts was invited to inspect the excavations and pronounce themselves satisfied that they had indeed seen the ditches of the Stonehenge Avenue exposed in Crawford's trenches. The absence of full publication and a site archive is compounded by the lack of any reference at all to these events in both Crawford's personal archive¹ and his autobiography *Said and Done* (Crawford 1955). In fact, apart from a few brief notes in the 1920s, Crawford scarcely ever referred to the episode again.

It is suggested here that these absences and omissions stem, in part at least, from Crawford's motives for undertaking the excavations in the first place. Possible explanations for what did and didn't happen can be assembled from various clues and fragments in Crawford's own published and unpublished writings, as well as those of others, along with an assessment of some of the under-explored or overlooked interests, motivations and methods of other late 19th and early 20th century archaeologists. Taken together, these allow the construction of a narrative that seeks to explain the lack of any detailed account of what happened at the Stonehenge Avenue in the summer of 1923, with the clear proviso that it *is* a narrative built around a set of absences. It is argued that Crawford's revelation needs to be considered against the post-Great War debate about the camera as a medium for connecting with the lost and invisible, as well as Crawford's own ideas and beliefs in such matters. It is suggested that for Crawford, a major concern in undertaking the excavations – the first time that a photographed cropmark was 'ground-truthed'² – was not to uncover 'facts' about prehistory, but to explore the possibilities of airborne photography as a form of 'remote' sensing, and the materiality (or otherwise) of the traces of the past being captured on photographic plates.

Connections between archaeology and psychical research have been explored recently by Amara Thornton³, while some of the episodes discussed in this paper have been noted on a few previous occasions. More importantly for the subject of this paper, Kitty Hauser has previously drawn attention to Crawford's childhood experience of ghosts (2008, 81), as well as comparing the appearance of cropmarks with the results of spirit photography (*ibid.*, 86). Otherwise, however, little attention has been paid to some of the more esoteric or occult interests of certain archaeologists (not that the likes of Crawford or Colonel Lane Fox⁴, for example, would have regarded their own interests in these areas as anything other than scientific), or



Figure 1: OGS Crawford photographed at Stonehenge in 1926. Crawford's surviving appointments diaries, at the Bodleian, record only one visit to Stonehenge that year, on 27th July. The lintel above him still bears traces of the 'restoration' work 6 years earlier. Photographer unknown. Image courtesy of the OGS Crawford Photographic Archive, Institute of Archaeology, Oxford.

the relationship between these interests and their understanding of archaeological or anthropological matters. As Lane Fox and many others repeatedly emphasized, observable phenomena required scientific investigation.

This paper is mainly concerned with Crawford's efforts to understand what caused some extremely narrow, almost imperceptible lines to appear on a small sheet of glass. An account of the discovery and excavation of the course of the Stonehenge Avenue, based mainly on the details that Crawford published himself in 1923–4, is followed by a discussion of spirit (or psychic) photography – Crawford's announcement that a camera had captured traces of something that was otherwise, to all intents and purposes, invisible came quickly on the heels of Sir Arthur Conan Doyle's (1922b) *The Case for Spirit Photography*, itself a response to the massive post-war increase in both popularity and scepticism surrounding the camera's alleged ability to do just that – capture the invisible traces of the lost⁵. After a brief look at the remarkable and contemporary entanglement of the archaeological and the psychic at Glastonbury, attention turns to the contents of Crawford's own personal archives and some of his

early, overlooked, publications in an effort to explain his difficulties with the initial implications of that glass negative. That Crawford wasn't alone in being an apparently 'scientific' archaeologist open to the possibilities of psychical explanations for observed phenomena is then explored particularly through a discussion concerning the domestic experiments of Colonel Lane Fox, widely cited as the man who first placed (British) archaeology on a sound, rational, *scientific* footing, before the paper concludes with a brief consideration of our current expectations of both ghosts and archives.

The Stonehenge Avenue, July 1923

Not long after taking up his post at the Ordnance Survey in 1920, Crawford began visiting RAF bases in order to inspect aerial photographs taken over the southern English countryside, and particularly the 'Wessex' chalk, in the course of training flights (see Barber 2015 for an account of how Crawford initially used and understood aerial photographs). These photographs, for the most part glass negatives rather than prints, tended to take one of two forms: (i) sequences of overlapping photographs which could be used to compile a mosaic covering a large

block of landscape; or (ii) individual photographs taken while ‘pin-pointing’, i.e. pressing a button to photograph a target directly below the aeroplane instead of dropping a bomb on it.

In July 1923⁶ Crawford was examining the accumulated glass negatives at RAF Old Sarum when he came across a set – a mosaic – covering a sizeable area of the Stonehenge landscape, mostly to the immediate north and east of the stones, taken two years earlier. On them, he identified traces of what he believed to be the previously lost course of the Stonehenge Avenue (**Fig. 2**): ‘It appeared as a pair of thin parallel white lines⁷; it bends sharply south-eastward, and then, after a straight run of just over half a mile, terminates abruptly (in the hamlet of West Amesbury) on the banks of the Avon’ (Crawford 1923a) adding, just in case of any doubt, ‘All this is absolutely new and was never before suspected, and there can be no doubt that it is correct’.

The discovery was announced by Crawford on page 13 of the *Observer* newspaper on Sunday 22nd July 1923. A further article in the *Illustrated London News* a few weeks later (18th August 1923: Crawford 1923b) repeated the

basic detail but came with the added bonus of a sizeable part of the air-photo mosaic itself, spread across two pages.

Crawford informed the *Observer’s* readers that he had just ‘returned from walking, with another archaeologist, along the whole length of the Avenue (**Fig. 3**). We could not see the faintest trace on the surface until we had got a mile beyond West Amesbury’ (i.e. they began at the Avon, moving from the unknown to the known) (Crawford 1923a). His companion on the walk was not named in the newspaper article, but according to Colonel Hawley’s Stonehenge excavation diaries (typescript copy in Salisbury and South Wiltshire Museum) it was Wiltshire-based archaeologist R.S. Newall, their stroll occurring on 19th July⁸.

Continuing his account of the walk, Crawford claimed that from a spot between the Old and New King Barrows, where he believed he had identified a bank of the Avenue, he and Newall “could see a double line in a field of potatoes quite plainly. . . and also where the two branches meet”, this reference to the ‘two branches’ (see below) suggesting they were looking in a westerly direction from



Figure 2: The glass negative on which Crawford first saw the traces of the Avenue, taken by an unknown RAF flier on 15th June 1921. This photo is of the reverse side, so everything appears the right way round. North to top right corner. With magnification, the Avenue can just be seen as two roughly parallel lines curving round between the last two trees towards the bottom right. Historic England Archive CCC8544/75. Photo: M Barber; ©Historic England.



Figure 3: A view across the Stonehenge landscape encompassing the full course of the Avenue. North is to top right. Stonehenge can be seen in the distance top left; just above centre is King Barrow Ridge, the two copses north of the road being those containing the Old and New King Barrow groups. The Avenue runs through the gap between them before curving south-eastwards towards the River Avon, which can be seen bottom left. Photo: Historic England Archive 26462/036, taken 27th August 2009 by Damian Grady; ©Historic England.

the top of the broadly north-south King Barrow Ridge. It was in the other direction, to the east, that 'no one has ever seen a trace of it'. Indeed, aside from the marks on the glass plate, as Crawford repeatedly restated, there was still no trace to be seen: 'The utter absence of other surface indications where the lines appear on the air-photo is remarkable, but in some ways not unwelcome; so much greater will be the triumph of air-photography if digging reveals the flanking ditches beside the banks there' (Crawford 1923a).

Previously, both the course and purpose of the Avenue had been somewhat clouded in uncertainty⁹. Crawford's discovery seemed to offer the chance to blow at least some of those clouds away, although in reality fixing the course of the Avenue on the ground still left plenty of room to argue about its date and purpose. Nonetheless, he transformed a landscape feature that had previously attracted little comment into a problem at the heart of questions over the origin, construction and purpose of Stonehenge.

Observed by John Aubrey (as 'the Walke, or Avenue': Fowles and Legge 1980: 97) in the mid-17th century, it was William Stukeley who first described the surviving earthworks and speculated about their course and purpose. Recognising that it approached Stonehenge from the northeast, the direction of midsummer sunrise, he suggested that 'the intent of the avenue was to direct the religious procession to the temple. . .' (Stukeley 1740: 34). He was able to trace it on the ground for a little over 500 metres northeast from the stones to the edge of the dry valley known as Stonehenge Bottom (**Fig. 4**), at which point he observed it dividing into two, one route heading east across Stonehenge Bottom and up King Barrow Ridge, and the other continuing more or less the northeast line towards the Stonehenge Cursus. The latter was, in fact, a much more recent track but the idea of two branches remained a firm fact of prehistory until the 1950s (Cleal et al 1995: 312–4). The earthworks of the eastern route faded out in arable on King Barrow Ridge, with Stukeley presuming, again partly on the basis of what were actually



Figure 4: The branch of the Avenue running north-eastwards from Stonehenge, turning eastwards just below the centre of the photograph to cross Stonehenge Bottom. Traces of the track mistaken for the 'northern branch' can be seen around the point where the Avenue bends. Photo: Historic England Archive 26554/023, taken 30th January 2010 by Damian Grady, ©Historic England.

much later features, that it continued in a straight line, perhaps as far as the River Avon at Ratfyn.

Following his identification of the actual course, Crawford (1924b: 13) reiterated Stukeley's idea of a processional route, in the process rejecting the late Sir Norman Lockyer's 'fanciful astronomical theories' (Crawford 1923a), although this rejection relied less on the discovery of the 'new' stretch of the Avenue than it did on the aerial photographs' apparent confirmation that there were indeed two branches, 'one leading to a race-course [the Stonehenge Cursus] and the other to a river (and neither branch straight)' (ibid.). Crawford's rejection of the 'fanciful' orientation seems somewhat odd today, but probably stemmed from his rejection of Grafton Elliot Smith and William J Perry's hyperdiffusionist theories – Lockyer had drawn explicit parallels between the megaliths of Europe and the temples of Egypt (e.g. 'the avenue'. . . extends in the general direction of the sunrise at the summer solstice, precisely in the same way as in Egypt a long avenue of sphinxes indicates the principal outlook of a temple': Lockyer 1906, 63)¹⁰.

Crawford also emphasised the 'new' route, connecting Stonehenge with the Avon, as 'a ceremonial way along which the stones of Stonehenge were transported' (Crawford 1923a), here referring to the bluestones and not the sarsens, of course. The geologist Herbert Thomas (1923)

had only recently identified the likely Welsh source of the former, suggesting a short crossing of Milford Haven and then an overland journey to Stonehenge as the most likely route taken. Crawford, drawing on his previous research into prehistoric movements of both people and things (Crawford 1912a, b; 1922a), now argued for a coastal route from Milford Haven around to Hengistbury Head, and then up the Avon to West Amesbury.

In drawing up his highly influential account and phasing of Stonehenge, Richard Atkinson (1956: 57, 65–6) reiterated Crawford's idea of the Avenue as a route for the bluestones, but added the complication that, to him, the Avenue itself was of two phases, the solstice-orientated stretch attached to Stonehenge being placed in his Period II (which by the final, 1979, edition of Atkinson's book was dated to c2100–2000 BC), one of a number of developments that he associated with a reorientation of Stonehenge towards that northeast-southwest alignment. The eastern branch, all the way from Stonehenge Bottom to the River Avon, was suggested to be a much later addition (c1100 BC). More recent analysis of available radiocarbon dates suggests that the Avenue appears to belong in its entirety to the later 3rd millennium BC, albeit with the proviso that it may have been constructed in more than one episode (Darvill et al 2012a, b)¹¹. The recent discovery of a former setting of bluestones at the end of the

Avenue, adjacent to the Avon, arguably reinforces the idea that the bluestones were hauled along the route followed by the Avenue, although Parker Pearson et al (2012: 26) suggest that the Avenue's earthworks may have memorialized rather than guided the effort, 'constructed after it happened, turning a remembered path into a formalized avenue', perhaps intended for use by the dead rather than the living (Parker Pearson and Pollard, quoted in Bowden et al 2015: 48–9).

Digging the Avenue, September 1923

In his first *Observer* article, Crawford claimed to 'feel quite certain that the marks on the air-photos are those of the Avenue banks, but I do not expect others to be convinced until trenches have been dug across to prove it' (Crawford 1923a). That digging began on 5th September 1923. This time, Crawford was assisted not by Newall but by another Wiltshire-based archaeologist, A.D. Passmore, along with an unspecified number of unidentified labourers. 'We were fortunate. . . in the choice of diggers', he noted, 'a most important consideration when so much depended upon a knowledge of the soil and upon the ability to detect signs of previous disturbance' (Crawford 1923c). The results were again presented first to the readers of the *Observer* in an article published on 23rd September, an article that began with the claim that 'The missing branch of the Stonehenge Avenue. . . has now been proved conclusively by means of excavation' (ibid.).

An obvious point to make about Crawford's excavation strategy in September 1923 is how far removed it was from the standards that he himself had already set both in print and in practice. His 1921 book *Man and his Past* contained a chapter on excavation which cited both General Pitt Rivers and Flinders Petrie as key authorities, and insisted on the absolute necessity of a modern 'scientific' approach in the field. Many years later, in his autobiography, he also stressed the role played in his own education by George Reisner.

In 1913, Crawford had obtained a post on Henry Wellcome's excavations at Jebel Moya in the Sudan. Crawford's excavation experience was, at the time, rather limited – an early and abortive poke around Walbury Camp, an Iron Age hillfort not far from his Berkshire home; a barrow at nearby Inkpen; and the Botley Copse 'expedition' of 1910 with the Peakes and others (Crawford 1955, 41–2, 64–5; see also Wickstead, this volume). He was essentially self-taught, so Wellcome arranged for him to spend a month in Cairo with Reisner, 'an excavator of the first rank' who nevertheless – according to Crawford – had been criticized for the 'over-elaborate' and 'mechanical' (i.e. systematic) nature of his recording system (Crawford 1955, 91; see also Browman and Givens 1996, and Doyon 2015): 'Reisner used to say that, armed with the records he kept, anyone could write up and publish his results later' (Crawford 1955, 92). *Man and his Past* restated what he had learned from practical experience in Cairo and Jebel Moya, combined with the key points from Pitt Rivers' reports on his Cranborne Chase excavations (Pitt Rivers 1887, 1888, 1892, 1898) and Petrie's (1904) *Methods and Aims in Archaeology*, from the marking out of a site grid

and the necessity for contour and earthwork surveys, to the careful monitoring and measuring of trenches, plans and sections and, of course, the importance of maintaining a proper written record¹².

He put all this into practice himself on his return to fieldwork following the end of the war. In 1919 he spent several weeks surveying and excavating sites around the Hengwm valley in northwest Wales, his promptly-published report (Crawford 1920b) restating his methods and demonstrating how he had put them into practice (and in the process establishing his credentials as a modern, scientific archaeologist and excavator at a time when he was unemployed). Everything he insisted was essential in *Man and his Past*, everything he put into practice at Hengwm, did not happen at the Stonehenge Avenue.

Three points along the course of the Avenue, as seen on the glass negatives, were chosen for examination by digging. The first spot was located 'near the middle, where the air-photo line could easily be located on the ground near a clump of trees. The subsoil here is chalk covered by about six inches of topsoil; at the moment it is a stubble field. Not the faintest trace of anything can be seen on the ground; nor could we throughout see any indication on the surface, even when we knew the exact position of the ditch to a foot. It was like steering a ship by means of sounding' (Crawford 1923c).

The excavation strategy was simple – select a starting point and then dig in a straight line until something was encountered:

'A narrow trench had been pegged out to cover the whole width of the Avenue' on an approximate east-west alignment. The labourers began digging at the western end until 'At eleven o'clock, fifteen feet from the starting point, we came upon the ditch of the western bank of the Avenue. It was clearly visible in the side of our trench as a V-shaped cutting filled with earthy soil. Later on in the morning another similar cutting was observed eighty-four feet east of the first; this was the eastern ditch of the Avenue.'

How sure was he? 'The width of the Avenue, where it has never been ploughed [i.e. close to Stonehenge] is seventy-five feet; and it has already been seen from the marks on the air-photos that where we were digging the Avenue was a little wider. We felt satisfied, therefore, that we had found what we were digging for, and that the evidence of the air-photos had been vindicated by a severe test' (ibid.) (Fig. 5).

The next trench was a short distance to the south-east, 'immediately north of the road from Amesbury to Stonehenge, near some new cottages'. Again a starting point was chosen on the basis of the aerial photograph, a trench (or a line) pegged out, and digging begun. The topsoil here proved to be a little deeper, but the eastern ditch was found after just four feet. Judging from the aerial photograph (but not measuring from it) that the Avenue was broader here, they recommenced digging 84 feet further



Figure 5: One of five contact prints in the Crawford Collection at the Institute of Archaeology, Oxford, showing the end of one of the excavation trenches with the Avenue ditch visible in section. These photographs were taken by Passmore. As far as I am aware, none of these photographs has been published previously. Image courtesy of the OGS Crawford Photographic Archive, Institute of Archaeology, Oxford.

west, eventually hitting the other ditch after excavating 29 additional feet of soil.

The third and final trench was located on top of King Barrow Ridge, between the two copses containing the Old and New King Barrows and roughly at the point where Stukeley claimed to have been able to see a trace of the Avenue before it disappeared into the arable beyond. The approach here was different – there was nothing to be seen on the aerial photographs at this spot. Instead Passmore laid out a trench using Stukeley’s published measurements as a guide: ‘At a point 257 ft. north of the ditch of the northernmost ‘King Barrow,’ we found the southern ditch of the Avenue. It is a testimony to the accuracy of Stukeley, the pioneer field archaeologist of the eighteenth century, that we found his figures correct to a foot; no unnecessary digging was required. The northern ditch was found by similar means’ (Passmore Notebook¹³, Wiltshire Museum, Devizes: DZSWS:AA2009.130).

Crawford then sought independent confirmation of their success: ‘On September 7, when two of these excavations were still exposed, they were visited by a number of other archaeologists who expressed themselves convinced that the course of the Avenue had been confirmed by the excavations, and that there could no longer be any doubt that the line shown upon the air-photos indicated it correctly’ (Crawford 1923c). These visitors had actually been specially invited by Crawford, although he only ever named Colonel Hawley, who at the time was excavating Stonehenge (including a section

of the Avenue) on behalf of the Society of Antiquaries, as being among them.

After the *Observer* article trumpeting the success of the excavations, Crawford only published two more very brief accounts of the work – one in the *Antiquaries Journal* (Crawford 1924a), the other in his Ordnance Survey monograph *Air Survey and Archaeology* (Crawford 1924b), these offering little additional detail, along with only the sketchiest indication of where the trenches had been dug (Fig. 6). Nothing more detailed ever appeared.

Crawford and ‘cropmarks’

In his first *Observer* article, while proclaiming aerial photography as a significant and new medium of discovery, Crawford offered little insight into what he thought had caused the traces of the Avenue to appear on the glass negative. Instead, while noting that the photographs had been taken at ‘a most favourable time, because so dry’ (Crawford 1923a), he was clearly puzzled about the absence of any corresponding trace on the ground. As with the case of the Hampshire field systems the previous year (see below), he had been expecting to see something on the surface.

In the second *Observer* article, published a fortnight after the excavations had ended, he offered a lengthier if ultimately unresolved explanation of just what those photographs seemed to have captured:

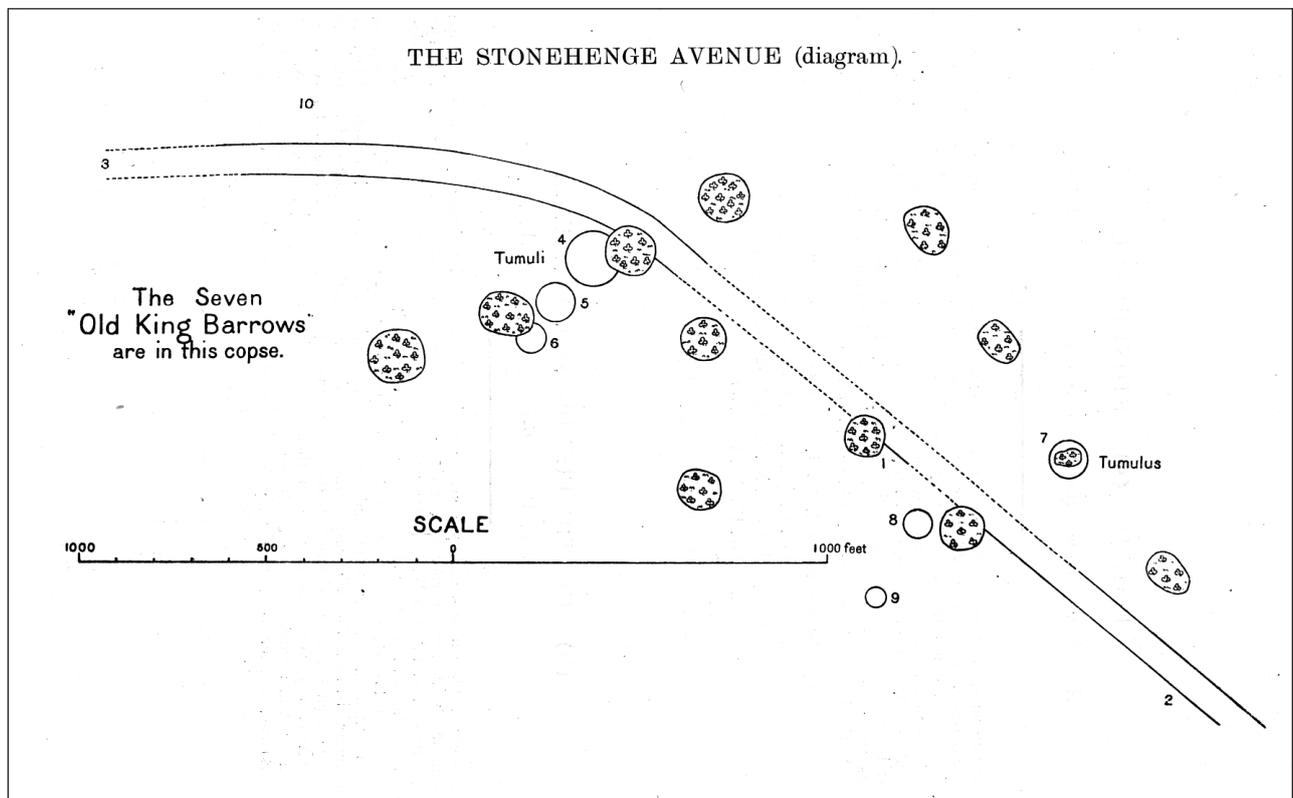


Figure 6: Part of the ‘new’ course of the Avenue, as published by Crawford (1924b). The numbers refer to the approximate location of the excavation trenches. Note that some of the circular ditched features visible on the RAF plates were also excavated in order to confirm that they did represent ditches surrounding plough-levelled round barrows. Crawford was assisted in this work by Colonel Hawley.

'The material of which the banks were made was dug out of the ground immediately adjacent to (and outside) the bank, so that a ditch was formed. Now, when a ditch has been dug in the chalk the mark of it remains indelibly graven there. Nothing can ever replace the chalk so as to appear as it did before it was moved. . . By digging, therefore, it is always possible to distinguish between disturbed and undisturbed soil. Where. . . the surface has never been disturbed since the first ditch was dug and the bank made, both can be seen without any difficulty. But when it has been ploughed the bank and ditch both disappear and all becomes flat as before. The observer on the ground can see nothing, but the crops grow better on the deeper, moister soil of the silted-up ditch; they form there a belt of darker green, which can occasionally be seen on the ground and nearly always from the air. Sometimes, however, the soil on the line of a flattened bank, being mixed with more chalk grains, forms a lighter streak visible from above. The marks which at first revealed the Stonehenge Avenue are just such lighter streaks, but', he concluded, 'what exactly caused them is still a puzzle'. In other words, Crawford believed that cropmarks would always be darker than the surrounding crop, while ploughed earthworks on the chalk downs should always appear as a lighter line. However, the Avenue's banks were long gone. There was nothing to produce those white lines¹⁴.

Crawford was, of course, struggling with something new – a cropmark captured on an aerial photograph. In fact, the word 'cropmark', meaning a variation in the height and/or colour of a crop caused, under certain conditions, by the presence of buried archaeological features, had yet to be coined. However, it was a phenomenon that had first been described nearly four centuries earlier, by the antiquary John Leland following a visit to the ruins of Roman Silchester (see Barber 2011: 111–127 for an account of pre-Crawford discoveries of cropmarks, and for relevant sources). Additionally, 'cropmark' sites had already been excavated on a number of occasions, including by Robert Plot at Oxford in the 1680s, William Stukeley at Great Chesterfield in Essex in 1719, and by Francis Haverfield and others at Northfield Farm near Long Wittenham, Oxfordshire, in the 1890s (ibid.). As early as 1857, reporting on his work near Standlake, Oxfordshire, Stephen Stone had offered a pretty good explanation of the reasons why cropmarks formed – why arable crops could sometimes 'show the situation and extent of every excavation underneath the soil as clearly as though a plan had been prepared and drawn upon paper' (Stone 1857: 99–100). In 1923, Crawford seems to have known none of this. It is impossible to be sure – for a start, very different standards of citation existed at the time – but his earliest writings about aerial archaeology show little knowledge of this lengthy prehistory of the cropmark.

It is often assumed that Crawford's recognition of the potential of aerial photographs for archaeology stemmed

directly from his wartime experiences in the Royal Flying Corps. In fact, their potential was brought to his attention by another field archaeologist, JP Williams-Freeman, in 1922 (Hauser 2008, 77–9; Barber 2011, 132–3). Williams-Freeman had been shown some RAF vertical photographs by Air Commodore Clarke-Hall at Weyhill Aerodrome near Andover, Hampshire, which showed extensive traces of plough-damaged lynchets – field banks representing a sizeable prehistoric field system – visible as soilmarks in ploughed fields on the chalk downs of Hampshire. These confirmed to Crawford something that he and Williams-Freeman had already suspected – that an aerial view provided a means of obtaining a basic plan of particularly extensive or complicated systems of earthworks, particularly those which had suffered some damage through ploughing and thus appeared to someone standing on the ground 'only as a confused tangle' (Crawford 1924b, 3): 'From the air an orderly system is visible. The bands of lighter-coloured soil are the field boundaries of a vanished agricultural community; they consist of broad low banks, and their lighter colour is caused by the admixture of small grains of chalk. It was possible to detect this fact on the ground but quite impossible to see there any system at all, and it would have been almost impossible to construct an accurate plan. With the help of air-photographs, however, this can be done' (ibid.). The airborne camera was 'a revealer of *almost* vanished earthworks' (ibid., 10, my emphasis).

Crawford unveiled the 'new' technique and this first discovery in a lecture given to the Royal Geographical Society on 12th March 1923, a lecture that he saw as promoting himself as much as aerial photography: 'it established my reputation as an archaeologist in the eyes of the world' (Crawford 1955: 168–9). That lecture was subsequently published in the Society's *Geographical Journal* (Crawford 1923d) and in revised and expanded form by the Ordnance Survey (Crawford 1924b), but had attracted attention as soon as it had been given. However, with Crawford placing the emphasis firmly on archaeological questions relating to field systems, wider appreciation was somewhat limited. Moreover, this initial unveiling presented aerial photography as an aid to untangling complex but nonetheless visible remains of the past. The sighting, just a few months later, of an apparently lost and invisible monument – and, of course, one connected to Stonehenge – inevitably generated far greater publicity both for the discovery itself and for the means of discovery.

Once the basic facts about the discovery and excavations had appeared, Crawford made little reference again to the events of the summer of 1923 until a brief remark three decades later in his book *Archaeology in the Field*, in a passage explaining the impact of aerial photography on archaeology: 'The existence of the ditches of the Avenue was proved by excavation. . .', he recalled (Crawford 1953: 49), but by the 1950s the causes of cropmarks were much better understood – there was no longer any need to resort to digging merely to 'prove' that something existed. In the 1920s, however, those trenches had been essential for demonstrating that there 'was not, as some were almost inclined to think, any magic power in the camera. . .'

(ibid., 46), a point he reiterated a few years later in one of the last things published before his death: 'The fact that air-photography revealed things that were not previously known made some people think that the camera itself had some magic power, enabling it to see what was invisible to the human eye' (Crawford 1957: 88).

Crawford never explained who these 'some people' were, or how they had conveyed their inclinations to him. There is nothing in his personal archive at the Bodleian, and as yet I have found nothing in print. However, the contents of that archive do raise the possibility that Crawford himself may have been one of those 'inclined to think' along those lines. What did he mean, for instance, when he told the readers of the *Observer* (Crawford 1923c) that he hadn't expected his excavations to produce 'tangible results'?

Photographing the Invisible

In the early 1920s, when Crawford publicly announced the discovery of the Stonehenge Avenue, psychical and related phenomena associated with photography were enjoying a raised profile in the wake of the enormous loss of life during the Great War (see e.g. Winter 1992, 1995; Harvey 2007), although that raised profile also owed plenty to well-publicised exposures of fraudulent practices. Nonetheless, while spirit photography was regarded with deep mistrust by many spiritualists and psychical researchers alike, there was a ready audience for its revelations.

Faith in spirit photography, including public advocacy by practitioners and believers, came to rely a great deal on faith in science, a belief that the camera was capturing something – specifically proof of an afterlife in the form of the spirit traces of the deceased – that was not so much 'supernatural' as simply beyond the capacity of the ordinary human senses to observe. Science was increasingly recognising and capturing traces of phenomena that were, to all intents and purposes, invisible, extending the reach of observation and measurement beyond what human senses could detect (see e.g. Natale 2011a, b; Enns 2015; Medeiros 2015; Ramalingam 2015). As James Coates argued in his 1911 book *Photographing the Invisible*, 'To say that the invisible cannot be photographed, even on the material plane, would be to confess ignorance of facts which are commonplace – as, for instance, to mention the application of X-ray photography to the exploration of muscles, of fractures of bones, and the internal organs. Astronomical photography affords innumerable illustrations of photographing the invisible' (Coates 1911: 2). In his earlier (1906) *Seeing the Invisible*, the list of 'unseen and imponderable forces' that could register a trace on a sensitised surface or through a sensitive medium was even longer, extending from wireless telegraphy and sound recording to 'the researches of bacteriologists' (Coates 1906: 28–9).

What particularly appealed to believers in spirit photography was the camera's apparent ability to obtain an unmediated form of documentary evidence – an unthinking machine mechanically recording whatever was placed (or placed itself) in front of the lens. This idea of 'machine vision' (Daston and Galison 2010; see also Tucker 2005) also, of course, drew on the proven capability of the

camera to capture phenomena beyond the apprehension of ordinary human eyesight, from Fox Talbot's early realisation that his calotypes were registering reflected light beyond the visible spectrum, via Muybridge and Marey's demonstrations of movement imperceptible to the naked eye and, of course, to X-ray photography. The science offered to support spirit (or psychic) photography was, naturally, prone to inconsistencies and contradictions. Some pointed out, for example, that a 'spirit' of whatever form captured on a photographic plate must have possessed some material existence, albeit (usually) invisible to those present at the time of exposure, in order to reflect light. Consequently alternative explanations emerged, for instance that the faces, hands, or entire bodies appearing on photographs were in fact projected on to the plate either by the spirits themselves, or through some process involving the unconscious thought processes of those attending the sitting. This kind of explanation was also readily adaptable for explaining one of the more problematic aspects of many spirit photographs – that the faces of the dead were clearly themselves often photographic images, sometimes half-tones (and occasionally represented people who turned out to be very much alive: see e.g. Kaplan 2008).

The highly malleable nature of the photographic image is something that there was a growing awareness of during the later 19th century. Photographers such as Oscar Rejlander, Julia Margaret Cameron, and Nadar demonstrated the extent to which the final image was dependent upon manipulations of the camera, the plate, the negative, the arrangement of light and shadow, and so on, all involving choices made by the photographer (see e.g. Tucker 2005). This awareness also owed much to publicised discussion and exposure of the practices of spirit photographers. As Lorraine Daston pointed out, 'As photographers and scientists who worked with photography well knew, considerable skill and manipulation on the part of the human operator were required to produce an image as untouched by human hands, drawn by nature's own pencil' (quoted in Medeiros 2015).

Accordingly, as with other psychical and spiritualist phenomena, considerable reliance came to be placed on direct observation by reliable and trustworthy expert witnesses, who understood the procedures being used, recognised the many opportunities for error or for fraud, and whose ability to pay close attention throughout was not in dispute. The photograph, originally touted as proof of the existence of a spirit world through its apparently passive, automated nature, itself required authentication from eye-witnesses, a process that could include direct intervention by the witness in some or all of the many aspects of the photographic performance that required human involvement, often in darkness. The photograph or the plate alone no longer accounted for the phenomena captured on them (Mnookin 1998).

With regard to what could be captured on a photographic plate, Coates (1911: 1) distinguished between three classes of phenomena – the visible, the material invisible, and the 'immaterial invisible or the psychic'. Examples of that middle category – the material

invisible – included things like the aforementioned muscles, fractures and internal organs which, though hidden from normal sight, could be revealed and visualised through the use of X-ray photography. The last category belonged ‘to the rare cases of psycho-physics. They are produced by the operation of intelligences in the invisible – through appropriate media – or man possesses psychic faculties and powers which have not yet received the attention they demand’ (ibid., iv). Crawford’s 1950s comments on the events of 1923 suggest that some at least were not clear as to which category the Stonehenge Avenue photographs belonged.

The immediate backdrop to Crawford’s faint photographic traces of an otherwise invisible feature was the exposure of fraud, a particularly high profile case involving the Society for Psychical Research (SPR). The SPR had been established in 1882 (although it had roots in earlier clubs and societies) with the aim of using scientific methods to examine the various phenomena loosely grouped under the heading of spiritualism. With a membership that included scientists, academics, clergy, politicians and literary figures, among others, and ranging from believers to sceptics, its early years were particularly marked by an interest among some of its leading lights in the possibilities that the investigation of certain phenomena might reveal something about the workings of the mind. A concern with hypnotism and ideas of communication at a distance led to a particular focus on telepathy (Luckhurst 2002) and the unconscious (Myers 1892; see also Ellenberger 1970).

In its early years the SPR had paid little attention to spirit photography, their position summed up in a paper by Eleanor Sidgwick which she only published a decade after writing it. Explaining the delay, she said that ‘I did not offer the paper to the Society for Psychical Research [at the time it had been written] because its attention had not been specially drawn to the subject and. . . my conclusions were on the whole negative. It appeared to me that, after eliminating what might certainly or probably be attributed to trickery, the remaining evidence was hardly sufficient to establish even a *prima facie* case for investigation, in view of the immense difficulties involved’ (Sidgwick 1891: 268).

Thirty years later, Harry Price, at the time an investigator for the SPR, had trapped a particularly high-profile victim – William Hope, leading member of a group of spiritualists known as the ‘Crewe Circle’, and someone who had been practicing spirit photography since at least 1908. Price’s initial report, published in the SPR’s *Journal* (Price 1922), led to an intense dispute within and beyond the pages of the SPR’s *Journal* and *Proceedings*, the matter rumbling on for more than a decade. Towards the end of 1922, a few months before Crawford’s first *Observer* article, Sir Arthur Conan Doyle published his book *The Case for Spirit Photography* (Doyle 1922b), the contents largely a defence of Hope, the title a nod to Patrick and Smith’s (1921) *The Case Against Spirit Photography*. Between Price’s exposure of Hope and Conan Doyle’s defence of him, the latter had also placed himself and his beliefs even more prominently in the public eye with his book *The Coming of the Fairies*

(Doyle 1922a), which dealt with the photographs of the Cottingley fairies, a classic instance of the camera recording exactly what was placed in front of it¹⁵. The validity of photography as reliable documentary proof was very much a matter of public debate.

An added complication for Crawford, perhaps, was the rather public entwining of archaeology and psychological research at Glastonbury Abbey, Somerset. In 1918, the archaeologist and architect Frederick Bligh Bond had published *The Gate of Remembrance*, an account of his excavations at Glastonbury Abbey which, at the time, had been underway for a decade. The book dealt mainly with Bond’s use of automatic writing¹⁶ as a guide to recovering lost elements of the Abbey’s architecture and history. It would be fair to say that publication of the book caused something of a stir, ultimately leading to Bligh Bond losing his position at Glastonbury, albeit mainly due to pressure from the Church of England’s local representatives rather than from archaeologists (Hopkinson-Ball 2007), some of whom – in private at least – were quite supportive (H Wickstead, *pers. comm.*)¹⁷. He seems never to have gone to any great lengths to keep the nature of his work secret – as early as 1908 he had alluded to his approach in the illustrated magazine *The Treasury*, claiming that ‘the power of the imagination may be ‘scientifically’ employed, and its intuitions rendered of service to the reasoning faculty, which is not in itself creative’ (Bligh Bond 1908: 245). It seems more likely that it was the publicity generated by the book, and the consequent higher profile that his psychical interests attained, that caused him difficulties¹⁸.

Sir Arthur Conan Doyle regarded *The Gate of Remembrance* as ‘one of five particularly convincing works’ which he urged sceptics to read (McCabe 1920: 140), although it is not clear that Conan Doyle had fully grasped Bligh Bond’s explanation of his ‘psychological experiment’ – referring to Bligh Bond’s book, he noted that ‘in automatic writing you are at one end of the telephone. . . and you have no assurance as to who is at the other end’ (Doyle 1919, 46). In fact, Bligh Bond was quite clear where he thought the calls were coming from, and recognised that often he himself was at both ends of the line. Bligh Bond saw the contents of the scripts as representing a blending of the workings of the subconscious minds of those involved – a combination of himself and co-automatist ‘John Alleyne’¹⁹, following their extensive and detailed study of all available documents and records relating to the history of the Abbey, and a more universal subconscious – a ‘reservoir of cosmic memory’ – comprising the collected memories and personalities of the dead (Bligh Bond 1918; 1919). As one automatic script put it, ‘ye past dyeth but not slepeth, nay ffor perchance hit wakyth and hit ys they of ye present who doe slepe and dreme’ (Bligh Bond 1918, 21). As Bligh Bond explained to readers of *The Times* (8th December 1919, p. 11), ‘There is very fruitful study for us all in this psychological business’.

Crawford: visions and senses

In his book *Creating Prehistory*, Adam Stout (2008) examined the processes that saw British archaeology, and particularly prehistory, become increasingly professionalised

and institutionalised during the early- to mid 20th century, processes that included the establishment of disciplinary boundaries, of professional norms, standards, values and, of course, methods: 'distinguishing the scientific approach from the romantic was an absolute necessity for those who sought to establish archaeology as a profession' (ibid., 165). Crawford's role in this was considered 'pivotal' (ibid., 20), his book *Man and his Past* 'a manifesto, a rallying cry for a new generation of archaeologists who shared in the idealism and the faith in the potential of progress' (ibid., 21), that new generation (or 'heroic band') including the likes of Gordon Childe, Stuart Piggott, Grahame Clark and Christopher Hawkes, among others. The problem of course is recognising where the boundaries between scientific and romantic approaches lay, and the relationship between boundaries adhered to in public and those in place in private, among one's friends, colleagues, and peers (see Wickstead this volume).

Man and his Past may have embraced the need for a more scientific approach to studying the past, but that approach was firmly grounded in a markedly Victorian outlook on cultural evolution and technological progress (Hauser 2008, 94), an outlook that, for example, allowed Crawford to identify the seed of the idea of the aeroplane in the eolith (Crawford 1921, 6). He retained a strong adherence to the theory of recapitulation, to ideas of psychic unity, and to the doctrine of survivals throughout his life, allowing him to regard travel to places such as the Sudan or the Hebrides as journeys in time as well as in space, but such beliefs were seldom so clearly stated as in 1921: for example, 'It is a law of nature', he insisted, 'that an organism can only grow to maturity by recapitulating the history of its ancestral development' (Crawford 1921, 40)²⁰.

Man and his Past offered another distinctly Victorian approach to encountering the past in the present – psychometry²¹, the idea that holding or touching an object could yield intimate details about its history. The term was first coined in the 1840s by Joseph Rodes Buchanan (and is defined and explained at length in Buchanan 1893), and the method obviously attracted the attention of some who were interested in more distant eras of the past. A key publication here is geologist William Denton's (1863) *The Soul of Things* (co-written with his wife Elizabeth, who was his preferred psychometric medium), in which he aimed to show how by 'placing specimens of various kinds in the hands of a . . . sensitive individual, they can behold pictures connected with the history of those specimens and perceive sensations that have been treasured up in them' (Denton and Denton 1863: 255; and see pp. 204–217 for a psychometric peek at the life of 'early man in England'). In *Man and his Past*, Crawford's discussion of the importance of the sense of touch to the 'student of man' differs in some respects from the approaches of Buchanan and Denton – for example, while they stressed the importance of the disinterested medium, for Crawford the degree of sensitivity stemmed from experience: 'One can learn more about a vanished race by handling the things their hands have made. . . than by reading all the books that have ever been written. For the letter killeth but the spirit still

haunts their old handiwork²², and one can absorb it by the mere touch. The true connoisseur will tell you nothing till he has touched the specimen you are submitting to him. It grew out of the mind of its maker through his fingers and back through them alone can it tell you its story' (Crawford 1921: 20–21).

Crawford's archives and publications prior to his appointment to the Ordnance Survey (and *Man and his Past* was largely written before he took up that post) also offer insights into a rather different Crawford to the one he presented subsequently. One of the most intriguing in this respect is an article entitled *Prehistoric Instincts*, published in 1920 in the *Cornhill Magazine* (Crawford 1920a). In it, Crawford wrote of William James and his hints of 'the existence within us of deep untapped wells of unconsciousness which are dormant throughout the greater portions of our lives. These wells lie deeper than ordinary intelligence. They are on the level of mere sensory perceptions and reactions' (ibid., 720); he assumed his readers' knowledge of Freud's 'theory of dreams, which explains them as the breaking-out of a wish of instinct repressed during the hours of full consciousness by an inhibition of the will' (ibid., 730); but accepted the difficulties of recording those memories, whether encountered in dreams or through other means, 'without tearing off the veil of magic which is half their charm; they are apt to lose their beauty and fade away if dragged ruthlessly up into the strong light of consciousness. They belong to the twilight of our past, and it is the poet who should undertake the revelation of their secrets' (ibid, 720).

The contents of that article are further reflected in some of his correspondence from the pre-1920 period, particularly correspondence with Carlie Peake (see Wickstead, this volume) who refers, for example, to Jung's *Psychology of the Unconscious*²³, which Crawford was trying to get hold of while a prisoner-of-war at Holzminden (letter, Carlie Peake to Crawford, 28th June 1918²⁴). The same letter also mentions Hippolyte Baraduc: 'I am fighting with Barraduc's [*sic*] book in French. . . & Oh but B is gloriously gorgeously mad. . . it is all about a machine for measuring auras and vibrations & that – I can vouch for some of it being true – but as usual he takes a lot for granted'. The book referred to seems most likely to be Baraduc's *The Human Soul; its movements, its lights, and the iconography of the fluidic invisible*, published in English in 1913 but first available in France in 1896. Carlie's description – 'gloriously, gorgeously mad' – is hard to disagree with. The machine for measuring 'auras and vibrations & that' was called a biometer. Effectively a form of magnetometer, it comprised a glass jar containing a needle suspended from a thread, which rotated above a marked surface from which Baraduc could take his readings. The book also dealt at length with a method for visualising auras, or 'iconography' – photography without a camera, capturing the 'animistic glimmering of man' (Baraduc 1913: 32) directly onto a sensitised plate. This was 'higher physics wrested from the occult' (ibid., 34) – 'things exist, which are not seen and yet exist' (ibid., 73. For more on Baraduc see also Didi-Huberman 2003; Chéroux and Fisher 2004; Alvarado 2006).

Crawford's interest in such matters perhaps relates to the kind of experiences briefly touched on in earlier correspondence with his aunts. His mother died days after his birth in 1886; his father just eight years later in India. Raised first in London and then Berkshire by two of his father's five sisters, as Kitty Hauser noted 'Religion infused Crawford's childhood home, and it ran through the family like a dormant gene. . . The religiosity of these siblings went deep, and took a variety of forms' (Hauser 2008, 2). Consequently, Crawford's 'early days had been somewhat overshadowed by the fear of Hell, in which my aunts believed with fundamentalist fervour. . . [U]ntil I was fourteen I did believe in hell-fire and everlasting torture' (Crawford: passage excised from *Said and Done*²⁵), shaking off first hell and then religion while at Marlborough College, which he attended as a boarder from 1900.

His Aunt Edith was part of the Anglican Community of St Mary the Virgin, which ran Spelthorne St Mary, Feltham, an institution established 'to give an opportunity of reformation to women anxious to overcome a habit they are unable to control' (Elizabeth 1974: 177), the 'habit' generally involving alcohol or drugs. Crawford later wrote of Edith that 'she believed in ghosts' and claimed to have had one successfully exorcised²⁶. On 17th June 1900, in a letter which he asked her to tear up once she had read it, Crawford told Edith that 'I have, but it need not trouble you, as it is only occasional and slight, been rather laughed at for believing in 'ghosts'; I do not mean such silly things as are put in magazines, 'she saw a white figure advancing' etc etc & such like trash – but in *your* ghosts. I think from your experiences that you do believe in them. . . I think too, although it may be absurd, that there are ghosts all over the place, only not visible – why some are permitted to be seen I do not know. . .'²⁷.

At some point Edith began collecting accounts from her fellow Sisters at Spelthorne St Mary for her nephew, detailing various incidents reported by them or their patients. They are contained within an envelope labelled 'Experiences for Osbert' stored among their correspondence at the Bodleian. There is no letter explaining why they were collected, or for what purpose. One of the 'experiences' is dated October 1905, by which time Crawford was at Oxford, but it is unclear if they were all collected at the same time. Typical 'experiences' include 'Tremendous pushing about of furniture, banging about, rattling handle of door & such a disturbance. . .'; 'sounds of heavy furniture being dragged across the floor. . .'; 'an uncanny feeling of someone invisible near the bed. . .'; and so on²⁸. In 1908, while still a student at Oxford, Crawford excavated a Bronze Age round barrow near Inkpen, close to his aunts' East Woodhay home. Judging by the surviving excavation notes²⁹, a key attraction was the occasional sighting of a headless figure near the mound.

Colonel Lane Fox – BAAS Glasgow and its aftermath, September 1876

Many figures from science and academia were attracted during the second half of the nineteenth century to the phenomena, beliefs and ideas surrounding spiritual-

ism. The membership lists and publications of the SPR underline the diverse scholarly and scientific backgrounds of those interested in subjecting such phenomena to scientific scrutiny. However, archaeology – and particularly British archaeology – has seemed peculiarly immune (although Amara Thornton³⁰ and Roger Luckhurst (2012)³¹ have discussed the psychical and spiritualist interests of some British Egyptologists of the later 19th and early 20th centuries especially), though this situation is more apparent than real – Crawford was not an isolated case. Frederick Bligh Bond appears to be the exception to the rule in the publicity he gave to his interests and methods. He was far from being the only British archaeologist to experiment with 'this psychological business', especially where automatic writing is concerned. Perhaps this can be best demonstrated by turning briefly to an episode in the life of Colonel Augustus Henry Lane Fox who, in his later guise as General Pitt Rivers, is often cited as the 'father' of modern, scientific approaches to archaeology.

At the 1876 annual meeting of the British Association for the Advancement of Science (BAAS), held that year in Glasgow, William Barrett, at the time Professor of Experimental Physics at the Royal College of Science for Ireland, Dublin, read a paper to the Anthropology Section entitled 'On Some Phenomena Associated with Abnormal Conditions of the Mind'³². The paper dealt principally with matters such as mesmerism, hypnotism, and induced somnambulism, and in particular the influence of suggestion – especially at a distance – on individuals in such states. His paper drew a sizeable crowd, and lengthy discussion, at times heated, ensued. That debate continued over the coming days on the letters page of *The Times*³³, focusing mainly on two key issues: firstly, the appropriateness of psychical research as a subject for serious scientific study; and secondly, the process that had enabled Barrett to deliver the paper in the first place, the latter being largely the responsibility of Alfred Russel Wallace, co-discoverer of the theory of evolution by natural selection, and Colonel Lane Fox.

Among the first to write to *The Times* was Lane Fox himself. He was particularly concerned about the way his own contribution to the Glasgow discussion had been reported – according to *The Times*' account of the meeting (13th September 1876, p. 5), 'Colonel Lane Fox gave results of his own experiments among the members of his own family, which he had carried on for the last four years, stating that his eldest daughter's presence was indispensable for the manifestations'. Lane Fox sought to clarify matters:

'In your report. . . I am stated to have said that I had witnessed the manifestations of spiritualism. I should be sorry that as President of the Anthropological Institute I should be supposed to have jumped to any such conclusions from the data that are now before us. Will you, therefore, kindly permit me to say that the experiments to which I briefly referred had reference to certain psychical phenomena connected with unconscious writing, and did not necessarily involve any conclusion of spiritualism. The expediency of inquiry into this subject appears to have been fully shown during the recent discussion at Glasgow'

(*The Times*, 16th September 1876, p. 7). Before considering this in a little more detail, it may be worth quoting a more comprehensive report of what Lane Fox actually said in Glasgow. Several newspapers and magazines published lengthy accounts of the debate, apparently based on a shorthand transcript, with the following version taken from *The Morning Post* (14th September 1876, p. 2)³⁴:

‘Colonel Lane Fox, Guildford, read a letter which he had written to [Barrett], in which he stated, respecting a visit to a well-known professional medium [Henry Slade, see below], that he did not go so far as to say that he was convinced of the genuineness of everything he saw there, although the writing was very puzzling to him. Nothing that he had seen done by professional mediums convinced him in the slightest degree, and he would discard the whole thing as legerdemain, were it not for certain phenomena that he had witnessed in his own family during the last four years, in connection with the use of the planchette³⁵, which answered questions which were put by members of his family. The séances had been confined to himself and the children, and he had observed their surprise as, one after another, they witnessed the appearance of the writing on the paper. His oldest daughter³⁶ seventeen years old, was evidently the one whose presence was chiefly necessary for the success of the séances, and she disliked them, because they gave her a headache. She was not particularly imaginative, nor excitable, and had no particular views on the subject, beyond expressing the opinion that it was rather a bore. She was not in the least degree in any abnormal conditions during the time of the séances. Two of his sons appeared to have, in a less degree, the same power as his daughter, and it was only when one or two of them held the planchette, or pencil, that a sentence was written, and when two persons held the pencil, it did not matter which hand was uppermost, the result was the same, and the one was under the impression that the movement might be made by the other. These facts appeared to him to discredit, if not to disprove, the theory of unconscious cerebration³⁷. No one holding the pencil knew what was written; they had even sat in such a position, with respect to the writing that it would be difficult for them to write. He had watched the position of the hands and arms, and found that motion was imparted from the joint hands to the arms, and not from the arms to the hands, but that was very difficult to determine. The writing was often confined to a simple yes or no, in a reply to a question asked; sometimes it was a whole sentence, but never more than a single line. Sometimes objects were drawn by the pencil, such as a crude figure of a house that a child might draw, but the drawings were meaningless, and had no reference to the questions asked. All their questions had been put as if addressing an invisible agent, although none of them had any

particular faith as to the existence of spirits. No information of the slightest value or interest was given in any of the replies, and no answer had been given which might not have been given by anyone present, except on one occasion when the age of a visitor was given which they did not know; but that might have been accidental. On several occasions the séances had ended with the pencil writing, ‘No more to-night,’ and after that was written the pencil would not move any more. They had asked for raps on several occasions, but they were never obtained. The supposed spirit wrote its name as ‘Minnie.’ The whole value of these experiments consisted in his confidence in his own children. There could be no motive in them for deceit. All through the experiments, however, the answers were trivial, and to suppose that such answers would be given from the unseen world appeared to be so stupid that one might be ashamed of investigating, were it not that important biological results might ensue from the investigation’.

Lane Fox’s contribution attracted very little comment in the press, although the *Leeds Times* (16th September 1876, p. 7) noted some ‘scoffing at these domestic stories’³⁸, while the *Medium and Daybreak* (vol VII, no 338, 22nd September 1876) noted that ‘Lane Fox, with all his wariness, can be deliciously illogical and self-contradictory’. After all, he appeared to have ruled out the unconscious mind, spirits, and deceit as possible explanations. They suggested he ‘give up discussion, take his own advice, and acquire further knowledge by investigation’, perhaps unaware that he was no stranger to the séance.

Lane Fox’s interest in psychical phenomena – as distinguished from spiritualism (see below) – has been noted before (e.g. Stocking 1971a; 2001; Melechi 2009, 220; Petch 2012; 2013), although aside from the 1876 letters to *The Times* and a couple of letters sent to George Rolleston (see below), there appears (so far) to be no extant reference to it written by his own hand, with the sole exception of his report on an investigation into an alleged poltergeist on his Rushmore estate a decade later (quoted at length in Podmore 1896–7, 109–110). This was published in the annual *Proceedings* of the SPR, of which his second son St George Lane Fox was a founder member.

Lane Fox’s letters to Rolleston, then Professor of Anatomy and Psychology at Oxford, were both written in the weeks prior to the BAAS meeting. In them, he wrote of:

‘. . . the proof I have of unconscious writing in my own family where I know there is no deception, I have seen it present [?] over & over again thus some of my children do write unconsciously full & connective answers to questions put to them although they are in no way given to unconscious action at other times and further I have proved that two or more acting in concert produces a more intense manifestation of the phenomenon [insert] whatever it is [end insert] than when it is done

singly, consequently it can't be the unconscious action of one mind, in fact in the case of my children one of them cannot do it alone and it is this what [illegible] me. . .' (Letter, Lane Fox to Rolleston, 29th August 1876, as transcribed in Petch 2013).

Lane Fox had written to Rolleston in an attempt to persuade him to attend a séance to be given by the American medium Henry Slade, who had arrived in London a few weeks earlier for a brief stay while en route to Moscow. His trip was sponsored by Helena Blavatsky and her associate Colonel Olcott, co-founders the previous year of the Theosophical Society (Oppenheim 1985; Milner 1999). Slade practised a form of automatic writing in which chalked messages appeared on a slate, and among those who came to observe him in action was Lane Fox, apparently drawn by the resemblances between Slade's specialism and what was occurring in his own home. He was, however, unimpressed by Slade, and urged Rolleston to go and see for himself: 'It is worth investigating as many people are being bamboozled by it' (Letter, Lane Fox to Rolleston, 24th August 1876, as transcribed in Petch 2013).

In his second letter to Rolleston, dated five days after the first, Lane Fox expressed disappointment at Rolleston's failure to attend the séance, as 'the subject whether it be all quackery or partly quackery or partly insanity or partly true is doubtless an important one for anthropology. I should not have thought the subject worth investigating had it not been for the proof I have of unconscious writing in my own family. . . I think the subject ought to be brought forward & discussed by good men. Certainly nothing I saw at Mr Slade's impressed me as much as what I have seen done at home. . .' (Letter, Lane Fox to Rolleston, 29th August 1876, as transcribed by Petch 2013).

Rolleston may have stayed away, but E Ray Lankester, Professor of Zoology at UCL, did go (Milner 1999). Apparently keen on exposing fraudulent mediums³⁹ (something he later referred to as 'skunk hunting'), it is not entirely clear why he chose to target Slade – the fact that he had been a pupil of Rolleston may be entirely coincidental. However, the timing of his exposure of Slade seems quite deliberate. Lankester, who had been a member of the Biology Committee of the BAAS which had originally rejected Barrett's paper before it was referred to the Anthropology Section, attended one of Slade's séances just the day before Barrett delivered his paper.

Lankester's letter to *The Times*, in which he detailed how Slade's fraudulent production of automatic writing had been uncovered⁴⁰, appeared on the newspaper's letters page on the same day as Lane Fox's explanation of his domestic experiments with automatic writing, and was placed immediately before it. In it, Lankester used this exposure of fraud to support his criticism of the decision to allow Barrett to speak at Glasgow, arguing that 'the discussions of the British Association have been degraded by the introduction of the subject of spiritualism, and the public has learnt – perhaps it is time they should – that 'men of science' are not exempt as a body from the astounding credulity which prevails in this country and in America. It is, therefore, incumbent upon

those who consider such credulity deplorable to do all in their power to arrest its development' (*The Times*, 16th September 1876, p. 7).

Wrangling over the implications of Slade's exposure continued for several days, alongside further fallout surrounding Barrett's paper. Lankester's pursuit of Slade ended with a much-publicised lawsuit brought under the terms of the Vagrancy Act, alleging the use of 'certain subtle crafts and devices to deceive and impose upon certain of her majesty's subjects' (Oppenheim 1985: 22–3). The case reached court at the start of October, with Slade being found guilty and sentenced to three months hard labour, a punishment he avoided as his conviction was overturned on appeal over a technicality.

Meanwhile, the correspondence in *The Times* revealed Lane Fox and Alfred Wallace as the men responsible for ensuring that Barrett's paper was on the programme for Glasgow. Over the course of this correspondence, Lane Fox sought, as many did at the time, to distinguish between 'spiritualism' and 'psychical research', and to insist on the need for scientific investigation of psychical phenomena, criticising those such as Lankester who saw only tricks and deception, who rejected the spiritualist/psychical distinction, and who scorned the possibility of any scientific proof for either. Implying that the likes of Lankester were, like the spiritualists, arguing from a position of faith rather than proof, Lane Fox insisted that 'Where there is the faintest indication of a beaten track, it is proper to follow it; but where, as in this case, we are entirely ignorant of our bearings, I submit that the proper attitude of science is to be open to conviction all round. If the spiritualist, impelled by hallucinations, or whatever we may be pleased to call them, can bring in evidence of a proper kind, we are bound to examine it. We have no right to stigmatize any class of evidence as common or unclean which appeals to us in the shape of facts that are appreciable by the senses' (*The Times*, 22nd September 1876, p. 10).

There was, obviously, a lot more going on here than an argument over the pros and cons of allowing Barrett to speak in Glasgow, or even over the appropriateness of using science to assess psychical phenomena. These debates also fed in to long-running concerns among anthropologists over the status of their discipline within and outside the BAAS, as well as equally long-running arguments over what the proper concerns and boundaries of the discipline should be (e.g. Stocking 1971b; Kuper 1988), while Wallace himself was an increasingly divisive figure within and beyond the scientific world as his belief in and advocacy of spiritualism became more widely known (e.g. Kottler 1974; Schermer 2002; Pels 2003; Mitchell 2014).

After the correspondence in *The Times* came to an end, there is no known record of Lane Fox discussing psychical phenomena in print or in public again (the later poltergeist case was presented as exposure of a hoax. Lane Fox's thoughts on the matter prior to his visit to the house concerned are not known), which is precisely how he insisted it should be – these were matters to be considered by appropriate experts away from the public gaze:

'One of the main functions of the science of anthropology consists in interpreting the past by the present, the unknown by the known. It is rarely that any popular belief is so entirely devoid of truth as to be destitute of some few grains of fact upon which the belief is founded, and the work of anthropology consists in sifting these facts from the large volume of credulity and some imposture with which they are associated. But although the reading of Professor Barrett's paper at Glasgow may have done some good by drawing our attention to the prevalence of spiritualism and to the fact that some of our most eminent men of science are believers in it, it is, I think, rather by a committee of enquiry that this investigation should be conducted, than by public discussion, which, even if it could be restrained within the bounds of reason, is liable to be discredited by the unintentional misrepresentation of the views of the speakers' (*The Times*, 16th September 1876, p. 7).

The Spectre of Cropmarks

'What . . . is natural and engaging in a child is out of place and even repellent in a grown-up man. It becomes a pathological symptom – a form of arrested development' – OGS Crawford (1918).

(i) Ghosts

Crawford was a firm believer in the reality of ghosts when he was 14. Five years later one of his aunts was collecting 'experiences' for him. A decade or so further on and he was reading and writing about Freud, Willam James and Jung, about dreams and layers of memory hidden beneath the conscious mind, and was discussing Baraduc's instruments for registering auras. A few more years and we find him struggling to understand how a photograph taken from the air could capture something from the distant past that was apparently invisible on the ground to the naked eye. Thirty years on Crawford wrote dismissively of beliefs about magic occurring within the camera. My own initial interest in this story revolved around those late comments, which suggested that some took his claims in 1923 to mean he was advocating some form of spirit photography. This certainly seemed to explain the unusual nature of the excavations – a group of expert eye-witnesses made far more sense in this context than measured drawings (or more photographs), but Crawford's remark about not expecting tangible results still stood out, while the ongoing public debate about spirit (and fairy) photographs was hard to ignore. But are these fragments enough to explain both what happened in 1923 and what didn't happen?

The key points just listed might suggest that Crawford's own approach to such phenomena recapitulated the path taken by those – such as the leading members of the SPR – who were interested in their investigation, from an initial belief in the possibility of some form of survival after death to a concern with the workings of the mind, although even on the basis of what little is known this is probably as reductive as it is speculative. Whether or

not these experiences and interests influenced his later work is beyond the scope of this paper, though there is nothing as explicit as some of the intriguing statements that made their way into *Man and his Past*. However, both that book and a paper written around the same time, *Prehistoric Geography* (Crawford 1922a), essentially represented the foundations for much of his subsequent work on the mapping and distributions in time and space of archaeological phenomena. Distribution maps represented horizontal slices through time, stratigraphic layers stretching back from the present to the distant past, all ultimately resting on the geological foundations that were seen as key to the patterning and meaning of much of the prehistory and early history of human activity in the landscape. Analysis of change through time not only permitted a better understanding of the present but allowed the archaeologist/geographer to look to the future. These successive layers allowed the archaeologist to 'travel through time upon the magic carpet of imagination. . . For his gaze is not directed backwards from the present; rather it ranges ever forwards from the past into the future. Like the traveller who has reached at evening the summit of a lofty pass, he scans with eager eyes the new landscape opening out before him; ever hoping amongst the low-lying valley mists to catch one glimpse of the Town of Heart's Delight' (Crawford 1921: 227). The utopian vision offered by this magic carpet ride is a reminder of the influence of Crawford's Kataric acquaintances (Wickstead this volume), and there is also much in these early publications that can be traced back to the Human Geography he studied at Oxford (see also Barber 2015), but some elements are also reminiscent of Jung's 'buried strata of the individual soul' (Jung 1917: 5), beneath which 'the oldest stratum. . . would correspond to the unconscious' (ibid., 37), specifically the collective unconscious. 'In so far as to-morrow is already contained in to-day, and all the threads of the future are in place, so a more profound knowledge of the past might render possible a more or less far-reaching and certain knowledge of the future' (ibid., 493, fn 17). Crawford referred to 'prophecy in the scientific sense' (Crawford 1922a: 262); Jung expected accusations of mysticism.

Among the people who contacted Kitty Hauser after she published her book about Crawford, *Bloody Old Britain*, was Peter Underwood, who had for many years been President of the Ghost Club. Crawford, he said, had been a member (Kitty Hauser, *pers comm.*). The Ghost Club had originally been established in 1882, the same year as the SPR. Membership overlapped considerably, especially in the early decades, the Ghost Club offering an alternative to the SPR for those who wanted to discuss their experiences and beliefs in private and in confidence. The Ghost Club did not publish. It was wound up in 1936, with some of its archive being deposited at the British Museum on condition that it remained sealed for 25 years⁴¹. Crawford is not named in the pre-1936 membership lists, nor is he ever named as a guest, so presumably he must have joined some time after the Club was restarted by Harry Price in 1938 (see Underwood 2010 for a short history of the various phases of the Club).

It is difficult to evaluate how reliable Underwood was⁴². An inveterate name dropper in his publications, his autobiography *No Common Task* made no reference to Crawford, but it did mention Crawford's close friend Mortimer Wheeler (who Underwood calls 'Rik'): 'I was surprised to learn that he had read several of my books, and he expressed considerable interest in the idea that ancient relics sometimes seemed to retain some malevolent influence' (Underwood 1983: 192). 'Sceptical but fascinated' is how Underwood described Wheeler, who had apparently told him that 'if he had not been a soldier and an archaeologist. . . he would have devoted his life to psychical research' (ibid., 193)⁴³. He also credited Wheeler with introducing him to Margaret Murray.

There is, as yet, no independent verification of Wheeler's interest in such matters, but it is clear that others were pursuing what might now be regarded as unorthodox routes to the past. The only other early 20th century attempt that I am aware of by an archaeologist to trace the course of the Stonehenge Avenue (both branches) beyond the point that Stukeley had recorded it was by Reginald Smith. Smith had been at the British Museum since 1898, and from 1927 was, for a decade or so until his retirement, Keeper of British and Medieval Antiquities there. His career was hallmarked by assiduous and exemplary service and research, the latter described (in an obituary by ET Leeds) as 'essentially thorough. . . though at times dry', missing that 'enlivening touch of imagination, that appreciation of human values, that inspiration which would have helped to raise it to a higher place' (Leeds 1940: 292–3). Leeds noted that Smith's 'only venture into unorthodoxy' concerned his persistent and prolonged attempt to assign flint mining to the Palaeolithic rather than the Neolithic (see Barber, Field & Topping 1999: 8–10 for a summary and references). However, Leeds must have been aware of Smith's other unorthodox ventures, but like Smith's own published notes on such matters, an archaeological journal was not the appropriate place to air them. Smith's chosen method for tracing the Stonehenge Avenue was dowsing (Smith 1939), a longstanding research interest of the SPR, among others⁴⁴.

(ii) Archives

A considerable amount of research on the Stonehenge landscape in recent years has taken place some distance from the monument itself. Archaeologists are constantly returning not just to conduct fresh fieldwork but also to consult the collected written and drawn records of previous episodes – particularly the various excavation campaigns – in the hope that the surviving notebooks, drawings, photographs and letters will help to flesh out the somewhat problematic publication record and help them understand what happened in the distant past – to re-evaluate the findings of earlier generations of surveyors and excavators afresh, in the light of current interpretative frameworks for prehistory. Such work generally provokes a sense of frustration – the archives produce some imperfect stories about the past alongside complaints about the quality and (in)completeness of both the archives and the original published accounts. But

there is little consideration as to why such problems exist beyond an implicit exasperation with the failure of earlier generations of archaeologists to comply with modern standards and practices. There is little consideration as to why we should expect any archive at all, let alone reflection on the motives for those early investigations beyond repetition of some familiar and simplistic stories, particularly the assumption that people excavated because they wanted to find out what happened in the past.

The absence of an archive for the Crawford and Passmore excavations of September 1923 is a direct result both of contemporary practice and, especially, the aims of those excavations – to determine whether this particular manifestation of the past in the present had a material cause. The absence of any mention of these events within Crawford's own personal archive or his autobiography arguably has more to do with his 'reputation as an archaeologist in the eyes of the world'. Otherwise it seems difficult to account for his repeated failure to acknowledge the first cropmark identified on an aerial photograph, the first recognition that the Avenue connected Stonehenge with the River Avon, the first suggestion that the Avenue was the route along which the bluestones were hauled, and so on. There is, as a result, rather less awareness of a key event in the history of aerial archaeology and of the Stonehenge landscape than might otherwise be expected.

The letters about ghosts, auras, Jung and so on are all contained within the part of his archive at the Bodleian that he insisted should remain sealed until the year 2000, when researchers would not just be met with the possibility of fresh insights into his life and work, but also with a series of explanatory essays and warnings about the use of this material (see Kitty Hauser's (2008) *Bloody Old Britain* for her tale of the first encounter with this part of the archive). The remainder of the Bodleian collection, which post-dates 1920 and the start of his life as a professional archaeologist, is markedly different in character and content, with no explicit trace of ghosts or the unconscious⁴⁵.

The case of Lane Fox underlines how easily an interest in such matters can be overlooked today, despite being prominently featured in the national, regional and local press at the time. The digitizing of historic newspapers, magazines, books and, of course, archives in general offers opportunities to transform understanding of the histories of people, places and events (Thornton 2016). The ability to undertake speculative searches of 19th century newspapers, for example, can be undertaken rapidly and remotely, complementing the time spent studying physical archive in various repositories. However, the time-saving element of digitized archives is only part of the story – recognition of the need to look in these and other places is key. Lane Fox's letters in the Rolleston archive are accessible as a result of the Leverhulme-funded *Rethinking Pitt-Rivers* project (<http://web.prm.ox.ac.uk/rpr/index.html>) and in particular through a pair of online posts by Alison Petch (2012; 2013). However, the poltergeist report, in print now for 120 years, has escaped attention. Tylor's séance diary, published in 1971 (and again thirty years later: Stocking 1971a; 2001), has not escaped attention in the

anthropological literature (e.g. Pels 2003; Schüttpelz 2010), but neither of the biographies of Pitt Rivers published since then mention it (Thompson 1977; Bowden 1991). To what extent have modern disciplinary boundaries influenced such research? To what extent does the digitization of archival and published resources offer one means to stray across these borders?

'What does it mean to follow a ghost?', asked Derrida (1994, 10); 'And what if this came down to being followed by it, always, persecuted perhaps by the very chase we are leading?' Derrida and many others have observed that archives are inevitably haunted by what they exclude – missing, repressed, forgotten – but the idea of haunting has extended beyond the archive, prompting the increasingly widespread use over the last couple of decades of the ghost or spectre as a conceptual metaphor, a means of opening up discussion about those abandoned, concealed or suppressed aspects of the past, in the process allowing interrogation of the actual formation of knowledge itself (see for example Davies 2007; Gordon 2008; McCorristine 2010; del Pilar Blanco and Peeren 2010; 2013; Smith 2013; Fisher 2014). At the same time, as Emilie Cameron (2008: 383–4) observed, it can appear as if 'everything, these days, is haunted', as important studies on the ghostly, the spectral and the uncanny are joined by the increasing use of 'passing metaphorical references to 'haunting' in recent scholarship', suggesting that perhaps 'Those who see and imagine ghosts are as deserving of interrogation as the ghosts themselves' (ibid., 390). The quality and quantity of the available material makes it difficult to assert with confidence that there is any real substance to the case made here – that the ghost in this particular part of the archive was a real belief in ghosts – but nonetheless there are ghosts there.

Acknowledgements

This paper has quite lengthy but somewhat hazy origins, the subject matter's first appearance in print being a vague footnote on page 270 of Barber 2011. The present version derives from two more recent conference papers, one given at the HARN gathering in Glasgow on 1st September 2015, the other in Irene Garcia-Rovira's session 'Archives as Archaeological Objects' at TAG Manchester, 16th December 2015. I'd like to thank the organisers of both for providing the opportunity to place lots of seemingly random notes and thoughts in some kind of order. I'd also like to thank the following for access to archives: David Dawson at Wiltshire Museum, Devizes; Sally Crawford and Ian Cartwright at the Institute of Archaeology, Oxford; Adrian Green at Salisbury & South Wiltshire Museum; and various staff at the Bodleian and British Libraries and the Historic England Archive, Swindon. Kitty Hauser allowed me to refer to Peter Underwood's letter about Crawford and offered some useful comments, while Helen Wickstead generally encouraged persistence as well as commenting on an earlier draft. I'd also like to thank the various organisers and editors at HARN and the BHA for smoothing the flow towards publication of this article, which was funded by Historic England.

Competing Interests

The author declares that they have no competing interests.

Notes

- ¹ Crawford deposited his personal archive with the Bodleian Library, Oxford, having taken considerable care over what should be made available to posterity. After his death in 1957, an unknown quantity of material was burnt in accordance with the terms of his will. The collection at the Bodleian comprises 136 boxes of material bequeathed via that will, plus six boxes previously deposited by Crawford in 1952. This latter collection was, at his request, sealed until 2000 (see Hauser 2008).
- ² Understood here as the belief, by those who privilege excavation above all other archaeological methods, that a site cannot be said to exist unless it has had a hole dug in it.
- ³ See www.readingroomnotes.com/public-engagements.html
- ⁴ Colonel Augustus Henry Lane Fox, as he (mostly) appears in this paper, is perhaps better known to archaeologists as General Pitt Rivers, the name change occurring in 1880 as the result of an inheritance.
- ⁵ Particularly pertinent to the entire discussion here is Kitty Hauser's *Shadow Sites* (2007), especially chapters 2 and 4, which deal at length with issues relating to photography, aerial archaeology and Crawford, including the suggestion that photos such as those of the Stonehenge Avenue represent 'almost a textbook case of the uncanny: for here is the apparent return of the dead' (ibid., 179).
- ⁶ Crawford never stated clearly when he first saw these negatives. In his *Observer* article he referred to making the discovery a short time before he inspected the site on the ground, suggesting some time in July. However, he could be referring to when he first saw the traces of the Avenue, rather than when he first saw and collected the negatives.
- ⁷ On the negative, of course, these lines were black.
- ⁸ According to Crawford (1924a: 14) he was wandering around the landscape on the 20th as well. Newall was assisting Hawley in his long-running excavations at Stonehenge.
- ⁹ The geography of the Avenue and its environs is complex for the uninitiated. The figures and captions here are best supplemented by reference to the recent English Heritage survey report (Field et al 2012), which is freely downloadable from the Historic England website (see bibliography for link).
- ¹⁰ Stout (2008) presents Crawford as a harsh critic of Smith and Perry, and indeed he was by 1923. However, a glimpse at some of his less commonly read publications (e.g. Crawford 1922b) shows that in 1923 he was an extremely recent convert to the opposing view – or at least he was professionally.
- ¹¹ Allen et al 2016, an interim report on the most recent excavations and dating of the Avenue, appeared as this article was going to press.

- ¹² As Mortimer Wheeler recognised around the same time, Pitt Rivers had been somewhat neglected since his death two decades earlier, his innovations in excavation methods largely ignored (see Wheeler 1955: 66–7; Hawkes 1982: (NB 1985 in text), 81ff).
- ¹³ Passmore's 'notebook' is actually a sizeable bound volume which Passmore had specially made some 20 years earlier, and was intended as a means of gathering together in one place the knowledge he wished to pass on to posterity. The account of the Stonehenge Avenue excavations is a typical entry – undated, clearly copied out neatly some time after the event, and telling us more about Passmore than the event itself. He does, however, acknowledge Crawford's involvement.
- ¹⁴ It may be worth pointing out here that cropmarks are *not* always darker than the surrounding crop, and neither are they 'nearly always' visible from the air. Their visibility, whether expressed through height or colour difference, is entirely dependent on localised ground conditions, particularly but not solely connected with relative soil moisture content. A sunny spell in July does not lay open the entire history of England to the skies. Finally, for those who share Crawford's faith in technological progress, lidar cannot see cropmarks.
- ¹⁵ He had, of course, published many other books as well as countless articles on matters spiritualistic. In addition, Conan Doyle was also a leading figure in the short-lived Society for the Study of Supernormal Pictures, launched in 1918 partly in response to the attitude of the SPR to spirit photography. It appears to have ground to a halt around 1923. See Jones 1989 for a summary of Conan Doyle's spiritualist publications and beliefs, while Wingett 2016 collects key articles by Conan Doyle including all those he wrote for the spiritualist magazine *Light*.
- ¹⁶ Automatic, or unconscious, writing is simply the process of writing without consciously doing so – without being aware of what is being written. There are many methods for producing automatic writing. See Hopkinson-Ball 2007 for a recent account of Bligh Bond's technique.
- ¹⁷ The difficulties that Bligh Bond's use of automatic writing causes for modern archaeologists are evident in the recent publication of 20th century excavations at Glastonbury (Gilchrist & Green 2015), which misunderstands the nature of his working methods (pp 9–12), and also omits him from the volume's back-cover blurb list of 'iconic figures' who have excavated at Glastonbury.
- ¹⁸ The article in *The Treasury* also saw Bligh Bond (1908: 245) use the analogy of the palimpsest – 'beneath which lie the pale records of centuries far remote' – to describe the landscape he was dealing with at Glastonbury, some 15 years before Crawford first used the term in an archaeological context.
- ¹⁹ Alleyne was a pseudonym for medium and retired naval officer John Allen Bartlett (see Hopkinson-Ball 2007).
- ²⁰ Crawford studied for both the Geography and Anthropology Diplomas at Oxford. From the latter he acquired a distinctly Tylorian understanding of anthropology, from which he seldom wavered afterwards. *Man and his Past* was also the one major Crawford publication clearly rooted in the ideas aired among the Boxford/Kata circle (see Wickstead, this volume).
- ²¹ Crawford did not use the word 'psychometry'.
- ²² A paraphrase of 2 Corinthians, 3:6.
- ²³ *Psychology of the Unconscious* (Jung 1917) was the title given to the first English translation of Jung's (1911–12) *Wandlungen und Symbolen der Libido*. A revised version appeared in 1952 as *Symbols of Transformation*.
- ²⁴ MS Crawford Special Collections 2, Bodleian Library.
- ²⁵ *Said and Done* typescript including passages removed from the published version: MS Crawford 107, Bodleian Library.
- ²⁶ Essay by Crawford: 'My aunt Sister Edith Teresa': MS Crawford 6 (Special Collections), Bodleian Library.
- ²⁷ Letter, Crawford to Aunt 'Deeshie', 17th June 1900, addressed from 'The Green, Marlborough'. MS Crawford 4 (Special Collections), Bodleian Library.
- ²⁸ MS Crawford 4 (Special Collections), Bodleian Library.
- ²⁹ Inkpen excavation notes: MS Crawford 101, Bodleian Library.
- ³⁰ Op. cit. Fn 3.
- ³¹ I'd like to thank the anonymous referee for bringing this book to my attention.
- ³² A version of the paper was eventually published in the first volume of the SPR's *Journal* (Barrett 1882), although the *Spiritualist* was one of a number of magazines that promptly printed the text apparently as given (vol 9, no 8, 22nd September 1876, pp. 85–88).
- ³³ Not just *The Times*, but it was in that newspaper that the main protagonists chose to air their views and their differences.
- ³⁴ The full discussion, including Lane Fox's contribution, and other relevant material, was also published at length in the same edition of the *Spiritualist* (op. cit. Fn30, pp. 89–94) that featured Barrett's paper.
- ³⁵ Planchette here almost certainly refers to a small, lightweight, heart-shaped wooden board no more than 6 or 7 inches long, with three 'legs' on its underside – two featuring castors, and the other containing a lead pencil. Participants would each place a hand on its upper surface, and the planchette would then move in response to questions, the pencil leaving a trace on a sheet of paper. This particular practice became incredibly popular in Europe and North America from the late 1860s onwards (see e.g. Sargent 1869), and played a key role in taking spiritualism into the domestic sphere.
- ³⁶ Ursula Katharine Lane Fox, born 1859.
- ³⁷ The theory of unconscious cerebration, as offered by William Benjamin Carpenter to explain, among other things, the various *physical* phenomena – rappings, table-turning, the movement of a planchette etc –

encountered in séances, proposed reflex actions caused by the unconscious workings of the mind as the root cause (see e.g. Carpenter 1874).

³⁸ The same newspaper (16th September 1876, p. 4) was also somewhat disappointed with Minnie: 'Surely disembodied spirits must have something either better or worse to do in their new state of existence.'

³⁹ 'The spirit medium is a curious and unsavoury specimen of natural history, and if you wish to study him, you must take him unawares, as you would any other vermin. . .' – Lankester, quoted in Milner 1999, 94. Lankester was, early the next century, one of the eminent scientists taken in by the Piltown hoax.

⁴⁰ Quite simply, Slade's chalk slate had been grabbed in the darkness of the séance, mid-performance, and was found already to contain more writing than it should have at that stage.

⁴¹ The archives are now held at the British Library (Add MS 52258–52273). See also Luckhurst 2012 for a discussion of the Ghost Club, with particular reference to things Egyptian.

⁴² He died in 2014, so I was unable to pursue the matter.

⁴³ According to Jacquetta Hawkes, discussing Wheeler's opportunistic conversion to Catholicism in order to facilitate his third marriage, he generally proclaimed himself a pagan, although she didn't elaborate on this (Hawkes 1985, 329). However, as Hawkes pointed out, Wheeler's 1966 piece about the 19th century explorer, ethnologist, etc Richard Burton is worth noting in this respect ('I like to dream that my own faith and, in tiny measure, my own experience have been the thin and lengthening shadow of his').

⁴⁴ One SPR member renowned for her skill as a dowser, as well as her interests and experiments in telepathic communication at a distance, was Clarissa Miles, who was also the photographer during the restoration and excavation work undertaken at Stonehenge in 1901 by Detmar Blow and William Gowland (Barber in prep.).

⁴⁵ The later collection, deposited after his death in 1957, never had any restrictions on access. Only the pre-1920 material, deposited in 1952, was sealed until 2000. As well as assuming that all those mentioned in the latter, and anyone who knew them, would be dead by 2000, he also expected some form of atomic warfare to have happened by the end of the millennium, although revolution was his preferred option.

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