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Organic, Historical Reasoning; an exploration of how non-specialist students can connect, through historical and archaeological artefacts, with the people who made and used them

Key words

Artefacts, historical empathy, Organic Historical Reasoning, primary school trainee teachers, understanding people's lives in the past.

Abstract

This chapter draws on a study (Moore 2019) which explored valid ways in which non-specialist trainee primary school teachers used material culture artefacts to make connections with people who lived in the past. It considered the problems caused by the concept of historical empathy and constructed a new concept, Organic Historical Reasoning, as the natural process by which students make such connections. The study first constructed a model of this concept based on recent literature, then undertook a process of research into student responses to material culture artefacts and finally related the model based on the literature review to the model derived from empirical research to posit the new concept. This chapter discusses the literature related to understanding people in the past through material culture artefacts, supported by some examples of how it is reflected in the empirical research.

Hugh Moore

Institute of Education - University of Cumbria, Bowerham Rd. Lancaster, LA1 3JD, United Kingdom. *hugh.moore@cumbria.ac.uk*

Rationale for the study

The study (Moore 2019) was part of a programme of research to understand the natural thinking of students about past lives. It represented the culmination of nearly thirty years of personal work and experience in the teaching of history in schools, museums and universities. Having worked in museums which featured strong archaeological collections I had observed that students thought differently about past lives when they worked with

material culture artefacts. Consequently, I undertook this study which led to the construction of a model to explain how students formed valid connections with people who lived in the past. I termed the resulting model as Organic Historical Reasoning (OHR) (Moore 2019).

The concept of Organic Historical Reasoning

Organic Historical Reasoning (OHR) is offered as a more complete understanding of the process of natural thinking about past lives than historical empathy. This is because OHR is constructed through forming an understanding of psychological empathy and other mechanisms that help us to think about past figures. Figure 1 shows the model of Organic Historical Reasoning which evolved from the study data

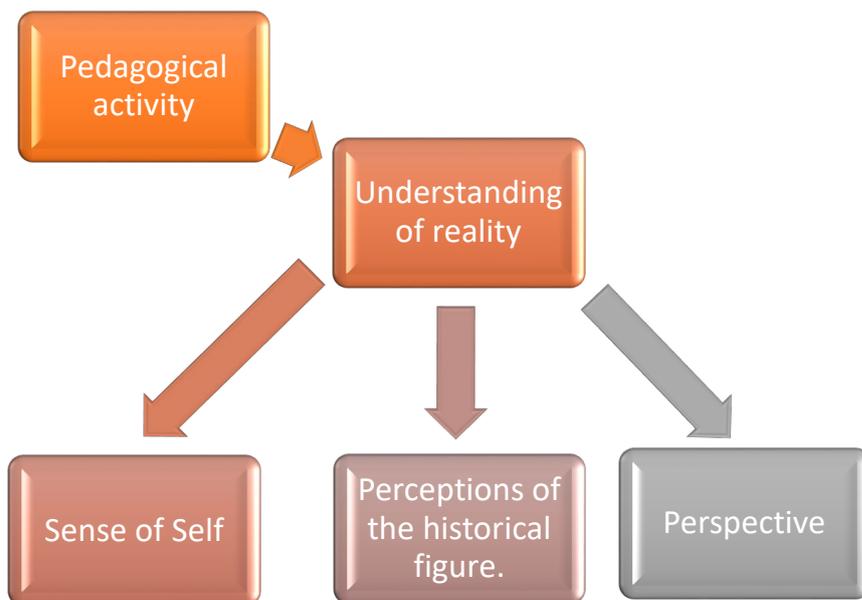


Fig.1 Representation of OHR as arising from the study data

In this study the *understanding of reality* (a feeling that people connected with an artefact had once lived, as we do today) was prompted by making use of genuine material culture during *Pedagogical activity*. This in turn led to natural thinking which appeared to demonstrate a *Sense of Self*, *Perceptions of the historical figure* and a sense of *Perspective* in relation to the past figures.

Thus, pedagogical activity through using artefacts appeared to lead to an increased awareness that the past was real. For example, participant no.5 tried to explain how the artefacts made the past real:

I quite like (historical) story but then actually seeing the things makes it real compared to just hearing the story and it just being just a story, just always makes it look real do you know what I mean? Seeing things that are related.

The students also gave a sense that they saw themselves in relation to the historical figures they were encountering through the artefacts. This was termed a *Sense of Self* in the model of OHR. In this category the research participants often made unprompted remarks about themselves in relation to their grandparents. No.11's words seemed to be fairly typical in this respect:

Umm I was thinking of my granddad, his dad was a prisoner in a Japanese war camp, yeah so he found all his diaries. It was only a couple of years ago and it went in the papers down there and everything, and that kept coming into my head. When I was a kid I remember my granddad showing us all these, you know all these diary entries and it didn't particularly make me feel more sad or more sort of connected or anything but that did keep popping up in my head thinking, wow - you know.

The students similarly demonstrated that they were aware of the historical figure. This was termed, '*Perceptions of the historical figure.*' This perception appeared to occur in different ways which made limited use of the imagination. The students sometimes visualised the figure as being connected with the artefact, imagined a presence or deployed empathy either historical or psychological. As an example, this is participant no. 3 discussing a Cumbrian Neolithic polished axe. She gives a sense that she has thought about the figures who created it.

I Like the craftsmanship on the axe actually it means that you can you know history for me...

Some of the material culture artefacts appeared to prompt students to see historical figures as human beings who faced similar struggles to those that we do today. One type of this

thinking was where students made comparisons or shared similar experiences with past lives. This is no.3 again, this time, discussing the Egyptian 18th Dynasty necklace:

Emm I suppose because it's familiar but different, you know it's almost like something we find at the seaside today isn't it sort of umm. I don't know, I like the colours.

No.3 later went on to explain:

Oh, and the colours, you know you sort of associate (with it) don't you with the colours - and I saw it as Egyptian.

The students also gave a strong and unprompted sense of natural 'historical perspective' whereby they often expressed an awareness that they could not think themselves into the minds of past figures. Such a feeling was described by participant no.7:

Because you can't physically go back to then, we can try to re-create it - but we will never know exactly what it's like. So although there's like all the texts and different things and artefacts we can't physically know what a person was like unless we bring them back from the dead and are maybe like talking to them about what it was like, we can't - we don't know that we're getting everything specifically down to the minor details right, we can try but it'll never be the same.

The use of material culture artefacts during teaching.

Experience had taught me that students appeared to engage deeply with the past where they were handling material culture artefacts. Many other writers (O'Hara and O'Hara, 2001:6972; Pluckrose, 1991:25-28, 93-95; Hoodless, 2011:73-74; Blyth, 1989:21-22 ; Harnett and Whitehouse, 2017:33-34 Nichol, 2017:53-54 ; Temple, 2014:143 ; Cooper2012:17-21 ; Cooper, 2014:3-4;) also suggested that it is good practice to use artefacts as a way of examining past lives because they offer the possibility of making a connection through evidence. For example, O'Hara and O'Hara (2001:69-72) pointed out that children assimilate a view of the world through a first-hand experience such as the handling of artefacts. Cooper (2014:3-4) reminded us of the words of Neil McGregor, the director of the British Museum who said that artefacts grant an immediate access to the ideas and concerns of the people who made them and how they lived and what they believed. Cooper (2012 :17-21)

has also suggested that artefacts are likely to be used during teaching as part of a process of historical enquiry and may (p.20) lead us to accept what we cannot fully know about the past. This is because whilst traces of the past, she suggests, tell us something of people's past actions we can never truly know the thoughts and feelings that underpinned those actions.

The study strongly suggested that material culture artefacts helped the students to think about past lives as having been real. This appeared to be a key component of OHR as it helped students to make a link with the past. For example participant no.7 discussed the experience of looking at the Victorian photograph collection. She indicated that when she was handling the artefact she could almost imagine being present during the period.

It was the authenticity of knowing that was actually it, you don't know what's been changed (inaudible word) on a replica but you don't know like enhancements whereas you've got that original and you can see, you can almost envisage yourself there.

Since the work of Cooper (1991) very little attention has been paid to the kind of incidental thinking that arises when students of history encounter past lives through material culture artefacts. This strand of thinking may be important as it could offer a way to teach students about past lives that sidesteps the multiple problems inherent within the discipline of HE. Indeed, my study (Moore, 2019) demonstrated that thinking arising from the handling of material culture promoted an awareness of the reality of past lives and caused students to make inferences about the similarities and differences between the present time and the past. This thinking seemed to be very different in character to the type of imaginative strategies that are typically used in historical empathy. Historical empathy is the type of thinking drawn from the work of Collingwood (1946) which has been significant in producing some controversial strategies for thinking about past lives which range from almost detective-like deductions (Lee, Dickenson and, Ashby 1997; Foster and Yeager, 1998) to 'imaginative free-form story-telling or re-enactment' (Ohn, 2010; Colby, 2010; Pelligrino, Lee and D'Erizan's, 2012). Ohn (2010) for example, invited teacher trainees to re-construct the past by creating broadly fictional narrative in the form of stories, which became diaries,

letters and news reports and, Pellegrino, Lee and D'Erizans (2012) had their school pupils engage in a re-enactment of the 1919 Paris Peace Conference. OHR thinking may be different because the student may co-construct the narrative by calling on a range of contextual and private knowledge through handling a material culture artefact. For instance, Cronis (2015:180-2) discussed the way missing narrative is both manifest and substantiated through artefacts. This is the idea of narrative co-construction – where the viewer brings their own experiences to partake in meaning making. Cronis (2015:180-188) explains that objects can behave rhetorically and identifies that viewers of artefacts are using them to fill narrative gaps in a way which can constitute a non-verbal and personal access to knowledge. Thus, the viewer of the material culture makes comparisons and is particularly impressed when something ancient is broadly similar to something used now. It is, Cronis points out a way of relating the distant past to the viewer's own life through comparisons and a recognition of similarities. For example, participant no.4 made such an observation when discussing the Roman dice.

It must have been a very good idea because we're still using it nowadays to play games, to count...

Objects, therefore, function as bridges between the past and the present. People's collective past is recorded within artefacts and this re-contextualisation is where the viewer interprets the past through the lens of the present without some of the dangers of presentism (i.e. thinking about past lives through the lens of present knowledge and understanding). Cronis (p.187) discusses the viewer's thoughts about artefacts in terms of re-contextualizations which involve shifts of meanings and through equivalencies which are a re-focussing from them to us. Artefacts, therefore, are not just about a reading of the past but a reflection on the present, the re-contextualization illuminates the present. Artefacts evoke the presence of the past through the imagination and allow the viewer to enter, just a little, into the life lived in the past (p.187-188). Indeed, Cronis described some people as being 'transported' into the past. This is because some people seemed actively to enter the past in their imaginations while others seemed to find that artefacts intensified their experience.

Thus, during natural thinking, the student may enter, just a little, into the past through making comparisons and recognising similarities with those past historical lives through the

material culture artefacts they created and used. This allows them to re-contextualise their ideas about the past through a shifting understanding of what the artefact demonstrates which allows them to refocus from the past historical life to their own. In other words, it may be that handling a Roman coin can make the Romans seem more real for the student. Participant No.10 observed the following after handling battlefield artefacts taken from the Somme:

Yes, the moment you've, you've got a bullet or shrapnel in your hand it suddenly locates it with real physical toll.

Participant no.8 discussing some battlefield archaeology from the Somme said something similar:

Seeing the shrapnel, seeing it rusted, seeing it old and knowing where it's from, I found gained my attention.

Bucciantini (2009:4) discussed the way museums use artefacts to construct narratives which can be understood by their viewers. This is an ontological approach which centres on how artefacts encompass their own stories. Bucciantini reflects (p.6) on the work of Benjamin (1999) who remarks that artefacts have an 'aura' which gives a viewer the power to connect to ideas which are larger than it. This may mean that during OHR the artefact connects the student to wider contextual ideas which may relate both to their own ideas about the past and to the context of the time in which the artefact was constructed. A conception of the potential power of this connection is contained within Crownshaw's (2007:179) work on photographs and memories of the Holocaust. Here he discusses Young's ideas (1993) about the shock that the artefacts provoke as creating a remembrance of things not witnessed. The artefact is not (within museums) an unmediated objectification of the past but it is interpreted in the light of present-day discourses and, through opening up an interpretive space around the artefact, it achieves surplus meaning.

Thus, material culture artefacts presented alongside strong contextual information can connect students to powerful ideas and this thinking may constitute a component of Organic Historical Reasoning (OHR). It is through this dimension of OHR that the student may gain access to a potentially powerful experience of the past, one where they may act as a witness to things they have not experienced. The status of 'witness' may allow for a vision

of the past which does not call upon the student to attempt to enter the mind of the past figure but allows them to think about the reality of the past.

The model of OHR proposes that an understanding of reality which seemed to be achieved through material culture artefacts appeared to promote strong natural thinking about past lives which was not primarily imaginative.

Perceptions of the historical figure

Part of the study (Moore 2019) therefore, was aimed at understanding how the historical figure was naturally perceived by the student through using material culture. It was thought that this may shed light on whether historical empathy was a component of a student's natural thinking about past lives. It was thought that the use of material culture artefacts would provide an opportunity to study this non-reciprocal relationship through a methodology which was not primarily imaginative. Past arguments have surrounded strategies to think about past lives which are primarily imaginative. For instance, R.G. Collingwood (1946:217-219), who was both an archaeologist and philosopher, asserted that the historian is concerned with sources which are an outward expression of human thoughts and it is only by re-thinking them for ourselves that we can uncover them. In his work he appears to be using the term '*imagination*' to describe how the historian fills in details of what is unknown (Collingwood 1946:240-243). Thus, through using their imagination to fill in details the historian is drawing from a toolbox to offer an imaginative interpretation of the thoughts and actions of a person in the past. The toolbox might include attempting to re-think or re-enact a person's thoughts or through the historian drawing upon the lexicon of their own personal thoughts and feelings to understand and interpret those of the past figure. For example, the historian draws upon their own experience of pain to understand that of the historical figure. Retz (2015:214) calls this Collingwood's re-enactment doctrine. Both Retz (p.217) and Hughes-Warrington (2003:15) assert that this educational focus on the methods of Collingwood originated with the work of Burston (1954:112-121) and many subsequent history educators (Burston, 1954:112-121; Levesque, 2009:147-9; Lemisko, 2004:1; D'Oro, 2004:4) who developed Collingwood's concepts into what became known as 'Historical Empathy'. There are well worked examples of archaeological teaching through using HE, for example Endacott and Sturtz (2015) who reported a project on Athenian lives and Lee, Ashby and Dickenson's (1997) often referenced study on the Emperor Claudius.

Even Collingwood (1946:301) gives an example of re-thinking the thoughts of Plato or other figures such as Solon or Hammurabi. However, R.G. Collingwood himself did not use the term 'empathy' (Hughes-Warrington 2003:72) and subsequent work merely drew upon his thoughts in formulating a definition of it. Retz (2015:217) also sees it as being unlikely that Collingwood would sanction any of the work of the empathising educators crafted in his name such as that of Shemilt (1984:41-43).

In table 1 shows the ways in which Collingwood suggested thinking about past lives.

Collingwood's orders of thinking about past lives	Examples from the writing of R.G. Collingwood (1946).
Human history	Firstly, history is concerned with human affairs (p.213). Secondly, the historian is not merely concerned with the action of an event but with the underlying thoughts that led to it (pp.213-215 & 217).
Perspective	Firstly, the past acts in the present; that is to say, as an historian, we can understand what is intelligible to us (pp.218,219). Secondly, the past is seen from the present time and therefore no history is final. Each generation will re-write history. Historical thought is a river into which no-one can step twice (pp.247-248).
Evidence	Firstly, history must be constructed in relation to evidence (246). Secondly, historians must become masters of their sources (p.238). Thirdly, the historian reflects on the truthfulness of those sources (pp. 234-237 & pp.243-245).

Context	Firstly, historical knowledge is related to a context, which an historian needs to know (p.247). Secondly, the historian's perspective is localised in space and time (p.246); history must be consistent with itself (p. 246).
Imagination	The historian constructs the reality of the past based upon ' <i>a priori imagination</i> ' (pp.240-243).
Interpretation	Historians can re-discover the past by re-thinking the past. They imagine that person's thoughts (pp.217-219). Historians critically engage with and re-think what they uncover of past historical lives (pp.215-216). Historians use their experience of the world to check the interpretations of sources (p.239).

Historical empathy has thus emerged as a concept which is often polarised between those who see it as being centred on cognitive (thinking deductions about evidence) and those who see it as being useful for making affective (centred on feelings) connections with past figures.

Cognitive Historical Empathy (HE)

Cognitive HE is a conscious reflection on the thoughts, motives, actions, articulations and beliefs of an historical actor. Such an approach seeks to utilize deductive and imaginative reasoning, to better understand such past lives (Cooper 1991:33-42). Many, such as Foster (1999:19) see this kind of HE as knowing people in the past through a process of cautious enquiry and a close examination of available evidence. This is sometimes seen as the objective and academic approach to historical enquiry about past lives (Davis, 2001; Lee and Ashby, 2001). Some writers on the subject, such as Lee and Shemilt (2011:47-48) discussed the cognitive dimension of HE as a mechanism, where, similarly to Collingwood (1946:282-302), the student attempts to re-enact the historical actor's mind. The act of re-enacting thoughts in the manner they suggested is entirely cognitive, a reasoning based on evidence

which is highly complex. However, the act of re-enacting such thoughts must inherently draw heavily upon written sources which will inevitably be skewed towards those figures for whom we have such records.

Writers such as Rantala, Manninen and Van-den-Berg (2016:324) have pointed out that some writers such as Lee and Ashby (2001:24) argued that feelings do not belong in the sphere of HE. Indeed, the cognitive domain of HE requires an interpretation of thought and action and this must be done by abandoning one's own perspective to take on that of the historical other. However, this type of reasoning based upon the historical actor's thoughts seemed to be changed when material culture evidence was presented to students because they seemed to be more engaged with the reality of the past figure and less engaged with what historical actor was actually thinking. Thus, during OHR, the students seemed to deploy their imaginations in a more limited way which was possibly more focussed on what they could perceive from the evidence – in this case the material culture artefact.

Affective Historical Empathy

Affective historical empathy is seen as different to cognitive historical empathy. It is seen as the domain in which the thoughts and acts of the historical actor are connected to their feelings and emotions (Rantala, Manninen and Van-den-Berg (2016:324-345). Thus, during the deployment of affective HE the student is thinking about and engaging with the emotions and feelings of the historical figure. In doing they are thought to be able to reflect on how affective and emotive behaviour orders their own lives so that they can perceive how the same (or similar) may have been true in the past. Thus, the affective domain of HE requires emphasising skills and insights, which can then be applied to understand the feelings and emotions of an historical figure and allow the student to know them better (Barton and Levstik, 2004, 2013; Van Sledright, 2001).

However, asking a student to use their imagination to create a picture of past lives based upon evidence where one is seeking either a cognitive or affective response sometimes appears to lead the student to think in an ungrounded way. In other words, such a strategy may actually push a student to construct a largely imaginary picture of the past figure. It was particularly interesting, therefore, that it was found during this study that students were reluctant to think about historical figures in such an imaginative way. They appeared to

accept that the evidence demonstrated that the past figure was real but showed that they understood that they could not fully know about the thoughts and feelings of the past figure. For example, No.2 gave a sense of a desire to identify with the past that arose through the artefacts. However, she contextualises this desire by explaining that, whilst the artefact allows her a glimpse of the past, what she can see of it is limited:

Erm, I do like replicas but the actual real thing I go like this is old, this is and you kind of look into the story but obviously you don't necessarily know the story...

Psychological Empathy is an evolved component of human behaviour

The debate on historical empathy suggested that it may be important to understand how psychological empathy orders a student's thinking as they connect to a past figure through material culture artefacts. Psychological empathy is regarded a key tool of human socialisation and appears to be an evolved trait that is hardwired into the human (and animal) brain. This means that for most humans its deployment is an entirely natural component of behaviour. Psychological empathy is deployed during engagement with 'others' and in preparation for interaction with others. At its most basic it is a fast response alignment such as returning a smile or a reaction to a thrown ball and at its most sophisticated it is a musing over the thoughts and feelings of another person.

Christov-Moore et al. (2014:604) indicated that Ψ empathy appears to have evolved as it helps to promote social and cooperative behaviour through enhancing the ability to predict the behaviour of others. It is widely present in both the human and animal sphere (Mason, 2011; Sanders et al. 2013; Cools et al. 2008; Fogassi, 2014) and has been demonstrated in dogs, rats and even invertebrates. It is also present in early infancy, (Alexander and Wilcox 2012). Psychologists such as (Christov-Moore et al. 2014:604; Singer et al. 2008:782 and Singer 2013) also show that empathy is hard-wired into human behaviour – in other words it is linked to defined areas of the brain. Therefore, it is likely to comprise a significant and sometimes unconscious component of engagement with others and in its various forms may not be switched off easily. This means that any strategy likely to promote empathy in an

ungrounded way may lead to thinking which is primarily empathetic in nature which could be disconnected from the historical figure.

Psychological empathy as reward

As a tool of socialisation psychological empathy is known to be a rewarding behaviour to engage in. This is because it promotes social cohesion through providing a reward for engaging with others. As participant No.6 observed;

I'm a people person – I love knowing about people and their history and I like people telling me about the wonderful things they've done in their lives and the experiences that have made them who they are - and I think history is just that on a bigger scale.

Indeed, Lockwood et al. (2014) note that exhibiting such empathetic behaviour is positively related to having closer relationships with friends, less depression and greater life satisfaction than those who use expressive suppression. In other words, we may enjoy engaging in the empathetic thinking about historical lives because it makes us feel good. Conversely, it may cause us stress to engage dispassionately with such lives and ignore the affective elements of what we see.

Empathy and OHR

We may ask, however, whether it is possible to empathetically engage with the plight of another who is not present. Some historical writers, for example (Sánchez-Augustí and Miguel-Revilla, 2017; Retz, 2015:215) have made assumptions that HE and Ψ empathy are different because reciprocity is not possible due to the historical distance between subjects. However, psychologists such as Christov-Moore et al. (2014:604-7) point out that we, as humans, can internally evoke the emotions and sensations of an absent other. Marsh (2018) also shows that such Ψ empathy confers the ability to think about the behaviour of others even through written sources. Indeed, Smith (2006:4-8), Christov-Moore et al. (2014:604-7) and Singer et al. (2013) all show that this type of empathy allows for the sharing and mimicry of the states of others who need not be present. In other words, we humans can naturally resonate with the feelings of someone who is not present as we may do when we read a novel or watch a TV.

Cognitive dimensions of OHR which lead to a natural understanding of perspective

Can this ability to empathise be detected as students handle material culture artefacts? Interestingly it was noticeable from the data was that material culture of any age appeared to be able to prompt empathetic responses. These responses appeared to be directly related to the human reality the artefact portrayed. For instance, a stone age artefact might prompt responses based upon its apparent complexity. You may recall the words of participant No.3 above, she later expanded on her thoughts about the Neolithic axe:

There wasn't always a sense of intelligence actually - from history. And when I see this, you know, I like I think umm there isn't a greater sign of intelligence than craftsmanship.

Such a statement, however, seems to use the imagination in a limited way. It also makes it difficult to suggest whether it was primarily affective or cognitive. Indeed, this was typical of many statements within the data. In understanding why this may be so it may be useful to see how both affective and cognitive empathy are linked. The psychologist Smith (2006:4-8) explains that cognitive Ψ empathy enhances social functioning through enabling us to understand and predict the behaviour of others. Smith (2006:8) also proposed that cognitive empathy and affective empathy are part of an integrated mechanism, where the cognitive component helps manage affective processes and the affective guides and regulates the use of the cognitive. Christov-Moore et al. (2014) later explained that such deliberative processes, which they term mentalizing, can lead to inferences about another person's bodily and affective states, beliefs and intentions. In other words, cognitive empathy allows us to think and reason not only about the actions of others but their emotive state too. This appears to demonstrate that engaging affectively about the plight of another can also lead to cognitive engagement as well.

It may be the case that many commentators have not fully understood the interplay between the two elements of empathy because they assume that there is a strong separation of the co-called cognitive and affective elements (Endacott and Brooks, 2013:41; Endacott and Sturtz 2015; Dillenberg, 2017:5; Rantala, Manninen and Van-den-Berg, 2016:324; Davis, 2001:3; Lee, Dickenson and Ashby, 1997; Barton and Levstik, 2013:8 & 2004). This may be problematic because the cognitive element of empathy is linked to the emotive element. In other words, the natural process of empathising can often involve reflecting on both the cognitive and affective state of others. Psychologists such as Kanske

et al. (2015:6-19) have investigated the complex process of understanding others through the sharing emotions and reflections on another person's thoughts. This type of thinking is achieved through what they term '*shared brain networks.*' These networks underlie our ability to engage in empathy. In other words, possessing brains which behave in similar ways allows us to function as social beings. This gives us, therefore, the common bond of experience with the historical figure that Collingwood (1946:239) had so long ago discussed. Kanske et al. point out that two processes known as ToM (Theory of Mind) and cognitive perspective taking (which is similar to cognitive/emotional Ψ empathy) enable us to engage in reasoning about the beliefs, thoughts and emotions of others. They describe the difference between ToM and cognitive perspective-taking as that the former yields propositional knowledge (thinking) about another's state whilst the latter allows for the sharing of another's affective and bodily state. Marsh (2018:110-115) calls this process mentalizing (the act of cognitive Ψ e and ToM) about the state of another person.

This may help us understand historical perspective

Thus, it may be that the propensity to engage in Ψ empathy during the handling of material culture very high because doing so activates '*shared brain networks*' which are highly evolved to allow for musing on the bodily and affective states of others. It may also be that Theory of Mind (ToM) and cognitive Ψ empathy allows for insights into the behaviour of others that are similar in character to HE. However, these dispositions will also make it clear that others have a different perspective to us which has been seen as a great difficulty for HE in the past. For example, here is participant no.10 discussing some photographs of soldiers who were thought to have been killed during the Somme battle.

(10) ... then there is an entire world of person in those photographs that people kind of - they can't pick out because they are imminently unfathomable because we never knew them and then they are suddenly kind of muted to you because those people were dead very shortly after.

Brophy and Alleman (2003:108) describe 'presentism' as a faulty form of historical perspective where there is a tendency to view the past through the lens of hindsight which leads to a confusion of past and present. In other words, it is the judgement of the past

through the knowledge and understanding that privileges those who inhabit the present. Thus, presentism is the tendency to judge past actions by our own standards rather than those of the time. This dilemma is discussed by many writers: Dillenberg (2017:15) for instance recognises that in engaging in HE one is sharing in the humanity of the past and refers to the work of VanSledright (2001) who argues that, whilst this involves an exploration of self, one can never fully understand another's experiences. Retz (2012:42) also questions whether it is possible to retrieve or project ourselves into the past without doing so from our own terms of reference.

However, psychological empathy and ToM allows us to understand that other may be thinking differently from ourselves. An example of this is no.6 who makes a statement which conveys that she has both thought about what the historical figure may have felt and knows that she cannot know what they actually felt. In other words, she has felt a connection to the figure but also understands that she cannot know what they knew.

You can like, not imagine, because obviously you're not there and you can't put yourself in their time - but you can start to think about the hardships maybe and what people went through and how life is very different.

My study (Moore, 2019) appeared to demonstrate that one of the ways in which presentist ideas may be overcome is through students re-forming their own ideas and thinking about the historical narrative as they encounter a material artefact within a contextual teaching process.

A Sense of Self in relation to the historical figure

A finding which arose from the data appeared to show that some more recent artefacts appeared to prompt the students to think about themselves in relation to history. For instance, no.10 who has been handling WWI battlefield archaeology explained that this connection is like a website inside his head.

I think then equally it sparks that kind of er - thought process or that thought map that kind of spreads out - almost a kind of website from the inside, kind of expanding out - all these things making connections with all these other things.

He also demonstrated that the connection has prompted him to think about himself in relation to his wider culture:

...in some ways it was quite moving but it's hard to not be moved - it's kind of one of those - it's very much in the cultural Zeitgeist at the moment being the centenary erm I also, er yeh it kind of - it does hit quite hard because I do know, of people in my family, you know of grandma's family and stuff like that who died in that war or who were part of that war erm and it's kind of - I think it's quite important especially for those who kind of come along later in the millennium who have never really experienced such an idea of total war to kind of reflect on that.

Indeed, a particularly striking and unexpected feature of the data was the number of unprompted references that the participants made to their grandparents. It was thought that these references to grandparents may be linked to the way in which we use memory to help define ourselves. Memory is a vital mechanism not just in terms of day to day functioning and knowledge but also in providing a conception of who we are as human beings. In this way an effective memory provides a narrative not only of our own journey through time but also allows us to think about how this journey relates to that of other people. We can see this function of memory as being linked to a conception of history, culture and identity. Black (2014:7) reminded us that group identity is a key feature of human society and discusses the possibility that identities are imagined and constructed rather than inherent. History is part of our identity and a sense of the past comes through family and overlaps with a personal or collective experience of the past. Indeed, this mention of wider family and family through time opened the possibility that the student who handled material culture may be engaged in remodeling their perspective of themselves as a being in history. Tani, Peterson and Smorti (2014:254-55) suggest this kind of personal meaning evolves from experiences which are constructed from interactions from others and Graci and Fivush (2017:489) discuss this way of forming memory in terms of narrative – the way memories are expressed shape self-identity and connect individuals to others. Ahonen (2001:179) explains this in historical terms as a dynamic interaction with the collective memory, which explains one's interaction with the prevailing historical narrative.

Conclusion

This model of historical Organic Historical Reasoning (figure 1 above) incorporated the idea that handling material culture during pedagogical activity can lead to organic thinking about past lives that is enhanced and reinforced by an understanding of the reality of past lives. It also incorporated the idea that one of the outcomes of this thinking is a natural awareness of perspective. The model has reflected a strong idea from the data. That the use of material culture artefacts as evidence during teaching can lead to students form ideas about past lives. This is because they appear to promote connections to what the students often termed the 'story' of the past. The term 'story' appeared to be linked to the student's understanding of the reality of the past. This connection then leads to the three natural ways to think about past lives. These are through a *Sense of self*, the possibility of *Perceptions of the historical figure* and a sense of *perspective*.

These may be important considerations for planning teaching about past lives. This is because it appears that an understanding of the reality of the past is linked to the student forming ideas about past figures which are not, primarily, based upon imagination and demonstrate a sense of perspective. This may also convey an idea that affective and imaginative strategies are less effective in engaging pupils with thinking about past lives than those which promote a sense of their reality (such as activities using artefacts). The model also conveys the idea that a significant component of OHR involves the student making a consideration of themselves in relation to the past.

Finally, this model may demonstrate that conveying a sense of the reality of the past may be a more important component of teaching than imaginative historical empathy type activities. It was important that the research demonstrated that such an understanding could be achieved through relatively humble artefacts such as some battlefield shrapnel or a well-used Roman coin.

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Dr Hugh Moore is a senior lecturer in history and education at the Institute of Education at Cumbria University in the United Kingdom. He is a specialist in the field of primary history and the teaching of early history and archaeology.

He has been publishing work on the teaching of history since 2004 and amongst many others is author of the following publications: Moore, H. (2012) Using ICT to decode Artefacts and Sources. *Primary History*, 62, pp. 39-40. Moore, H. (2013) Chronological Thinking. *Primary History* 63, pp. 22-24. Moore, H. (2014) Using Sources to Create Narrative, in H. Cooper (ed.), *Writing History 7-11*. London: Routledge, pp. 79-91. Moore, H. (2017) Using Artefacts and Sources Creatively, in H. Cooper (ed.) *Teaching History Creatively*, 2nd edition. London: Routledge, pp. 1-87. Moore, H., Angus, R., Brady, C., Bates, C. and Murgatroyd, C. (2017) Creative Approaches to Time and Chronology, in Cooper H. (ed.) *Teaching History Creatively*. London: Routledge, pp. 105-120. Moore, H.G. (2019) 'Organic Historical Reasoning,' redefining the concept of 'Historical Empathy.' PhD Thesis, Lancaster University. Accepted February 2019.