# DIGGING UP THE DEAD: CURRENT APPROACHES TO THE EXCAVATION, PROTECTION AND ANALYSIS OF ARCHAEOLOGICAL HUMAN REMAINS

# Notes of the one-day Conference 29 November 2012, Edinburgh

# Pots, pebbles and precious objects: aspects of burial rites afforded to children in Bronze Age Britain

Dr Dawn McLaren, AOC Archaeology Group

#### Abstract

Children, an integral part of any community and society are rarely considered in narratives of the past. This is particularly true of prehistory where children's activities and actions are often undetectable. One facet of the archaeological record where children can be seen is through their formal burial which has, until recently, been understudies. The paper was drawn from a recently concluded Doctoral research project which considered the funerary rites afforded to children during the earlier Bronze Age (c.2500 – 1400 BC). By considering the data provided by the skeletal remains of the children who were the focus of formal burial alongside the grave goods provided by the surviving mourners it is possible to begin building a picture of typical burial practices and explore what this can tell us about children in the past.

Although burial practices have been the focus of studies for centuries, until recently these have overemphasised high status burials, with less attention to unaccompanied burials. The lack of child burials has led to suggestions that minors were not entitled to the same rites as adults, however recent studies have shown that funeral status and objects were not just indicators of wealth but that the situation is more complex. One study estimated that 1 in 18 of the BA population was afforded formal burial although the mechanisms for selection are not known. Studies have focused on adults with little consideration of children; often child burials have been seen as incidental. Given high mortality rates there had been suggestions that adults detached themselves from children.

Questions on which this research has focused include: were children eligible for burial rites? is childhood recognised as a distinct lifestyle in the BA? is there evidence of violence or neglect towards children? For the purpose of the study the end of childhood was defined as 15. The first stage of research comprised systematic study of BA burials in published reports (antiquarian to modern) to build a gazetteer – focusing on three areas, Scotland, Yorkshire and Wessex; over 1200 burials were studied. Just over 230 child burials in Scotland are reliably dated, c.100 inhumation.

Site types associated with children are the same as for adults, e.g. barrows, flat graves. There appears to be no routine spatial separation of child burials in cemeteries (although there are some instances of this). Burial grounds exclusively for children are rare but do exist. In general, older children tend to be interred singly; younger children are more likely to be associated with adults. The proportion of younger to older children is different for cremations though it is not clear whether this is a result of better survival of cremated bone or differences in practice.

There is little information about the health and diet of children in this period. Skeletal remains record dietary deficiencies, including examples of TB or leprosy. Pre industrial mortality rates for children are high (c.40% may have died before the age of 5) and very young infants are significantly underrepresented in the record.

Two principles govern grave goods – marking the deceased as part of the community (providing with everyday objects) and following local trends. One common artefact with child graves is pottery vessels. There have been suggestions in the past that small pots were children's toys, but whilst some child graves had small pots there was not a consistent correlation. Provision of paired beakers with child and adult graves does occur with pots of different sizes, larger with the adult, smaller with the child; this practice appears to be nationwide. Flint tools are also common grave goods with children of all ages; knives with older children.

Grave goods with older children are generally more consistent with those of adults. Adornments are rarer but range from necklaces to single beads, the latter possibly seen as amulets. Only a small number of child burials in Scotland are associated with ornaments. Other exceptional artefacts include mini-battle axes. Some small axes are also found with adult burials where they have been interpreted as amulets. There is no evidence of toys associated with child burials; if any of organic material and have not survived.

Where afforded formal burial children's graves show the full range of practice though most objects included are personal. It contradicts the view that children were unimportant in society.

A number of aspects were raised in discussion. The bias in the age of buried children may in part be a consequence of the burial process taking a higher toll on children's bones. There is also possibly some bias

in excavation as smaller bones may be easier to miss. This adds to any impact from differences in burial practice. There does not seem to be any particular correlation between size of burial chamber and children; there appears to be a standard size for all cists the and majority of child burials fall into this range although with a tendency to the smaller end of the scale. Regarding multiple burials, it was noted that there is not evidence for the length of time lapse between building of a cist and the death. Past excavators have not necessarily looked in a way to ascertain whether there was only a single phase of burial.

# And a tram ran through them: the excavation of post-medieval urban cemeteries in Edinburgh

# Dr Sorina Spanou (Headland Archaeology)

#### Abstract

The paper will discuss the results of the excavations of a post-medieval graveyard in Leith. The excavations – a 6 month long excavations, part of the Edinburgh Tram Initiatives under taken in 2010 by Headland Archaeology – involved unearthing nearly 400 burials below Constitution Street adjacent to South Leith Parish formal churchyard. Post excavation analyses are currently ongoing but this is a good time to take stock of our overall methodology and discuss issues pertaining to excavating urban cemeteries; including recovery in the field within the constraints of rescue excavation; analysis of human remains and pathology of post-medieval populations; preservation and limitations of stratigraphy and chronology; and finally public attitude towards open viewings on the excavation of 400 well preserved bodies on their doorstep.

South Leith Parish origins date back to the 15<sup>th</sup> century as St Mary's Chapel, being made into a parish church in 1609 with significant rebuilding of the church in the 19<sup>th</sup> century. The current churchyard wall is dates from just after 1790 when Constitution Street was built. Much of Constitution Street was built over burials. The excavation recorded c.400 burials of variable completeness: 305 fully or partially excavated. Dates ranged form the 14<sup>th</sup> to the 17<sup>th</sup> century. No finds had previously been reported from the area covered by the excavation though it has been estimated that several hundred graves have either been removed or are truncated by Victorian and modern services.

Preliminary results show that both sexes and all ages were represented with slightly more females than males. Their ages ranged from older child to older middle age. There were few infants, though these could have been buried elsewhere in the cemetery. The average stature was below the British average to the period possibly indicating poorer living standards, something also supported by evidence for metabolic conditions such as scurvy, rickets. Dental health indicates consumption of a lot of soft carbohydrate e,g, porridge, bread. At least 47 individuals showed degenerative joint disease.

In terms of funerary practices, the majority were single extended supine burials in coffins or earth cut graves, arranged in closely spaced rows. Most were single inhumations with some double e.g. superimposed, and some group burials in pits or layers. The majority were E-W with slight variation, and 3 N-S. Excavation was carried out in two parts, each a linear area along the line of the street, dictated by the need to keep one side of the street open during works. Several burials spanned both halves, and difficulties of multiple layers also added complexity in matching up records of burials across the two phases of excavation.

Preservation was generally good, but completeness of skeletons recovered variable (part a consequence of limited geographical extent of excavation). Several had been truncated by modern services/cuts. There was also intercutting of different burial episodes. Of the skeletons absolutely dated c.50% dated to between 1500 and 1635. Some remains may date from the late 14<sup>th</sup> century and could predate the chapel (1483) and may relate to the hospital of St Anthony which lay to the W. Southern parts of the area excavated had more sparse burial than the north but there was no particular pattern to the dates of burials.

The excavation attracted media and public interest. Some interpretation posters were displayed on adjacent fences. The excavation was carried out in full view; but no-one appeared to be upset by this, perhaps in large part due to the age of the burials. It was acknowledged that active excavation of human remains provides different experiences for the public and it us difficult to stage manage this.

Discussion raised the issue of public relations and noted that there was no dedicated individual to speak to the public/answer questions, although this may have been useful. However, it was not as disruptive as expected because it was possible to continue digging whilst talking. The tram project is controversial and the Council has a media team and is conscious of public interest. The project had talked to community groups; it was felt important to show and explain to people what was being done in a professional manner, and bring the public along by dealing respectfully with the remains.

The work did not locate a cemetery boundary but given the constraints of rescue excavation it was only possible to look at this small area. The cemetery extends beyond the current limits of the Constitution Stree possibly as far as the links.

# InterArchive: unlocking the hidden soil archive from archaeological human burials Dr Clare Wilson (University of Stirling), Carol Lang, University of York

#### Abstract

The InterArchive Project is a multidisciplinary research project funded by the European Council under the European Communities Seventh Framework Programme (FP7/2007-2013)/EC grant agreement no 230193, into the hidden archive of human internment. The project, run jointly by Universities of York and Stirling, aims to retrieve the maximum amount of archaeological and historical information from grave soils, using complimentary analyses of soil micromorphology, inorganic geochemistry and trace organic chemical analysis. The project will allow us to understand the role of soil chemistry and soil features in the preservation of burial residues on a micro- scale where visible macro remains can no longer be recorded. This valuable undiscovered archive of archaeological and forensic information, containing both physical remains and chemical signatures, gives a greater understanding of the built environment.

This presentation explores the hypothesis that: soils and sediments immediately associated with the decomposition of human internment serve as a valuable and under-utilised archaeological record, using several examples of which: South Leith, Church of St Mary's Edinburgh and Syningthwaite Prior, North Yorkshire are two. Grave soils were analysed, using soil micromorphology and associated techniques, to aid the understanding of pedogenic processes and elemental composition of the grave soils incorporating burial remains. The analysis provides a comprehensive inventory of information regarding the archaeological inhumations within the burial soil through the spatial analysis of soil features in relation to the body.

The results to date suggest analysis utilising micromorphological soil thin sections, from the context of an archaeological human inhumation, can detect degradation products from the burial and artefacts derived from burial rituals, which are no linger visible to the naked eye.

The state of decay of graves can be such there us little evidence for body and degradable objects. These techniques aim to identify micro-scale evidence in grave soils to seek by standard excavation.

Sampling protocol involves taking of soil samples from 17 main points in the grave/burial– skull, pelvic region, hands and feet. Samples of soil are taken from adjacent to and underneath these, and from control areas – one from undisturbed ground and two from grave fill. The process is carried out alongside archaeological excavation. There can be problems where there us a lack of soil – in mass graves.

Grave soils were analysed using soil micromorphology and associated techniques to aid the understanding of pedogenic processes and elemental composition of the grave soils incorporating burial remains.

Analysis looks at micro-fauna activity (high levels especially at the skull, pelvis and feet indicating a high level of organic material not degrading away), presence of iron/manganese nodules, found in areas of high organic matter, and analysis of voids and residue coating the voids, including analysis of mean ratio of oxygen to carbon in residue in the voids, and phosphorous/iron ratios. There may be elemental signatures to indicate presence of a body of none survives.

The analysis provides a comprehensive inventory of information regarding the archaeological inhumations within the burial soil through the spatial analysis of soil features in relation to the body. The results to date suggest analysis utilising micromorphological soil thin sections from the context of an archaeological human inhumation, can detect degradation products from the burial and artefacts derived from burial rites which are no longer visible to the naked eye. Increased levels of carbon within fine material around these voids shows the retention of organic material from degradation products especially around the skull and pelvis. There are also increased levels of phosphorous especially in the fine material around the skull and pelvis compared to the control, a result of degradation products moving from the body to the soil. The sampling method is quick and non-destructive working in tandem with the excavators. Initial results suggest degradation products are retained in soils around and below the body,

# Osteoarchaeological research in Scotland: a review Dr Kath McSweeney and Marlo Willows, University of Edinburgh

#### Abstract

The teaching of Osteoarcheology at the Archaeology Department at the University of Edinburgh was introduced in 2003, and by 2007 three taught osteologically related Masters Programmes had been

introduced (Osetoarchaeology, Human Osteoarchaeology, and Forensic Anthropology). We now have a thriving 'osteological' community with ten PhD students conducting osteological research in various parts of the UK and Europe, five of these in Scotland. This paper will discuss the status of these various research projects and focus on one in particular, that being undertaken by Marlo Willows on health in Medieval Scotland.

# Dr Kath McSweeney

The themes of the five research projects in Scotland comprise:

- Cremation technology and ritual in BA Scotland. Aspects being explored include whether individuals
  were cremated as complete bodies or as disarticulated bones; was the body adorned/clothed; numbers
  of bodies in the fore; efficiency of the cremation process; how much of the body was collected. The aim
  is to further understanding of the cremation process and ritual in Scotland.
- Osteoarchaeological examination of skeletal remains from Westray. The site dates to the Iron Age and the majority of remains are of infants, and are mostly disarticulated. Questions include the significance of the site and its position whether fortuitous use of an existing site or ritual significance.
- Using biometrics to test indices: e.g. unusual flattening of tibia bones caused by squatting. Measurements are being used to test theories/indicies.
- Assessment of activity markers in Scotland in the medieval population: looking at whether particular activities can be detected from bones.
- Activity markers in Scottish Neolithic populations- looking at remains mainly from cairns on the islands.

#### Marlo Willows, Research on health in medieval Scotland.

The aim of the work is to merge historic and archaeological information and address gaps in knowledge regarding health. Many sites have been excavated but for various reasons (not least budget/time constraints) there has been no comprehensive look at health. The aim is to get a more complete picture of life – lifestyle and its effects on health, prevalent diseases, health care practices. The research covers the period 500-1500 AD, and has looked at remains from 4 populations – two urban (one monastic including lay burials), one island and one rural:

- Ballinbrae (rural Dundee 6-17<sup>th</sup> C 197 skeletons)
- Isle of May, F of Forth, Benedictine priory from the 12<sup>th</sup> C, popular pilgrimage destination and possibly also a place of healing, 5<sup>th</sup> 16<sup>th</sup> C 58 skeletons. C 75% of the skeletons predate the priory.
- Whitechapel, Perth medieval chapel 13<sup>th</sup> C to 1559 (demolished) with burials possibly as late as the 17<sup>th</sup> C. 58 skeletons.
- St Andrews Library, 19<sup>th</sup> century built on the graveyard of Holy Trinity Church (built 15<sup>th</sup> C and used to c. the reformation. 72 articulated skeletons.

Aspects affecting lifestyle include demography, climate, environment, occupation, housing, hygiene, diet, treatment of illness. Sampled skeletons were compared with other skeletal populations in Scotland and some from England to look at diseases, lifestyle effects, rural vs urban influence, monastic vs lay, status, interpersonal violence, dietary information, migration, health care in practice.

# What can isotopes do for you? Exploring the success, potential and problems of their use in burial archaeology in Scotland *Dr Janet Montgomery, Durham University*

#### Abstract

Over the last 30 years, several types of isotope analysis to explore ancient human diet and mobility have become almost routine in both commercial and research archaeology projects. The ubiquity of their use tends to obscure the fact that there is still a lot we do not know about their limitations, what causes the variations we seek to exploit and thus what they tell us about people in the past, In addition, whilst dates are almost always useful, there are research questions which isotope analysis will not answer and the client may feel that the extra information obtained does not justify the often large costs. This paper will explore the potential and problems inherent in their application and present some examples of isotope studies taken from both research and commercial projects in Scotland to illustrate when, where and which isotope systems can work well.

On its own isotope analysis gives no more information than other technologies; the results need to be put into archaeological/geographical context. Caution is needed to ensure that interpretation is not presented as fact. There are various reasons why projects/researchers use isotopes, not always necessarily the right ones, including: everyone is; project won't look cutting edge without it, the project will not get funds

otherwise, want to know where people come from (though in fact the technique will tell where they don't come from), it has been used before and it worked well.

There is a need to be clear about what question is being asked and which type of sample will answer it. Different information may be obtained from different samples. Teeth are formed in childhood with little subsequent change so give information for childhood. Bone collagen is renewed throughout life (though the turnover rate is not known) and mature adults have lifetime averaged values - it is not really known how long a period adult results represent.

#### Carbon and Nitrogen isotopes

Various factors will influence the ratios of isotopes including: C3 vC4 in plants (there are no C4 plants in Scotland), differences between marine and terrestrial protein, coastal foods, e.g. use of saltmarsh grazing can alter values, foodwebs (trophic level change - herbivore, omnivore, carnivore), physiological stress (e.g. illness, rapid growth), dietary stress (famine, reduced variety in diet), manuring and fertilising.

For material from excavations at Whithorn isotope analysis worked well, and showed distinct differences between the lay population and bishops. In this instance that information was also available from archaeological evidence, but the site provided a test of the technique. The bishops were eating more marine protein than the lay population; differences may not be a simple question of status, but e.g. the difference between a primarily meat or fish based diet. Amongst material from Westness, where the results showed a number of clusters for C-N isotopes, the different clusters may be the result of differences of status or mobility – a question of whether those with differing results are people eating fish, or individuals who have come from somewhere else where fish was consumed. Detailed location of origin cannot be distinguished from isotopes – they indicate conditions at origin.

#### Strontium isotopes

These reflect geological terrain (solid and drift) on from which primary plant food was sourced. It is good at distinguishing marine from terrestrial, e.g. where seaweed is being used as fertilizer results will cluster in certain area of graph - certain levels of strontium may indicate people living on small islands.

The Beaker people project used isotopes to try and look at residential mobility of 250 bodies across Britain to interpret data in the context of current theories and material culture, e.g. whether people coming in from abroad? Success of the technique depends partly on where skeletons are recovered. In England most of the remains are from chalk or limestone areas. The burials looked at in Scotland were mainly from the east coast and from across a great variety of geology. Use of strontium in Scotland is a problem because of the diverse geology – variations in strontium levels may only indicate that they have moved from the next hill because the geology changes so rapidly. Thus strontium analysis may not always be very helpful; it is expensive so there is a need to be selective in its use.

Bioshperic strontium ratios are affected by geology (whether varied or homogenous will affect the questions that can be answered), rainfall (there is some evidence that where there is heavy rainfall strontium ratios bear little relation to geology), coastal proximity (which can override geological effects). Human Strontium ratios are affected by e.g. land use (what crops are being grown), food choices (food may be brought in some distance), salt ingestion.

#### Oxygen isotopes

Oxygen isotopes give indications of climatic regime, seasonality, water sources, trophic levels. It is possible to produce isotope value contour maps to indicate differing levels of isotope ratios: these reflect e.g. rainfall, so there are distinct differences in isotopes between west and east coasts. However, the maps assume that rainfall is drunk as it falls but water may be taken from a secondary source, spring, aquifer (and so may be hundreds of years old before consumed), or lake water - all will affect the isotope levels. Evaporation by heat/wind can have a significant affect as can storage (e.g. use of dewponds, water butts), river water may have travelled some distance, transport through aqueducts

Biospheric oxygen isotope ratios are affected by topography, rainfall, climate, coastal proximity. Human oxygen isotope ratios are affected by water source, food choices (including where and how prepared), individual physiology.

Additionally people do not always drink unmodified water for various reasons – heating, consuming as liquid based diet, drinking milk, brewing. So a question of how do we know what people were doing in the past to affect the levels. An experiment to look at changes in isotopes in beer during the course of the brewing process demonstrated a significant change in levels between the water used and final product. One reason for conducting the experiment was that for almost all Anglo-Saxon sites the results were anomalously high.

In using isotopes to look at migration there was also an issue that people look to move to similar regions so this may not impact on isotope ratios as much as expected and may not get picked up by isotope analysis.

In discussion, there was a question of whether the beaker burials showed correlation with distance from the coast, it was noted that there are no geographical differences but noted that most of the burials from Scotland are from the coast and few from inland. With regard to marine vs terrestrial data, it was noted that there is a lot of old carbon in the marine environment can make dates look older.

# Depicting the dead: forensic and archaeological facial reconstruction *Prof Caroline Wilkinson, University of Dundee*

#### Abstract

This presentation discussed the challenges associated with the identification of the dead from facial appearance, in relation to the soft tissue reconstruction and skeletal assessment. The application of craniofacial superimposition, facial reconstruction and post-mortem depiction will be described and research evaluating the accuracy and reliability of these techniques will be discussed.

Prof Wilkinson's primary work is in forensic investigation, although it also involves archaeological work. Much information about people is derived from faces – age, ethnic group. Some of that information can also be derived from skeletal remains – age, sex, indication of ancestral group, pathology or trauma, indications of culture (e.g. skull deformity).

The process of recreating faces is now more computer based, based on 3D images of skull from e.g. CT scan. The process involves looking at muscle structures on the skull, and facial features determined by analysis of bone. There are anatomical standards to use for determining facial features from skeletal structures (data from measure dissection, CT and MRI data and ultrasound).

Further details such as skin and eye colour, wrinkles all guesswork as there is no information on this from skeletal structure. Another aspect of difficulty is age related changes – these do not occur at the same rate in different individuals. Estimate of weight is also difficult from skeletal remains. Also unknown are any modifications of skin – tattoo, piercing, although for archaeological remains there is additional information from well preserved bodies, e.g. from bogs or mummified.

One way to assess accuracy of reconstructions is to compare these with actual faces, though this can only be assessed for cases where remains have been successfully identified, so the test results are biased because unsuccessful remains are not identified to enable the comparison. Various blind tests have also been done with living subjects to measure differences – generally 67% of the surface is within 2mm of error.

For archaeological reconstructions there is more artistic licence – the main reason there are produced is for is for illustrations. In these cases work is conducted with historians/archaeologists to determine additional likely aspects that cannot be determined from skeletal material alone.

# Partners in Crime David Thurley and Jennifer Miller (Northlight Heritage)

#### Abstract

The partnership between criminal investigation professionals and archaeologists is one that has crept up cautiously despite earlier preconceived opinions on both sides. As with other disciplines, the partnership with law enforcement was driven by a determination to plug as many of the legal loop-holes that help guilty persons escape conviction as possible. Forensic archaeology is now an established and accepted discipline and has produced excellent results in the cause of justice on numerous occasions. However, forensic archaeology is much more than an extension of mainstream commercial or academic methods, although standard techniques do still apply. The differences come from the highly complicated interface between archaeological practices and legal proceedings, from the acceptance of working 18hr days for a week or more after a murder; from the aptitude to adapt immediately and effectively to constantly changing circumstances; but most fall from the ability to report succinctly to Courts of law and withstand rigorous cross-examination.

This presentation will explore the interface between archaeology and criminal investigation, giving brief case examples.

*D* Thurley (formerly crime scene manager and forensic co-ordinator with Strathclyde Police). The police need to identify relevant expertise and use this at the right time; they work closely with forensic scientists of all kinds. Forensic archaeology is very specialised – there is a need to be aware of police protocol which has evolved to deal with crime scenes. Investigation of crime scene involves finding and recovering all evidence. For anyone involved it is important to advise if they cannot do something. Media attention is not wanted at a crime scene nor speaking to anyone about a scene; there are different pressures to archaeological excavation.

#### J Miller, forensic archaeologist and botanic profiler

There a number of transferable skills from archaeology include aerial photography, DBA, field-walking, geophysics, trial trenching, excavation, finds, recording, illustrating/interpreting, specialist ID (botany, oils, entomology, bone), reports. Crime scene aspects that are different to archaeological investigation include police protocols, hierarchy, legalities. Legal issues have precedence over everything. The police maintain a database of experts who have worked successfully on crime scenes.

In terms of evidence capture there is a crucial 48 hr window beyond which the chances of identifying perpetrators diminishes rapidly, There is therefore a lot of effort to deal with a crime scene quickly. Investigation works on the principle of Locards principle – every contact leaves a trace. Contamination needs to be avoided. There are particular procedures in working on a crime scene. The work can involve long hours/days at the crime scene and processing information. False economy loses prosecutions. Legal procedures and best practice need to be followed. There needs to be flexibility and lateral thinking. There is a need for those involved to maintain communications. A key principle is that courts are only as good as the last mistake. Use of standards is important, including IfA Forensic S &G.

Looking to the future, forensic archaeologists have a clear role in criminal investigation. There is a need for awareness and understanding of how each side works, including through education, training, CPD. There needs to be mutual trust and understanding of legal/moral obligations (IfA S&G, Home office guidelines, Euro ForArch forum), and maintenance of best practice.

# Historic Scotland's Human Remains Call-Off Contract Rod McCullagh, Historic Scotland

#### Abstract

The call-off contract has been in operation since the late 1990s. In that time archaeological contractors have investigated almost 100 cases of disturbed or discovered ancient burials. The paper describes the remit of the contract, its purpose, how it operates and examples of the kinds of new information the contract rescues. It will also look at some of the problems of the contract, some of the harms that accrue if disturbed burials are not handled sufficiently well and some of the burdens they create.

The purpose of the contract is to step in when it is deemed that there is no obvious other institution with an interest in found human remains. The contract reacts to applications for help, e.g. from County Archaeologists, museums. The work is subordinate to police/procurators fiscal and usually the police have been involved already and declared no criminal interest; the primary duty in finding human remains is to inform the police. When contacted HS will request as much information as possible, including photos, to enable assessment of significance of the site and whether the call out is merited. The contract sends a contractor in as soon as possible to recover key archaeological information. In the last 10 years there have been 77 call outs, including to locations where the coast is eroding, or remains have been found during agricultural practice in land that has not been intensively farmed.

Examples of cases include

- 12 Grove St Edinburgh: contract was contacted by J Lawson regarding a find during refurbishment of a garden: information from the remains felt to be important for understanding of the preceding landscape.
- N Uist, Loch Paible: a burial uncovered by erosion. The west coast of the W Isles is an area rich in archaeology but with high levels of erosion, where the sea is stripping peat off an area of archaeological sites. The contract does not have the capacity to investigate a site, just to rescue the bone. There is also the aspect of public offence if human remains are not dealt with,
- Kiloran Bay, a rich site of Neo and BA burials. HS alerted by a resident of the island after someone had dug into a cist. Geophysical survey indicated likely other burials in a low mound and the threatened remains were removed.
- Langwell, Sutherland: a farmer phoned to report a find, describing a 3D body covered in cloth or basketry. Police had visited and extracted some bones (for which the farmer had criticised the police/PF for their approach to the site). Damage done to the site proved to be largely superficial and useful information remained to be recovered. Analysis later showed the body had been wrapped in hide and dated to c 800 BC.

The Call-off contract has its origins in the 1970s when the Inspector of Ancient Monuments, in reaction to increasing number of problems, created the Central Excavation Unit to act as a 'fire brigade'. The CEU was usually sent in response to finds of human remains; whilst there are not a huge number of calls there is a

need to react quickly. From 1992 the CEU was no longer available. The Call-Off contract was created in 1998 – using competitive tendering to engage a contractor, There have been 3 tendering rounds so far, another is coming up shortly. It is felt this is the best way of handling rapid response call-out which ensures a rapid professional response. Expenditure on the work is c. £40K per year.

On receiving a request for call-out the first stage is to ascertain location, what the find is, why it is significant, whether police are satisfied that it is not criminal, whether the landowner/tenant is happy for the work to be done, access, health and safety, any local sensitivities, All that information goes to the contractor to provide a price estimating time on site, travel. If the work is approved, contractors can generally be on site within 24 hrs (48 for the islands). Once the site is exposed there is a rapid reduction in information and potential for additional disturbance – natural and human hence the need for rapid response. A lot of information about the past comes from bodies and context of bodies so there is a need to retrieve as much as possible. Once material is recovered there are issue of post excavation to see if a site's potential can be realised. Grave context have enormous potential to provide information. There is a need to report back to LA archaeology service, and keeping in touch with local people is also very important.

There are a number of benefits to the contract. It is very effective for minor projects. For HS it removes a problem and enables information to be obtained from the bones. The police appreciate the service because it removes a problem for them. It allows county archaeologist to do something positive, For local people it removes disturbed burials and returns important information about forebears. Landowners may benefit from impediments being removed. Scottish archaeology benefits from recovery of information. Not all call outs lead to excavation, e.g. if bones are recovered through ploughing but there is no evidence for context – once checked no need for further work.

Part of the consideration in recovering remains is that new techniques of analysis may be applied in the future. Human remains have the capacity to respond to ever more techniques. This raises a problem because of the push for reburial respectful closure. There is a need for a repository to provide respect for ancient dead whilst not denying scope for future research. There are problems with disposal if a museum does not want the remains.

The call off contract reacts to short term problems. More work is needed in looking at how the material recovered fits into a more meaningful body of analysis and theory, Contractors have tried to do synthesis for interpretation but it is a challenge (e.g. in resourcing). There is a duty to publish but this can be a problem because most journals do not want single burials. There is no momentum of research although bodies have enormous research capacity. If landowners do not get feedback there is a missed opportunity to establish good relationships. It is also important to be able more focused questions to be asked on site.

# De sepulchre violato: lessons learned from the Human Remains Call-Off Contract *Alan Leslie, Northlight Heritage*

#### Abstract

Drawing on our involvement with the Human Remains Call-Off contract, originally as part of the former Glasgow University Archaeological Research Division, and subsequently through Northlight Heritage, the paper highlights some of the issues that arose during the course of the contract, lessons learned though carrying out the work, questions or themes which the experiences raise, and thoughts about how these might be addressed in future. The paper will include, with reference to particular projects, the interrelationships between archaeologists and police forces, procurators fiscal and forensic pathologists; balancing local interests and interventions within a national strategy, including interaction with local communities; problems, opportunities and strategies for post excavation analyses; the audiences for human remains call off work and how best to reach them all; future hurdles and opportunities for the study of human remains.

The contract is a positive initiative which should be retained, as a national perspective which is funded publicly; it does not exist to support commercial development. Whilst the argument has been made that whatever funding is available for the contract should be disbursed locally this is not a view shared by HS. The Human Remains Call-Off Contract (HRCC) is administered in the national public interest by a national body. There is considerable public benefit, and the added value from commitment of many people from various organisations who help or participate should not be underplayed. Archaeological projects involved in human remains engender specially strong local interest (more than other types of archaeological work). There is potential to use these as catalysts for continuing engagement with the local community. It could strengthen support for archaeology more generally – there is a need for political support for archaeology.

This conference has focused on applying scientific techniques to recover maximum information from remains. There is a need to balance this with concerns about value for money and accessibility of results. Post excavation budgets are the most expensive part of the HRCC. There are several examples where

particular analyses have returned relatively little information. Given the need for cost-effective use of public money, this raises a number of questions:

- Whether in hindsight all the post excavation analysis is worth the proportion of funding spent, which in turn raises the question of how best to evaluate the usefulness of various techniques of analysis on human remains, and pool knowledge to draw on in designing post excavation programmes.
- There is a need to be able to go to specialists for advice on what could be obtained from particular analysis without necessarily having specific questions in the first place. There is a need to pull together understanding about what is a good or bad choice of technique in different situations.
- Communication is key and there is a need to find straightforward ways for scientists to produce reports accessible to the general reader. It is recognised that many specialists are based in universities and need to produce peer review publications. This should still be part of what is produced but highly technical reports are often indigestible and unsuitable for the non-specialist archaeologists.
- There is a general question of public benefit from the HRCC. Should results be disseminated to the public given that it is paid for by public money? This was not something that has been achieved very effectively at present it will have time/cost implications but there is a need for public support,
- Members of the public frequently instigate HRCCs. Interaction with the local community, even if involving only a small number of visitors, can be a challenge for the team given the pressure to get the work done.
- The issue of a member of public filming work and wishing to put on U-tube has also arisen and raised the question of whether this should be discouraged? Some people may be upset by viewing excavation of human remains; thought at e.g. Constitution Street Edinburgh there had not been an issue. Some sites more recent burials will be more sensitive than others. It was important to be professional and show due respect and be seen to have a duty of care.

There is a major task of managing public interaction as positively as possible. There is a need to look at the benefits that could be brought in better engaging the public. It would have significant practical implications; these are not always fully considered when letting the tender or tendering for tenders.

There is a need to convey the message that archaeologists do not dig bodies unless there is a compelling reason, and if done it is done with respect. There is a need to understand wider public views on the subject and address concerns. It was noted that in England there have been changes in practice relating to excavation of human remains following government review of the implications of the Burial Act based on view of public attitudes to the dead. It is interpreted to mean that it is not lawful to remove a body that may have been interred from its original place of burial except under licence, which has given rise to the practice of applying for a licence, and of screening excavation of burials from public view. It has also required human remains to be re-interred within two years of the excavation (although no mention in the Act of reburial).

There is a need for better communication between archaeologists and those with enforcement role (police, PF). There are examples of site's archaeological integrity being compromised because of a lack of understanding of its nature and antiquity, e.g. by police removal of bones from the site. In some instances, police have overridden advice from archaeologists. It illustrates misunderstanding of the nature and sensitivity of archaeological burials. Any scene with human remains should remain untouched until modernity or not is established. If obviously ancient they need to be treated with respect by the police. There needs to be more awareness/education. Police and criminal justice system needs more understanding of now archaeologists deal with burials and their importance. It is up to archaeologists to communicate better.

Two key issues for the future:

- Human remains are always going to come up without warning through e.g. erosion, ploughing. So there will still be a situation to be managed, and funding will be required. The question is to decide on the best use of available funds is the current practice the only or the best solution?
- Better communication and education there appears to be difficulty in communicating effectively with the public. Journals are not effective for the wider public. There is a need to reach out more directly, to engage and educate by involving people. This engagement needs to be carefully thought out and may need different attitudes as well as funding.

# **GENERAL DISCUSSION**

#### Screening excavations from public view

There differing opinions on screening A view expressed was that screens give people the choice but does not mean archaeologists are being secretive; they can still encourage site visits and engagement, but the screens alert people to the existence of remains. There are great variations in people's reaction to the dead, and there is concern about triggering complaints. Whilst those who do not wish to view human remains them may be a small minority, there is a need to consider their rights where this does not impinge on the majority; if only a few complain/go to the press it can blow up the issue. It may also depend on context – screening being more appropriate in/adjacent to a churchyard in use but with less need for screening of rural sites.

The majority of the discussants felt however that screening was not necessary, and archaeologists were not strong enough in defending position. Strong evidence suggested that local people are more upset about the lack of information than what is happening; thus there is a case for greater communication, e.g. through media officers and archaeologist on the ground. Also the public viewing of such work brought about other significant benefits in terms of allying fears over the treatment of their 'ancestors', archaeologists being seen as providing a professional service and care for the dead.

#### Reporting

There is a need to include appropriate academic content/evidence whilst making results accessible. The requirements need to be raised with specialists at the outset of a project; also to plan dissemination at the start of work. When approaching specialists following post excavation assessment there is a need to specify both academic reporting and something for more popular consumption. Both public and academic dissemination is needed – one report will not serve all. There could be an argument for the more academic papers should be done in specialists' own time, that only the 'public' report should be done under HRCC as this work is being funded by public money. However, it was countered that if a specialist provides a report that cannot be understood the specialist has failed; it was a myth that they should be unintelligible. There is an issue of communication between those commissioning the report and the writer. It was suggested that regional archaeologists need to take a lead in public dissemination.

#### **Public engagement**

To get the public on board it was suggested that there is a need to work outside the standard working day; archaeologists need to be involved in local societies, do presentations and actively engage with the public and involve them practically. Outreach was an issue for many e.g. local authorities because there is a drive from central government to cut these aspects of work.

There needs to be a public relations strategy built into the tender for each site as a primary consideration, though accepted that it may not always be possible to do much. It was suggested that this should be the case for all work, not just dealing with human remains.

J Lawson thanked all the speakers and audience for an interesting and useful day.