

LEAD ARTICLE

When You are more Likely to Die of Cancer than Become an Academic: What is the Role of PhD students?

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It was 25 years ago that *Papers from the Institute of Archaeology* (PIA) was launched by postgraduates at the Institute of Archaeology. In the introduction to the first issue David Harris, then Director of the Institute, described the role postgraduates played in creating the journal,

'I am therefore delighted that several of our current research students have taken the initiative – and put in the necessary sustained effort – to launch *Papers from the Institute of Archaeology* (PIA). The appearance of this first issue of PIA is the result of much hard work by a dedicated group of postgraduates who not only assumed responsibility for the practicalities of production but also for extracting the contributions from their colleagues and editing them to a high standard! The result is a substantive contribution to archaeological scholarship. . . ' David Harris (1990)

That opening shows a glimpse of the different roles that PhD students play in archaeology: contributors to archaeological scholarship, managers of journals, editors, and much more. It was the role of PhD

students in archaeology that I was asked to write about as the opening for this, the 25th anniversary PIA lead article.

What is a PhD for?

PhD programmes are undertaken for a diverse range of reasons from intellectual curiosity to a love of the subject. But, anyone applying to a research or teaching position at a University will be acutely aware that a PhD is a requirement for such employment and acts as a gatekeeping mechanism for anyone who may wish to pursue such a career. This means students see the role of a PhD as an 'academic passport' (Noble, 1994) and the process of an apprenticeship to become an 'academic' (Armstrong, 1994).

' . . . essentially, a PhD is a training and apprenticeship in research, a period of learning the tricks of the trade, of becoming a professional, and of establishing yourself as a peer among experts.' (Park 2005 quoting undated source)

While there is no data for UK archaeology PhD student specifically, data from similar or associated fields shows that a high percentage of PhD students want academic jobs, i.e. history (81.2%), geology (58%) and philosophy (88.7%) (Golde & Dore 2001). For anthropologists in the United States, where archaeology is considered a sub-field of anthropology, 87.4% of new PhDs wanted

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an academic job at some point during their course (Rudd et al 2008). Worldwide most students undertake PhDs with the idea that they want to become academics:

'... that students, having survived the rigors of graduate school and obtained the Ph.D., were entitled to jobs doing independent research, preferably as tenure-track faculty in research universities.' (LaPibus 2001 p. 263)

This view of the role of PhD students as academic apprentices has been enshrined since the creation of the first PhD programmes in the UK. Even back in the 19th century there was a push for academic staff to hold a PhD. "By the end of the nineteenth century, the PhD had become the *sine qua non* [requirement] of American [university] teachers" (Simpson, 1983) and because British Universities did not have these degrees they were losing students to German and American Universities. When the PhD was introduced into the UK between 1917 and 1920 it was viewed as a way to compete for students against American and German universities that were offering PhDs (Simpson 1983). The PhD programme in the UK has always been seen as training for academics and the PhD students as playing the role of apprentices.

There have been recent calls to change the role of PhD students in the UK away from the traditional 'academic in training'. Park (2005, 2007) presents an analysis of the driving forces behind these changes, essentially a lack of academic jobs and the need to make graduates 'employable'. Archaeologists have had this conversation for decades, though mainly via informal 'pub' or 'dig hut' chats. The most recent formal incarnation of that discussion occurred at the 2014 TAG Conference (Altoft 2014) during the 'Students in Archaeology' session.¹ What has been missing from the conversation in archaeology is the data to prove that change is needed. We do not know if the role of PhD students as academic apprentices is outdated or if there is demand for it to be changed in

archaeology, as it has in other disciplines. This article will be a brief empirical analysis of the changing job prospects of PhD students in archaeology and how it relates to their role as future archaeologists. The goal of which is to start a conversation about the different roles PhD students have, or should have, in archaeology.

Is academic job hunting in archaeology harder than hunting unicorns?

Is there a lack of academic jobs in archaeology for PhD students, enough so that we must question the role of PhD students? The answer to that question can be found through a compilation of different sources: the Higher Education Statistical Agency (HESA);² HESA's predecessor the Universities Statistical Record (USR);³ the different *Profiling the Profession* surveys of professional UK Archaeologists (Aitchison 1997, Aitchison & Edwards 2003, Aitchison & Edwards 2008, Aitchison & Rocks-Macqueen 2014); and the different UK research assessments like the 'RAE' (Research Assessment Exercise, RAE 1992, 1996, 2001, 2008) and 'REF' (Research Excellence Framework, REF 2014).

The official higher education (HE) statistical data show that there has been an increase in academic positions (**Figure 1**). This is collaborated by the research assessments and *Profiling the Profession* data (**Figure 2**) which demonstrates that most of the different data sets produce similar results. But most of that growth in traditional academic positions has been in temporary work. Currently 95% of research & teaching positions are on permanent or open-ended contracts while 75% of research only positions are on fixed term (temporary) contracts.

Figures 1 and **2** show growth in the total number of jobs but determining the actual number of positions that have opened up is more complicated because there are retirements, leaving of posts or, in sad cases, deaths in which positions become available. The URS data provides the actual number of new people in permanent academic positions. There was an average increase of 5% new archaeologists

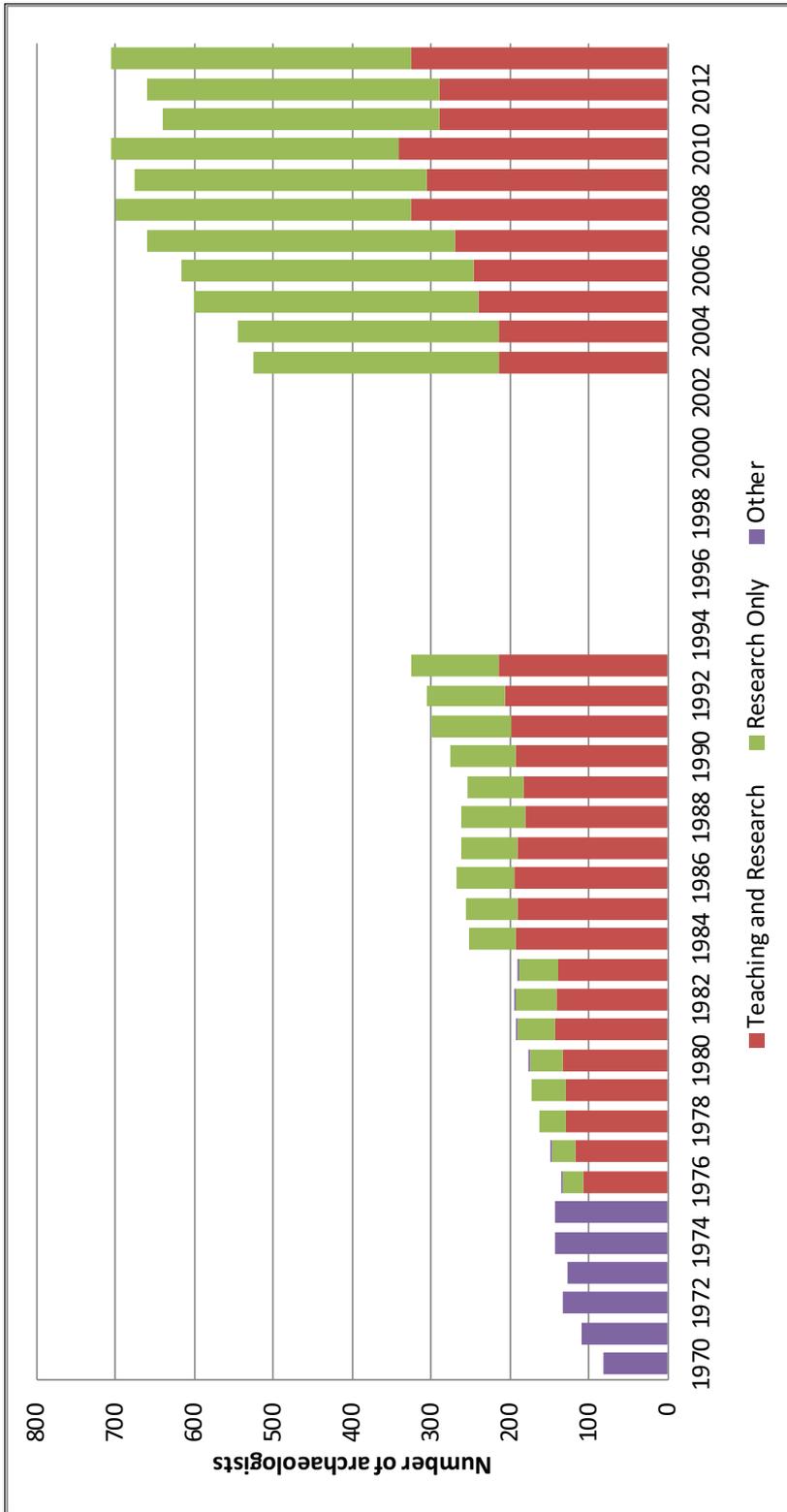


Figure 1: The number of teaching and research and teaching only, other, and research only positions in UK archaeology at universities 1970–1993 & 2003–2013.⁴ Support positions and those as part of auxiliaries, like commercial units are not shown.

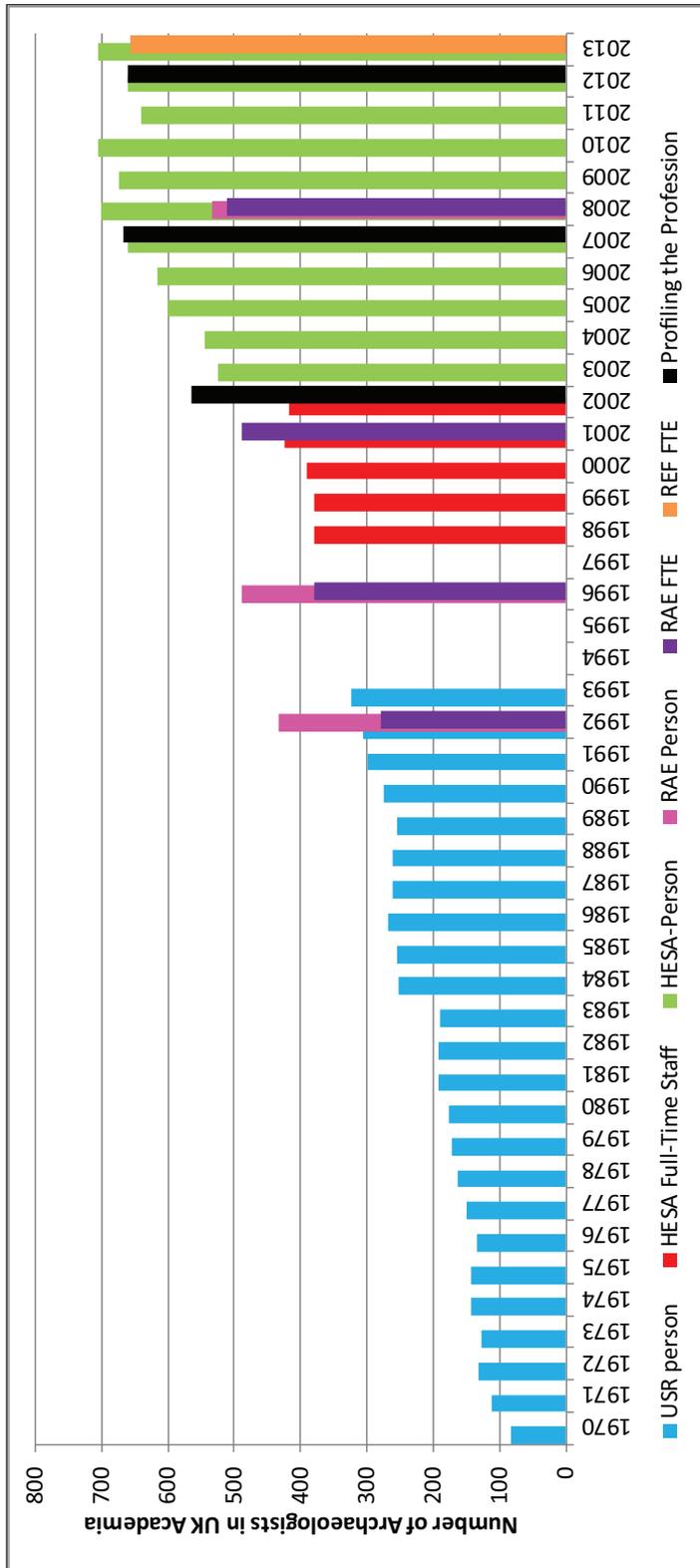


Figure 2: The total number of archaeologists employed in research and teaching positions in UK universities from multiple sources.⁵

in permanent academic positions each year, from 1980–1993, taking into account new positions, retirements, etc. That means that currently there will only be, on average, 15 new permanent positions available each year.

It's raining PhDs

While the number of permanent academic positions have increased at a steady rate the data from USR, HESA and the research assessments (RAE & REF) show an explosion in the number of archaeology PhDs granted in the recent decades (**Figure 3**). When compared together the contrast between PhDs and positions is stark (**Figure 4**).

Better chance of dying of cancer

There are fluctuations with some years being better than others for the job market but using a rolling three and five year averages to smooth the fluctuations it is possible to determine the relative odds of PhDs obtaining an academic job (**Table 1**), currently around 10%. To put those numbers into context, the odds of dying from cancer in England and Wales is 29% (ONS 2014). Yes, one has better odds of dying from cancer than getting a permanent academic job in Archaeology. One also has better odds of dying of Heart Diseases – 28% or Flu and Pneumonia/respiratory diseases – 15% or possibly dementia and Alzheimer's – 9%.

Different odds for different people

This is not to imply every new permanent position in UK archaeology academia should come with a complimentary prostate exam or mammogram. The comparison to cancer is not a correlation but is used to put the odds into a relatable context. Keeping with the analogy there are certain behaviours and environments that increase ones chance of dying from cancer, like smoking or working in an asbestos rich environment. In archaeology there are certain aspects that increase or decrease one's chances of getting a permanent academic position. For example, being a woman in the 1970s and 1980s cut one's chances of getting such a position (**Table 2**).

There a multitude of factors that influence the outcomes, many of which are out of one's control. Luck may even play a significant role when the odds are so low. Some people will be more advantaged than others but on average the odds are poor for everyone.

Other Archaeology positions

Not only was it 25 years ago that PIA was launched but it was also when PPG16 was first introduced in the UK and 'commercial archaeology' in its current form was created. This event provided an assortment of new job opportunities for PhD students to become professional archaeologists as the number of professional archaeologists in the UK has grown greatly (**Figure 5**), recessions aside.

Yet, we do not see this growth in PhDs translating into the same increase in professional archaeologists. The *Profiling the Profession* series have recorded a sample of the types of degrees that archaeologists hold. This includes archaeologists that work in traditional university settings. While the number is going up, currently 19% (10% in 2002–03 and 11% in 2007–08 see **Figure 6**), it only translates to approximately 1000 professional archaeologists with PhDs. In the last 20 years we have graduated between 2200 and 2300 archaeology PhDs – approximately 1600 in the last ten years alone. This means that a significant portion of archaeology PhD students go on to jobs outside of archaeology, possibly half or more.

Discussion

This paper started with a quote from David Harris, but there was more to it (emphasis added):

'The appearance of this first issue of PIA is the result of much hard work by a dedicated group of postgraduates who not only assumed responsibility for the practicalities of production but also for extracting the contributions from their colleagues and editing them to a high standard! The result is a substantive contribution to archaeological scholarship **which,**

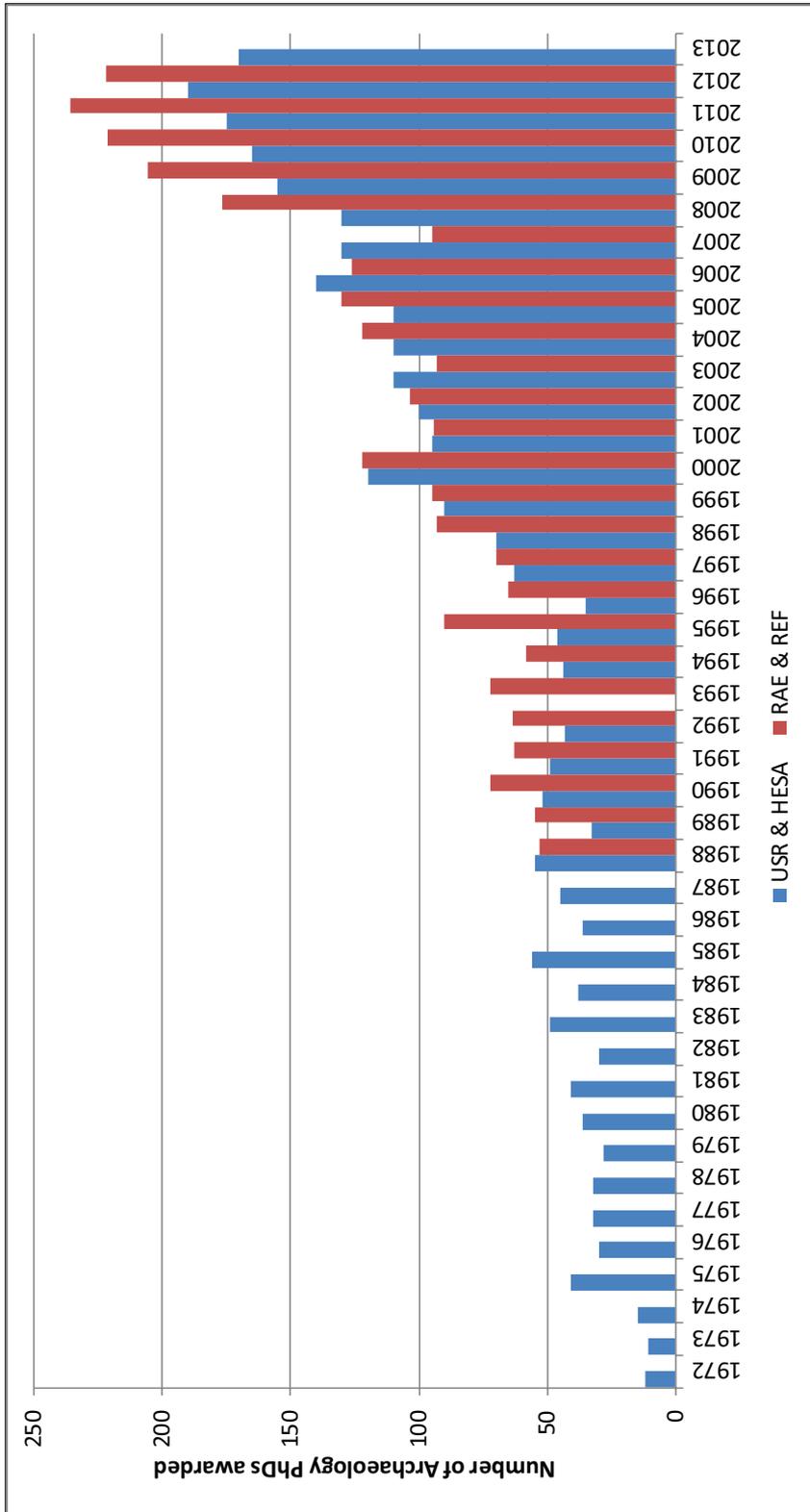


Figure 3: Number of archaeology PhDs granted in each year from 1972 to 2013 (no data for 1993) from HESA,⁶ USR⁷ and the Research Assessments. HESA data is rounded to the nearest five.

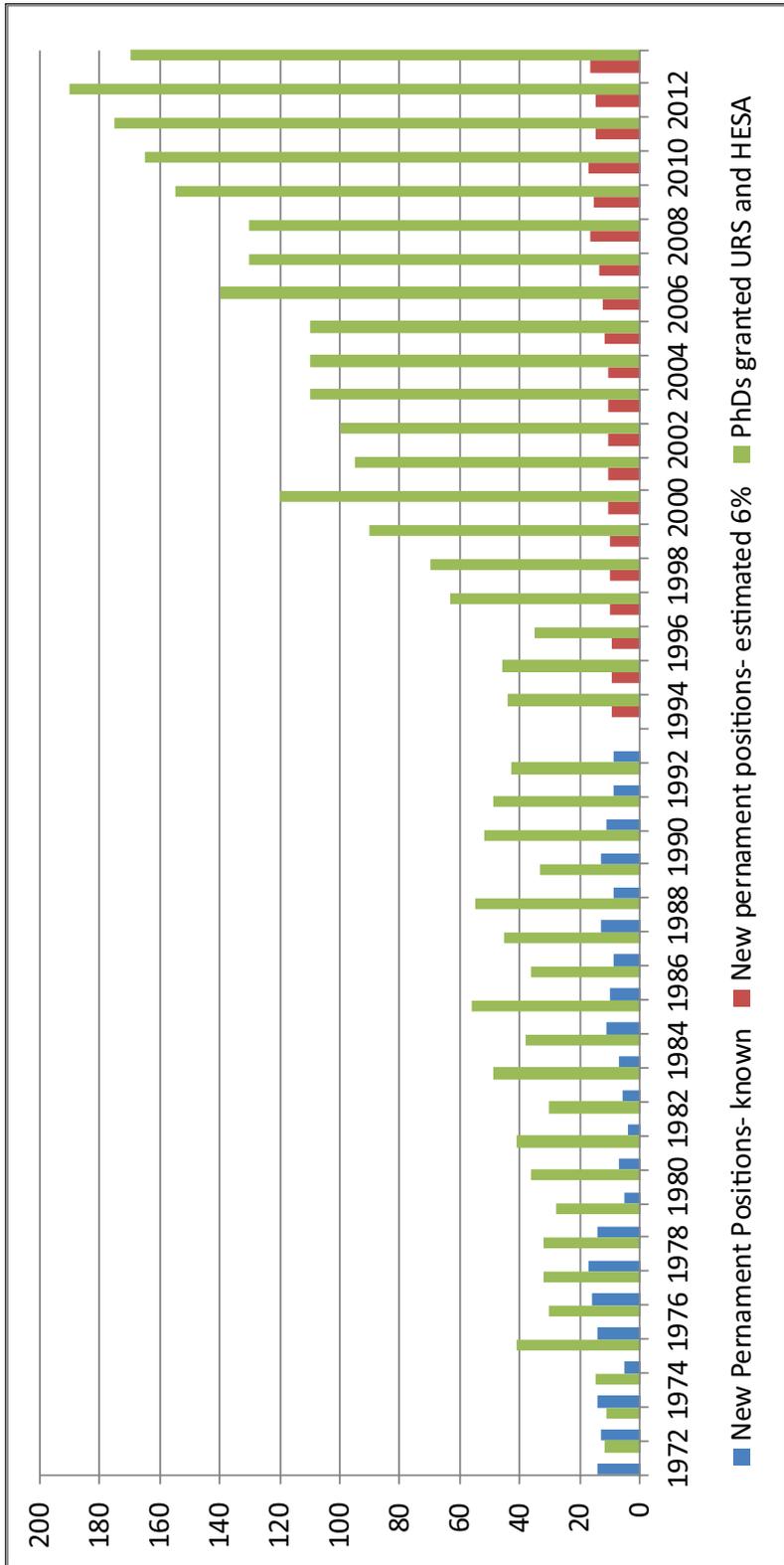


Figure 4: Actual number and calculated number of new research and teaching positions i.e. permanent positions, against PhDs given in archaeology.

Year	Ratio Jobs to PhDs	3 year average ratio	5 year average ratio
1976	47%		
1977	50%		
1978	53%	50%	
1979	50%	51%	
1980	14%	39%	43%
1981	17%	27%	37%
1982	13%	15%	29%
1983	12%	14%	21%
1984	18%	15%	15%
1985	20%	17%	16%
1986	28%	22%	18%
1987	20%	22%	20%
1988	24%	24%	22%
1989	27%	24%	24%
1990	25%	25%	25%
1991	22%	25%	24%
1992	21%	23%	24%
1993	20%	21%	23%
1994	21%	21%	22%
1995	20%	20%	21%
1996	27%	23%	22%
1997	15%	21%	21%
1998	14%	19%	20%
1999	11%	14%	18%
2000	9%	11%	15%
2001	11%	10%	12%
2002	11%	10%	11%
2003	10%	11%	10%
2004	10%	10%	10%
2005	11%	10%	10%
2006	9%	10%	10%
2007	10%	10%	10%
2008	13%	11%	10%
2009	10%	11%	10%
2010	10%	11%	10%
2011	8%	9%	10%
2012	8%	9%	10%
2013	10%	8%	9%

Table 1: The ratio of PhDs earned to available research & teaching academic positions in archaeology.

	Positions males obtained	PhDs granted to males	Ratio of male PhDs to male jobs	Positions females obtain	PhDs granted to females	Ratio of female PhDs to female jobs	Percentage being male increases odds of getting a position
1974	11	10	110%	3	5	60%	45%
1975	4	25	16%	1	16	6%	61%
1976	11	22	50%	3	8	38%	25%
1977	13	23	57%	3	9	33%	41%
1978	13	23	57%	4	9	44%	21%
1979	11	16	69%	3	12	25%	64%
1980	4	28	14%	1	8	13%	13%
1981	5	27	19%	2	14	14%	23%
1982	3	20	15%	1	10	10%	33%
1983	6	29	21%	0	20	0%	100%
1984	5	22	23%	2	16	13%	45%
1985	8	33	24%	3	23	13%	46%
1986	8	21	38%	2	15	13%	65%
1987	5	32	16%	4	13	31%	97%
1988	10	37	27%	3	18	17%	38%
1989	5	15	33%	4	18	22%	33%
1990	7	27	26%	6	25	24%	7%
1991	8	32	25%	3	17	18%	29%
1992	6	31	19%	3	12	25%	29%

Table 2: The ratio of men and women PhDs to research and teaching job obtained by that sex in the same year. USR data.

in the seven papers selected for this first issue, display a breadth of research themes and methods – ethnographic, stylistic, experimental, theoretical and analytical – which nicely reflects the diversity of postgraduate research that is characteristic of the Institute. The list, and abstracts, of the 18 PhDs awarded between January 1989 and February 1990 is also a fine testament to the vigour and range of current research.’ (Harris 1990)

David illustrates some of the roles that PhD students play in the discipline but he also highlights perfectly the problems students are facing – there were not 18 new permanent academic positions for just those UCL students in 1990, there were only 13, and 11 the following year. While they had better odds than current students in all likelihood many of them did not continue to produce vigorous research across a breadth of research themes and methods. Only in the early 1970s did PhDs have a 50% chance of become an academic, still not great odds.

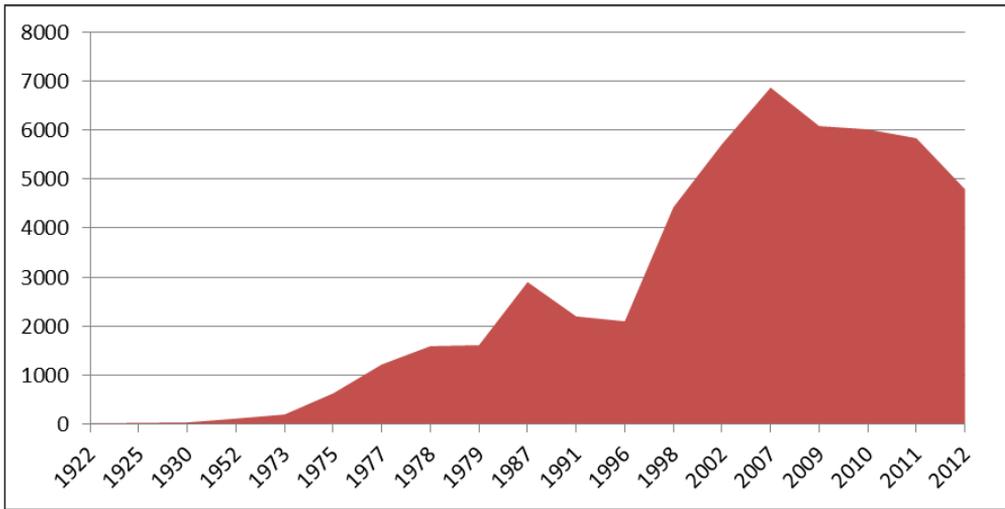


Figure 5: Number of professional archaeologists in the UK. From Aitchison & Rocks-Macqueen 2014 (Creative Commons licence).

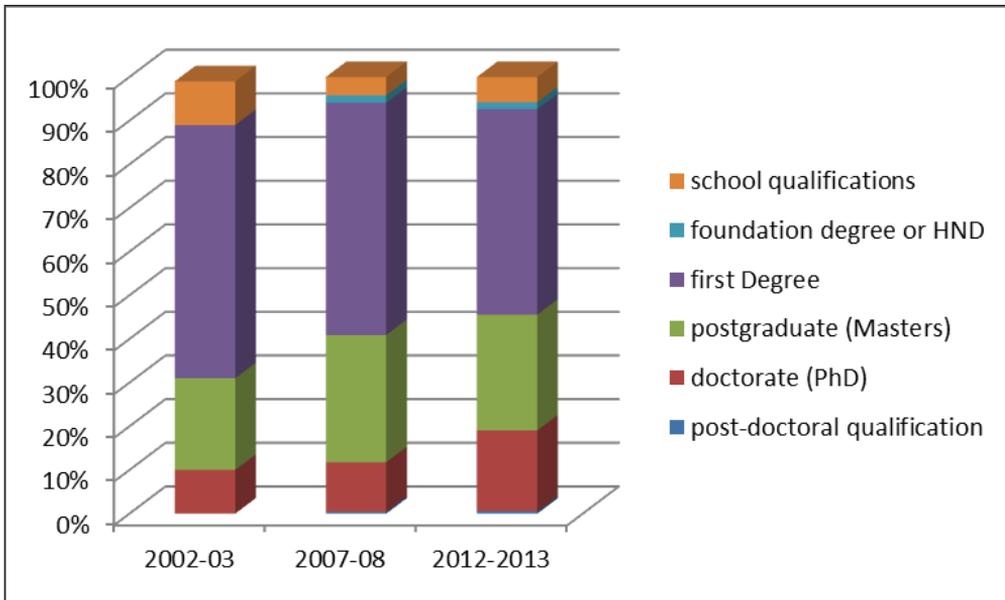


Figure 6: Percentage of highest degree held by professional archaeologists in the UK. From Aitchison & Rocks-Macqueen 2014 (Creative Commons licence).

Currently, if UK archaeology PhDs are like their compatriots in the US or those in other fields of study, 90% want to be an academic but after getting a degree 90% of them will never be one, at least not one with a permanent position. While many of them will go on to other careers in archaeology, half of them

won't. When the odds are that only one in ten PhDs will get a permanent lectureship type position than what is the role of the other nine PhD students?⁸

A worrying implication from these numbers is how the profession has reacted to situation – it has done nothing. Has our profession embraced

a dystopian view of the role of PhD students in which 10 students enter but only one leaves an academic in a cynical academic version of the post-apocalyptic Thunder Dome?⁹ If this view is taken than the role of PhD students is more akin to gladiators in the Colosseum. They are sent out to do battle for the glory of their owners. With victories they are celebrated and if they win enough they are eventually elevated to the same level as their trainers. With defeat they are simply forgotten.

I would like to believe otherwise but find myself hard pressed to articulate the role of PhD students in archaeology that does not involve being future professional archaeologists or gladiators. So I open up this year's forum with two simple questions:

- What is the role of PhD students in archaeology?
- What should/could be the role of PhD students in archaeology?

Response

Andrew Bevan

Doctoral research can be an enormously rewarding experience. PhDs in archaeology not only continue to provide a highly specialist training, but just as importantly, are an engine room of original ideas in their own right, about aspects of the human past and the contemporary world. That said, it is undeniably true that now is an anxious and pressured time to be doing a PhD in archaeology. Doug Rocks-Macqueen's lead article nicely characterises some of the PhD supply-and-demand challenges we face as a subject area. Degrees are becoming more expensive to attain and traditional permanent faculty positions in UK archaeology are becoming harder to get. Alongside this, there has been a sharp growth in fixed term post-doctoral positions, and while these roles often enable early career researchers to develop extended personal projects and/or to contribute to the kinds of collaborative projects that were all too rare before, they are also a frustratingly precarious form of employment. This forum therefore provides a really timely opportunity for an important debate.

As with any healthy lead paper, Rocks-Macqueen's makes plenty of comment with which you can only wholeheartedly agree, but also prompt some points of disagreement. For example, while dystopian thoughts about professional futures in academic archaeology are entirely understandable, I do not think it is really fair to say that UK institutions are doing nothing to address these challenges, or indeed that they merely look on while PhD students "do battle for the glory of their owners" (whoever the latter are supposed to be!). In the current climate, university leaders, graduate administrators, archaeology departments and individual PhD supervisors agonise about how best to position PhD students to compete well in a tough job market. Moreover, from the earliest stages of PhD admission right the way through the PhD process (in most of the UK institutions I can think of), departments work hard to co-design increasingly marketable, career-building research projects and work hard to provide far more teaching and training opportunities that was ever traditional in UK PhD programmes. They are also starting to debate how best to build better after-PhD support, even if this is a domain where I personally think far more could be achieved. Clearly, there is always room to do more, and hopefully the current discussion will point to some possibilities.

I also worry a little bit about treating the UK situation in isolation rather than as a global, discipline-spanning problem (e.g. by speaking in terms of PhD to job ratios without considering the growth or shrinkage of these abroad or the relative perceived worth of a UK PhD). Bernstein and colleagues (2014: 7) put it well: "what was once a small group of privileged apprentices in a handful of elite universities has now been replaced by tens of thousands of doctoral students in hundreds of universities. Moreover, borders and barriers have been supplanted by global landscapes, simulations, collaborations, study abroad, and instant communication. As a result, research doctorates are increasingly offered by institutions all over

the world, not just by research universities in Europe and North America. Doctorates are also offered jointly by collaborating institutions in different countries, by institutions operating outside their home countries, and through distance education. The graduates of today's research doctoral programs work in roles and settings that were unimaginable in earlier times" (see also Schuster and Finkelstein 2006; Cyranoski et al. 2011; Powell 2015). So the implication of a closed, autarkic system of UK PhDs and UK jobs strikes me as missing some important ways in which UK institutions often export their PhD expertise to jobs abroad and vice versa. UK archaeologists typically do well in this international environment, getting post-doctoral posts and permanent jobs abroad in comparatively large numbers. Some PhD graduates have very clear personal reasons for needing to find local employment, but for those willing and able to be mobile, there is now a much wider set of interesting opportunities. For instance, at UCL, we have had 107 new students register for a PhD in archaeology or heritage over the last 5 years, of whom only 46% are UK residents, 21% EU and 33% overseas. We do not have exact figures on where finishing PhDs end up, but we do track such things informally (e.g. over the last 15–20 years) and there is clearly a similar spread of UK, EU and overseas job destinations. A very reassuring number of PhD graduates are in permanent academic positions or in good high-profile post-docs, or in high-level academic-related positions as museum curators, heritage institution leaders, CRM directors, etc. Some, a minority overall, do move out of academic life entirely but conversations with them only very rarely suggest that they felt forced out by circumstance. More awkwardly perhaps, and yet harder to judge, the currency of PhDs from different degree-awarding institutions probably varies even within the UK, with likely onward effects for which university's PhDs are most favoured in career terms (whether or not we agree that such varying value judgments by institution are fair at PhD level). So

I agree that the conditions are difficult and the anxieties understandable, and it may conceivably be that we have not yet seen the full impact of this challenging job climate. However the outlook is arguably slightly better than the lead article implies, especially when viewed in this international context.

A related feature of the increasingly heterogeneous environment that creates PhDs is the fact that the range of academic and academic-related jobs now available has also diversified. There is greater emphasis on inter-disciplinary teaching among otherwise traditional subject areas, as well as newly growing fields such as digital humanities, cultural heritage and certain kinds of scientific archaeology. There is also far more cross-over today between academic work and the priorities of policy or curatorial institutions. In this world, the person who strategically develops diverse skill-sets over the course of their PhD tends to be best-positioned not only to showcase their core specialism, but also to contribute to wider debates in neighbouring disciplines, to go for jobs requiring a mix of quantitative and qualitative methods, and/or to enable non-traditional forms of public engagement (this latter emphasis becoming increasingly important through things like the research 'impact' agenda in the UK and elsewhere). Hence while it is true that a PhD can no longer be seen as an immediate, trouble-free passport to a traditional academic job in archaeology, there are good reasons to retain some optimism, and, with the help of supervisors and parent departments, to build a profile which leaves as many professional doors open as possible.

Response

Hana Morel

The Shifting HE Landscape

The timing of this discussion could not have been more appropriate: particularly as we see significant structural changes to the landscape and funding of Higher Education (HE) in the UK and elsewhere (IPPR, 2013). Only recently has the Government released

the HE Green Paper, *Fulfilling Our Potential: Teaching Excellence, Social Mobility and Student Choice* (BIS, 2015), and the 2015 Comprehensive Spending Review (HM Treasury, 2015), which has resulted in the Government's Department of Business, Innovation and Skills, which HE falls under, receiving a 17% cut to its budget and a change in the HE landscape (Morgan, 2015). This, alongside other proposals to structural changes, includes: a continuation of the quango bonfire (or merging – depending on your perspective); the introduction of the Teaching Excellence Framework; cost-cutting strategies and the simplification of particular processes; an apparent move away from the over-emphasis in research that the Research Excellence Framework encouraged; and the marketization of academia leading to new goals of employability and creating a skilled workforce catered for business demands.

But why is this important? Understanding changes in the larger socio-political and economic environment allows us to appreciate how Higher Education Institution (HEIs) goals, functions, and intended outcomes are changing. This, in turn, has changed societal values towards Higher Education; as such the role, career path and areas in which PhDers contribute towards have been called into question (Hepi, 2015). For example, a lot of pressure is being put on HEIs to forge links with industries (ie. IfM, 2014; Dowling Review, 2014), driven by goals to increase the UK's knowledge economy, market economy, and pool of skilled talent ready for employability. The link between HE and employability is now strongly embedded in our mindsets, and because of that we have started to ask questions about the *value* of HE – or more particularly the value for money and cost benefit (OECD, 2012; UUK, 2015a). In a sense, students have become customers preparing themselves as skilled labour for a market workforce. As HE becomes further entrenched in marketability, it finds itself needing to readdress and renegotiate its position and contribution to society in terms of measurable output and outcomes (using

whatever metrics fits purpose). It does this through its staff and students – and so their roles change too.

The Role of the PhD

Rocks-Macqueen's leading article starts with the late Harris' editorial to the first volume of the PIA. Interestingly, I too quoted this editorial in the PIA's Volume 24, reiterating that 'much research remains unknown to colleagues around the world', and that the 'vigour and range of current research' needs to reach wider audiences (Harris, 1990; Morel, 2014). The role of the PhD student that Harris spoke of extended far beyond extra- or co-curricular activities that one may choose to be involved with while researching: PhD students play a critical role in contributing innovative, exciting, unfamiliar and fresh theories, practices and applicable research to the archaeological (and non-archaeological) community and wider society, and are encouraged to do so in the academic environment which is both supportive and inspiring. They are key actors in creating a strong knowledge economy, developing research collaborations (which play a role in negotiating international bilateral agreements), and pushing innovation. Their base, HEIs, are hubs – or centres – of vision and creative power, with the virtue of supposedly harbouring scholarship, knowledge exchange, and collaboration as well as providing the facilities, infrastructure and expertise to support new research. The Universities UK report *Future of Cities: Universities and Cities*, states, 'Universities provide highly skilled graduates, world leading research, technological innovation, and business support [and] the future of our cities is intertwined with the future of our universities' (2015: 1, 2). In addition, students and influential alumni have a great capacity in building connections and strengthening networks across 'regions and internationally through research collaborations, engagement with industry' and other links around the world (ibid: 3). What this implies is that PhDers are fundamental – and potentially highly influential – if they choose to be the advocates, innovators, challenges,

decision-makers – or as Foreign Policy (2015) puts it, *global thinkers*.

What is a PhD for?

I have a bone to pick (pun intended) with the lead article's discussion of PhD students and academic positions, perhaps because I personally had no prior (or post) intention to pursue an academic career during my PhD. To start, I am not sure that the role of the PhD student is (or should be) determined by the abundance or absence of academic positions – why should it be? It seems somewhat anachronistic to do so. Rocks-Macqueen mentions 'we do not know if the role of the PhD students' as academic apprentices are outdated': I propose that while PhD students may be academic apprentices should they choose to be, it is by no means the *only* role, position or option for a PhD student. This returns us back to understanding the wider value of Higher Education, in that it offers transferable skills far more advantageous than the expertise of the particular topic explored.

But let us look away from the actual larger contribution of HE, and focus on what a PhD is worth for archaeologists. While Rocks-Macqueen makes a legitimate point that in the US, an archaeologist requires a Masters degree to qualify as a 'professional' archaeologist, as seen in the Registrar of Professional Archaeologists and by law (see Antiquities Act 1906; rpanet.org), we are now seeing an increasing move towards bridging the chasm between academia and CRM. Furthermore, the same requirements are not required in the UK. Indeed, there are debates surrounding the issues of 'professional' archaeologist and the 'amateur' archaeologist (we won't go there), but there are no requirements for academic qualifications in the UK. This reality highlights that the pursuit of a PhD is not necessarily tied to a clear career trajectory into academia.

It should also be pointed out that in some cases, pursuing a PhD can work against an individual, simply because they have not ventured out of their offices for three

or more years, and so have no experience demonstrating they can undertake essential or even desirable skills requested by potential employers. The point here is that PhD candidates should accept that they can no longer expect their degree to work as a passport into well-paid positions or employment. Work experience and apprenticeship pathways are equally valuable in terms of employability.

Is academic job-hunting in archaeology harder than hunting unicorns, asks Rocks-Macqueen?

I think we have to be somewhat flexible when it comes to understanding the potential and reach that archaeology can offer to the wider society and to potential employers – as in, perhaps start to see a rhinoceros as a fat unicorn, and then the probability for job-hunting becomes somewhat more optimistic, or at least realistic. While it is devastating that any under or post-graduate might find themselves over-qualified and working in a sector unrelated to their area of expertise (CIPD, 2015), reducing the role of PhDs to an issue of 'supply and demand' does nothing more than support a tone of soft social engineering either by discouraging individuals to invest the time, energy and money into PhDs, or by discouraging Government to support such programmes. Perhaps attention should be turned to a discussion about job creation (CIPD, 2015); more support and investment in the social sciences, arts and heritage (ACSS, 2015; Million +, 2015); or issues with employees working over-hours (which effectively is another part-time or full-time position). What should *not* be an option is diminishing skilled individuals simply because the mind-set of the day is to equate the value of HE with employability and the job market.

What are the odds. . .?

Rocks-Macqueen provides a fair amount of odds and ratios. There is mention of the classic (dis)advantages that come with gender (and let's assume class and race are part of

the 'different people' discussion), in which I will add the category of *who you know*, and how large your social/professional network is. It would be interesting to know how many recent PhD graduates simply do not apply for job posts because they know the job has already been allocated to a particular individual. This sort of nepotistic environment may further influence the role of the PhD candidate, in that during their studies they may do well to increase their visibility within the community by continuous networking and participation in events or projects – albeit generally at the financial expense of the student. While it may not be easy, ongoing participation within the archaeology community also gives something critical back to the student: they learn and experience the world of archaeology beyond academia and beyond their isolated and niche subject, realising that their role as a skilled and valued archaeologist can go further than their area of expertise. In short, perhaps it is worth seeing the PhD as a rigorous learning process involving specialised scholarship rather than as something that caters for a specific career path – particularly if that specialised scholarship is investigating the symbolism of a tiny artefact from the remotest place on earth from a 9,000 year old site (*this example is not based on a true story – but could be*).

Conclusion

At the close of the leading article, a sentence lingers: *'has our profession embraced a dystopian view of the role of PhD students. . .'* In both the UK and the US, archaeology became part of the planning system, which helped push the professionalization of archaeology *but* also could offer so many job opportunities in research, comparative site studies, and other specialised work. Particularly today as we see our cities and landscapes increasingly look identical to one another, as cultural landscapes are traded for cookie-cut/big brand companies – streamlining planning processes and squeezing resources to lure in international markets – it is worth asking how archaeology can expand and

adapt to the needs and protection required in today's socio-political climate. Perhaps the problem lies in the nature of how archaeology in general renegotiated its role (after joining the planning system) with the construction industry and compliance. Whether development-led archaeology wants to or not, they simply do not have the time nor money to invest the necessary resources into various parts of the archaeology process i.e. post-excavation research. Many contract units do spectacular work, however external pressures – such as Government fast-tracking the planning process or clients wanting quick and lower costs – do leave a void that could be well-served by the qualities many PhD graduates leave their studies with.

The role of the PhDer has so much potential. Think one step beyond, and the role of the Institution itself, filled with great minds, has so much potential. We – together – can be think tanks, can influence policy, can create channels with other sectors, can work on questions and areas others do not have time for, and so on. Our role, individually and together, is about innovation, creativity, having the space and support to research ideas that may not be profitable; it is about being in the environment and having the vigour to question, and instigate change. It is about creating a milieu for all sectors without driven agendas that would ordinarily block greater collaborations and ideas. At risk of sounding too idealistic, we have only to look back at the history of institutions and research centres to see this. So, before we start farming for labour, let's rethink and expand our role, rather than shrink it.

Reply

Doug Rocks-Macqueen

A Way Forward When You Are More Likely to Die of Cancer than Become an Academic

'When You Are More Likely to Die of Cancer than Become an Academic' is close to being a click-bait title. 'It can't be this bad' was most people's first reactions when I shared the data

with them. It was the respondents' reaction and probably yours too. Bevan hypothesised that the UK may export PhDs to jobs in other countries. Morel pointed out, using herself as an example, not everyone who undertakes a PhD wants to become an academic.

Bevan and Morel are correct but it makes very little difference. The DISCO projects show that there is very little mobility across European Archaeology (Aitchison, et al. 2014). Those that do cross borders tend to do so in small numbers and the exchanges run both ways. Between the UK and the United States there is almost an equal exchange of archaeologists working 'across the pond' in academia (Rocks-Macqueen 2011, Rocks-Macqueen 2012). While there are many advantages to an exchange of scholars the relief of the job market is not one of them; the UK is not a significant exporter of PhDs. Not all PhD students dream of jobs in academia, but as raised in the lead paper 80–90% of PhD students have aspirations of academia. A few people finding jobs in foreign Universities or a few not interested in academia is not going to significantly increase odds when the UK produces roughly 200 PhDs per year.

There may be other factors that will improve the odds but only slightly. HESA data shows that a little less than 400 PhD students have external funding for their PhD. Fees paid for and a living stipend that pays rates similar to what one could make in the commercial sector, but without a precarious employment situation and having to work in the rain/snow, is a good deal. Even if the odds of post-PhD employment in academia are poor undertaking a fully funded PhD is a great option for students who can get them.

Moreover, once one has a PhD there are very little downsides to applying for academic positions other than taking some time working on an application. Hana asked the question, 'It would be interesting to know how many recent PhD graduates simply do not apply for job posts because they know the job has already been allocated to a particular individual.' One recent post-doctorate

position received 600+ applications. That was fairly open in what could be researched and an outlier but almost all academic positions now receive upwards of 150–200, sometimes 300 or 400, applications. Insider jobs do not seem to discourage applications. Worse, if the implication of the question is true than I am not sure which is more depressing, low job prospects for all or guarantee jobs for some based on patronage and no job prospects for the rest.

Until the introduction of this article no one has quantified just how bad the job situation is i.e. 3x more likely to die of cancer. Might fewer people apply for a PhD now that the numbers are known, especially self-funded students that have more to lose, very doubtful. The greatest source of funding for Heritage in the UK has been the Heritage Lottery Fund. UK heritage is literally built upon the foundations of people knowing their odds of winning are essentially non-existent, magnitudes worse than getting an academic job, yet still choosing to participate. I suspect you could hand my article to every person applying to an archaeology PhD and I would be surprised if one person, let alone two people, would decide not to undertake a PhD.

Would appeals of the heart make a difference? Ten years ago the eloquent Brian Fagan (2006) wrote this:

"The chances of finding a job in a research university or even teaching at an undergraduate institution on a permanent basis diminish every year. Sally, a former student of mine, had dreams of working in a major university researching early African farmers and having graduate students of her own. The dream faded rapidly when she found herself on the job market. She's teaching unhappily at a college in the Midwest, with no opportunities for any research. . . I know of a Mesoamerican PhD who makes a living dogwalking, of another who teaches biology at a multimedia

university, of a classical archaeologist who lives despairingly in St. Louis working in the restaurant business after seven years spent acquiring what he bitterly calls “a useless degree.”

Yet the number of newly minted archaeology PhDs has gone up around the world – not un-surprising given that self-funding is usually undertaken through student loans which delays the impact of ones decision to undertake a self-funded PhD for years, possibly a decade or more.

To top off the fact that we have more people than jobs, that nothing is going to improve those odds, that there might be a feudalistic system of patronage instead of a meritocracy, there is 40 years of data showing a one way trend of diminishing job prospects in academia. This means we are on the cusp of a Golden Age of archaeology. With lack of auditory and visual cues in writing I understand that such a statement may come off as sarcasm; it is not.

Archaeology is in perpetual crises. We have archival crises, construction bulldozing over heritage crises, looting in (insert any countries name) crises, sexual harassment crises, employment crises (too few or too many there never seems to be just enough archaeologists) and the list goes on. Archaeology has the demand for smart, driven and creative people to deal with all of these crises.

That is not to be confused with a general call for smart and driven people that so often goes out. Too many archaeologists begin their careers with a glamorous vision of the field, only to be emotionally and psychologically shattered by the realities of the trenches. An experience that changes the way people referred to the glamour of archaeology; treating it no longer as a positive quality but as a dangerous illusion. No, we should not blindly send archaeologists into the killing fields of a particular section of archaeology just because there is a boom in jobs there.

No, we need archaeologists that tackle issues of job employment in all sectors of

archaeology by increasing job opportunities, not filling them. We need organisations like DigVentures which is an archaeology crowdfunding and crowdsourcing venture. We need organisations like Past Preservers, an expert consultancy, casting and talent representation. When the History Channel in the United States has TV shows like Ancient Aliens, and TV companies are no longer beating down the doors of archaeologists to make history and archaeology shows we need archaeologists who beat down the doors of production companies. We need people like Big Heritage who fund most of their community work through sources that are not the HLF.¹⁰

We need archaeologists who break down disciplinary boundaries and move both what archaeology means and what we contribute to the world. We need archaeologists like Tara Copplestone and Andrew Reinhard who are at the forefront of archaeogaming, which is intersection between archaeology and video-games. We need Sarah and Eric Kansa from Open Context who were honoured at the White House for their contributions to Open Data and Open Access. We need Sarah Parcak who won the TED award for her archaeological work.

This is not a game of this archaeology is better than that archaeology. These are examples about people finding ways to push the boundaries of archaeology and its relevance to the wider world. With crises in careers, looting, heritage management there is great demand in archaeology for these sorts of archaeologists. But, demand does not mean job demand. These examples are people who have found ways to carve out new and exciting avenues for archaeologists to expand into. If archaeology is to grow and prosper it needs people to help it do that. What is the role of PhD students? That is the question that is at the heart of this article. I see the potential role of PhD students to be the heroes that archaeology needs.

Is this call so different from Bevan and Morel's? Possibly not. They both end their responses with similar calls:

“The role of the PhDer has so much potential. Think one step beyond, and the role of the Institution itself, filled with great minds, has so much potential. We – together – can be think tanks, can influence policy, can create channels with other sectors, can work on questions and areas others do not have time for, and so on. Our role, individually and together, is about innovation, creativity, having the space and support to research ideas that may not be profitable; it is about being in the environment and having the vigour to question, and instigate change. It is about creating a milieu for all sectors without driven agendas that would ordinarily block greater collaborations and ideas. . . . So, before we start farming for labour, let’s rethink and expand our role, rather than shrink it.”

“In this world, the person who strategic develops diverse skill-sets over the course of their PhD tends to be best-positioned not only to showcase their core specialism, but also to contribute to wider debates in neighbouring disciplines, to go for jobs requiring a mix of quantitative and qualitative methods, and/or to enable non-traditional forms of public engagement (this latter emphasis becoming increasingly important through things like the research ‘impact’ agenda in the UK and elsewhere). Hence while it is true that a PhD can no longer be seen as an immediate, trouble-free passport to a traditional academic job in archaeology, there are good reasons to retain some optimism, and, with the help of supervisors and parent departments, to build a profile which leaves as many professional doors open as possible.”

However, the change I believe needs to happen is probably far more radical than what they envision, even if we all have the same

goal in mind. I question if current PhD programmes can produce the outcome we all envision. This is not a cheap shot at academic archaeologists. As Bevan points out,

“In the current climate, university leaders, graduate administrators, archaeology departments and individual PhD supervisors agonise about how best to position PhD students to compete well in a tough job market. Moreover, from the earliest stages of PhD admission right the way through the PhD process (in most of the UK institutions I can think of), departments work hard to co-design increasingly marketable, career-building research projects and work hard to provide far more teaching and training opportunities than was ever traditional in UK PhD programmes.”

Indeed, there is very much a push across all UK Archaeology departments to better prepare their students, both undergraduate and postgraduate, for a range of different possible paths with an ever greater emphasis on “transferable skills”. But, to modify a quote from Dan Ariely, emphasising transferable skills in archaeology is like teenage sex: everyone talks about it, nobody really knows how to do it, everyone thinks everyone else is doing it, so everyone claims they are doing it.¹¹

Let me tell you a story that demonstrates what I mean by that. At the TAG conference in Bradford after delivering what has been kindly described as ‘the most depressing 15 minute paper ever given at an archaeology conference’ in which I covered similar PhD data as covered in this article I sat down for lunch with a new PhD student. Let’s call him Toby, who understandable was glum about his future career prospects. I believe his exact words were, ‘well. . . fuck’. So I asked him what he wanted to do as an archaeologist.

‘Be a professor’

‘No, that is a job title. I want to know what you want to do as an archaeologist.’

It turns out that Toby really likes teaching people field archaeology. He has been a supervisor on several field schools and wants a career doing that. In reality he was unlikely to find that in academia. Most lecturers would be hard pressed to find more than a few weeks in the field in any given year. Moreover, they have so many other duties that it is unlikely they have much opportunity to teach in the way Toby imagines. I suspect many people with dreams of academia might have idolised versions of what the job entails.

Toby and I talked about how he could obtain that goal. We discussed how during field seasons in various countries site supervisors at field schools can get paid. We discussed how during the off season there are many HLF funded projects which need people to teach archaeological skills. We discussed what he would need to make that happen; business training, teacher training, health and safety training, etc. How he should gain experience in project management so he could run a project where he trains people. His PhD should be built around researching teaching and training.

His final output should be a portfolio of training or running a training project, but it is not going to be that. It is going to be 70,000–90,000 words on an obscure aspect of archaeology. That is why I question if universities are able to do enough currently, even if they are trying very hard. If we start out with the premise that a PhD is several years of concentrated research that ends with a 70,000–100,000 word monograph, than that is all that we will get. I am hard pressed to see how many people can strategically develop diverse skill-sets over the course of their PhD, create think tanks, influence policy, create channels with other sectors, work on questions and areas others do not have time for when they are spending all of their time working on a monograph about 'investigating the symbolism of a tiny artefact from the remotest place on earth from a 9,000 year old site'. As I was putting the finishing touches on this piece I was pointed

towards this quote, via Twitter, 'If teaching is 40–90% of most full-time faculty jobs in higher education, pedagogical study should constitute at least 40% of the work graduate students do toward a graduate degree' (Stommel 2016). While, focusing on an academic career as an outcome it captures my thoughts on the matter of PhDs. If something is so important that it will lead to a vocation or avocation it should not be tacked on as afternoon workshop, it should be embedded in what you do.

So what if we start out with the premise that a PhD is several years of concentrated work that seeks to solve a problem and can end with success or failure in any medium? Then PhD students would have the time to influence policy. Imagine if the outcome of a PhD was making historic environment records a statutory requirement in England, Scotland or Northern Ireland like Wales has recently done. To realistically accomplish this a student would need to spend maybe 40% of their time studying the political system, 40% of their time working with the necessary stakeholders and 20% of their time creating the legislative, something that cannot easily be fit into a traditional PhD. This not to throw out a traditional PhD as an option, sometimes monographic outcome from intense research is what is needed for certain projects. This is about significantly broadening what can be accomplished by PhD work. In my mind, if we had more projects like this than we would certainly be entering a golden age in archaeological work.

Is this even possible? I am sure there will be those that say what I am talking about is not a PhD. To them I would remind us all that what a PhD is has been malleable throughout its very short history in the UK. The PhD was imported in the 1910s into the UK by universities to attract students who were going to American and German Universities. This marketing gimmick has evolved from 20–30 page papers finished in a year or two into 100,000+ word multiple volume tomes produced through an intense training process in conduction research. Even that is

changing. Increasingly, a PhD does not mean that you pursued a single topic through to the creation of a monograph but that you have produced a range of outputs, a portfolio PhD. There is the American PhD through a series of journal publications and in the UK most universities offer the option of a PhD based on their work outside of university. A gentlemen's pursuit that is becoming ever more diverse on almost every measurement, gender, sexuality, ethnicity, class, etc., can certainly change once more.

The outcomes I imagine are possible so it is now upon us, archaeologists, students and academics to make the changes we want to see to happen. It is up to us to expand and redefine the role of post-graduate students to be something greater than they have been in the past. If you are a prospective student think about what you really want to do, not the job title you want, the career and life you want. Then work with your prospective university to find the guidance and build the programme that meets your needs. Academics work with students to help them do more. Work within your department, school, college or university to change regulations so that students can do more with their PhD, should they choose to. Archaeologists think about funding a different sort of PhD. There are many organisations that help fund students and consider a non-traditional PhD to meet your needs. If a student's PhD does not look like the one you undertook do not stigmatise them or discriminate against them, keep an open mind. We should all do our parts to help make this happen.

Competing Interests

The author declares that they have no competing interests.

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Notes

¹ These conversations can be viewed at https://www.youtube.com/playlist?list=PLBjeGwwG0rtQpe3HimLfpj7Ta6f_f4HL

² Provides statistical data on UK higher education from 1994 to 2014 (HESA 2015).

³ URS collected statistical data on UK higher education, now stored with the UK Data Service, from the 1970s until it was dissolved in the 1990s to form HESA (USR 1996a, 1996b)

⁴ The HESA data is only in a database (Heidi) from 2002 forward. All the HESA information from 1994–2002 is not in that database and the information has to be gathered from summary reports. This information is coarse and cannot be investigated further so there is a gap from 1993 to 2003. In 1984 there was a change in recording from department based in to subject taught. This caused the increase in numbers mainly by including archaeologists who working in other departments like continuing education. The HESA data is based on 'Cost Centres' which are clustering of subjects by their costs. This is similar to the original measurement of departments served in. This difference in data recording explains why it appears research and teach positions appear stagnate during the 1990s. The trends between departments served in and cost centres line up and show a

slow but continues growth in this type of recording. The HESA data did not separate out research only and teaching & research positions till 2003.

- ⁵ There are limits to what the data can tell us. For example, it will miss archaeologists who may work in non-archaeology departments that are related like Classics or History. There are also some problems with reporting e.g. the University of Edinburgh did not report Archaeology data for the 2008 RAE. The key factor to remember when examining this data is that it comes in two forms, a count of full-time person equivalent or every person. With full-time person equivalent two part-time .5 FTE jobs are counted as a single person even though two people are undertaking the work. The other method of counting involves counting every person regardless of the number of hours they work a week. Thus you get two different counts for some of the datasets. In some cases only full time employees are counted. Even with difference the multiple sources show that within a couple of positions we know how many academic archaeology positions there were since the 1970s.
- ⁶ HESA data is split into Archaeology as a humanities (titled just Archaeology) and Archaeology as a science (Archaeology as a Physical Science or Archaeology and Forensics were the titles of this category). Both have been combined to create a single number of Archaeology PhDs conferred.
- ⁷ There were 19 unknown awards given in 1975–76 that have been counted as PhDs.
- ⁸ This number will be far greater as many PhD students do not obtain a degree and drop out of their programme.
- ⁹ The reference to the Thunder Dome is from the Mad Max series of movies.
- ¹⁰ You can learn more about Big Heritage's funding model here – <https://www.youtube.com/watch?v=MejBWz9R2eE>.

- ¹¹ The original quote was 'Big Data is like teenage sex: everyone talks about it, nobody really knows how to do it, everyone thinks everyone else is doing it, so everyone claims they are doing it.'

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