

archaeologists/guides often received after the tours described earlier, and the results of our surveys of visitor reaction, our illustrations of archaeological reasoning seem to have been communicated to people. Some did go away knowing archaeological method: not what we know about another time, but how we know it. So far, the community and its visitors have responded enthusiastically to this way of returning their past.

Our method of reaching the public was chosen in the absence, as yet, of any clear archaeological interpretation of early Annapolis. Clearly, that content is appropriate for a tour when it becomes available. Also, given that critical theory is a method for situating self and society and produces only momentary piecings of reality, a critical analysis must be ongoing. This will ensure that the picture of the action of modern ideology, which we can provide through illustrating archaeological method, will not be reabsorbed by the very ideology we are trying to highlight.

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LEY LINES: SENSE AND NONSENSE ON THE FRINGE

Tom Williamson and Liz Bellamy

A 1972 Antiquity editorial referred to ley hunters as belonging to:

the world of New Diffusionists, Black Horses, pyramidiot, straight trackers and the rest of them, the world which every student of antiquity recognises, with an embarrassed smile, as a danger only to those whose weak and muddled heads prefer the comforts of unreason to the difficult facts of archaeology. (Daniel 1972:4)

On the other hand, the ley hunter Paul Screeton wrote of archaeology in his classic text Quicksilver Heritage:

we would not take kindly to being associated with a study whose foundations are the plunder of tumuli, the amassing and categorisation of broken pottery and implements, and the scratching away of soil with incredible patience. (Screeton 1974:25)

It is thus that archaeologists and believers in ley lines have tended to discuss their differences. In a recent article in Popular Archaeology, however, Aubrey Burl attempted a more rational discussion of ley theory (Burl and Michell 1983) and this followed R. G. Atkinson's brave article in the Ley Hunter itself (Atkinson 1981). It can only be hoped that these indicate a new trend in archaeology, and a more serious consideration of its fringe. This would be a salutary change, for, prior to the publication of these articles, communication between the two camps was conducted at the level of sporadic exchanges of vituperation. These served only as brief interruptions in the war of silence in which each side tried to ignore the other and rejected any attempt at compromise. This has been so effective that it may be necessary to inform many readers of the nature of ley theory and to give a brief account of the history of the subject.

It first developed in the 1920s, the brainchild of one Alfred Watkins, prominent amateur archaeologist and pioneer archaeological photographer. He outlined his theories in a number of books, the most famous and comprehensive of which is The Old Straight Track (Watkins 1925). This is subtitled 'Its Mounds, Beacons, Moats, Sites and Markstones', and Watkin's thesis is based on the notion that these and other ancient features appear to be in alignment more often than chance would predict. Watkins believed that the alignments, which he named leys, represented

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ancient tracks, originally surveyed in the Neolithic period. They were straight because people were able to move from A to B in a dead straight line, prior to the development of private property and the resultant division of land. Neolithic inhabitants fixed their sights on some prominent distant feature, such as a peak or a notch in the hills, and walked straight towards it, using the mounds and stones for additional guidance.

In The Old Straight Track, and in his subsequent work The Ley Hunter's Companion (Watkins 1925; 1927), Watkins elaborated the methodology of ley hunting in his characteristically clear and straightforward style. Ley hunting involves taking an Ordnance Survey map and a pencil, and drawing straight lines through a variety of ancient features. The aligning features include not only those placed to mark the track, and the settlements and meeting places along it, but also large numbers of structures which are conventionally considered to date from the medieval period or later. Watkins justified the inclusion of these by the doctrine of 'site evolution'. This suggests that although the features date from long after the Neolithic period, they stand, for a variety of reasons, on sites which had been of significance at that time. The ubiquity of medieval churches, for example, was explained by the argument that these generally occupied sites which had been in continuous religious use since the Neolithic.

Map work, however, indicates only the possible existence of a ley line, and this must be followed by fieldwork. This consists of the search for additional 'mark points' not noted by the Ordnance Survey. The most important of these are features not normally considered by archaeologists to be of any great antiquity. Watkins observed that Scots Pine trees were often found on ley lines, and he therefore deduced that these were the descendants of trees originally planted to mark the ley. Ponds were thought to have been constructed for the same purpose, and, most important of all, 'mark stones' had been erected. These are small stones which are generally considered by archaeologists to be an unconvincing amalgam of natural, medieval and post-medieval features such as rubbing posts and glacial erratics. In addition, Watkins found confirmation for the existence of leys in English folklore and in place-names. The name 'ley' is thus derived from the frequency with which settlements with names containing this element occurred on the alignments.

For some years after its initial inception, the subject received considerable attention, and in 1928 the Straight Track Club was formed. This was a genteel organisation in which groups of ladies and gentlemen visited notable ley lines, had picnics, and posed for Watkins' photographs. New information on the subject, and accounts of new leys, were disseminated by a system of postal portfolios. The club survived until the second war, when the subject seems to have died away, and it was not until

the 1960s that there was a resurgence of popular interest. This was closely associated with the development of the 'alternative culture' of the late 1960s, with its rejection of established standards, established attitudes, and even established knowledge. The climate of thought that encouraged the revival of ley theory, also profoundly changed its nature: the original utilitarian interpretation was replaced by one more 'spiritual' and esoteric.

Present theories are essentially a direct development of those first advanced by John Michell (Michell 1969) and are based on the notion that the alignments mark lines of power, along which passed the 'earth energy'. This energy was transmitted across the English countryside along lines of megaliths and was stored and accumulated in various kinds of earthworks. The mathematical and astronomical expertise being discovered by Thom and others at around the same time was seized on as 'proof' that the early inhabitants of these islands were capable of surveying the ley network (Hitching 1976). In turn, the theories of ley hunters provided a utilitarian explanation for the newly discovered 'megalithic science'. It was suggested that phenomena such as eclipses produced surges and variations in the flow of the earth current and that observations were necessary to predict their occurrence. Ley hunters also identified connections between leys, UFOs, and a variety of paranormal phenomena, all of which appear to occur regularly on (or above) the alignments.

Many prominent ley theorists associate leys with a notion of a Neolithic Golden Age of peace and plenty. In this society of free, peace-loving equals, the 'earth energy' was used to ensure fertility and health. Some have argued that the Neolithic inhabitants of Britain were able to produce three harvests a year (Screeton 1974), while more extreme ideas involve the use of the energy for levitation and astral projection. Yet the subject encompasses a range of opinions, some of which are by no means bizarre. There are many who simply believe in leys because they feel that the statistical evidence for their existence is good. Some suggest that the alignments could have been 'ritual' constructions quite unrelated to undiscovered forms of natural energy. Others argue that the earth energy could be dimly perceived and used to determine the locations in which certain 'ritual' structures were built, but that it was of no practical use. At these levels, believers are a group by no means wholly divorced from orthodox archaeology. Evan Hadingham has written:

It would be unusual to go to any current archaeological dig and not find a surprisingly large group of people dedicated to discovering and discussing the secret force fields of ancient monuments. (Hadingham 1975:228)

This may be something of an overstatement, but more than one

professional archaeologist in Britain has entered the orthodox study of the past through an interest in leys. The same, no doubt, has happened in the case of numerous amateurs. The fringe road to archaeology is a well-trodden track.

It therefore seems something of an oversimplification to dismiss ley theory as a mere tissue of lies, supported only by "weak and muddled heads". There are at present some 20 books in print primarily devoted to the subject. What, if anything, can be learned from the popularity of a subject which all professional and academic archaeologists castigate as worthless?

One of the attractions of the subject is undoubtedly the notion of 'the layman's revenge' - the understandable thrill of being able to prove the 'experts', the ivory tower academics, to be wrong at their own game. Paul Sreeton writes:

Academics are unable to see the wider implications of the researches we amateurs have undertaken. Somehow they cannot, or will not, accept leys. They do not fit into their narrow concept of the past, and so cannot be incorporated. (Sreeton 1974:25)

Yet there are deeper and more important reasons for the subject's appeal. Ley hunting involves both map and fieldwork, and both stages of the process are open to anyone. Although more sophisticated ley hunters use large scale maps and surveying equipment (Devereux and Thompson 1979), it is quite possible to make important discoveries using only a 1:50,000 Ordnance Survey map, a sharp pencil, and a ruler. There are thus no serious financial limitations on the participation of an enthusiast. Furthermore, it is unlikely that novices will have to put up with long periods of waiting before any results are forthcoming from their researches. Since most ley hunters agree that an alignment of five points should provide a good indication of a ley, it is possible for the complete beginner to discover a promising line within a few minutes. The subsequent search for Scots Pines, ponds and 'markstones' likewise requires limited specialist knowledge.

Moreover, having completed their map and fieldwork, all ley hunters can participate in the theoretical side of the subject. Everyone seems welcome to speculate on the origins and purpose of the alignments, and they stand a good chance of having their 'discoveries' published. In the world of the fringe, there is no real dichotomy between the 'experts' and 'amateurs'. Ley hunters have achieved a true democratisation of knowledge, albeit of knowledge which is more or less worthless.

Fieldwork has a vital importance to all serious ley hunters, for in the discovery of long-lost 'mark points' they feel

that they are making contact with the remote past. Prehistory is thus made tangible and immediate through a physical search. Their enthusiasm for this aspect of the study, and the overall support given to ley hunting, perhaps confirms what is suggested by the popularity of orthodox subjects like local history or landscape studies. People do not want to feel that the past is dead and remote - something to be read about in libraries and looked at in museums. They prefer to identify it as something tangible in the present, in the landscape all around them, and they are powerfully attracted by the possibility of being able to discover and recognise it for themselves.

For many ley hunters, however, the features they discover are invested with more than a merely antiquarian interest. They believe that they represent the relics of a prehistoric spiritual science, created by a society very different from anything documented in the historic or ethnographic record. This society was one which was superior to ours, both ecologically and 'spiritually'. Its technology was based on the utilisation of the earth's natural energy paths, in contrast to our own dangerous and polluting energy sources. The relics of the system therefore have a direct relevance to modern society, for they provide evidence of a past society against which the achievements of the present can be judged. Ley hunters contrast this with an academic archaeology which they either feel has no relevance at all, or regard as an implicit justification for the social, economic and ecological status quo. They believe that conventional archaeology does no more than present a primitive and barbarous past against which the achievements of the present can be favourably compared.

Archaeologists ought to be aware of the nature of ley theories, for they demonstrate how a large number of interested and intelligent people view the past. There is clearly something appealing about a subject which both encourages a belief in the antiquity of the landscape and gives the study of the remote past a direct relevance to the present. Some of the appeal must also lie in the organisation of ley studies, for there is indeed much justification in the ley hunters' boast that all are welcome to contribute (Sreeton 1974). It is possible that archaeology might profit from looking at, and perhaps emulating, some of these more impressive aspects of the ley hunters' approach. In some cases this would obviously be impossible. The myth of a golden age, for example, is an intrinsic part of our cultural heritage, rooted in the Biblical and classical traditions. Appeals and references to it occur in many forms of English literature, from pastoral poetry to the prose writings of Adam Smith, Carlyle and Cobbett. It is a potent poetic and political myth and a natural perspective for a critique of the present, but it is hardly a useful perspective for a scientific study of the past (Williamson and Bellamy, in press).

Nor can archaeology by definition exploit the understandable attraction of the 'layman's revenge'. Yet the ley hunters' claims that the study of the past is in some way relevant to the present, that it is more than a sterile intellectual pursuit, and that all should be allowed to contribute, are points which could perhaps be profitably learned by some archaeologists.

Yet there are other reasons why archaeologists should be aware of these and other fringe beliefs, for it is only by having some knowledge of them that they can be effectively contested when encountered. The concept of leys is now quite deeply rooted in our popular culture. 'The Old Straight Track' is an image which occurs in contemporary music and in literature from the poems of Auden to the children's books of Alan Garner (Garner 1963). Ley lines crop up in many works concerned with the paranormal (Wilson 1981), and they even appear in a modern report on exorcism convened by the Bishop of Exeter (Petitpierre 1972). The subject may seem to the majority of practising archaeologists like patent lunacy, but it is clearly not lunatic enough to prevent articles by prominent ley thinkers from appearing in the New Scientist (Robins 1982; Devereux and Forest 1982).

Even archaeology has not been immune from its influence, and this perhaps serves as a reminder that the subject is rather more intimately connected with the totality of contemporary society than many academics seem prepared to admit. Elements of ley theory appear in a number of otherwise useful and popular archaeology books (Hunter et al. 1976; Childe 1982), and there is good evidence that Watkins has been a major influence on the development of astro-archaeology - in particular on the work of Thom (Williamson and Bellamy, in press).

In such a situation, archaeologists are clearly failing in their duty if they allow a sizeable proportion of the general public to believe in a theory which they themselves dismiss as lunacy. It seems strange that they should not attempt to mount a more sustained campaign against such erroneous and time-wasting theories, for it is supposed to be their job to provide the public (and not just the amateur archaeological public) with knowledge about the past.

With the honourable exceptions already mentioned, the normal response to ley theory by the archaeological establishment has been silence, ridicule, or misrepresentation (Crawford 1953). When more serious discussion has taken place, archaeologists have tended to dismiss the theory not with informed criticism but on the basis of ill-informed prejudice. Traditionally, they have denied that ley lines could have existed because 'primitive' peoples lacked both the desire and the ability to construct them. The creation of the ley network would have necessitated an almost fanatical interest in the construction of long, straight align-

ments or pathways. Yet the discovery in the Andes of long, dead straight ritual pathways, up to 25km long and connecting a range of features very similar to the 'mark points' on leys, serves to defeat the argument that the concept of leys is not possible (Morrison 1978). This is one of many cases in which ley hunters have been right for the wrong reasons or anticipated significant developments in conventional archaeology. In the 1930s, Watkins was arguing that prehistoric Britain was densely settled and extensively cleared. This assertion was based on the doctrine of 'site evolution' and on the practicalities of long-distance sighting, and he dismissed as 'glib' the suggestion that the country was mainly covered in trees. The advances in landscape archaeology over the last two decades have shown that in this it was Watkins who was correct, rather than those who ridiculed his views at the time. Small wonder that to many people the arguments of the ley hunters seem plausible and the archaeological response unfair and inadequate.

It seems imperative that archaeologists follow the lead taken by Burl and Atkinson and give more consideration to the theories of the 'fringe'. It almost seems as if some academics believe in two levels of knowledge: 'truth' for an educated elite and 'lunacy' for the masses. Many do not seem to care that sane and intelligent people are prepared to waste time and effort plotting meaningless lines on Ordnance Survey maps, even though some of these are diligent and conscientious fieldworkers of great potential value to conventional studies of the past.

It may be because ley hunting and associated fringe approaches are not a direct danger to our data base, in the way that treasure hunting may be, that archaeologists feel that they can be safely ignored (indeed, ley hunters castigate archaeologists for their destruction of the 'ingenious structures' of prehistory). We would suggest that this is a short-sighted view. The popularity of all the alternative approaches to the past, from ley hunting to treasure hunting, should not be viewed as entirely disparate phenomena. They can be profitably viewed together as a kind of popular repossession of the past. The acceptance and proliferation of such alternative interpretations could ultimately pose a very serious threat to the authority of conventional archaeology. This could have alarming consequences; for archaeology, of course, is uniquely dependent on the good will of the general public. Not only does it depend on them for its finance but also for the protection of its evidence, which can only be preserved by common consent.

The reasons for the general popularity of alternative approaches to the past cannot be debated here, but the lessons to be learned from an examination of ley hunting are clear. The strongly defined professional stance of archaeology should not be allowed to lead to any further diminution in the status of the

non-professional worker, historically the mainstay of the subject in this country. Those with an interest in the past should on no account be made to feel excluded from its orthodox study, and this is especially true at a time when spiralling unemployment is leading to increased leisure.

At the same time, archaeology must be seen to be relevant to the wider issues of society. This is not just a case of the subject's aims but also of the communication of these to the general public. The ley hunters' description of archaeologists as being involved in a kind of boring and methodical treasure hunt, irrelevant and inward-looking, may indicate the way in which many people see our discipline. It seems strange that the popularisation of archaeology is so often done in terms of objects and artefacts rather than interesting and useful knowledge. Strange, too, that little attempt is made to explain the developments in method and theory in the subject over the last two decades at a popular level. The lessons to be drawn from ley hunting are that if archaeology fails to stress the immanence and relevance of the past, and to encourage popular participation at every level, then in a nominally free society others will always be ready to fill the void.

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STONEHENGE, GENERAL PITT-RIVERS, AND THE FIRST ANCIENT MONUMENTS ACT

Christopher Chippindale

When Sir John Lubbock began, in 1870, to prepare legislation to protect prehistoric and other ancient sites, he had in mind their defence against careless destruction by their owners for the sake of some trivial advantage. The Jockey Club, for instance, had during the 1860s mutilated the Devil's Dyke where it runs across Newmarket Heath because scouts and tipsters had been using it to sneak views of the racehorses in training. A century later, that kind of damage by landowners -- whether less or more accidental -- continues. A more contemporary threat is the one that follows from the overwhelming response of a well-educated, well-meaning and interested public. No aspect of the heritage is immune. Historic houses and, especially, gardens take a fearful onslaught. The main tracks up Snowdon are only prevented from degradation into broad stony swathes by a programme of restoration and repair. Hadrian's Wall has suffered badly, and so have the more famous Wessex sites. The access paths to Wayland's Smithy and West Kennet chambered barrows are pounded mud all the year round, liquid or dried as the season falls. At Avebury, the ends of the bank segments, the favourite places to scramble up, are losing their grass cover. The path up Silbury Hill has been so eroded that the Hill is now permanently closed and must be viewed from a distance.

The damage is usually very local, for the tourist is an unusually gregarious creature. The only other visitors you see at the barrow-groups only half a mile from Stonehenge will, most likely, be archaeology students on a university field-trip. Where the millions of eager feet do tread, the damage can be appalling, both directly (through erosion of paths and grass cover) and indirectly (through the damage caused to the attraction itself by the facilities provided there). Land's End has been a notorious case in this respect. Some kinds of archaeological sites, such as the Palaeolithic painted caves, cannot begin to bear the numbers; and for most of these, not just for Lascaux, a presentation to the non-specialist public through the medium of an entirely artificial replica must be the answer.

Stonehenge, the most famous archaeological site in Europe, is naturally as much under siege as any; and the cumulative effect of individually well-intentioned and sensible decisions over the last 50 years has left it with among the worst of all possible worlds. The lavatory arrangements contrive to be both intrusive and inadequate. The car-park is very close but, since the pressure of numbers has forced the closure of the central sarsen building, the Stonehenge everybody knows (at least in silhouette) and wants to see, has nevertheless to be observed