

## Lines of Sight: Alfred Watkins, Photography and Topography in Early Twentieth-Century Britain

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Fig.1  
FC Tyler Alfred Watkins photographing Eastcombe Cross, April 1926  
Black and white photograph  
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### Eccentric geographer

Alfred Watkins (1855–1935) (fig.1) originated the idea of ley lines, surveyed alignments which, so he maintained, articulated the prehistoric landscape and movement through it. The idea has its fullest exposition in Watkins's book *The Old Straight Track* (1925) with photographs taken throughout his native Herefordshire (fig.2).<sup>1</sup> The search for ley-lines became a cult in the countryside discovery movement of 1930s Britain and was revived with the republication in 1970 of *The Old Straight Track* with a forward by John Michell, author of *The View over Atlantis* (1969).<sup>2</sup> Ley-lines became connected with all manner of enigmatic lines in the landscape, such as dowsing lines, feng shui and the patterns scraped on the remote Nazca plateau of Peru.<sup>3</sup>



Fig.2  
Alfred Watkins  
*Arthur's Stone, Dorston, Green Way Sighted to and Beyond the Mound*  
Black and white photograph, published as fig.14 of Alfred Watkins, *The Old Straight Track*, Methuen, 1925  
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The Watkins revival occurred at the beginnings of the 'land art' movement in Britain. [Richard Long](#) (fig.3) first found out about about ley-lines at the time of his solo exhibition at The Whitechapel Gallery in 1971:

Someone came up; he saw my lines of walking across Exmoor, the line made by walking and said, have you heard of this man, an eccentric geographer who had a strange theory about invisible lines that connected prehistoric sites across England. That was the first time I had heard of these ley-lines.<sup>4</sup>



Fig.3  
Richard Long  
*A Line Made by Walking* 1967  
Photograph and pencil on board  
Purchased 1976  
© Richard Long  
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According to Michael Auping, [Hamish Fulton](#) (fig.4) was not only aware of Watkins but made a study of his work.

His *Straight Line Walk*, 1969, relates to the artist's fascination with the prehistoric 'ley' system of walking paths. Around the same time, Fulton made a special visit to the Hertford [sic] Public Library to see Watkins's original books. Fulton acknowledges this as a very important visit, not only because of his interest in the concept of a walked line for navigational purposes, but also because of the artist's admiration for the sheer visual and physical beauty of Watkins's books. Fulton remains fascinated by the clarity and elegance of 1930s and 1940s book layouts, with clear geometric blocks of text, augmented by delicately tinted, tipped in photographs.<sup>5</sup>



Fig.4  
Hamish Fulton  
*The Pilgrim's Way* 1971  
Photograph and text  
Presented by Tate Members 2003  
© Hamish Fulton  
[enlarge](#)

This paper is part of a longstanding academic interest in visual culture and topographical traditions in Britain. The subject first arose in two exhibitions curated with Nottingham colleagues some years ago on art and mapping and on landscape aesthetics in Herefordshire.<sup>6</sup> I was prompted to return to it by the appearance of some photographs by Alfred Watkins in the 2005 *A Picture of Britain* exhibition at Tate Britain and by current academic interests, in a number of disciplines, in visual representations of antiquity.<sup>7</sup> This paper will explore the way the ley-line idea is shaped by Watkins's photographic theory and practice, a popularising one which was part of a broader survey movement in topographical representation which emphasised access to landscape and its history for an educated public.<sup>8</sup> Watkins's books were issued at a high point of public interest in the archaeology of landscape with reports of spectacular finds by British expeditions in the Middle East (Arthur Evans's discovery of Minoan civilisation in Crete, excavations at Ur in Mesopotamia by Leonard Woolley and Howard Carter's dramatic discovery of Tutankhamun's tomb) as well as discoveries at home such as excavations at Maiden Castle and the revelation of prehistoric earthworks in aerial photographs, hitherto hidden patterns of the past which inspired a young generation of modernist English landscape artists. I will consider the politics as well as poetics of Watkins's field of vision, how it revealed some boundary disputes in the terrain of antiquarian enquiry.

## Drawing with light

Well before Watkins took up antiquarian pursuits in his sixties he was famous as a highly successful populariser of photography, inventing and successfully marketing photographic aids and authoring a key text for amateur photographers *Photography: Its Principles and Applications*. Watkins took up photography in 1875, aged twenty. He developed his photographic practice alongside a career running the family's brewery and flour-milling business in Hereford. Watkins focused on flour milling because it offered opportunities for modernising the industry (replacing mill stones with steel rollers, electrifying the plant) and widening his horizons, taking him not only throughout the region to meet farmers but to London markets too. Among the products of the The Imperial Flour Mills, as they were called, was a patent nutritious flour, so called Vagos (named after the Roman name for the river Wye flowing through the city), which sold nationally. Watkins was a liberal activist, campaigning for free trade against Tory tariff policies, largely on the virtues of cheap British staple food, and gave lantern-slide lectures around Herefordshire which attracted the newly enfranchised class of labouring men, some of whom recalled the hungry years of the nineteenth century, who helped create the liberal electoral landslide of 1909.<sup>9</sup>

In photography, as with food, Watkins went from local to national attention. He founded the Herefordshire Photographic Society in 1895, one of many such local societies. Elected a member of the Royal Photographic Society, he became a fellow in 1910 and that year was awarded their Progress Medal for his researches into photographic theory and practice, a number of which were published by its journal. Watkins patented various affordable light meters which, as much as cheap cameras, made photography a mass pursuit. These were developed in a workshop adjoining the flour mills, the Meter Works (which also made

other measuring devices for sale including calibrated metals rules and dough meters for domestic and trade baking).<sup>10</sup> The highly successful Bee light meter was produced in Birmingham by R. Field, foremost manufacturers of range finders for surveyors and the military.<sup>11</sup> Priced initially in 1892 at 2s 6d, about the cost of a Gillette Safety Razor, it sold in its thousands for nearly fifty years to both amateur and professional photographers, with US dials for those using Kodak cameras. It was famously used by Herbert Ponting in his iconic polar photographs of the Scott's 1910 Antarctic expedition published in *The Great White South* (1921). From the 1890s Watkins issued popular manuals (successfully competing with those of camera manufacturer Ilford) which publicised his own devices and in 1911 published the first of many editions of *Photography: Its Principles and Applications*.

In the Preface to this book which was written in a Radnorshire roadside inn, on a car trip with a folding vest pocket camera, he recalled how he had first come to the inn thirty-five years before in winter, on pony and trap, with a heavy wet plate photographic kit and developing tent, and had taken scenes by a stream with trees hung with hoar frost. This was during a business trip, one of many journeys which shaped Watkins's views of both photography and topography. He welcomed access to both. At the time of publication photography had 'so expanded its limits that every class uses it':

Is it the schoolboy snapping his sisters or schoolmates with the Brownie bought yesterday; or the astronomer wishing to make star records? The traveller, seeking records of the people, customs, architecture, and landscape beauties of the country through which he passes, that he embody them in a book or lecture; or the experimenter dipping into the records of early investigators, and eager to be in touch with even small discoveries?

Watkins argued that in principle and practice all photography, of whatever kind, was, as the word meant, 'drawing with light' and much of his advice concerned the accurate calculation of exposure times, in both taking and developing photographs. He elided photographic representation and physiological perception, noting the physical similarity the human eye and the photographic camera and lens, from a diagrammatic Newtonian perspective: 'we see in straight lines'. For this reason Watkins was keen on long-focus lenses and opposed to the 'unnatural and violent perspective' produced by wide-angled lenses for much picture-postcard photography of the time which catered to 'the uneducated eye' and took in more than a person could ever actually see from a given standpoint. He was sympathetic to pin-hole photography for its depth of field and absence of distortion and halation, not to mention its cheapness and simplicity of apparatus, noting it 'has been found really useful for artistic reproductions of landscape, buildings or still life, where absolute sharp detail is not required'. Sharpness was precisely what Watkins valued. Telephoto lenses, he noted, were widely employed in military surveillance but were being increasingly used in an 'attractive field of work – the photography of mountain peaks' (a field pioneered by the climber Vittorio Sella whose work illustrated geographical studies of Alpine regions but which was also evident in current illustrated books on upland Britain). Telephoto lenses could tolerate no camera shake, so Watkins own camera for field work (see fig.1) was a stand camera with tripod; the rack and pinion movement on its baseboard allowed lenses of various lengths to be used. A chapter on documentary 'record photography' describes the main forms of survey photography:

The first is photography by military men or surveyors for making a map or record of position and heights of points. The second is organised photography by a society [he mentioned the Birmingham-based Warwickshire Photographic Society as a pioneer] of buildings, costumes, customs and methods of working, which it is important to have a pictorial record of.<sup>12</sup>

Watkins's antiquarian interests ran parallel with his photographic ones.<sup>13</sup> In 1882 he supplied photographs for a book *Hereford, Herefordshire and the Wye* by D.R. Chapman, librarian and curator of the Hereford Free Library, and assisted in the compilation of the walks described. In style and subject, the book was in a longstanding genre of guide-books, directed at the artistically minded tourist seeking out sites in this

canonically picturesque county, following a well beaten track along the Wye valley in late summer and autumn, taking in old mills, wells, churches, castle ruins, orchards, hop-gardens, and cottages and farmhouses 'untouched by the hand of the restorer'. Even a snap-shooting tourist with an 'instantaneous camera' could follow in the footsteps of Birmingham landscape painter [David Cox](#). Eight Collotype illustrations, so called ink-photos by the London firm Sprague and Co., were made from Watkins's photographs. The lithographic process contributed to the picturesque effect, producing a misty atmospheric perspective effect which contrasts with the precision of the permanent platinotypes which were tipped into three special copies, one supplied to the Hereford Free Library and Museum. One excursion departs from the picturesque path to the Black Mountains around Pandy, a trip to be undertaken with map and compass, and one which takes in terrain, and ways of navigating it, which came to define the landscape of ley-lines.<sup>14</sup> Watkins's first published piece of antiquarian research was on old pigeon-houses, 'A Summer among the Dovecotes' published by *The English Illustrated Magazine* in 1892. The subject, and some of the writing style, suggests a familiar scenic excursion, but it is soon clear that Watkins's focus on these features has been developed by an eye for the country which can both delineate the detail of the building and the dip in a 'couple of wooded knolls [which] break the line of horizon' where the building is located. This way of seeing was both a product of long familiarity with the landscape and a counter-picturesque Ruskinian sensibility, one expressed in the line illustrations made after Watkins's photographs by two of the leading arts and crafts illustrators associated with the Birmingham School of Art, H.M. New and C.M. Gere.<sup>15</sup>

## Field of vision

Watkins joined the Woolhope Naturalists' Field Club, Herefordshire's natural history and archaeology society, in 1888 and became its dominant figure, eventually president in 1918, through his provision, for free, of almost all the photography for the Club's *Transactions*, making it the most advanced illustrated publication of any such local society and superseding that of many national, more academic ones. While concerned to record aspects of the past, especially those connected with popular ways of life, Watkins also focused on new developments, such as street clearances in Hereford to make it a brighter, more open city, and, on a special train excursion, the construction of the Elan Reservoir in mid-Wales, built to supply Birmingham with water. There were limits to Watkins's power, notably his unsuccessful campaign to have women admitted to the Woolhope Club (as they were to the Hereford Photographic Society).<sup>16</sup>

From the beginning of the century Watkins wrote conventional illustrated articles for the Woolhope Club on various antiquarian subjects, chapels, wayside crosses, city walls and ancient pottery, accompanied on his excursions by the manager of the Meter Works, W.M. McKaig, who assisted with the field work including the photography. Nothing, it seems, prepared members for Watkins's astonishing contribution to field archaeology, his systematic idea of ley-lines, at the Club's autumn meeting on 29 September 1921. This was an afternoon excursion and evening lantern slide lecture in the Club's rooms in Hereford Free Library and Museum, reported the following year in the Club's transactions as a paper on 'Early British Trackways, Moats, Mounds, Camps and Sites.'<sup>17</sup> The paper was not printed in full because, as the report stated, Watkins had 'elaborated and published his thesis in a book' of this title. This was issued in 1922 as a slim but finely produced and well illustrated volume, priced at 4s/6d, and aimed, in his words at 'the average reader', under the imprint of the Watkins Meter Company (which issued his manuals on photographic exposure) and distributed by a London publisher Simkin, Marshall, Hamilton and Kent.<sup>18</sup>

The title *Early British Trackways* placed the book in the popular genre of 'highways and byways' topography, focused on a variety of old roads, from green lanes and ridge-ways to Roman roads.<sup>19</sup> In contrast to what he called the 'misty appreciation' and 'vague ideas' of much of this writing, Watkins offered a clear, measured view, grounded in careful fieldwork of the 'geometric aspect of topography, a framework for new knowledge'. Watkins's British trackways were not like those in a book such as Edward Thomas's *Icknield Way*, winding ways folded into the landscape, the product of the tread of generations of men and animals (a trope that goes back to picturesque theory generated in eighteenth-century Herefordshire); rather they were direct, expressly commercial, routes, surveyed and planned. Watkins was reluctant to call his thesis a theory, as if that was a conjectural view, rather it was a matter of fact, or rather of logical inference from material

facts, a sorting out of previously unrelated and unnoticed information ‘embedded’ in the mind and on the ground (this included local sayings and place name as well as sites) which Watkins called the orderly unwinding of a previously tangled string. Thus a longstanding antiquarian puzzle, the ‘meaning of mounds’, would be solved not so much by cutting them open, and peering inside, but by looking over the landscape and seeing their form, like that of mark stones, replicated in the shape of hills in the distance. Herefordshire’s encircling hills, including the Malverns, Black Mountains and Radnor Forest, which on a clear day foreshorten to the naked eye, are a defining feature of the ley system, producing a topography with a pronounced sky-line aesthetic. Further sightings along ley-lines would connect a range of sites and artefacts in a newly revealed field of vision, with a clear optic of spatial and social order.

The facts, according to Watkins, were that an otherwise inchoate assemblage of sites (including moats, mounds, standing stones, churches, wayside crosses, holy wells, legendary trees, cuttings, Roman roads and ancient bridleways) throughout the region, running up to sixty miles, were systematically connected as a network of alignments, so called ley-lines. These were sighting lines, originally from primary, hill-top observations points and the basis for modifying the landscape to articulate alignments by constructing cuttings, embankments and causeways, building megaliths, planting trees and making ponds. Far from being the piecemeal product of the tread of generations, ley-lines were precision engineered by a powerful caste of expert surveyors. Walking, or any form of locomotion, was secondary to a system of sight lines. This network was organized by a Neolithic people apparently ‘with few or no enclosures’, as a fundamental form of social organization, ‘for commerce and assemblies of the people’, later ‘when troublesome times came’ for defence and permanent settlements and ‘objects of superstition and genuine veneration’.

The grid of ley-lines came to Watkins, he tells his readers, as a ‘rush of revelations’ on 30 June 1921, when on a visit to Blackwardine, a sighting from a hill-top led him to see on a map, before he saw it on the ground, a straight line linking various ancient sites. The map was probably the new Popular Edition of the Inch to One Mile Ordnance Survey Map which, on the front cover, had Ellis Martin’s famous figure of the cyclist in Norfolk jacket, tweed cap and plus fours, looking over the landscape unfolded on his map from one hill to that in the distance (fig.5). Watkins followed up his revelation with further map-assisted hill sightings, ‘unhampered by other theories’, and found it ‘yielding astounding results in all districts’. The theory could be verified, through what may seem a somewhat circular form of reasoning, ‘on an inch to a mile ordnance map with the aid of a straight edge’. By sticking a steel pin on ‘an undoubted sighting point’ placing the straight edge against it and moving it around until several (not less than four) sites (including place names) came exactly into line (fig.6). Travelling along the line would reveal further sites not marked on maps, such as woodland glades, trenches, fragments of causeways and above all, otherwise unnoticed notches on the crest of hills.



Fig.5  
Ellis Martin  
Cover illustration to Popular Edition, Ordnance Survey ‘One-Inch’ map  
[enlarge](#)



Fig.6  
Alfred Watkins  
*Original Alignments*  
Hereford Library no.1578g  
© Hereford Library  
[enlarge](#)

Watkins's revelations reordered a lifetime's experience. As in the preface to his photography text, Watkins tells how the theory, he now realises, originated long ago, in Radnorshire, when as a lad travelling for his father's brewery he pulled up his horse look with wonder at two sites he now knows are linked, the Four Stones, standing stones in a field corner, and later the same day came the first view of Castle Tomen, marked by a clump of trees, at the summit of Radnor Forest road. 'The note of unsatisfied wonder struck that day has lingered through nearly fifty years' unusually intimate knowledge of our beautiful West country borderland, and I know now that my sub-conscious self had prepared the ground and worked at the problem I now see solved'.<sup>20</sup>

The alignment of the Four Stones and Castle Tomen forms the cover illustration, and frontispiece for *Early British Trackways* (fig.7). This takes the form of a collage, with three photographs of the sites, one a telephoto shot of Castle Tomen, superimposed on a woodland glade marking a ley. Watkins had used collage for the cover of *Hereford, Herefordshire and the Wye*, pinning a photograph of Hereford cathedral on a scene in a hop garden, but here assembles a composite landscape. This combined some conventional techniques of popular landscape photography, riming foreground stones and distant hills and splicing a focused background shot onto a foreground one, with the older conventions of topographical print series, running views as a journey sequence. There are affiliations with arts and crafts landscape photography by Frederick Evans, highly structured views, uncluttered by modern incident, articulated by rising paths to the horizon.<sup>21</sup> There are twenty plates in *Early British Trackways*, some with multiple views. As if to emphasise that the ley system literally overlooked picturesque sites like castles, the focal point of a view of Brampton Bryan Castle (complete with Victorian garden) is at the very margin of the photograph, the summit of Coxall Knoll. One plate has three vertical strips from separate telephotographs showing sighting cuttings in hill summits. Two plates are of reworked Ordnance Survey maps, one cut up into strips (in the style of old road maps) showing the course of leys. While Watkins favoured the coloured, folding Popular Edition as the 'working scale' for use in the field, he used the larger uncoloured sheets on four drawing boards for plotting lines, along with other instruments for ley mapping, T squares, divided quadrants and glass pins used by photographers.



Fig.7  
Alfred Watkins  
Collage of black and white photographs, published as frontispiece of Alfred Watkins,  
*Early British Trackways*, 1921  
Hereford Library no.1578b  
© Hereford Library

Watkins was not the first to entertain alignment views of the prehistoric culture. As Pennick and Devereux show, in many parts of northern Europe from the later eighteenth century, and with increasing frequency from the later nineteenth, when map use was more widespread, scholars of varying quality detected systems of lines in the landscape, especially in work on druidism, centuriation, old roads and ancient astronomy. This came to Hereford in 1870, at a meeting of the British Archaeological Association, in a lecture by William Henry Black, historiographer to the Public Record Office, who speculated on a global system of alignments in which he located some local sites. Watkins was just fifteen at the time, but did attend later meetings of the Woolhope Club when Black's ideas (largely forgotten by mainstream archaeology) were presented.<sup>22</sup> *Early British Trackways* is close to a scientifically minded work like O.G.S. Crawford's *Man and His Past* (1921) in its focus on the openness of prehistoric landscape, on mobility and trading routes, particularly in the economic geography of minerals and metals, and its plotting of Roman Roads (Crawford's 'own particular groove') on Ordnance Survey maps, joining up surviving fragments in straight lines and then doing field work to discover remains along the alignment.<sup>23</sup>

The landscape of ley-lines draws on various strains of progressive sensibility. Ley-lines articulate a free trade utopia, enabled by an enlightened planning regime, looking back and forward to a liberal landscape without landlordism.<sup>24</sup> The pre-enclosure vision, cutting across established propertied interests, recalls the imaginative geography of John Bunyan's *The Pilgrim's Progress*, where the narrow path to the light is 'straight as a rule can make it'. Watkins's 'rush of revelations' on that June day in 1921 came in a summer of 'clear, smoke-free distances', a clarity caused by coal stoppages which encouraged progressives at that time to envision another system of power, the national grid of electricity.<sup>25</sup> In contrast to the prevailing scholarly view of a culture of isolated settlements in forest clearings, *Early British Trackways* offers a model of ancient Britain as an organised, unified, mobile and expansive society. This activates the heritage of the Herefordshire border country as the ancient British kingdom of Siluria, which under Caractacus had resisted Roman dominion, a mythology mobilised in contemporary views of the British Empire.<sup>26</sup> While Watkins's views are aligned to the pressure for public access to the landscape, one codified by the civilian initiative of the Ordnance Survey to publish its Popular Edition, the military imperatives of reconnaissance, for an enthusiastic fundraiser and recruiter for the late war, are evident too. The prehistoric caste of ley-line surveyors made their sightings according to Watkins 'in much the same way as a marksman gets the back and fore sights of his rifle in line with the target'.

## Second sight

Despite, or perhaps because of the scepticism of fellow members of the Woolhope Club, and some criticism in newspaper reviews, Watkins undertook an intense period of study to substantiate and develop his theory.

Over the next three years he conducted further map-work and excursions, with his assistant, W.M. McKaig, who also supervised the meter works and did much of the drawing for the books, and continued to combine business transactions with field work. Watkins was no walker along ley-lines, at least for any distance (he once broke his ankle pacing directly up a steep hill); he favoured motor cars of various kinds, both steam and petrol powered vehicles, to get close to the key sites, to carry his camera and his assistant Mr McKaig, and to establish the scope of the system.<sup>27</sup> Watkins read widely in a range of related literature, including topographical works, regional geographies, illustrated magazines, place name studies, folklore, and literature, from Shakespeare to Robert Louis Stevenson. Many scraps of evidence are brought in to support the theory, some from sympathetic correspondents, some apparently ad hoc including observing a girl fording a pond and the reports of a local drainage board. Poorly schooled, (his father had him work his way up the firm from being a delivery boy), this amounted for Watkins (in his sixties) to a form of self education. The result was a 235-page book *The Old Straight Track*, with 129 illustrations, published by Methuen in 1925, when Watkins was seventy years old.

While Watkins was intent to locate the ley system in his home region, with the object of a chapter on 'Leys in Radnor Vale' to show how, in this 'compact district', old straight tracks are 'thick on the ground', the effect of the range of new evidence is to greatly extend the theory, both geographically, to the rest of Britain and beyond, and culturally, from a system of material, expressly commercial livelihood to one which included various forms of spiritual and even occult knowledge and, in tune with the popular movement for historical re-enactment, assumed an expressly performative element. As such it connected to sensational views of archaeological sites elsewhere, for example Sir Norman Lockyer's work on sun alignments in Greek and Egyptian Temples and famously Stonehenge. Thus the photograph of Mr McKaig lying on what is described as a sacrificial stone (fig.8) is informed by a work called 'Sun Worship in the Malvern Hills' by one P.H. Lestrangle of the Malvern Geographical Society and echoes the restaging of a similar event in a photograph Watkins took from the *National Geographic Magazine* illustrating an article on Inca ritual sacrifice. Watkins extended his repertoire of views in ley collages to include sites throughout England and one of the Ghaza Desert, taken by a man on duty with the Hereford regiment in Palestine during the war. The later, literary, chapters of *The Old Straight Track* lose touch with local field observation in some speculative flights of word association, one tracing a line from the Welsh 'twyt', pronounced 'toot' in English, to the Tut of Tutankhamun to Tooting, south London (a nice antidote to this suburb's reputation at the time among highbrow critics as the end of civilisation).



Fig.8  
Alfred Watkins  
*Sacrificial Stone, Aligning with Giant's Cave Above It*  
Black and white photograph, published as fig.101 of Alfred Watkins, *The Old Straight Track*, Methuen, 1925  
Hereford Library no.184  
© Hereford Library

Ley-line seeking became something of a countryside craze and in 1927 Watkins issued a portable field guide *The Ley Hunters Manual* to cater for it. Admirers around the country, sixty-seven of them, formed a Straight Track Club, which not only met but corresponded (on the model of other postal contributory clubs, like the English Mechanic Photographic Club) circulating growing portfolios of work. This Club included some devotees of some of the more fringe diffusionist theories, taking in Egypt and Atlantis and the growing cult of Glastonbury.<sup>28</sup> Watkins continued to elaborate his theory until his death in 1935. To demonstrate his

theory that the grooves in the Queen's Stone at Symonds Yat by the Wye were not as received opinion had it, caused by glacial action, but made to fit wickerwork for human sacrifice, he re-enacted such an event during a lecture at a Woodcraft Folk camp in 1933.<sup>29</sup> Having tried to resist some of his more mystic followers, he reckoned that ley-lines required more than a straight functional explanation. The year before his death he confessed to his son that his original 1921 revelation followed a near death experience from a heart attack, and the receipt of an 'unusual gift' like second sight: 'I have been psychic all my life, but I have kept it under and never told anyone about it'.<sup>30</sup>

While the *Hereford Times* loyally reckoned *The Old Straight Track* was 'A Rosetta Stone of Topography', the national press was sceptical. The *Times Literary Supplement* complained that the book's argument lost all direction, going down 'countless bypaths': 'It may inspire ramblers with new hobbies, but it is not a good example of a judicial mind'.<sup>31</sup> The review in *The Church Times* was the longest and most approving. The book might appeal to antiquarian vicars pleased to locate their churches in an ancient rural landscape, and Watkins had devoted a whole chapter to alignment thinking in the Old and New Testaments; in its emphasis on public access to enchanted landscape, the review bears the imprimatur of the paper's first lay editor, the socialist Anglo-Catholic Sidney Dark.<sup>32</sup> Watkins's influence on the visual arts was confined to the work of illustrator and devoted Churchman Donald Maxwell RA, author of *A Painter in Palestine: Being an Impromptu Pilgrimage in the Holy Land* (1921), and converted to the ley-line system by Watkins's field manual *The Ley Hunter's Companion*.<sup>33</sup> First issued as stories in *The Church Times* Maxwell's topographical detective tales were published as books in the early 1930s (fig.9). These represent a domestication of Watkins's vision by setting the pursuit of invisible roads in the home counties of Kent, Surrey and Sussex and by their claim that archaeological revelation was as homely as those other British scientific discoveries, of gravitation in an orchard and steam power in a kitchen; it was a discovery 'made by a man who was going for a walk'.<sup>34</sup>

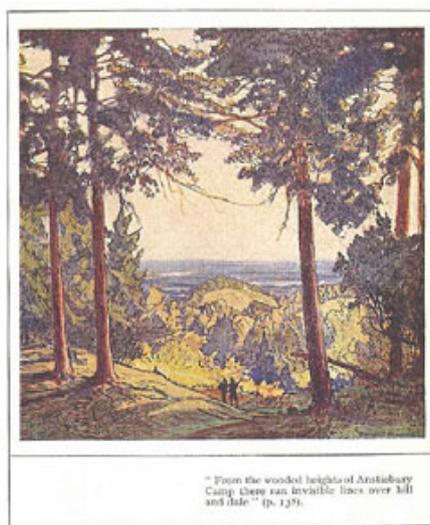


Fig.9  
'From the wooded heights of Anstiebury Camp there ran invisible lines over hill and dale'  
Frontispiece of Donald Maxwell, *A Detective in Surrey*, 1932  
[enlarge](#)

The most hostile reception of Watkins's theory, because it trespassed on his territory of archaeological knowledge, came in the work of O.G.S. Crawford. In 1923, in his new post as archaeology officer of the Ordnance Survey, Crawford had his own spectacular revelation of ancient landscape. Looking at some negatives of practice photographic surveys taken by military pilots over Salisbury Plain, Crawford saw faint lines of an avenue leading away from Stonehenge. The photograph was published in the *Illustrated London News* and the existence of the avenue confirmed by excavation later in the year.<sup>35</sup> As well as referencing Crawford's cartographic based work in Kent, Watkins had clearly read about the Stonehenge discovery, for he reckoned aerial photography would help substantiate ley-line theory, but Crawford was intent on repudiating it.

Crawford founded *Antiquity* in 1927 as a new kind of publication between a learned journal and the popular press to publicise serious research and scholarship, with high production values, classy typography, accessible writing and high quality illustrations, especially aerial photography. *Antiquity* particularly appealed to a literary and artistic audience, inspiring modern-minded artists with a taste for the primordial Britain,

notably [John Piper](#) and [Paul Nash](#).<sup>36</sup> In the first editorial Crawford noted that archaeology was ‘emerging from the archaic stage, and we are able at last to see single facts in relation to an organic whole, the history of Man’. ‘We shall keep our readers informed about important discovered made and books published; and we shall warn them about mare’s nests. Many so called discoveries are nothing but newspaper "stunts"; many best-sellers are written by quacks. Such books are ignored by the learned world’.<sup>37</sup> Crawford refused to accept an advert from Methuen for *The Old Straight Track*, now in its second edition, and exposed Watkins work where he could without giving him the credit of naming him.

Aerial archaeology was valued precisely for its modern, moneyed glamour, carrying the subject away from the control of old men like Watkins, the very figure of the antiquarian. Crawford was in his thirties, Piggott early twenties, as were Piper and Nash. Crawford was financially supported in civilian archaeology by Alexander Keiller (also in his thirties) who enjoyed a substantial private income from the family marmalade business. Their jointly authored *Wessex from the Air* (1928) is much more conscious of the heritage of archaeology than anything in Watkins’s works. One photograph of the Stonehenge Avenue (fig.10) also reveals in the form of a large white spot, surrounded by a darker band, a round barrow opened by the eighteenth-century Wiltshire field antiquarian, Sir Richard Colt Hoare; it is as much about the archaeology of archaeology, and its role in regional identity, as about that of the landscape itself.<sup>38</sup> Despite Watkins’s hopes that it would confirm the ley system, aerial photography, in its planar style, flattening relief, offered a contrasting optic to the hill top, skyline views which envisioned the ley system.

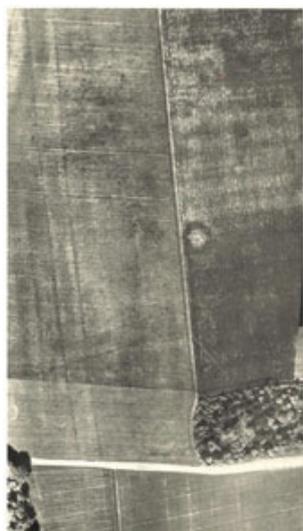


Fig.10  
*The Stonehenge Avenue*  
 Published in O.G.S. Crawford and Alexander Keiller, *Wessex from the Air*, Clarendon Press, Oxford  
 1928  
[enlarge](#)

## Dead men’s eyes

Perhaps the most vivid commentary on Watkins’s vision is in M.R. James’s ghost story *A View from a Hill*. First published in 1925, it is one of a series of ghost stories by this master of the genre concerned with archaeological research, with haunting and often horrific events produced by misplaced curiosity and overzealous investigation.<sup>39</sup> James’s principal career was as an antiquarian scholar and college administrator at Kings College, Cambridge and Eton, working on what he called ‘Christian archaeology’, library scholarship on books and manuscripts, notably on the apocryphal books of the Bible, rather than field work. He published for a popular as well as academic readership. As well as *A View from a Hill*, in 1925 he also published the handsomely illustrated guide book *Abbeys* for the Great Western Railway. The work for this took James into Herefordshire and involved site visits and collecting information from existing guides and articles in local history journals.

*A View from a Hill* concerns Fanshawe, a ‘man of academic pursuits’ from Cambridge or Oxford, tired of college and committee meetings, at the outset of the long vacation staying with a new friend, a squire living ‘in the depths of the country’. On the evening of his arrival he and his host take a walk up a hill which dominates the area. The squire points out various archaeological sites, old earthworks and a Roman villa, identified by one Baxter, an old watchmaker in the village who was also ‘a great antiquary’ and who died

fifteen years ago. The squire tells his guest that Baxter would shut up his shop for days at a time to ‘wander off over the district, marking down places, where he scented anything, on his ordnance map’. To the consternation of the man servant, they take a pair of unusually heavy binoculars which Baxter made himself. The squire points out various landmarks to be seen from the summit of the hill, notably a ruined abbey and clump of trees on neighbouring Gallows Hill. Through Baxter’s binoculars Fanshawe sees into the past, the abbey complete and a scene of hanging on Gallows Hill. After a nightmarish sleep in which he sensed ‘something had been let out which ought not to have been let out’, Fanshawe spends a morning perusing the transactions of the County Archaeological Society with many articles by Baxter on most eras of archaeology prehistoric, Roman and Christian, ‘written in an odd, pompous, half-educated style’, and in the afternoon rides his bicycle to Gallows Hill, an evidently haunted place whose spirits try to ensnare him. Baxter’s heavy binoculars are not, we are told, like modern light field glasses but more a form of camera, with their own development process, which draws on photography’s reputation as a spectral, ghost-producing technology. To cut a short story even shorter, it turns out that Baxter had excavated the bones of executed criminals, boiled and distilled them in a liquid which he sealed in the binoculars. Looking through ‘dead men’s eyes’ destroyed Baxter, as it was the spirits of the dead men in question who killed him.

## Notes

1. Alfred Watkins, *The Old Straight Track, its Mounds, Beacons, Moats, Sites and Mark Stones*, London 1925.
2. Originally published by Methuen & Co. Ltd., *The Old Straight Track* was republished as a Sago Press book by Garnstone Press, London, who also published *The View Over Atlantis*. I recall both books at the time, when, along with titles as various as Jeff Nuttall’s *Bomb Culture* and the *Tibetan Book of the Dead*, they formed part of the alternative paperback shelf in student flats and, around the small Scottish university town where I studied, in run down cottages where people got their heads together in the country.
3. Tom Williamson and Liz Bellamy, *Ley Lines in Question*, Kingswood, Tadworth, Surrey 1983.
4. Richard Long, *In Conversation Part Two*, Holland 1986, p.125. I am grateful to Joy Sleeman for this reference and the one following.
5. Michael Auping, ‘Tracking Fulton’, in *Hamish Fulton, Selected Walks 1969-1989*, exhibition catalogue, Buffalo 1990, p.12.
6. Nicholas Alfrey and Stephen Daniels eds., *Mapping the Landscape: Essays on Art and Cartography*, Nottingham 1990; Stephen Daniels and Charles Watkins, *The Picturesque Landscape: Visions of Georgian Herefordshire*, Nottingham 1994.
7. David Dumbleby, with essays by David Blayney Brown, Richard Humphreys, Christine Riding, *A Picture of Britain*, London 2005. On representations of the past see Brian Leigh Molyneaux ed., *The Cultural Life of Images: Visual Representation in Archaeology*, London 2000; Sam Smiles and Stephanie Moser eds., *Envisioning the Past: Archaeology and the Image*, Oxford 2005 (an abbreviated version of a chapter in this book is available on line in [Tate Papers, Sam Smiles, ‘Thomas Guest and Paul Nash in Wiltshire: Two Episodes in the Artistic Approach to British Antiquity’](#)).
8. On photographic survey see Elizabeth Edwards, ‘Commemorating a National Past: The National Photographic Record Association, 1897–1910’, *Journal of Victorian Culture* vol.10, no.1, 2005, pp.123–31. On survey and educated access more generally see David Matless, *Landscape and Englishness*, London 1998.
9. Ron Shoesmith, *Alfred Watkins, A Herefordshire Man*, Little Logaston Woonton Almeley, Herefordshire 1990.
10. *Ibid*, pp.57–70.
11. ‘Notes on the Industrial Side of Photography in Birmingham’, *The Photogram*, vol.77, no.77, May 1900, notes. My thanks to Pete James for this reference.
12. Alfred Watkins, *Photography, its Principles and Applications*, London 1911, pp.v, 1, 17, 32, 321–5, 264–79.
13. Shoesmith, 1990, pp.71–106.
14. Chapman, *Hereford, Herefordshire and the Wye*, Hereford 1882, pp.45, 47, 76. On ink photos see Geoffrey Wakeman, *Victorian Book Illustration: The Technical Revolution*, Newton Abbott, 1973, pp.142–3.

On the picturesque in Herefordshire see Daniels and Watkins, 1994 and Stephen Daniels, Charles Watkins and Susanne Seymour, 'Border Country: The Politics of the Picturesque in the Middle Wye Valley', in Christiana Payne, Michael Rosenthal and Scott Wilcox eds., *Prospects for the Nation: Recent Essays in British Landscape 1750–1880*, London and New Haven 1997, pp.157–82.

15. Alfred Watkins, 'A Summer Among the Dovecotes', *English Illustrated Magazine*, 1892, pp. 45–53. On Gere and New see Simon Houfe, *The Dictionary of British Book Illustrators and Caricaturists 1800–1914*, London, 1978, pp.315, 399.
16. Shoesmith, 1990, pp.107–122.
17. Report on Autumn Meeting, Paper on 'Early British Trackways, Moats, Mounds, Camps, and Sites' by Alfred Watkins FRPS, *Transactions of the Woolhope Naturalists Field Club*, 1921, pp.32–4.
18. Alfred Watkins, *Early British Trackways, Moats, Mounds, Camps, and Sites* Hereford, 1922.
19. Adam Stout, *Choosing a Past: The Politics of Prehistory in Pre-War Britain*, unpublished PhD thesis, University of Wales, Lampeter 2004, pp.191–3.
20. Watkins, 1922, p.34.
21. Ian Jeffrey, *Photography, A Concise History*, London 1981, pp.102–4; Anne Hammon, 'The Soul of Architecture', in Anne Hammond ed., *Frederick H. Evans: Selected Texts and Bibliography*, Oxford 1992, pp.1–33; Clive Scott, Frederick Evans: 'Photography as Mediation', *Journal of European Studies*, vol.30, no.1, pp.35–56.
22. Nigel Pennick and Paul Devereux, *Lines on the Landscape: Leys and other Linear Enigmas*, London 1989. L.V. Grinsell, 'Alfred Watkins and *The Old Straight Track*', *Transactions of the Woolhope Club*, vol. XLVI, 1988–90, pp.76–81.
23. Crawford, *Man and His Past*, Oxford 1921, especially chapters 14 and 15.
24. On the civil vision of free trade see Frank Trentmann, 'National Identity and Consumer Politics: Free Trade and Tariff Reform', in Donald Winch and Patrick O'Brien eds., *The Political Economy of British Historical Experience, 1688–1914*, Oxford 2002, pp.215–44.
25. Bill Luckin, *Questions of Power: Electricity and Environment in Inter-war Britain*, Manchester 1990, p.17.
26. Daniels, Seymour and Watkins, 1997. Tim Barringer, 'Music and Vision: Landscape, History and Empire in Elgar's *Caractacus*', paper given at AHRC framework seminar 'Land, Air and Water', University of Nottingham, 2 July 2006.
27. Shoesmith, 1990, p.28.
28. Stout, 2004, pp.203–30.
29. Shoesmith, 1990, pp.128–31.
30. Allen Watkins, *Alfred Watkins of Hereford*, London 1972, p.30.
31. Alfred Watkins News Cuttings, Herefordshire Archives, M90/2.
32. Stout, 2004.
33. Michael Finch, *Donald Maxwell*, Kendal 1995, pp.175–6, 201–5.
34. Donald Maxwell, *A Detective in Surrey: Landscape Clues to Invisible Roads*, London 1932.
35. Kitty Hauser, 'Fertile Images', in Melanie Keen and Eileen Daley eds., *Necessary Journeys*, London 2005, pp.34–7.
36. Kitty Hauser, 'Photography and the Archaeological Imagination: Britain c.1927–1951', D.Phil thesis, University of Oxford 2003, pp.116–60.
37. Editorial Notes, *Antiquity*, vol.1, no.1, 1927, pp.1–4.
38. Crawford and Alexander Keiller, *Wessex from the Air*, Oxford 1928, p. 222.
39. First published in *The London Mercury*, May 1925 pp.17–30. The Herefordshire setting was identified by James in the preface to his *Collected Ghost Stories* and the Watkins connection first noted in Rosemary and Darroll Parodoe, 'The Herefordshire of a "A View from a Hill"', *The Ghosts and Scholars M.R. James Newsletter*, Issue 6, September 2004.

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