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Revista d'Arqueologia de Ponent
nº 30 2020
Pàgs. 101-125

DOI 10.21001/rap.2020.30.5
Universitat de Lleida
ISSN: 1131-883-X
ISSN electrònic: 2385-4723
www.rap.udl.cat

Some Aspects of the Collection-Driven Exploitation of the Archaeological Record in England and Wales

Algunos aspectos de la explotación impulsada por el coleccionismo de los registros arqueológicos en Inglaterra y Gales

This paper addresses some issues relating to collection-driven exploitation of the archaeological record (artefact hunting) in England and Wales. It looks at who the collectors involved are and why they do it, how they go about finding and searching sites for collectables, and what they do with them. A brief overview of the UK online trade in dug-up antiquities is also given, and the response of British archaeology to the phenomenon. The effects of the introduction of new legislation (the 1996 'Treasure Act') together with a dedicated and centralised recording scheme for finds made by the public are discussed. The relationship between collecting and archaeological research, together with archaeological attitudes towards collectors are also explored, in particular the issue of the degree to which the recording of material voluntarily reported by artefact hunters creates useful archaeological data. It is shown that the manner by which this information has been collected severely limits its use for many archaeological purposes.

Keywords: Antiquities trade, archaeology, artefact hunting, metal detectors, portable antiquities, Portable Antiquities Scheme.

Este artículo aborda algunas cuestiones relacionadas con la explotación del registro arqueológico impulsada por la búsqueda de restos arqueológicos en Inglaterra y Gales. Se examina quiénes son los coleccionistas involucrados y por qué lo hacen, cómo van a encontrar y buscar yacimientos con el fin de recuperar objetos, y qué hacen con ellos. También se ofrece una breve perspectiva general del comercio en línea de antigüedades desenterradas en el Reino Unido y la respuesta de la arqueología británica al fenómeno. Se discuten los efectos de la introducción de una nueva legislación (la "Treasure Act" de 1996) junto con un plan de registro específico y centralizado para los hallazgos hechos por el público. También se explora la relación entre la búsqueda de restos arqueológicos y la investigación arqueológica, junto con las actitudes arqueológicas hacia los coleccionistas, en particular la cuestión del grado en que el registro del material notificado voluntariamente por los cazadores de antigüedades proporciona datos arqueológicos útiles. Se ha demostrado que la forma en que se ha reunido esta información limita severamente su uso para muchos fines arqueológicos.

Palabras clave: comercio de antigüedades, arqueología, búsqueda de restos arqueológicos, detectores de metales, antigüedades muebles, Portable Antiquities Scheme.

Introduction

This paper attempts to present a summary overview of some aspects of the Collection-Driven Exploitation of the Archaeological Record (artefact hunting and collecting) in England and Wales and in particular addresses the conflict that has arisen between these activities and the need to preserve the archaeological record from damage and destruction. This entails also a discussion of the means adopted to deal with this conflict through forming a 'partnership' scheme to record archaeological material in private hands (the Portable Antiquities Scheme – PAS), and the degree to which this mitigates the damage caused. This presentation draws on many sources but is largely based on the author's own close observation (since the late 1970s) of the artefact hunting milieu and the archaeological response to its activities and in particular more intensive scrutiny by means of using for this purpose the social media associated with collecting over the last twenty years (a form of 'netnography', Kozinets 2002).

The United Kingdom has a very rich archaeological heritage and long traditions of preserving and studying it, but differs from the majority of the countries of Continental Europe in, through historical accident, having a system of heritage legislation that allows the private collection of archaeological artefacts, and the practice of exploiting those archaeological sites that are not covered by specific protective measures as a source for them. This means there are no restrictions on collection-driven exploitation of the majority of known (and yet unknown) archaeological sites in the country. In most areas of the UK, all that is required for artefact hunters to exploit such sites for personal entertainment or profit is to gain the permission of the landowner to enter the property and remove artefacts from the ground and gain legal title to them. Within the UK, there are differences in the manner how these finds can be treated. In Scotland, the local Treasure Trove laws mean that all finders of archaeological artefacts are required to report everything that they find. In Northern Ireland, all artefact hunting is conducted under licence, again with compulsory reporting.

In England and Wales (151,149 km^2), however, the law about ownership and handling of archaeological finds is comparatively liberal. Under the 1996 Treasure Act (Bland *et al.* 2017: 108-10), only a limited range of categories of find that are over 300 years old (considered "Treasure" by the law) have to be reported to a local coroner, and if it is decided in an official inquest that they are Treasure, the objects can be acquired by a public collection and the finder and landowner get financial recompensation at market value determined by the Treasure Valuation Committee (which has to be raised by the acquiring institution). If no public institution wants these objects, or cannot raise the money, the object is returned to the landowner and finder to use as they see fit. Most often, the object is sold to collectors on the antiquities market and the profit split 50:50.

Under the current legislation of England and Wales, finders of objects that do not fall into the narrow definition of "Treasure" can basically do with them what they want. For the past 20 years, there has been a centrally-coordinated "Portable Antiquities Scheme" (PAS) based in regional centres in England and Wales, that aims to record archaeological objects found and voluntarily shown to its staff by members of the public, including by metal detector users, so that a record can be made on its online database of objects that would otherwise be lost without trace. This is discussed in more detail below.

The history of private collecting of archaeological objects

The collecting of prestigious antiquities at the "high end" of the market had been going on in the UK as part of the art trade since the Grand Tour in the 18th and 19th centuries. This was a niche activity for most of the nineteenth and early twentieth centuries, indeed, there was a decline in interest in the period of modernism of the 1930s and 1940s (see Rosenstein 2009: 150-1). As the people of Britain became wealthier and left behind post-War austerity, and at the same time began to face an increasingly uncertain and alienating future, from about 1960, there seems to have been an increase in interest in collecting historical objects (Ibid.). At first — with the exception of ancient coins — archaeological objects were not popular as collectables, they were in short supply (from splitting of old collections and falling numbers of chance finds from increasingly mechanised agricultural and building operations) and therefore relatively expensive and hard to obtain. There were relatively few collectors and few specialist dealers in such material, operating from brick-and-mortar shops or by mailing lists.

It was only in the 1960s and 1970s that hobbyists began to go out in the British countryside looking for historical collectables for personal entertainment and profit on a large scale. While the collection by small numbers of amateurs of lithic artefacts found on the surface by chance or searching had had a long tradition in several regions of Britain (especially on the Chalklands, Breckland and Lincolnshire Wolds), this seems to have declined in popularity in the 1950s. In the mid to late 1960s, in the sudden expansion of interest in antiques generally, three types of artefact hunting started to gain prominence; the first two of them seem to have spread from the USA. The first was the digging of Victorian and Edwardian rubbish dumps for vintage bottles (and other objects). Bottle digging reached a peak in popularity in Britain c. 1972-77, but then declined fairly rapidly 1976-1985. It is not clear why there was this decline in interest (perhaps this in part was due merely to a change in fashion, but another factor might have been due to the reserves of easily accessible bottle dumps becoming exhausted by this time). The second type of searching (initially called "treasure hunting"), was the use of metal detectors to hunt for buried ancient and historical objects, and this hobby was to remain popular much longer. Numbers of metal detector users seem to have started to rise fairly rapidly after 1981 (see below). A third niche hobby that began growing

in the late 1970s was "mudlarking", the searching of the finds-rich deposits in the foreshore of urban sites like London, and amassing collections of artefacts like that (Sandling 2018; Maiklem 2019).

It was the rise of the hobby of artefact hunting with metal detectors in particular that allowed increasing numbers of people access to collectable (and saleable) objects from the past. This was the context of increased discussion and the creation of new laws and policies on portable antiquities in the 1980s and 1990s. From the mid 1990s, there was also a gradually increasing growth of the market for collectable portable antiquities through the Internet, which is an integral part of the international trade in portable antiquities.

The attraction of artefact hunting

It may be observed that there are today many thousands of people in the UK that have private collections of archaeological artefacts, and artefacts found in Britain are also exported for collection in other countries (such as the USA). The reasons for this are fairly complex (See Rosenstein 2008; Sawaged 1999). In western society there is a great interest invested in the past, in that it is seen as in some way being part of our own (individual and collective) identity. From a collector's point of view, apart from their "timelessness" (contrasting with our own personal mortality and temporal anonymity) these man-made objects, memorial parts of vanished lives, have endured over time, they thus carry some of the (abstract) past into our present in material form. Through their historical and cultural associations, they attain the status of fetishes that have an ability to evoke a "connection" with distant, idealised and exotic times, they have a story to tell. Archaeological collectables have aesthetic qualities (a "patina"), a specific uniqueness ("no two are alike") and can act as status-enhancing trophies, as well as having a financial value as a commodity that can be monetised by selling them to other collectors. Thus owning a 'piece of the past' has wide appeal.

It is instructive to read how British artefact hunters justify what they are doing. Most often this consists of generalised statements that the collecting of artefacts is a way of "learning about the past" that is the opposite of school learning. The ethos is well summed up in an "Introduction to Metal Detecting" (NCMD, nd):

> Did you find the subject of history tediously uninteresting when you were at school? Were you bored to tears when being made to learn about our past from chalkboards and textbooks? […] Perhaps, on the other hand, visits to […] museums ignited some spark of interest in our past but left you feeling somewhat frustrated. You felt an overwhelming desire to touch the artefacts and coins that were once the everyday items of use by our ancestors, but those glass barriers denied you the privilege of making that physical contact with the past. […] Until about three decades ago, that privilege was reserved for the lucky few such as archaeologists, museum staff, historians, and scholars. […] Only then would a select few of these treasures be put on display for the public to admire. Towards the end of the 1960s, however, new technology appeared that would change that system and grant the privilege of handling old or ancient finds to the mainstream public. The hobby of metal detecting had been born.

Two aspects of this text are notable. The first is how the rhetoric about collecting of archaeological objects is shifted from the conservation aspect to one of access, and from privileged contact with a fragile and finite resource to one of collectors' rights. Secondly, we may note the manner in which the emphasis is on the sensual perception of the past, through touching it, holding items representing it in one's own hands. Another account (Anon 2017) gives several motivations for artefact hunting, it is "more than a hobby, it's a way of life":

> Metal detecting has many benefits other than perhaps one day discovering a hoard of coins. It is […] a great way to keep fit, make some extra money, meet friends and unearth the history beneath our feet. […] While out with your metal detector you are learning, learning about the history of our ancestors and their cultures. You will gain knowledge on coinage, tools, jewellery and other items people used years ago. It's just part of the hobby taking home all of your finds, cleaning […] and then researching them. It's exciting to find out what it is you have found, where it was from, who used it and why!

In order to identify and contextualise their finds, artefact hunters may use existing manuals written for collectors, or even archaeological literature. Occasionally, individual artefact hunters may even become expert in particular groups or types of material (such as buckles, fibulae, buttons or coins) and write a book themselves on the basis of what they have learnt from their collecting activity. But in most cases, there is no written legacy and these personal "insights" into the past — and the collections on which they are based, die with the collector.

Although the hobby was initially labelled in a reputation-damaging manner "treasure hunting", it was later rebranded more euphemistically as "metal detecting" and the motives for being involved in the activity were depicted as far less mercenary. One common motif that serves this purpose and is found in texts produced by metal detector users is to stress how collectors "link with" people of the past, as noted by artefact hunter Dave Crisp (2014):

> It's not all about pots of coins and jewel-encrusted gems, but the items people have lost over the past 2,000 years, the fascinating everyday artefacts — buckles, brooches, rings, weights and buttons. All these lost items are our history, and they shouldn't just be left in the ground to rot and disappear. These Celtic, Roman, Saxon and Viking items conjure up the history of our shores, the people who made us what we are today, the ancestors whose blood runs in our veins, and their lost objects are ours to enjoy.

Leaving aside the nationalist overtones of that passage and the implied moral imperative to rescue items from an uncertain fate, these links with the ancestors are not seen as relating to abstractions, but as specific individuals associated with the actual object the collector holds in their hand (NCMD, nd):

> One of the most interesting aspects of this hobby is connecting with the finds you make. With very ancient artefacts, this can truly stretch your imagination. You might find yourself asking questions such as: What was the name of the person who last held this little Saxon sceatta? or What did he or she look like? Perhaps you even create your own answers and write them in a log of your finds. Although marvellous and mind stretching, historically such mental wanderings can never be factually based. What a shame that you will never meet the actual owner of that superb Roman enamelled brooch you have just uncovered. An even greater shame perhaps is that you are unable to meet that medieval moneyer who kept mis-striking those short cross pennies you find. Despite this, by simply finding the item you create a bridge across time connecting you to the person who lost the item. This is what we term a Time Line. Technology — it is argued — may never be able to produce a functional time machine, but until it does, the metal detector admirably fills the gap. However, there are finds of more recent times where you not only create a time line to a past loss but, if you are very lucky, you may meet the very person who experienced the loss, or direct members of his/her family

Here, it is contact with the objects themselves that creates what the author considers to be a "time line" back to the past, to real living, and very human, people. In an interview (Barnett 2017), metal detector user Steve Critchley takes this notion further, he sees the objects as parts of past lives in vanished landscapes:

> Metal detecting is an often solitary, slow pastime, which more often than not turns up little more than a few buttons or a sewing needle. But wait, for in such innocuous items buried in the soil, there's a picture of an England lost to time. Buttons, hairclips, loose change — that's what detectorists like Critchley call "casual losses". Things not buried deliberately, but just accidentally discarded. And through such finds, stories can be told across the chasm of years. "Imagine finding a bit of loose change, then some more further along, and some more," says Critchley. "Then it emerges that there was probably a path across this field at some point in the past. Or say you find some buttons. You can imagine men working the field on a hot day, taking off their waistcoat, a button pinging off. A little further away you'll perhaps find a needle, lost by one of the farm-worker's wives who sat at the edge of the field, sewing, while the men worked". These are visions of a time long gone that will never be turned up by professional archaeological digs […]. Minor they might seem, but all the same, the army of detectorists — especially those who, like Critchley, log and extrapolate their data — are uncovering and preserving our very history.

The motif of imagining stories around the artefacts, narrativising them, is quite a common one in texts produced by metal detector users. This quote also highlights that artefact hunting is different from other forms of collecting as it can offer a "unique way of experiencing the historic landscape" (Winkley 2016) for participants who tend to use metal detectors to search for artefacts close to home and increase their understanding of local history and of the surrounding everyday landscapes that combine their own experiences of the land and "their perceived version of how it was experienced in the past, thus creating a very particular type of place-making".

Not all metal detector using artefact hunters are interested in the local landscapes and everyday objects found in them and the historical stories they have to tell. Some are primarily "coin shooters", looking for coins on the sites they exploit, and only collecting up the other fragmented metal objects (so-called "partifacts" in the ergot of the collector) incidentally — and sometimes for immediate sale. Coins have an appeal that they have pictures and writing on them, and are therefore easy to place in a known historical context without effort, linking to the "kings and battles" history of the schoolbooks. They transform the abstract into something material and tangible. Coins have the additional virtue for the artefact hunter of often being intrinsically valuable and duplicates can be sold. Small corroded Late Roman copper alloy coins can be sold in bulk to "zappers", a specific group of collectors that like cleaning them to reveal the legend, while the small thin-flanned Medieval silver hammered coins ("hammies") are difficult to find and creating a good collection of them is a way for their finder to display detecting prowess.

When discussing collection-driven exploitation of archaeological sites in the UK, the attention of archaeologists is often mainly focussed on the removal during artefact hunting of objects older than the 300 years that is the cut-off point of the Treasure Act. This obscures an important element of this collecting activity in the UK. Artefact hunting is not only carried on sites containing finds dating to pre-1720. A large amount of the material collected and discussed on "metal detecting" forums is post-medieval (post 1500) and modern (eighteenth and nineteenth centuries as well as small metal "vintage" and "byegone" items from the 1920s to 1940s). These all form part of social history and are for their finder a tangible reminder and illustration of a vanished past age, though one that is more easily understandable and arouses nostalgia because it is familiar through books, stories and television costume dramas. The material remains of the "familiar past" (Orsner 1998; Tarlow and Walton 1998), recognizably lying at the roots of modern British society, are more relevant to the present. This is why this type of material culture is so appealing to collectors. This could be observed in the composition of collections when the privately-run UK Detector Finds Database, "run by detectorists for detectorists" (UKDFD 2005-19; 2020) was publicly visible (until 2016, it is now hidden). While almost 50% of the objects showcased there were coins, of the remaining artefacts, over 80% were Tudor or later.

Personal museums, artefact collections

Hobbyist artefact hunting in England and Wales is quite clearly leading annually to hundreds of thousands of archaeological finds leaving the archaeological record and their context of deposition, but being curated in thousands of scattered ephemeral personal collections. Despite this, in the absence of a proper survey of this phenomenon, nothing much

is known about the nature of these collections, their size and composition, how they are stored and used. A certain amount of information can be gleaned from online sources where artefact hunters or collectors proudly display all or part of their collection, or on the occasion when one is donated to a museum after the death of its owner.

In general, the ones we know about by such means seem to not have particularly good documentation. There is no mechanism that encourages owners of such collections to retain any kind of documentation of the object, where it was found, in what circumstances and what it was found with, or whether it is recorded by archaeologists or in another public record. Examples shown online suggest that only rarely are items held in such collections individually catalogued or labelled with identifying information, the findspot and name of the landowner that granted title to the finder. Familiarity with such collections indicates that many of the items tend to have been stored loose or laid out on tabletops or in rare cases mounted in showcases. Despite claims to the contrary, the likelihood of the objects receiving proper conservation care in such a collection are slim because of a lack of knowledge and resources of their owner. Anecdotes detail some horrific cleaning methods that have been routinely used by some artefact hunters, such as cleaning metal objects such as coins in coca-cola or rock tumbling drums. There is no generally accepted code of best practice or ethical code for artefact collectors in the UK comparable to ones in place for the museums profession.

Only relatively few of these scattered ephemeral collections of artefacts end up in public institutions. It is not clear what happens to the majority of them when the artefact hunter loses interest and gives up the hobby, moves to a smaller house, or dies. A collector who is no longer interested in the old artefacts may gift them (either as individual items or as a bulk lot) to a fellow collector known socially. In such a situation, there is the possibility that the new owner will have access to information about the findspot and other associated details. In some cases, as indicated by the number of objects appearing on sale throughout the year on eBay, these unwanted objects are sold either by the finder himself, or his heirs. It may be suspected that this does not always happen, a person clearing a house or flat when the previous occupier has died may simply discard the accumulated old broken and corroded pieces of metal. Even if they are recognized for what they are, the new owner may not feel it is worth the bother finding and then taking them to a dealer or museum when there are so many other things to sort out. In other cases, even when museums have already been offered boxes of loose and unlabelled objects, not all of them have the storage space and staff to sort through what may amount to be several thousand items, most of which have only tenuous connection with the needs of the museum collection. Even if they accept some of these collections, they probably cannot accept and properly curate them all (the costs of conservation and cataloguing the majority of the more mundane and repetitive items may be felt more than they are worth to the museum).

There is no mechanism to follow the movement of objects between various ephemeral private collections after it leaves the collection of the finder. Even objects that had been shown to archaeologists and recorded are in effect later totally lost to science. Even if a few decades from now a coin or brooch surfaces anonymously, it will be difficult to relate it to one of the mass of records of similar-looking objects in archived archaeological records. Many artefacts in private collections are simply inaccessible to researchers for the very reason that nobody knows what a given collector has. Even in the case that a finder showed the artefact to archaeologists who recorded it and its current whereabouts in a private collection are known, there may subsequently be only limited access to the material. Kershaw notes (2013: 17) a problem with this situation. The identification and classification (or reclassification) of artefacts is therefore:

> heavily reliant on images and written accounts produced by others, which can vary in quality and detail. This has clear implications for the ability of this study to identify and classify relevant artefacts and to assess more subtle features which may be revealed only through close, first-hand study, such as design irregularities, object wear and surface treatment.

Obviously, there are serious flaws in this as a system of curation of archaeological information.

There are a number of studies of collecting from the point of view of the psychology of collectors and on the psychodynamics of collecting (see for example, Belk *et al.* 1988; Rubel and Rosman 2001; Subkowski 2006). These discuss the differences between collecting and 'accumulating' or 'hoarding', the ways in which collecting is used to structure individual identity in relation to a sense of temporal and spatial ordering but also relationships with others, and explore ideas of 'value', and the relationship between collecting and notions of 'good citizenship' as well as the modern state (Pearce 1994). Much of the discussion of collecting refers to the purchase of items commercially recognisable as collectables. While relevant to understanding Collection-driven exploitation of the archaeological record in general, the links become more tenuous in the case of artefact hunting where the collection is built up from selection of items from haphazardly-found mass material.

The "good collector" model

Quite a common motif in the justification of all types of artefact collecting is the admission that, while academics may consider it damaging to archaeological interests, it also produces the benefit of saving the object, providing them with a "good home" where they will be respected and looked after (Renfrew 2000: 20-1; Hall 2007: 3-5; McIntosh 2000). This was expressed in one of the quotes above, about the archaeological material in the soil of unthreatened sites is somehow "lost items [that] are our history", and "they shouldn't just be left in the ground to rot and disappear". In Britain, on their forums, the artefact hunter talks of "saving" them, "recovering" them (from being "lost"), making what was invisible visible again (if only to themselves). This type of

valorisation of participation in collecting activity by appealing to "higher loyalties" is common as one of the guilt- and critique-reducing narrative mechanisms in collecting generally (Mackenzie and Yates 2015). This may be expressed as a desire to preserve an artefact allegedly in danger, or it may rest on a claim that the collector has a privileged ability to appreciate the importance, aesthetic qualities of the artefact, or that its possession is necessary for their "research" or other cultural edification or identity-confirming needs.

In the justification of artefact hunting in Britain, another argument is also being used, and was met in the quote above. It is being increasingly suggested by artefact hunters and even archaeologists that on cultivated earth the action of (artificial) fertiliser, and other agricultural chemicals, as well as farm machinery are damaging many artefacts, particularly metal ones, buried in the soil (e.g., UKDFD 2007):

> The vast majority of metallic objects that remain in the ground are condemned to certain destruction as a result of the intensive agricultural practices and land development that are associated with modern living. Agrochemicals, for example, will completely destroy a base-metal object within a few years of being in the ground.

In support of this anecdotal evidence from detector finds is cited. There is not space here to address this question fully, suffice to say many of the "common sense" applications of this argument ignore some basic facts on soil chemistry and the manner in which fertilisers are used in modern farming, and also confuse collectability (aethetics) with archaeological information content. The vast number of metal artefacts seen on sale online (see below), even though these may be imagined to be the less desirable items that were found but rejected from the finder's own collection, seem to show none of the features claimed by supporters of "better out than in [*situ*]". This question still needs much more substantive research and a balanced assessment for a number of soil types and agricultural regimes.

Size of the British artefact hunting and collecting community

The number of artefact hunters in the UK is a totally unknown quantity, even if we restrict the enquiry to the number of people actively using metal detectors for collection-driven exploitation of the archaeological record in the area of England and Wales.

In the first years of the 21st century, there were some wild estimates of overall "metal detectorist numbers", but nothing concrete. In 2003, it seemed to the present writer, on the basis of the scant information that was available then, that a reasonable estimate was quite a low one, 10000, with just over a thousand in Scotland (Barford 2005). About 2010, it seemed that the original estimate needed altering, the present writer then estimated on the basis of the increases in numbers of members of metal detecting clubs that that by that time the number had probably increased to 16000. Thomas (2012: 58-9) has a similar estimate), In 2011 however, the National Council for Metal Detecting (NCMD) was claiming there were around 20000 metal detector users in the UK (Gray 2011). By 2015, the NCMD estimate appears to have risen to 25000 (Ashworth 2015 and Malmo 2015) and then Hardy's (2017) research produced figures of 27000 "metal detectorists" (in England and Wales) and another 1000+ in Scotland. While there may be problems with these figures (in particular the total probably includes people who use their machines only for searching modern coins and lost jewellery on beaches and never venturing onto an archaeological site), they seem to represent the true scale of the artefact hunting community in England and Wales at the moment. Figure 1 shows these various values graphically. These various estimates seem to be consistent with the view that there has been considerable expansion of this damaging hobby during the past twenty years. The implications of these figures would seem to be that the increase may have been of the order of 17000 more detector using artefact hunters in 17 years.

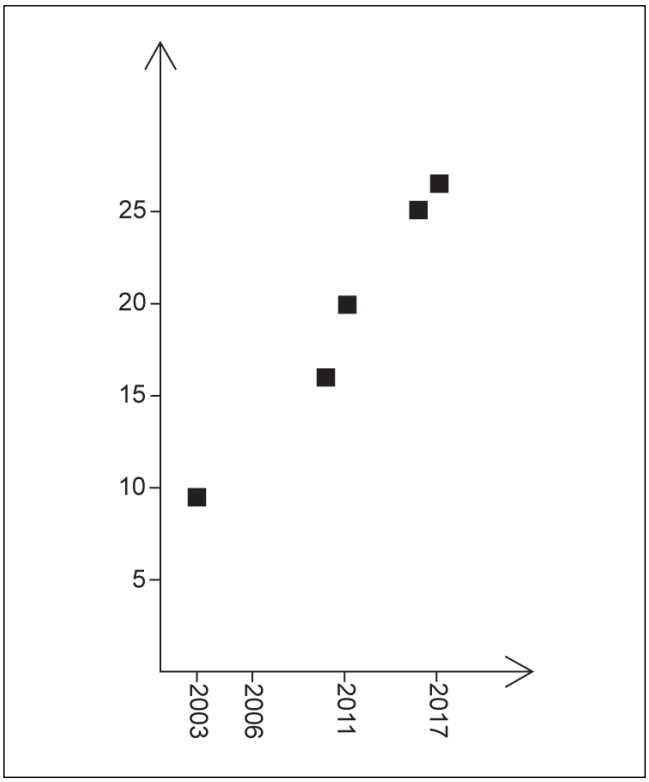

Figure 1. Schematic presentation of the estimates of numbers of artefact hunters in England and Wales in successive years (vertical scale, thousands of individuals): Author.

Who are these people? Where studies have been done (for example on participants on commercial rallies), the hobby seems mainly to attract men, and their ages fall into two main groups, individuals in their twenties and thirties, with a second cusp in the mid-fifties and sixties (Thomas 2012). Thomas also discovered that many of them tend to be engaged in the hobby three years or so before giving it up for other pastimes, while there is a hardcore element that stays in the hobby a decade of more. In Britain, the hobby is mainly practiced by "white" individuals. With the possible exception of recent

Polish immigrants, to judge from inline forum participation and club membership, it seems that there are relatively few artefact hunters in Great Britain from ethnic minority communities.

While artefact hunters like to stress the wide variety of social contacts one can make on commercial artefact hunting rallies with metal detectors, it has been established through the use of postcode data that many of the people that came into contact with the Scheme fell into what the National Readership Scheme's social grade classification (used until quite recently in marketing as well as in UK government reports and statistics) considered to be "social groups C2, D and E", which covered skilled manual workers and semi and unskilled manual workers (Lammy 2005).

The sites artefact hunters exploit

The location of sites where artefact hunting can be and is undertaken is constrained by the modern landscape, particularly land usage and property boundaries (Richards *et al.* 2009: 2.4.1 fig. 9). We know something of collecting practices from the Portable Antiquities Scheme (PAS) records (see below). Most of the collected material seems to come from rural sites and artefact scatters in fields where the landowner has given permission to search and assigned ownership of the material to the finder. Most reported finds (Fig. 2) come from lowland sites, only 1.9% were from sites above 200m, and only 0.3% above 300m a.s.l. (Robbins 2014: 41 fig. 6). Where we have records of land use of material recorded by the PAS, some 87% of the material comes from cultivated land (ploughed soil is easier to dig to extract finds). The material that is reported is far less frequently collected from grassland, heathland and woodland (this comprises about 4% of the PAS database entries), waterways, wetland and coasts also account for less than 2%. Ease of access to the land is also an important factor in determining which areas are exploited more intensively, there is a clear concentration of searched areas near to major roads or in the vicinity of habitation areas such as towns (Richards *et al.* 2009: 2.4.2.1; Kershaw 2013: 13-14). Only a small quantity of the reported material (3%) has been collected, however, in the immediate environs of built-up areas.

The artefact hunter will approach individual landowners with property in areas likely to produce collectable artefacts (and may "research" the locality to identify such potential "hotspots" or "productive" sites, ideally ones that have not already been searched by other collectors). They will then attempt to come to an agreement about getting access to the land, and take away any collectable artefacts that they may find, and establish the details about how this should happen and any financial issues deriving therefrom. There are however problems with this, increasing numbers of farmers are wary of such arrangements for a variety of reasons and "permissions" are jealously guarded.

For those who cannot obtain access to fields themselves, there are a growing number of commercial artefact hunting rallies across the country. Here clubs or commercial entities obtain access to a block of rural land by offering the landowner a fee and then covering costs by selling tickets to the one or two-day event to artefact hunters, the latter are provided with a campsite and get to keep everything they find (except those falling into the legal definition of Treasure). Quite often various traders set up a stall at these events, such as metal detecting equipment suppliers, and antiquities dealers (both to buy any artefacts found that the artefact hunter does not want to take home, but also to sell collectables to the participants to fill gaps in their collections). These events are widely advertised and attract relatively large numbers of participants, sometimes in the hundreds. The business is quite a lucrative one for all concerned especially when large numbers of people take part in each event (one well-known rally organizer recently took £58 and £60 per person for tickets to two summer rallies attended by several hundred participants). Each year there are held about thirty major rallies and perhaps five hundred smaller ones, organized for members of individual clubs and groups.

When they are attended by archaeologists who attempt to record the material found, it can be seen that these events are hugely damaging to the archaeological record of the area where the rally was held. The majority of them are, however, not accompanied by an archaeological recording team. One problem is that the bigger rallies are held at weekends and on public holidays. The Portable Antiquities Scheme sometimes sends their staff to such events and in a few days on-site recording they can boost their database numbers by higher numbers of contacts made with artefact hunters and finds seen.

There are also "metal detecting holidays" where landowners charge a fee for foreign metal detector users (often from the USA, but also those European countries where artefact hunting for archaeological material is forbidden) to come and search their land and take away anything they find.

The material found in both these types of events has to be treated critically; rally (and especially holiday) organizers are widely known to "seed" the areas to be searched with artefacts coming from the market (not infrequently, bulk buys of artefact fragments from the Balkans). Even if these items are recognized for what they are during a rally and not recorded by archaeologists, those that remain in the fields afterwards may (several decades later, when the commercial event has been forgotten) be recorded as authentic finds. Another possible source of contamination is that it has not been unknown for participants to bring to such events objects found elsewhere which they pretend to "find" to impress fellow collectors, or establish a recorded "provenance" for an object of illicit origins.

Supporters of collaboration with artefact hunters often suggest that searching by artefact hunters of random areas of land where they have search agreements but where sites are not known will lead to the discovery of new archaeological sites. If this information is then communicated to archaeologists, it can then be entered on the local government Historical Environment Records, the information used in archaeological research and also the site can taken into account during development planning. While this is

to some extent true, the issue is raised here how information from collectors can be interpreted (for example in terms of on-site and off-site finds). In both cases, artefact hunters will often return many times to "productive sites", which may skew the collection of data from them compared to sites not perceived as productive to search.

An important problem that metal detecting collectors jealously preserve details of the location of their (sic) "productive" sites, in order to prevent other artefact hunters finding out about their location and exploiting them (with or without the knowledge or agreement of the property owner). When there is collaboration between collectors and heritage professionals, one of the conditions of reporting finds and findspots is therefore that these data are kept secret and only revealed to bona-fide researchers but are not made public. This goes against the notion of the archaeological heritage as a common good and one in which heritage management decisions ought to be taken with full transparency and accountability.

Another problem is that a finder may have reason to want to record a find, for example to establish ownership, but be unable to reveal where it is actually from. For example, they might have been searching the land where it was found illegally without permission. Another situation where the finder might prefer to say an object was found somewhere other than the real findspot might be to avoid sharing the value of an item with a landowner that would demand "too high" a share of the value of the item (so by saying they found it elsewhere they can come to a better deal with another landowner). In fact the artefacts belong to the landowner, but to judge by what they write on their forums, it appears that many artefact hunters consider they have a greater right to another's property by virtue of having found it. In such cases, a false provenance may be given, and in the absence of the requirement to document the origin of finds, such false provenances may get into archaeological databases and once there, the fallacy will remain undetected or any suspicions in effect are unprovable. There are a number of major finds about which such suspicions are whispered, but rarely stated out aloud. In the case of the records made by the Portable Antiquities Scheme, the archaeologists employed there do not as a rule verify the finder's assertions (for example by means of documentation of assignment of ownership by the owner of the land where the find took place) and tend to take them at face value. A few cases of falsified provenances have been discovered and documented, other cases almost certainly exist but remain undetected. This issue requires more study.

Obviously, if the aim of the hobby is to find collectable historical artefacts, it makes sense for a searcher to identify sites that are going to be especially "productive" of such collectables. Handbooks written for metal detecting artefact hunters (e.g., Fletcher 2000; Grove 2005; Villenueva 2006; 2007) include many detailed accounts of how to "research sites", that means find sites which will produce collectables in quantities. This includes using archaeological gazetteers and reports as pointers. There are specialist digital resources, such as the commercial ARCHI website containing details of the location of more than 190,000 British archaeological sites and compiled mainly from archaeological literature (Archaeology UK's ARCHI Database). If such methods are used to target potentially productive sites, it is clear than many of the sites being exploited are not new at all, but those that are already known.

Numbers of objects found and collected

It is difficult to provide a reliable estimate of the number of archaeological objects (more than the law's 300 years old) that are dug from the archaeological record of England and Wales each year, whether or not they are reported to the PAS. Despite attempts at liaison with these collectors over several decades, we have no statistics on the number and location of scattered ephemeral private artefact collections formed in the UK, neither do we know much about their size and nature. Earlier estimates, based on what a small sample of artefact hunters had reported (Dobinson and Denison 1995: 8), suggested 400 000 ancient to early modern (pre-1600) artefacts were then being removed from the ground annually by artefact hunters.

As part of a public awareness raising programme, in 2006, a grassroots conservation group, Heritage Action created an online "Artefact Erosion Counter" that shows the potential scale of information loss caused by collection-driven exploitation of the archaeological record in England and Wales (Heritage Action 2006). Through a close study of candid reports of their finds rate by artefact hunters on social media over a period of a year and a half (principally from several "metal detecting" forums, but also modified using the results of several formal and informal surveys), it was decided that an estimate of an average of 30.5 archaeologically recordable (though not necessarily collectable) finds over 300 years old a year was applicable. This figure takes into account that some detector users go out searching for collectable items infrequently and demonstrably find very little and very few archaeological items, while others go out every day and can find huge amounts of collectables, including very many archaeological artefacts. The algorithm on which the counter operates was deliberately designed to depict a very conservative estimate. In constructing the model, the number of active artefact hunters was postulated (based in part on the present writer's own estimates at the time — see above) as only 8,000 in England and Wales — despite every other estimate at the time being far higher. The counter suggests that on that basis (8000x30.5) the annual rate of discovery was 244,000 recordable objects.

For a long time, the British archaeological establishment was loath to accept the Heritage Action figures and their implications, but after a long official silence it was only later admitted that this conservative estimate was likely to be a relatively accurate simulation of the real situation. Robbins (2012; 2014: 14) published a tentative estimate that is similar to that proposed by the amateur group. This indicates that c. 260,000 objects are removed from the ground annually.

More recent work by Samuel Hardy (2017) using the results of a careful study of the internet sources on artefact hunting (including surveys they contain of finds rates and time spent artefact searching in a year) seems to show that these figures could be wrong by several orders of magnitude. He attempts to use information from social media to determine the number of items artefact hunters find a year with metal detectors. While the degree to which Hardy's estimates correspond to the true situation remains unverified, they are the latest and most closely argued available, and their implications are clear. A problem here is that using the reports of finders themselves, his figures include results deriving from those people that collect the post 1650/1700 material of the familiar past (see above). His survey also did not sufficiently discriminate reported results apparently deriving from beach detecting (where finds rates may differ), rather than referring solely to the use of machines on archaeological sites. On the basis of the data he collected, Hardy comes to the conclusion (2017: 8.3, tables 26 and 27) that in England and Wales, artefact hunters with metal detectors perhaps remove from the archaeological record as many as 2,473,521 recordable objects in one year (i.e., they find 88.3 reportable objects each). While this is not impossible (metal detector users have reported that searching some Roman sites can produce >30 coins and metal objects in a few hours on one weekend), it is three times the value more directly established just over a decade earlier by Heritage Action, and in the view of the present writer its verification is a topic that requires more research. Nevertheless, even if we apply the finds rate (30.5 recordable items a year) that the Heritage Action Counter uses to Hardy's estimate of the number of 27,000 active detector users (Barford 2018), we still get disturbing figures (the figure would be 823,500 objects a year). Even if these estimates are mistaken, by how much would they have to be wrong for the situation they describe not to be a disturbing one?

The online antiquities market in England and Wales

There are few constraints on the buying and selling of archaeological objects in Britain, trade in them can be carried out openly and legally. They are therefore sold in three types of venue, auction houses, antiquities dealers and through private transactions between individuals. Since the mid 1990s, the Internet has taken over as the main venue for antiquity sales (Chippendale and Gill 2001; Fay 2013: 213). This has changed the face of the antiquities market and collecting (democratising it) and has vastly increased the size and scope of the market. Internet sales, through eBay for example, have removed any barriers that may have earlier existed and enabled a large number of actors to become involved in the sale of antiquities in an amateur fashion. Selling antiquities in this market requires little capital, no previous experience, knowledge or expertise, reputation or contacts. The marketplace that has been created is a global one, that transcends the traditional constraints of space and time, it operates in a virtual space 24 hours a day and ensures anonymity to sellers and buyers. Sales offers are available for a fixed time and when they are finished, the information disappears from the web. This transience makes these sales difficult to monitor and track.

The UK currently has one of the world's largest online markets for antiquities, Fay (2013: 197) calculates it as being second only to that of the USA (30.5 and 45.2% of world sales respectively), and greater than other economically developed countries like Germany (the third ranking at 4%) and France. According to her figures, based on monitoring the site closely over a period of four months in 2008, there were 94,425 antiquities (including 53,415 coins) sold annually with a total value of £2.24 million a year. She identified four groups of sellers (2013: 211-3):

1) One-off sellers who only listed one item in the four months of the data collection period often among other second-hand items (43% of sellers fell into this first category). Possibly this represents the recycling of material encountered by chance when old collections were split up and dispersed through non-specialist venues though some of these sellers might be metal detector users.
2) "Amateurs" listing between 2 and 9 items, indicating that they have access to at least a small collection of antiquities, these were probably mostly metal detector users and other collectors selling off duplicate and unwanted finds (37% of sellers).
3) The third category she listed as "dealers", who listed frequently, with between 10 and 99 listings over 4 months (15% of listings and the mean number of listings per seller was 31 over the 16 weeks).
4) The fourth category that she identified were "high volume dealers", who listed over 100 items over the study period, indicating access to a wide number of ancient objects (4% of sellers - mean number of items listed for this group was 333 with the most prolific seller listing 4,583 listings over the four month period). They are responsible for 69% of listings and 71% of sales.

Currently British artefacts are also being offered for sale by metal detector users from the UK through other social media venues, such as Facebook.

For the purpose of this paper, the UK portal of eBay (*https://www.ebay.co.uk/*) was examined by the present writer 18th August 2019. It was found that on that day in the section labelled "British antiquities" on sale by dealers based in the UK only, there were 13,825 antiquities (4,563 small objects and 9,262 coins - 20 Celtic, 5,414 Roman and 3,828 "hammered" coins -Anglo-Saxon to Tudor). Some were being sold in short-term "snap" auctions, while others would be displayed for 30 days or until they were sold.

The number of sellers involved cannot easily be precisely established, but may be estimated as upward of 1,200 at the time of the investigation, but was probably more. Fay (2013: 201-2) found that 52% of the artefacts and 74% of the coins on the portal when she monitored it were actually sold during the period they were on offer. The ones that were not sold are often relisted and many eventually find a buyer.

Leaving aside the coins, the small objects on offer on eBay in August 2019 ranged in sale price ("buy now" prices only were analysed) between £ 5 and several over £1000. Of these, 70% of the objects were on sale for £ 5-40, a further 18% were valued in the middle range of £40-110, while the remaining 12% were offered for higher prices.

The material offered for sale in 2008 and 2019 consisted mainly of coins and small objects but in terms of their typology (Fay 2013: 202-3, 204-5, table 9) the selection on sale was not representative of typical excavated archaeological assemblages. In 2008, over 38% of the assemblage was made up of ancient jewellery, mainly brooches and rings, a further 23% can be described as domestic and personal objects (buckles and clothes fasteners are common), 22% as tools or weapons (mainly axes and arrowheads). The largest percentage was made up of small bronze items 32%, with flint and stone objects comprising 16% and pottery only 12% (and iron, 4%).

Most of these artefacts seen were most probably authentic archaeological finds. It seems that where one can tell, in the low price range at least 3-4% have the appearance of foreign artefacts (with odd typology or patina) being offered as British finds, and a small percentage (perhaps about 1%) appear to be fakes. In the middle price range, the number of object that may be strongly suspected as being foreign finds "laundered" as British rises to at least 20% (though the real figure may be higher) — these figures mainly refer to the offerings of the larger dealers. There may be some fakes here too. Most of the more obvious fake antiquities were in the higher value end of the range (particularly above £100, with some on offer for considerably more).

Very few of the descriptions of the objects being sold contained even sketchy provenances and collecting histories — and hardly any sellers indicated that any such information was available at all. None of the descriptions included information that there was a document from the owner of the property where the object was found assigning title. Only a few sellers (in fact eleven) gave the information that the objects they were selling had been recorded by archaeologists (the Portable Antiquities Scheme, see below), this means that only 22 items out of the total of 4563 small objects had been recorded (0.48%). Among the coins and tokens, it was even worse, only five (0.05%) had been recorded (none Roman, one Celtic, the rest medieval and later).

The damage done to archaeological sites and assemblages by artefact hunting is obviously far greater than indicated by the sheer numbers of artefacts on sale. The considerable number of artefacts being offered through venues like eBay are of course those that were collected in the field during artefact hunting but superfluous to the collecting needs of those that found them. But in artefact hunting, not all the displaced material even leaves the site. Not every piece of metal dug out of an archaeological site when a metal detector locates it will be deemed collectable, and many thousands of fragments are dug out of their archaeological context only to be immediately discarded by the finder while only a selection is retained. Both categories of material leave holes in the archaeological record. The relatively large number of objects openly sold therefore is just a fraction of the degree by which the archaeological record has been depleted of diagnostic and bulk artefacts.

Collectors only acquire a selection of the types of material contained in the archaeological record, and the selection process is one based on collectability and aesthetic appeal. As a result, antiquities dealers only trade certain specific categories of artefact that are readily marketable, the rest of the material from a commercially exploited site never even leaves the side of a looter's hole. Atwood (2004) tells of visiting archaeological sites exploited by artefact hunters and examining the discarded material that shows these "subsistence diggers" knew precisely what was and was not saleable on the market.

The numbers of collectable British artefacts on open sale also hint at the size of the accumulations of decontextualised archaeological material making up unknown numbers of scattered and ephemeral personal collections of archaeological artefacts in the UK. Even if not every one of these items offered by dealers is sold immediately, or is not in fact an authentic artefact (and perhaps not all items marketed as British finds in reality come from British soil), this shows the scale of the market involved, and the damage being done to archaeological sites all over the country by collection-driven exploitation of the archaeological record. This problem has been going on now for sixty years, since the introduction of the hobby metal detector. Anecdotal evidence from the 1980s tells of suburban garages in SE England where dealers were known to have had plastic sacks full of metal artefacts sorted into categories, buckles, strap-ends, personal ornaments and so on.

Conflict between collection and preservation

The advent of artefact hunting and collecting with metal detectors initially alarmed archaeologists, who became aware of the scale of the removal of artefacts from the archaeological record and the disruption of the record by the selective removal of material. This led to a split developing in the archaeological community in Britain. By the 1980s, attitudes about artefact hunting and collecting were in effect divided between those who saw archaeology as "discovery" (and even object-centred) and those whose concerns focussed on the conservation and sustainable use of the archaeological resource, who took a broader more site-based approach. In the first group of archaeologists, one could find many academics and museum professionals, eager to make use of the opportunity offered by this dismantling of the archaeological record for getting access to more and more new material for study, publication and display. In the latter were representatives of other groups, heritage professionals, such as conservators and heritage environment managers. For various reasons, public information campaigns in the 1980s and early 1990s (such as the ill-fated "Stop Taking Our Past" (STOP) campaign — Thomas 2012b) were having little effect on the growth and

public acceptance of the hobby of portable antiquity collection. Attempts to change the laws to deal with the problem were only partially successful. The only result was that the old law of Treasure Trove was modified in 1996 legally to define a category of finds ("Treasure") which, as the name suggests, comprises certain objects of gold and silver and certain hoards more than 300 years old, the reporting of which by finder is now obligatory (Treasure Act 1996). Artefacts not falling into this definition have no special status under UK law. This change in law did not provide any protection whatsoever for the sites being stripped of material by artefact hunters.

Attempted mitigation: the Portable Antiquities Scheme

In the light of the impasse brought about by the failure of previous approaches, in 1995 the Council for British Archaeology published a survey on "metal detecting" in England (Denison and Dobinson 1995) that took another look at the problem, and revealed some disquieting facts about the impact of the hobby. It concluded that of the hundreds of thousands of artefacts recovered by detector users every year, only a fraction was being reported to museums and through this crucial information about archaeological sites was being lost. The report drew on the experiences of those that had worked with artefact hunters that brought objects into museums and archaeological units for identification and recording. They had recognized that many artefact hunters were enthusiastic and were involved in the hobby because this was a way that they could satisfy their interest in the past, and finding, owning and handling ancient objects was a way of having contact with it. It was argued that, if by closer liaisons with metal detector users, their enthusiasm were to be fostered and guided in the right direction, and if archaeologically acceptable procedures of searching and recording were encouraged, this could be used for the benefit of archaeological knowledge.

Discussions after the publication of this report led to the development of a new approach. While there was mandatory reporting of artefacts falling into the category of 'Treasure', a separate body (the Portable Antiquities Scheme, PAS) was set up in 1997 to promote voluntary reporting of all non-Treasure archaeological finds in England and Wales to provide preservation by record of the information being lost.

The PAS has operated through the organization of a network of regional officers across England and Wales since April 2003 (Bland 1998; 2004; 2005; 2009; Thomas 2014; Portable Antiquities Scheme website). At present there are 38 Finds Liaison Officers (FLOs) based in 27 regional centres in England, and 3 in Wales. They are supplemented by volunteer recorders, managed by staff at the British Museum and supported by National Finds Advisers. The FLOs and their teams identify and record the archaeological finds members of the public and artefact hunters bring them. In parallel with the Treasure Act, the Scheme only records finds more than 300 years old. At the beginning, the numbers of new records were impressive, 37,518 archaeological objects were recorded in the year 2000-2001, but today the numbers seem to have settled to around 80,000 objects a year. After recording, the artefacts themselves (unless they are Treasure) are returned to the finder who may do what they like with them, collect them, sell them, even discard those which they do not want for their personal collections. As noted above, no track is kept of any artefacts (for example passing through the antiquities trade) after they have been returned to their finder.

The main aims of PAS are set down on their website (PAS 2003). The function of the new body was "to advance knowledge of the history and archaeology of England and Wales by systematically recording archaeological objects found by the public". The primary purpose of the Scheme became "to encourage all those who find archaeological objects to make them available for recording and to promote best practice by finders", and thus attempt to mitigate the knowledge loss caused by their removal from the archaeological record. Another aim was stated to be "to raise awareness among the public of the educational value of archaeological finds in their context and facilitate research in them". The Scheme was also to provide a medium that would not only "increase opportunities for active public involvement in archaeology" but also "strengthen links between metal-detector users and archaeologists".

Another initiative of the PAS was the promotion of a Code of Best Practice for Responsible Metal Detecting in England and Wales (the current one is a cosmetic revision (2017) of the original document of 2005). This however has proven to be unpopular amongst metal detector users, who prefer one created by their own hobby association that does not explicitly define "responsible artefact hunting" (NCMD 2000/2012).

British archaeologists, wearied of two decades of previous conflict with artefact hunters (metal detector users), have tended to welcome the existence of the PAS. Its database of about a million records of artefacts is regarded by many of them as providing a useful resource, and has been described in terms such as "a rich and detailed source of information increasingly used by academic and professional archaeologists to study the past and inform planning decisions" (Bland *et al.* 2014). It is worth noting that Britain has nothing like, for example, the Polish AZP project (Kobylinksi and Szpanowski 2008, 14-5), in which the country's archaeological sites are localised, defined and documented by institutionalised systematic fieldwalking by trained specialists. This means that the records of where archaeological sites and monuments are known (the Historic Environment Record, HER) in Britain is composed solely on the basis of archival sources and reports of accidental finds made by members of the public.

The PAS was a body set up *ex tempore* to deal with a specific political issue, and has no established place in the British heritage protection legislation. This has meant that it has periodically to seek funding in the ever-changing administrative landscape of British heritage management systems. It has never had a secure future. To a great extent, this has been

instrumental in it being constrained to present its activities as a string of continuous successes, and to avoid drawing attention to more controversial issues related to the damaging effects of current policies and practice concerning collection-driven exploitation of the archaeological record. In particular, the Scheme has seen the acquisition of records of large numbers of artefacts as a primary aim, and to that end has in recent years diplomatically persisted in courting the artefact-hunting community in order to obtain a supply of such material, and being extremely wary of being involved in any action, or making any public statements, that would rouse the suspicions and animosity of artefact hunters or collectors.

One of the activities on which the Scheme has therefore been focussing from its inception is maintaining an online database containing information about non-Treasure finds brought in by members of the British public for recording. Increasingly the rapid development in quantitative terms of this resource has become to be seen as the *raison d'etre* of the Scheme itself. About 2003, the Scheme began to quietly drop from its description of its own mission that it was an archaeological outreach (educational) organization. Gradually the idea developed that the database was not for mitigating data loss from unreported accidental finds and material removed deliberately by artefact hunting and collecting, but a more broader notion was adopted of the resource recording all finds made by members of the public and others (finds made by archaeologists were even included).

Although it was set up to capture information about finds made by members of the public that did not fall under the aegis of the Treasure Act (which there was a legal obligation on the finders to report), at some stage, probably about April 2007, the Scheme then started systematically recording Treasure finds on the database in order to boost finds numbers (according to the Treasure Act 1996 art. 12 this should be the subject of a separate report, putting them on the database duplicates this legally-required information). This means that finds numbers are automatically increased by several tens of thousands every time a large Roman coin hoard is found by a metal detector user. There are (1st Sept 2019) currently 13,599 records of Treasure items included on the PAS database (those records together concern 234,487 objects), 980 of them concern hoards. Since this practice was adopted, one can no longer use the PAS database as an index of the degree to which English and Welsh artefact hunters were willing voluntarily to report their finds to the authorities. In March 2010, the PAS database was even expanded by the addition of two academically-compiled databases of Iron Age and Roman coin finds (containing a total of 52,696 records of 325,250 objects). With these changes, the database no longer constituted an index of the reports of finds by "responsible metal detectorists" and the data that was coming from their activities has now been submerged by information of much more diverse origins.

As a result of the means by which British archaeology is forced by the country's idiosyncratic legislation to deal with the problem of collection-driven exploitation of the archaeological resource, the relationship between artefact hunting and archaeology is described in British archaeological circles to be a "partnership" (Clarke 2008). Although unthinkable in other countries, Britain's archaeological partnership with artefact hunters is commonly perceived to be beneficial for both sides. Certainly artefact hunting is endowed with legitimacy in the eyes of the British public through such talk, and clearly finds are produced by the activity which may be studied by archaeologists. Indeed, it may even be said that through their press releases and other media, in their praise of "responsible metal detecting", and failure to strongly castigate any negative aspect of the hobby, the PAS has been steadily legitimising and promoting Collection-Driven Exploitation of the archaeological record.

Supporters of the PAS approach justify their position by drawing attention to the research opportunities supplied by information about thousands of new artefacts that surface due to the activities of collectors (Fig. 2). We have the paradoxical situation of heritage professionals jubilant that recently the Scheme reported its "one millionth object" removed from the archaeological record by an artefact hunter — without considering that this is an indirect reflection of the scale of damage caused by artefact hunting to the archaeological record down through the years, before we even consider the question of how many artefacts are removed and not reported at all under a Scheme which is entirely voluntary.

It is not just in the UK that British policies on artefact hunting and the manner in which an attempt is made to mitigate the damage done as their result are seen as desirable. From the object-centred viewpoint, several outside observers have judged that something like the PAS is needed elsewhere too (Deckers *et al.* 2016: 267; Vos *et al.* 2018). Huth (2013: 129) considers the UK's PAS a "resounding success [durchschlagender Erfolg]" and seems to consider it a "correct way to deal with artefact hunters". Tragically, such "assessments" expressed by foreign academics and artefact hunters rarely take into account information other than that coming from the PAS's own propaganda of success.

Degree of Mitigation

Archaeologists are agreed that in general, collection-driven exploitation of the archaeological record is damaging to the sites, deposits and archaeological assemblages (for example on surface sites) affected. In the 1980s, archaeological discussion in Britain emphasized this, but somehow the main object of concern was depicted as the loss of artefacts into scattered ephemeral and uncatalogued private collections and onto the antiquities market. The Portable Antiquites Scheme was set up as a form of preservation by documentation of the information (about the finds/objects) that was being lost. This is why every day the front page of the PAS website proclaims statistics of the Scheme's success like: "1,466,405 objects within 939,395 records" (on 1st January 2020). That is information on the existence above ground of nearly one and a half million objects that (unless the finders reported them elsewhere) would not be known

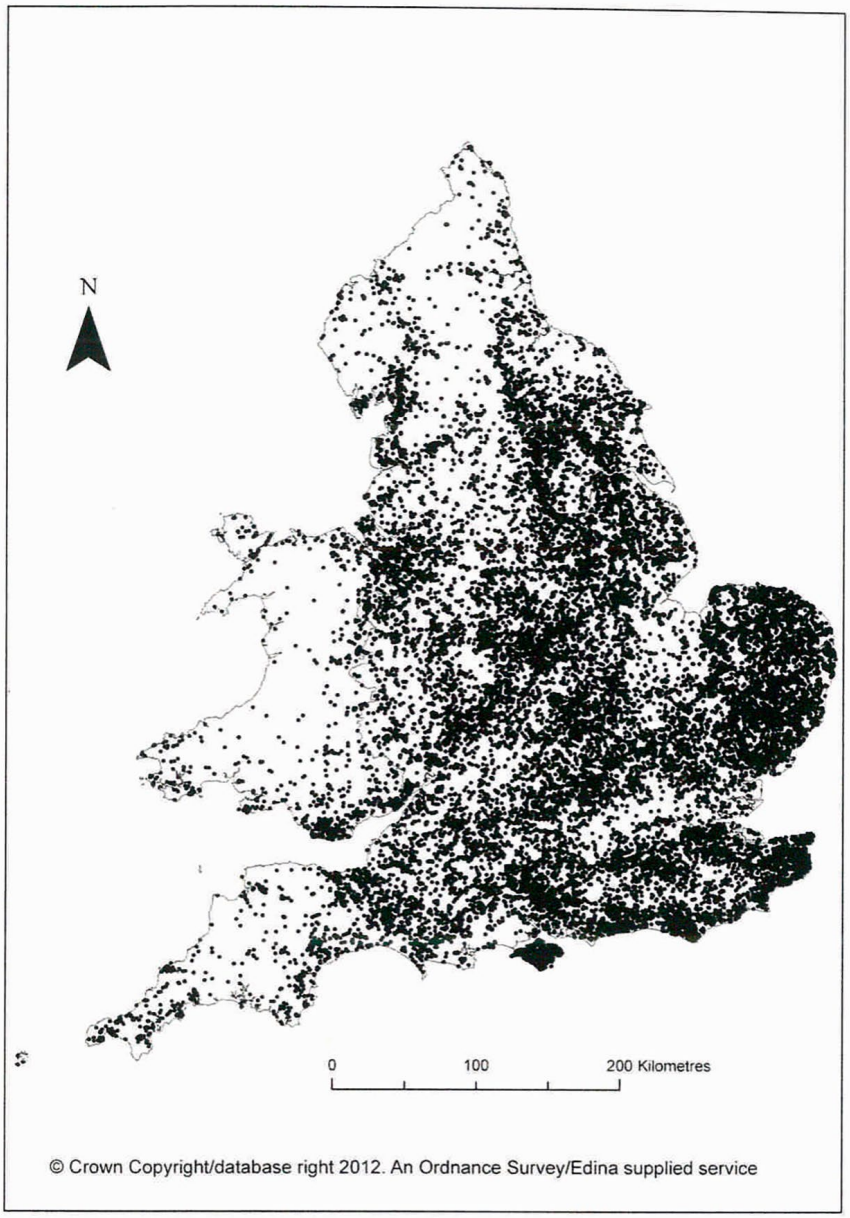

Figure 2. Where the destruction is taking place. Dot distribution map of the location and scale of reported artefact hunting activity 2003-2012 in England and Wales – each dot represents many more other unrecorded episodes (after Brindle 2014: fig. 4).

about. According to the PAS and its supporters, these figures mean the PAS and the policies behind it, are a success. But is that the only way those figures should be seen? To measure the success of the PAS as a means of providing mitigation, we need to put the information about what it has achieved in the broader context.

Number of artefact hunters reporting finds: It is noted that a decade or so ago figures were published that revealed that "between 2003 and 2009, the average number of finders (metal detector users and others) offering their discoveries for recording to the PAS each year was just 3,631" (Kershaw 2013: 15). Apparently in response to some observers questioning the reality of their "success" on the basis of a critical analysis of those figures a decade or so ago, the PAS stopped presenting data on the number of metal detector users that were reporting their finds to the Scheme, the figure is now hidden in their annual reports in vague percentages. It is difficult to see this as anything else in an attempt to hide from the public and lawmakers the fact that despite the trumpeted rates of "success", only a minority of those involved in collection-driven exploitation of the archaeological record are in fact coming forward with finds. Other sources indicate a picture of "substantial and widespread under-reporting" (Kershaw 2013: 15). Even in Norfolk, with a good relationship between artefact hunters and archaeologists and very high numbers of artefacts reported annually, Kershaw notes (2013: 16-7) that anecdotal evidence suggests that in the Norwich area, 75% of local detector users did not report any of their finds. It has been noted above that there is evidence suggesting a massive discrepancy between estimates of the total number

of active artefact hunters and collectors in England and Wales and the average number of finds they are removing, and those that are actually being reported.

There is also the problem that, as noted above, there seems to be some evidence that the numbers of metal detector-using artefact hunters have been quite steadily rising by 1000 a year. In order to deal with the problem, the funding of the mitigation efforts would have to increase by the same rate. In the lifetime of the PAS, this increase in numbers might have been as much as about three-fold, but funds for PAS have instead been declining over the same period. The Scheme has not, from year to year, been eager to admit honestly the degree to which they are able to keep up with the rate of finds removal from the archaeological record, there are no incentives for there to be a push for an increase in funding (even if there were a political will, or the money available, to do so to service the necessity of dealing with the effects of a minority hobby).

Number of artefacts removed and not reported: the PAS database currently contains some 900000 records of 1.5 million artefacts reported by artefact hunters, but that is just a fraction of the numbers or recordable items removed from the archaeological record. With the PAS currently creating about 60-80000 records a year (2014: 64149 records containing information about 117409 objects; 2015: 63492 records of 90228 objects; 2016: 61840 records of 84766 objects; 2017: 57745 records of 79174 objects; 2018: 50716 records of 71895 objects; 2019: 53545 records of 80835 objects). This means that, according to one of the estimates noted above, overall only 1 in 5 artefacts removed from the archaeological record by collection-driven exploitation is currently being reported to the Scheme. According to Hardy's (2017) estimate, it could be as few as one in ten. This important fact is often overlooked by those archaeologists (and collectors) who are concerned to stress that the PAS is a great success worthy of emulation elsewhere.

Site effects of exploitation by artefact hunters: The focus of the PAS is object-based, but of course the archaeological record is not just a loose dump of artefacts; the artefacts form just part of a much more complex pattern of evidence that together form that record. It is precisely the other parts of the record and its taphonomy that are totally ignored by the collecting activity, concerned just to extract collectable things.

Artefact collecting is a selective activity. A buried collectable/recordable item produces the same signal on a metal detector as any other, and many other fragments of metal are blindly dug out of "productive" sites and simply discarded because they are not collectable, yet they all are archaeological evidence that has been removed from a site or assemblage. Also associated material, wall plaster, tile, pottery, animal bone, metalworking waste and a large range of other material are simply not gathered or even noted by collectors who are interested in only a specific range of objects to collect. It is very difficult to interpret an isolated findspot on the basis of second-hand information in the PAS database, since we have little evidence what potentially associated information has simply been omitted by the reporter. The information recorded in the PAS database cannot reflect any data input that simply was not there in the first place. To counteract this, it is frequently assumed that many of the finds made by artefact hunters are in fact "off site" losses (Thomas 2000: 238; Kershaw 2013: 12; Geake 2014) which it is argued would in some way help balance out biases towards traditional areas of archaeological focus. To use information about them in such a way assumes that the "data" have been collected with the same research aims as archaeology, which of course they have not.

In a number of cases, artefact hunting takes place in areas where there is a potential for undisturbed stratigraphy to be just under the surface (such as the earthworks of a deserted Medieval village under grassland) or below a thin layer of disturbed soil, disturbed by shallow ancient or more recent ploughing before the use of heavy machinery. Many artefact hunters have few scruples about searching accessible unploughed land (old pasture, heath, woodland), even though the *Code of Best Practice for Responsible Metal Detecting in England and Wales* discourages it. There have been a number of infamous examples of the loss of information by the inexpert excavation of metalwork from undisturbed archaeological contexts in such circumstances (e.g., Gill 2014; 2015). Artefact hunters claim their machines do not penetrate very deeply and cause little damage on stratified sites, but when the target is a large body of metal, this clearly is not true.

Other artefacts recovered by artefact hunters come from surface assemblages (artefact spreads) on ploughland. While it is true (as is often stressed by supporters of collecting) that this material will have lost any relationships in terms of vertical stratigraphy, its distribution and associations are not without pattern or significance. Archaeological methodologies exist that utilise detailed information on horizontal positioning within spreads of archaeological material in surface sites. Indeed this is often the principle means of investigation of such sites in landscape and settlement archaeology. Yet these techniques are rarely used in the exploitation of sites like this in the search for collectables, any information about the patterning of the artefact scatters across a site are destroyed by cherry picking random items based on non-archaeological criteria. The information required to interpret surface sites is lost when diagnostic artefacts are very selectively collected from it (selected for their aesthetic or other values as a collectable rather than as archaeological evidence). Even in the cases where the position of a find is noted with the highest accuracy possible, their collection is often poorly documented in terms of their relationship to other elements of a surface assemblage. Finds lacking in contextual data and information about associations, representativity or sampling strategies have lost a good deal of their potential value as archaeological evidence.

Short of a team of archaeologists going and visiting each of the sites after metal detecting finds have been reported (obviously vastly expensive in the

case of about a million records of reported finds), we have no way of knowing how representative the collected and reported material is of what is on the sites exploited by these collectors. We might have only the finder's verbal report and even then, there are no data fields in the PAS database to record such information in any detail. One can only conclude that, unless this information is recorded elsewhere, it is lost. Only rarely are there resources available for the professional examination of a site flagged up by metal detector finds.

Representativeness of pickup

When the PAS was set up, it was intended to be a form of preservation by record — it was intended to obviate the necessity of introducing legislation to put articles 2 and 3 of the Valetta Convention into action (which in fact had been first proposed in the 1969 London Convention). The intention was that artefact hunters and other members of the public finding archaeological material would bring it to the Scheme in order to get it properly identified by archaeologists who would then make a record of it. In the "frequently asked questions" section of the web page (PAS nd [2003]), it says "we would like to know about everything that you have found — not just metal objects", adding "it is often best to let the Finds Liaison Officer see all your finds, especially if you are unsure what they are: a nondescript lump of copper-alloy may turn out to be a fragment of an archaeologically important Bronze Age ingot". They also stress that they would like to see worked flints and pieces of pottery picked up when people go metal detecting "because these are also important archaeologically". But not everything an artefact hunter will collect is of interest to the PAS, for "we record all objects made before about 1650. We may be selective in recording finds of later objects".

It is difficult to account for the way this ignores the fact that, as stressed above, there is a considerable difference between what an archaeologist collects from a site and what a collector will find of interest in it. Archaeological evidence and a collectable artefact are not the same thing. "Nondescript lumps" may not leave the site at all. It is clear that the material passed over by collectors will include large numbers of fragmentary artefacts which are either too nondescript to be attractive as a collectable or to be recognised by them as artefacts. This one of the factors that reduces the information value for archaeological research of material taken out of a site or archaeological assemblage by artefact hunters.

On looking through the PAS records, it can be seen at once that they are the effects of the operation of these selection processes. The objects displayed there are by no means representative of the full range of archaeological material one might expect from sites in the British Isles. The paucity of finds of ceramic, stone and animal skeletal material or other organic material is obvious. This is what may be expected of an assemblage abstracted from what is gathered by artefact collectors using metal detectors, there is a noticeable bias towards coins and aesthetically attractive fragments of decorative metalwork. Within this group, there is an additional bias towards copper alloy and silver, with relatively few lead and lead alloy and iron items.

As in the case of the material appearing on EBay, even in the case of the copper alloy items however, one observes in the PAS database a preponderance of artefacts more prone to be treated as collectables. It is these that are selected by artefact hunters searching "productive" sites to place in their finds pouches for adding to their collection (or resale to dealers or on internet auction portals) and it is from this pool of objects that the material reported to the PAS is taken. Objects not selected for collection or sale end up in the artefact hunter's "scrap" or "trash" bucket (this material is destined for sale for recycling as scrap metal, or is simply discarded).

In the PAS database, we can see this effect in the case by doing a search of the assemblage of objects of the Late Iron Age (mid-2nd century BC- 43 AD) brought in for recording by these collectors. According to the database's search facility, at the end of August 2019, of the 6,082 objects categorized as belonging to this period in the records, as many as 2,214 were coin finds, another 2,327 were personal ornaments (mostly fibulae – 1724), and there were 472 harness fittings, 46 weapons and 1023 other small finds representing every other facet of Late Iron Age life. Of these, pottery comprised just 349 finds. Most of the objects were of non-ferrous metal (5,598 items), just 25 were of iron, 31 stone finds, 8 fired clay object fragments, 5 fragments of metalworking debris and just one piece of animal bone. This is quite obviously not a mirror image of the sort of finds that are typical in the assemblages of material culture that would be created by systematic fieldwork (such as the excavation) on a site of this period where the boxes of pottery, animal bone, fired clay, and other finds would far outnumber the coins, weapons, chariot fittings and personal ornament. The PAS database assemblage is very clearly the result of extremely selective pickup from the sites exploited by these collectors. Whole categories of evidence are missing, or nearly so, from the picture of Late Iron Age life and society (pottery imports, animal bone, spinning and weaving tools, briquetage, to name a few). Obviously, collectors are intent on building up a collection of items that appeal to them, while archaeologists create a project archive with different aims in mind.

The same exercise carried out for the Late Bronze Age (1000BC to 700BC) reveals that the database contained records of 6,465 objects of this period. Of these, 1,875 were of copper alloy, two of lead alloy, 54 of gold, 491 items were flints (209 scrapers, 16 knives, 85 arrowheads, mostly barbed and tanged), there were 57 pieces of pottery, 9 stone objects, two iron tools and a blue glass bead. Of the total, 3,021 of the copper alloy objects were components of 303 hoards. Again, taken alone, this is not a secure basis on which to say much about material culture or the distribution of settlement in Late Bronze Age Britain.

There are therefore a number of factors that mean that the PAS database does not contain data of any real quality for serious archaeological research pur-

poses. This collection of records on loose artefacts divorced from their contexts presents a distorted picture of the material culture of the sites, contexts and assemblages from which they come. If the information collated in this resource is on something, it is on one aspect of the patterns of activities of artefact collectors that is documented, but even then incompletely. In order properly to understand the information recorded by the PAS, it is imperative that collecting patterns are understood, and this is a subject on which research is still incomplete (see Robbins 2014). It is a major fault of the PAS that after twenty years of liaison with artefact collectors, we still have only a very vague and sketchy picture of the pattern of the activity itself comparable to the information resulting from Susan Pearce's 1993-5 'Contemporary Collecting in Britain Survey' (Pearce 1998). Part of the reason might be the terminology applied, the activity is described using the euphemistic "metal detecting" which hides the fact that it is not the "detecting" that is the aim, but digging and taking a historical metallic artefact for collection or sale. Very little of the publicity material of PAS in fact refers to collections and collecting at all. It may also be remarked that one element that needs to be taken into account is the full range of material being included in these personal collections. At the moment, the PAS takes no interest in the more recent artefacts collected (less than 300 years old), yet as has been discussed above, this is a major area of interest for artefact hunters searching the fields for collectables.

The PAS database as an archaeological resource

A major argument offered for supporting the PAS partnership approach and voluntary reporting in dealing with the effects of collection-driven exploitation of the archaeological record is that it produces as one of its alleged benefits a record of material that can be used in archaeological research (Robbins 2014; Bland *et al.* 2014). Closer scrutiny however suggests a different picture. Far from being the all-round useful resource that is claimed, there are severe problems and limitations associated with the use of these "data" for all but the most superficial and generalised study (Barford 2016: 45). There is however no lack of "discovery"-oriented British archaeologists that have been tempted by the existence of an accumulation of information about many loose finds with their photos, descriptions and findspots who have tried to make use of it as a resource. One is reminded of the old cliché on the difference between British and continental archaeology where one has theory and is in search of material, the other having material in search of theory. In this case however, the PAS has accumulated a considerable amount of material, and archaeologists are busily seeking ways to utilise it.

Much of the research done on the basis of PAS records is necessarily focussed on typology and analogies of individual artefacts, and basing attempts at narrativisation and "object histories" on this and broad-brush dot distribution mapping. This often results in very simplistic interpretations in terms of ethnicity and geographical range that verge on the culture-historical approaches of the early years of the twentieth century (Kossinnism). The nature of the material favours research models that are based on a dot distribution approach and focused on aspects that can be addressed by utilising the emblemic characteristics of artefacts [gender, social status, identity]. Opportunities that involve utilising contextual and taphonomic information are extremely limited. The database has been compiled in a positivistic and passive manner and cannot therefore be used directly in question-driven research, rather the questions that are asked are dictated by the existing data. In examining the material accumulated by collection-driven exploitation of the archaeological record, the archaeologist is forced to examine it therefore from the collector's point of view, which leads to the erosion of the archaeological approach, and leads to an antiquitist and artefact-centred view of the past. By these means, the limitations of the database constrain archaeology and, since it is a public resource, the public perception of archaeology, into a similar atavistic object-centred mould. It may be argued that this is on many levels harmful to the discipline as a whole.

Collectors are not archaeologists

There is little doubt that, as a tool, the use of a metal detector in an appropriately planned research programme and methodology has many benefits for archaeological work. Surveys with metal detector of ploughsoil for example can massively enhance the information available from fieldwalking and surface collection. As already stressed, the information in the PAS database is, however, an incidental by-product of a totally different use of this tool, the employment of the instrument by hobbyists engaged in collecting artefacts for personal entertainment and profit.

For a number of reasons, British archaeologists have come to think of the information resulting from Collection-Driven exploitation of the archaeological record within a positivist model that treats it as some kind of ersatz archaeological evidence, and deficiencies in quality of the contextual recording and biases are in some way compensated by the sheer quantity collected. The failure to recognize the full implications of the nature of this information is a puzzling feature of the archaeological collaboration with artefact hunters and collectors.

Looking at a lot of the research that is being done on the basis of finds recorded in the PAS database (for example Kershaw 2013 and Brindle 2014) it is easy to get the impression that what interests archaeologists is "x-marks-the-spot" information about where in a region an artefact was found rather than its site context, even in broader terms. Very little attention has been paid in the literature of the degree to which the recording of the effects of collection-driven exploitation of a site aids the understanding of the source sites. Yet, surely if the PAS records are to form any kind of archaeological mitigation of the damage to and destruction of the archaeological record on the

sites from which collectables are being removed, this is a fundamental question.

This issue is especially raised in the case of the targeting of sites known from the archaeological literature, which is used by artefact hunters to pinpoint a site already known to be productive of potential collectables in order to extract from it material for collecting. In any notion of "responsibility", or "best practice", any erosion of preserved sites in this manner ideally should be conducted in a manner that supplements, confirms or enhances what is already known about the site, and according to some kind of previously agreed research programme. In the absence of this, it is obvious that random and selective removal of diagnostic finds with or without proper recording constitutes destructive erosion of the resource for personal entertainment and profit. For this reason, supporters of the PAS are especially loath to discuss issues concerning the relationship of artefact hunting and collecting and the sustainable management of the archaeological resources (see the discussion initiated by Gill 2010 in *Papers from the Institute of Archaeology* 20).

Supporters of the PAS partnering approach suggest that archaeological data are created by the Scheme's database. Yet, it is obviously next to impossible to resolve even as simple an issue as the nature, size, boundaries and status of the site or spread of archaeological material on the basis of examining the records of a selection of loose finds said to be from different parts of it. This is especially the case when material is removed from it by an individual or individuals untrained in archaeological methodology and methods of observation, interpretation and inference but then recorded as second-hand information at a distance from the site by another party (the FLO), utilising what amounts to hearsay information. It is questionable whether any "data" obtained by such means can form a firm basis, either in their own right or in combination with information from other sources, for more advanced archaeological research. It is likely that they are capable only of providing a distorted view of the past seen through the prism of the view of the collector. In this sense, the loose objects recorded on the PAS database do not comprise archaeological data at all in the usual sense. There is no overall consistent factor directing which the artefacts listed in it were collected, selected and then recorded. For the same reason, the information about found material catalogued in the database cannot be directly amalgamated with the evidence obtained from controlled archaeological research (excavations and field survey) as they are collected for different purposes. Evidence is collected by artefact hunters inexpertly in the field, and selected with a "collector's eye" and not one intended to interpret site processes and associations. The archaeological approach and methodology are absent from the investigative process.

This is despite the fact that when the PAS was set up, the intention was to educate finders to approach the exploitation of the archaeological record in a responsible manner and adopt a "best practice" approach, which would interlock with archaeological (and thus, it was argued, society's) needs. It was envisaged that artefact hunting in England and Wales would be "tamed" and that both parties, archaeology/society and the artefact hunters/collectors would gain something from that partnership. Twenty years on, it can be seen that this bold social experiment was based on false premises, and above all the curious failure to recognize the difference between collecting and archaeological research.

Archaeologists have in general tended to go little further than accept the argument that artefact hunters are both perceived and portrayed as having a "common interest in the past" with archaeologists (though it seems no more sophisticated comparison is being made than a common interest in "digging up old things"). The British press even frequently refers to artefact hunters as "amateur archaeologists". Britain has indeed a long and laudable tradition of amateur archaeology, often done in collaboration with local societies attached to museums (and with an extensive textbook literature for this market). We should be wary of abandoning the distinction between archaeology (the study of the past through the material remains by the application of the methodologies of archaeology) and mere collecting of artefacts like so many postage stamps. They are not the same thing. It should be brutally obvious that artefact collecting is no more "doing archaeology" than collecting folk costume Barbie dolls is "doing ethnography".

Part of the problem with attempting through 'outreach' and partnership with the PAS to train British artefact hunters as ersatz archaeologists is probably the characteristics of the sector of the British population that take up the hobby. In particular, this concerns their ability effectively to engage in the learning process, to absorb and assess information, or to understand the aims and methods of archaeology together with the reasons behind them. PAS seems to have found out quite early on that a strikingly high percentage of the people they were engaging with came from groups of lower socio-economic status (see above), and furthermore were "people who have often felt excluded from formal education" (Lammy 2005). At the time, this was treated as a sign that the clientele of the PAS was "more representative of the UK population than many other cultural activities, such as those who visit museums". Under a labour government, this was used to provide a comforting picture of the "democratisation" of access to heritage and inclusiveness, it was being claimed that "the PAS has also helped to break down social barriers and to reach out to people who have often felt excluded from […] the historic environment". This social-unifying mission of archaeology however should not be taking place at the cost of the wanton and massive destruction of the archaeological record.

A number of factors conspired to prevent the introduction of a new mentality to the UK artefact hunting community as a whole. Two decades on, this has turned out to be a naïve and idealistic dream. On closer contact with the community (now rendered much easier by use of the internet and social media than it was in the 1970s when the present writer began to investigate these issues), it is not difficult to see why. The lower educational achievement of

many artefact hunters can be seen in the standards of articulacy and literacy that may be observed on their social media. This suggests that a large proportion of the people that take up artefact hunting in the UK have below average adult literacy skills. This has important consequences for both the manner in which archaeological outreach is conducted among them, it is no use just posting up a reading list and hope that they will study the works indicated (and there is anyway no such reading list on the PAS website). It also has important consequences for the notion that these people can be relied on for the "reading" of the archaeological record they disturb in their collecting activities, then interpreting and articulately reporting the archaeological contexts of the finds they remove from the ground and then bring for recording.

The position of British archaeologists on artefact hunting and collecting

It may be wondered where British archaeologists, who one would have thought would be concerned about the state of preservation of the finite and fragile resource that is the source material for their discipline, stand on the question of the damage done to it by artefact hunting and collecting. After all, it is difficult to believe that British entomologists and ecologists would likewise be gleefully encouraging tens of thousands of people to comb the vanishing wild habitats of England and Wales with nets and killing jars to make collections of rows of dead butterflies in a case all neatly labelled with their findspot — so that their current shrinking geographical range and variation of wing pattern and colour could be studied. Labelled wild bird egg collections (also a typically English aberration) were promoted once as a means for the egg hunters to "engage with nature" and as a form of "citizen science" (it is now illegal in the UK not only to collect eggs, but now even to possess them, but killing-jar lepidoptery is not).

According to the latest available survey (Aitchison and Rocks-Macqueen 2013) in 2013 there were 4,792 professional archaeologists working in the UK and, presumably, curious about and aware of what is happening. One might have expected therefore some lively evidence-based debate on artefact hunting and the antiquities trade and the damage they cause in the literature and social media. In fact, any dissent is relatively subdued. A few archaeologists have outspoken opinions on artefact hunting, Colin Renfrew (2000a: 15) has categorised it among the most significant causes of destruction of the archaeological record today, which "is being destroyed at a formidable and increasing rate […] by looters in order to serve the lucrative market in illicit antiquities through which private collectors and, alas, some of the major museums […] fulfil their desire to accumulate antiquities'. Such voices however are noticeably in the minority.

There are at least two factors that contribute to this. The first is that while many archaeologists in regions that are major "source countries" for the international trade in illicit antiquities tend to be very concerned about, and active in their attempts to fight, collection-driven exploitation of the archaeological record and antiquities trafficking (some in the recent Syrian civil war even losing their lives in the effort), the same cannot be said for archaeologists in the main "market countries" at the other end of the supply chain (USA, UK, Germany etc.). It is there that it is not difficult to find academic and museum archaeologists (and others) vigorously defending the position that there are "higher loyalties" involved. They hold that it is imperative to study, publish and display finds (such as Mesopotamian cuneiform tablets and cylinder seals, loose papyri, coins, classical sculptures, incantation bowls and other artefacts) "surfacing" on the antiquities market, and the fact that they were unethically and illegally procured with the destruction of context and removed from the source country is necessarily treated by them as a minor irritation in the shadow of the "information" that can be got from their study. It is in this circle of belief that one can perhaps inscribe the support in the British archaeological community of the PAS-partnership with collectors.

The second factor is the specific nature that the "detector debate" in Britain invariably takes. It may be observed that the PAS has tended to be careful how it deals with its "partners". British artefact hunters, represented mainly by metal detector users, tend to be very "tribal" and extremely militant in their defence of their hobby. Since the early years of the STOP campaign, archaeologists learnt that there were limited possibilities of discussion with a large segment of the milieu. This continues today in any interchange of views on these topics through social media. Too frequently, critical archaeological comment on any aspect of the hobby will immediately be met by a confrontational response from the other side, which often takes the form of insulting behaviour, personal attacks and even threats. Not surprisingly, many British archaeologists have learnt that it is better not to try to reason with these people and simply avoid engaging with them. In general, the attitude has developed that dealing with these difficulties is the problem of the PAS and one gets the impression that the average archaeologist is content to simply let them get along with it and save everybody else the bother.

This attitude is expressed for example by Moshenska (2010: 26-7) who declares "not only is the metal detecting (sic) debate needlessly divisive and intemperate, it is also staggeringly unimportant". He develops this saying that the depletion of the archaeological record through its exploitation as a source of collectables by tens of thousands of people in a period extending over many decades is not a problem in Britain:

> There are parts of the world where looting poses a serious threat to archaeological heritage and our ability to interpret the past. Britain is not one of these places. Nonetheless there are serious threats to archaeological heritage in Britain. Metal detecting is not one of these.

Athough he does not expand on his reasons for holding such opinions, for Moshenska the consideration of artefact hunting as in any way related to the looting going on beyond his island's shore is therefore "unhelpful" (2010: 24).

There are other academics also in denial, and determined to support the current English and Welsh policies on artefact hunting. These include the six authors from different archaeological bodies and universities who united to write a curious ultra-defensive and insulting article critical of Hardy's (2017) conclusions on the degree to which those policies were leading to archaeological damage (Deckers *et al.* 2018). They are openly critical of "detractors" (see UKDFD 2007) and supportive of "finders" and the alleged "social benefits" produced by the PAS. Attempting to deflect attention away from the import of what Hardy wrote, the authors claim that there is nothing wrong with artefact hunting anyway because removing random collectables from the archaeological record is not damaging, it is even, they say, "fundamentally wrong" to suggest it is (Deckers *et al.* 2018: 323). Although adamant that Hardy's figures on the scale and rate of loss of material from the English and Welsh archaeological record were wrong, they were notably unable to offer any figures of their own or suggests alternative ways to determine them.

The prospects for the future are not entirely bleak. It is becoming more difficult to ignore the evidence of the scale of the problems surrounding artefact collecting in the UK. The British Archaeological Trust Rescue has recently published a policy document (Rescue 2018) which took a critical stance on artefact hunting and the antiquities trade:

> unregulated hobby detecting and other fieldwork does not contribute sufficient value or information to our understanding of the past to justify the damage caused to the wider archaeological resource, in particular by detecting on non-arable land, by poor recording of find locations and by inadequate postexcavation reporting [...] the PAS has been unable to sufficiently advocate for archaeological methodologies and rigorous survey practices to underpin artefact collecting and this results in archaeological material being removed from the landscape without appropriate recording [...] therefore we have concluded that the current system for regulating the recovery of archaeological evidence by non-professionals in the UK is inadequate.

In the light of such conclusions, Rescue is now calling for a national investigation into the feasibility of a licensing system for the collection-driven exploitation of the archaeological record and

> for all metal detecting, fieldwalking, excavation and other intrusive survey to be subject to prior authorisation on a case-by-case basis, supported by appropriate pre-commencement documentation [...] the introduction of legally enforceable compulsory reporting of all recovered archaeological material supported by adequate resourcing of procedures for authorisation and supervision.

The document also calls for the creation of antiquities legislation for England that requires all archaeological objects offered for sale to be fully and legitimately provenanced and that would "discourage the sale of UK archaeological artefacts". In particular, it suggests exploring the possibility of automatically making archaeological objects found become the property of the state. Similar changes were also presented for public discussion in a recent consultation document on revising the Treasure Act and associated documents (DCMS 2019).

Public engagement on portable antiquities issues

One of the aims in setting up the PAS was to reduce the damage done to the archaeological record by artefact hunting, it has instead unwittingly been instrumental in legitimising that activity in the UK, and indeed seems even indirectly to have been party to the dramatic increase in popularity of the hobby. The strategy of the PAS has involved promoting a picture of the archaeological benefits of so-called "responsible detecting" and collecting, even referring to it as "citizen archaeology" (Bolton 2016). This has had the regrettable effect that the British public has been receiving a very confusing message about collection-driven exploitation of the archaeological record, and the collection and trade in archaeological artefacts generally. The PAS, together with the restricted nature of the material that the current Treasure legislation is bringing into the public domain and showcasing there, are affecting the way that the cultural heritage is conceptualised, exhibited and interpreted in the museum or digital media setting. It is presenting to the public a wholly false picture of archaeology itself. It appears in the public domain merely as a search for precious "things" (the shinier the gold and silver that they are made of, the better). Promotion of the "responsible" making of personal artefact collections and building up an independent and personal picture of the past through accumulating decontextualised objects has a number of other unfortunate effects.

As noted above, the task of the PAS is to educate the public on archaeology. In fact, for a number of reasons, and despite a twenty-year effort, it is not managing to make much of an impact on public attitudes. The ancient past and the way it is studied seem to be too difficult for them to explain to a wider public and the Scheme relies on relatively simplistic terms involving ethnic labels, often making glib reference to existing public preconceptions about the prehistoric period from television and film. The narratives that can be offered to the general public on the basis of the decontextualised finds with which it deals tend to be rather simplistic and replace the discourse of archaeological inference on the basis of context and associations by an object-centred art-historical (or typological) approach more appropriate to the age of antiquarianism. Spectacular finds, such as the discovery of a number of Bronze Age hoards or coin hoards by metal detector users, appear momentarily in the media headlines, where they are often accompanied by some object-centric narrativisation about what aspect of the past it illustrates, often some trite "human interest" details, and stress is almost always laid on the market value financial worth of the discovered Treasures. But this does not seem to generate longer term effects on public awareness of the archaeological context or the nature of archaeological enquiry.

Failing to firmly discourage members of the public from collecting antiquities also has the effect of legit-

imising the trade in decontextualised artefacts. It is also creating a new body of archaeological material outside established public curatorial institutions that Daubney (2017) has called "floating culture" which constitutes "a significant ethical and legal challenge both for heritage protection policy and the antiquities market in the U.K. and beyond". Artefact hunters may buy artefacts from dealers to fill the gaps in a collection by mixing objects bought online with those they have found. Unfortunately, the bazaar archaeology (Muscarella 2000) on offer by dealers today includes a number of fakes and misdescribed artefacts. At some stage some of those collections will be donated to public institutions and somebody will have to catalogue it.

In the manner in which British archaeologists are presenting artefact hunting to the wider public is a very puzzling lack of connection between that which is done at home, and that which is read about happening abroad. In the UK, the serious newspapers write with concern about the destruction of archaeological sites by artefact hunting in countries like Iraq, Syria, Egypt and Afghanistan. It is a paradox that archaeological supporters of private collecting in Britain cannot answer the fundamental question of why "looting" of archaeological sites for collectables is reprehensible when done by brown-skinned diggers in the tells of the Middle East, yet "metal detecting" is something that can be tolerated and even encouraged when done by fair skinned diggers with metal detectors in Middlesex.

Producing favourable publicity for collecting and a failure to promote more firmly an archaeological point of view interlock with recent concerns in the British Post-processual critique. In particular they relate to the brand of archaeology emerging from it which attempts to engage in a form of "public" archaeology which is in some way less elitist and more democratic and more "socially responsive". This involves exploring interactions between individual and society, the intersections between past and present and the relationships of academic pursuits and social life. This school of thought holds that archaeological inquiry and conclusions should not exclusively be the domain of academics, but should involve multiple potential publics (local communities, amateurs). This takes as a premise the deprivileging of claims to specific knowledge and encourages the creation of multiple narratives about the past — in other words accepting that all claims and inferences are equally effective at advancing interpretation and understanding of the past. This is the intellectual background to British archaeology treating the relationship between collectors and academics as a partnership based on a common ground.

The history of the PAS as an example of this trend suggests that there are a number of issues in such an approach that need to be addressed. There are a number of problematic features of the interactions between collectors and archaeologists (both those working in the Scheme as well as those attempting to utilise the information accumulated as a result). In particular, treating both collecting and archaeological research as aspects of the same phenomenon disregards the fact that they are incompatible when seen from the position of the need to protect the archaeological resource against uncontrolled collection-driven exploitation. In addition, it may be questioned whether it is possible, and under what conditions, to arrive at a truly multivocal archaeology, in which all competing perspectives and approaches can be considered equally valid. In particular, when does it cease to be archaeology?

Conclusion

This text addresses only a few of the issues connected with current British policies on the exploitation of the archaeological record as a source of collectable items, which clearly is now occurring at a massive scale. Not only are the nation's archaeologists not protesting this process, one might even say the majority are supportive of collectors even actively "partnering" the artefact hunters through the Portable Antiquities Scheme. This is widely regarded by them as an interesting pioneer attempt to deal with loss of knowledge through the collection-driven exploitation of the archaeological record in England and Wales and one that gives them access to many fresh artefactual discoveries to study that would not otherwise be available. That assessment totally ignores a whole range of issues. It is abundantly clear that the degree of mitigation of information loss through unregulated collection-driven exploitation of the archaeological record is severely limited, and the degree to which the artefact hunting milieu is aware of and applying best practice in their collecting activities is clearly inadequate. In particular, this approach has also had the unfortunate effect of legitimising artefact hunting and collecting. This applies not only to Great Britain with its specific legislative situation, but is now rashly being pointed out as a model worthy of emulation by artefact hunters, collectors and antiquity dealers and their lobbyists abroad in countries with totally different legal structures. Other areas of doubt include the ethical dilemmas concerning whether it is right to amass personal collections of material inaccessible to more detailed research, or to sell objects from such collections on the open market. There are also concerns that the payment of rewards for "Treasure" finds sends out a questionable message. It is clear that there are many issues involved in the current British policies on artefact hunting, collecting and the commerce in archaeological material that could only be touched upon in a text this size. Collection-driven exploitation of the archaeological resource is a contentious issue in the British context. The failure of the Portable Antiquities Scheme to provide effective mitigation of the overall damage done and information lost due to this hobby, to discourage the exploitation of the finite and fragile archaeological record of England and Wales as a "quarry" for collectables, as well as its failure to initiate and engage in a wider public debate on these issues, raise questions of the usefulness of this approach. Has not experience now shown, beyond any possibility of serious denial, that if we really do intend to protect the British archaeological record, it is time to revisit current policies on artefact hunting

and the antiquities trade? After twenty years of failing to cope with the damage that is being done, perhaps it is time for some serious reflection and debate, and artefact hunters and collectors can be told to "STOP", Stop Taking Our Past from what is left of the accessible archaeological record in Britain. More than enough of it has gone already.

Acknowledgements

I would like to thank Nigel Swift and Prof. David Gill for helpful and informed discussion of many of the issues raised here and their support. I am grateful to two anonymous peer reviewers for some helpful comments on the manuscript. Over the course of the author's research many people, artefact hunters and collectors, archaeologists, museum staff and officers of the Portable Antiquities Scheme, too numerous to mention individually, have graciously supplied information or answered queries about specific aspects of the issues related to collection-driven exploitation of the archaeological record, I would like to thank them all, but all the opinions expressed and any errors in interpretation are mine alone. All links to the internet were active on 1st April 2020 unless otherwise noted.

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Data de recepció: 11/09/2019
Data d'acceptació: 28/01/2020

Bibliography

Aitchison, K., Rocks-Macqueen, D. (2013). *Archaeology Labour Market Intelligence: Profiling the Profession 2012–13*. Landward Research. Sheffield.

Anon (2017). Metal Detecting UK – The Complete Guide. *The Detectorist.uk*. Available on the Internet: <http://www.thedetectorist.co.uk/metal-detecting/>.

Archaeology UK (2015). *ARCHI, UK Archaeological Sites*. Digital Documents, Balham, London. Available on the Internet: <http://www.digital-documents.co.uk/>.

Ashworth, L. (2015). The rise of detectoring: Holding history in your hands. *The Independent*, Aug 24, 2015. Available on the Internet: <https://www.independent.co.uk/life-style/history/the-rise-of-detectoring-holding-history-in-your-hands-10469999.html>.

Atwood, R. (2004). *Stealing History: Tomb Raiders, Smugglers, and the Looting of the Ancient World*. St. Martin's. New York.

Barford, P. M. (2005). What are the effects of Artefact Hunting on the Archaeological Resource? *The Quarterly - The Journal of the Norfolk Archaeological and Historical Research Group,* 58: 3-6.

Barford, P. M. (2018). A Revised Artefact Erosion Counter for Artefact Hunting in England and Wales (2018). *Portable Antiquities Collecting and Heritage Issues Blog* Sunday, 15 July 2018. Available on the Internet: <https://paul-barford.blogspot.com/2018/07/a-revised-artefact-erosion-counter.html>.

Barford, P. M. (2016). Portable Antiquities Collectors and an Alter-Archaeology of Viking England. *Acta Archaeologica Pultuskiensia,* V (Pułtusk Academy of Humanities Institute of Anthropology and Archaeology): 31-46. Available on the Internet on researchgate.net: <https://tinyurl.com/yyjemwwd>.

Barnet, D. (2017). Real-life detectorists: The metal hunters who are digging up a treasure trove of British history. *The Independent*, 16th November 2017. Available on the Internet: <https://www.independent.co.uk/news/long_reads/detectorists-season-3-buried-treasure-trove-hoxne-hoard-metal-detector-detecting-artefacts-roman-a8055786.html>.

Belk, R. W., Wallendorf, M. and Sherry, J. (1988). *Collectors and Collecting. Advances in Consumer Research 15: 548-553. Available online:* <https://www.acrwebsite.org/volumes/6863/volumes/v15/NA-15>.

Bland, R. (1998). The Treasure Act and the proposal for the voluntary recording of all archaeological finds. In: Denford, G. T. (ed.). *Museums in the Landscape: Bridging the Gap*. Society of Museum Archaeologists Conference 1996, St Albans, England. *The Museum Archaeologist,* 23: 3-19.

Bland, R. (2004). The Treasure Act and the Portable Antiquities Scheme: a case study in developing public archaeology. In: Merriman, N. (ed.). *Public Archaeology*. Routledge. New York: 272-291.

Bland, R. (2005). A pragmatic approach to the problem of portable antiquities: the experience of England and Wales. *Antiquity,* 79 (304): 440-447.

Bland, R. (2009). The Development and Future of the Treasure Act and the Portable Antiquities Scheme. In: Thomas, S., Stone, P. G. (eds.). *Metal Detecting and Archaeology.* The Boydell Press. Woodbridge: 63-86.

Bland, R., Robbins, K and Pett, D. (2014). The Portable Antiquities Scheme database as a tool for archaeological research. British Museum. London. Available on the Internet: <http://www.britishmuseum.org/research/research_projects/all_current_projects/pas_in_archaeological_research.aspx)>.

Bland, R., Lewis, M., Pett, D., Richardson, I., Robbins, K., and Webley, R. (2017). The Treasure Act and Portable Antiquities Scheme in England and Wales. In: Moshenska, G. (ed.). *Key Concepts in Public Archaeology*. London (UCL): 107-121. Available on the Internet: <https://www.jstor.org/stable/j.ctt1vxm8r7>.

Boulton, H. (2016). The British Museum announces most successful year ever, Annual Review Launch 2016. British Museum press release 1st July 2016. Available on the Internet: <https://enews.britishmuseum.org/pdf/annual-review-press-release.pdf>.

Brindle, T. (2014). *The Portable Antiquities Scheme and Roman Britain*. British Museum Press. London.

Chippendale, C., Gill, D. (2001). Online Auctions: A New Venue for the Antiquities Market'. *Culture Without Context,* 9: 4-12. Available on the Internet: <https://traffickingculture.org/app/uploads/2012/07/CWC-9.pdf>.

COUNCIL OF EUROPE (1992). European Convention on the Protection of the Archaeological Heritage <https://www.coe.int/en/web/conventions/full-list/-/conventions/rms/0900001680072318>.

COUNCIL OF EUROPE (1992). Convention for the Protection of the Archaeological Heritage of Europe (revised). Valletta, 1992. Available on the Internet: <https://www.coe.int/en/web/culture-and-heritage/valletta-convention>.

Crisp, D. (2014). The joy of metal detecting – it's not just about the treasure. *The Guardian*, August 29th 2014. Available on the Internet: <https://www.theguardian.com/commentisfree/2014/aug/29/joy-metal-detecting-treasure-antiquities-folkestone-beach>.

Daubney, A. (2017). Floating culture: the unrecorded antiquities of England and Wales. *International Journal of Heritage Studies,* 23.9: 785-799. Available on the Internet: <DOI: 10.1080/13527258.2017.1325770>.

DCMS (2019). Revising the definition of treasure in the Treasure Act 1996 and revising the related codes of practice. Public consultation February 2019, Department for Digital, Culture, Media and Sport. Available on the Internet: <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/775560/Revising_the_definition_of_treasure_in_the_Treasure_Act_1996_and_revising_the_related_codes_of_practice.pdf>.

Deckers, P., Bleumers, L., Ruelens, S., Lemmens, B., Vanderperren, N., Marchal, C., Pierson, J. and Tys, D. (2016). MEDEA: Crowd-Sourcing the Recording of Metal-Detected Artefacts in Flanders (Belgium). *Open Archaeology,* 2: 264–277. Available on the internet: <https://www.degruyter.com/view/journals/opar/open-issue/article-10.1515-opar-2016-0019/article-10.1515-opar-2016-0019.xml>.

Deckers, P., Dobat, A., Ferguson, N., Heeren, S., Lewis, M., Thomas, S. (2018). The Complexities of Metal Detecting Policy and Practice: A Response to Samuel Hardy, 'Quantitative Analysis of Open-Source Data on Metal Detecting for Cultural Property'. *Open Archaeology* 4(1): 322-333. Available on the Internet: <https://doi.org/10.1515/opar-2018-0019>.

Dobinson, C., Denison, S. (1995). *Metal detecting and archaeology in England*. Council for British Archaeology. York.

Fay, E. (2013). Trading in antiquities on eBay: the changing face of the illicit trade in antiquities. PhD Thesis, Keele University October 2013. Available on the Internet: <http://eprints.keele.ac.uk/197/1/Fay%20PhD%202013.pdf>.

Fletcher, T. (2003). *Reading Land, a guide to identifying productive search areas.* Greenlight Publishing. Witham.

Geake, H. (2014). Coping with no context: using Portable Antiquities Scheme data in early-medieval research. Unpublished abstract of seminar at University of York 22 January 2014.

Gill, D. W. J. (2010). The Portable Antiquities Scheme and the Treasure Act: Protecting the Archaeology of England and Wales? *Papers from the Institute of Archaeology,* 20: 1–11. Available on the Internet: <http://doi.org/10.5334/pia.333>.

Gill, D. W. J. (2014). Context matters: The So-called Crosby Garrett Helmet. *Journal of Art Crime,* 11 (2014): 53-59. Available on the Internet: <https://www.academia.edu/7158149/Context_matters_The_So-called_Crosby_Garrett_Helmet>.

Gill, D. W. J. (2015). Damaging the archaeological record: the *Lenborough* Hoard. *Journal of Art Crime*, 13 (Spring): 51-57. Available on the Internet: <https://www.academia.edu/12874105/Damaging_the_Archaeological_Record_The_Lenborough_Hoard>.

Gray, L. (2011). English Heritage launch campaign against 'night hawkers. *The Telegraph*, 11th Feb 2011. Available on the Internet: <http://www.telegraph.co.uk/news/earth/earthnews/8316620/English-Heritage-launch-campaign-against-night-hawkers.html>.

Grove, B. (2005). *The Treasure Hunter's Handbook: Britain's Buried Treasure - and How to Find it*. Piatkus Books. London.

Hall, J. L. (2007). The Fig and The Spade Countering the deceptions of treasure hunters. *AIA Archaeology Watch* (August 15): 1-10. Available on the Internet: <https://www.archaeological.org/pdfs/archaeologywatch/figandspade.pdf>.

Hardy, S. A. (2017). Quantitative Analysis of Open-Source Data on Metal Detecting for Cultural Property: Estimation of the Scale and Intensity of Metal Detecting and the Quantity of Metal-Detected Cultural Goods. *Cogent Social Sciences*, Volume 3, Number 1. Available on the Internet: <https://dx.doi.org/10.1080/23311886.2017.1298397>.

Heritage Action (2006). Artefact Erosion Counter. Available on the Internet: <http://www.heritageaction.org.uk/erosioncounter/>.

Huth, C. (2013). Vom rechten Umgang mit Sondengängern: Das "Portable Antiquities Scheme" in England und Wales und seine Folgen. *Archäologische Informationen, Bund,* 36: 129–137.

Kershaw, J. (2013). *Viking Identities: Scandinavian Jewellery in England*. Oxford University Press. Oxford.

Kobylinski, Z., Szpanowski, P. (2008). Metal detector users and archaeology in Poland: the current state of affairs. In: Thomas, S. and Stone, P. (eds.). *Metal Detecting and Archaeology*. Boydell and Brewer. Woodbridge: 13-24.

Kozinets, R.V. (2002). The Field Behind the Screen: Using Netnography For Marketing Research in Online Communities. *Journal of Marketing Research*, 39 (1): 61–72. Available on the Internet: <http://www.nyu.edu/pages/classes/bkg/methods/netnography.pdf>.

Lammy, D. (2005). Forward. *Portable Antiquities Scheme Annual Report 2004/05:* 3-4. Available on the Internet: <https://finds.org.uk/documents/file/PAS_2004_05.pdf>.

Mackenzie, S., Yates, D. (2015). Collectors on illicit collecting: Higher loyalties and other techniques of neutralization in the unlawful collecting of rare and precious orchids and antiquities. *Theoretical Criminology,* 20 issue: 3: 340–357. Available on the Internet: <https://doi.org/10.1177/1362480615607625>.

Maiklem, L. (2019). *Mudlarking, Lost and Found on the River Thames*. Bloomsbury Publishing. London.

McIntosh, S. K. (2000). The Good Collector: Fabulous beast or endangered species? *Public Archaeology,* 1: 73–81 (with Lord Renfrew and S. Vincent).

Milmo, C. (2015). 'Nighthawks': Tracking the criminals plundering ancient sites with the latest

equipment. *The Independent*, 29th December 2015. Available on the Internet: <https://www.independent.co.uk/news/uk/home-news/nighthawks-tracking-the-criminals-plundering-ancient-sites-with-the-latest-equipment-a6789921.html>.

Moshenska, G. (2010). Portable Antiquities, Pragmatism and the 'Precious Things'. *Papers from the Institute of Archaeology,* 20, Dec. 2010. Available on the Internet: <https://pia-journal.co.uk/articles/10.5334/pia.336/>.

Muscarella, O. (2000). *The Lie Became Great: The Forgery of Ancient Near Eastern Cultures*. Brill. New York.

NCMD (nd). *Introduction to Metal Detecting*. ACG Publications Ltd. Available on the Internet: <https://www.ncmd.co.uk/wp-content/uploads/ncmd-introduction-to-metal-detecting.pdf>.

NCMD (2000/2012). Code of Conduct. In: *Appendix A to the NCMD Constitution. Revised February 2000. Amended AGM June 2012*. Available on the Internet: <https://www.ncmd.co.uk/code-of-conduct/>.

Orsner, C. E., Jr. (1998). Negotiating our *'familiar'* pasts'. In: Tarlow, S. and West, S. (eds.). *The Familiar Past? Archaeologies of Later Historical Britain*. Routledge. London: 273–285.

PAS (2003). About the Scheme. Available on the Internet: <https://finds.org.uk/about>.

PAS (nd [2003]). Frequently asked questions about the Scheme and its work. Available on the Internet: <https://finds.org.uk/getinvolved/faq>.

PAS (nd [2019]). Research in progress using our data. Available on the Internet: <https://finds.org.uk/research/projects>.

PAS (2017). *Code of Practice for Responsible Metal Detecting in England and Wales (2017)*. Available on the Internet: <https://finds.org.uk/getinvolved/guides/codeofpractice>.

Pearce, S. M. (1994). *Interpreting objects and collections*. Leicester. Available online: <https://is.muni.cz/el/1423/jaro2013/SAN105/um/Susan_Pearce_Interpreting_Objects_and_Collection.pdf>.

Pearce, S. M. (1998). *Collecting in Contemporary Practice*. Sage Publications. London.

Portable Antiquities Scheme Website. Available on the Internet: <www.finds.org.uk>.

Renfrew, C. (2000a). *Loot, Legitimacy and Ownership: The Ethical Crisis in Archaeology*. Debates in Archaeology. Duckworth. London.

Renfrew, C. (2000b). The fallacy of the Good Collector of looted antiquities. *Public Archaeology,* 1(1): 76-78.

Rescue (2018). *Our policy for the future, Rescue, The British Archaeological Trust January 2018*. Available on the Internet: <http://rescue-archaeology.org.uk/wp-content/uploads/2018/10/Rescue-policy-all-April-2018_bookmkd.pdf>.

Richards, J. D., Naylor, J. and Holas-Clark, C. (2009). Anglo-Saxon landscape and economy: using portable antiquities to study Anglo-Saxon and Viking Age England. *Internet Archaeology*, 25. Available on the internet: <http://intarch.ac.uk/journal/issue25/richards_index.html>.

Robbins, K. (2012). *From Past to Present: Understanding the Impact of Sampling Bias on Data Recorded by the Portable Antiquities Scheme*. PhD Thesis, Southampton University. Available on the Internet: <https://eprints.soton.ac.uk/360475/>.

Robbins, K. (2014). '*Portable Antiquities Scheme: A Guide for Researchers*'. British Museum. London. Available on the Internet: <https://finds.org.uk/documents/guideforresearchers.pdf>.

Rosenstein, L. (2009). *Antiques: the History of an Idea*. Cornell University Press. Ithaca, N.Y.

Rubel, P. and Rosman, A. (2001). The Collecting Passion in America. *Zeitschrift Für Ethnologie*, vol. 126 (2): 313–330. Available on the Internet: <www.jstor.org/stable/25842828>.

Sandling, T. (2018). *London in Fragments: A Mudlark's Treasures*. Quarto Publishing Group. London.

Sawaged, T. (1999). The Collecting Culture: An Exploration of the Collector Mentality and Archaeology's Response. *Nebraska Anthropologist,* 121: 80-88. Available on the Internet: <https://digitalcommons.unl.edu/nebanthro/121>.

Subkowski, P. (2006). On the psychodynamics of collecting. *The International Journal of Psychoanalysis*, 87.2: 383-401.

Tarlow, S., West, S. (eds.) (1998). *The Familiar Past? Archaeologies of Britain 1550-1950*. Routledge. London.

Thomas, G. (2000). Anglo-Scandinavian metalwork from the Danelaw: Exploring Social and Cultural Interaction. In: Hadley, D. M. and J. D. Richards (eds.). *Cultures in Contact: Scandinavian Settlement in England in the Ninth and Tenth Centuries* (Studies in the Early Middle Ages). Brepols. Turnhout: 237-255.

Thomas, S. (2012a). Searching for answers: A survey of metal-detector users in the UK. *International Journal of Heritage Studies,* 18(1): 49–64.

Thomas, S. (2012b). How STOP started: Early approaches to the metal detecting community by archaeologists and others. In: Moshenska, G., and Dhanjal, S. (eds.). *Community Archaeology: Themes, Methods and Practices*. Oxbow Books. Oxford and Oakville: 42-57.

Thomas, S. (2014). The Portable Antiquities Scheme in England and Wales. *Suomen Keskiajan Arkeologian*

Seura, 2014,1: 25-36. Available in the Internet: <https://www.academia.edu/12165866/The_Portable_Antiquities_Scheme_in_England_and_Wales>.

TREASURE ACT (1996). *An Act to abolish treasure trove and to make fresh provision in relation to treasure*, 4th July 1996. Available on the Internet: <http://www.legislation.gov.uk/ukpga/1996/24>.

UKDFD (2005-19). UK detector finds database, recording our heritage for future generations. Original website, available on Internet: <http://www.ukdfd.co.uk/>. [link broken by end of 2019]

UKDFD (2020). UK detector finds database, recording our heritage for future generations. New website, available on Internet: <https://www.ukdfd.co.uk/v46/>.

UKDFD (2007). Metal Detecting - The Hobby and its Detractors. privately published. Available on the Internet: <http://www.ukdfd.co.uk/pages/ukdfd-190607.pdf>.

Villenueva, D. (2006). *Site Research for Detectorists*. Greenlight Publishing. Witham.

Villenueva, D. (2007). *Successful Detecting Sites: Locate 1000's of Superb Sites and Make More Finds*. Greenlight Publishing. Witham.

Vos, D., Heeren, S., Van Ruler, N., Smallenbroek, K. and Lassche, R. (2018). PAN (Portable Antiquities of the Netherlands): Harnessing Geospatial Technology for the Enrichment of Archaeological Data. *GI_Forum* 2018, 2: 13-20. Available on the internet: <https://austriaca.at/0xc1aa5576_0x003a1fc5.pdf>.

Winkley, F. (2016). The Phenomenology of Metal Detecting: Insights from a Unique Type of Landscape Experience. *Papers from the Institute of Archaeology,* 25(2)13: 1–15. Available on the Internet: <http://dx.doi.org/10.5334/pia.496>.