10 SIMPLE STEPS
TO BETTER ARCHAEOLOGICAL MANAGEMENT

MARTIN LOCOCK

Also by Martin Locock

Prose

THE FLOW OF THOUGHT: A MANAGER'S GUIDE TO USING POETRY FOR REFLECTION

(Carreg Ffylfan Press, 2010)

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MEANINGFUL ARCHITECTURE: SOCIAL INTERPRETATIONS OF BUILDINGS

(Avebury Press, 1994)

Poetry

CAREFULLY CHOSEN WORDS

(Carreg Ffylfan Press, 2010)

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10 simple steps to better archaeological management

Practical advice for project managers to improve their effectiveness

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Preface

Archaeologists as a group are enthusiastic, committed, and flexible. The archaeology industry in Britain employs 7,000 people and has an annual turnover of £200 million, so clearly it must be doing something right.

Yet in prosperous times it seems to be incapable of keeping its workforce happy, busy, prosperous, and well-trained, and in hard times its response has been short-sighted, over-optimistic, and erratic. There are historical reasons why archaeologists have been sceptical of management training, but at the core of the profession's difficulties lies the inability of archaeological managers to fulfil their role effectively, mainly because their apprenticeship of the trowel left them ill-equipped to do so.

This book sets out a practical programme of personal and professional development that will leave managers with the confidence to address the business elements of modern archaeology, and a recognition that doing so is as important and as worthwhile as handling archaeological data.

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My current and former employers and any other body with which I have been associated do not endorse my views.

Section 1: introduction

This book owes its origin to a session at the IfA Conference for Archaeologists 2008 on managing archaeology. In 1994 I had contributed a paper to an earlier conference, subsequently published in the volume ***Managing Archaeology****, edited by Malcolm A. Cooper, Antony Firth, John Carman, and David Wheatley (1995), looking at project management and the role of the project manager in the then-new field of commercial archaeology.*

In the meantime, I had done a lot more project management, inside and outside archaeology, and also undertaken formal management training. The nature of communication had changed too: my 1994 paper was illustrated by three hand-drawn overhead projector slides, but in 2008 it was a blog, a Powerpoint and a print-on-demand book. After the conference, I continued to add to the ***10 simple steps*** *blog to address related issues as I encountered them, and I have now taken the opportunity to incorporate these elements in an expanded version of the book.*

'10 simple steps to better archaeological management' is a bold title. If the steps are so simple, why don't people take them? And who am I to say they are needed, and will work if applied?

Perhaps I should start by summarizing the experience on which my recommendations are based. My pre-PPG16 career at Stanwick Roman villa (Northamptonshire), Dudley Castle (West Midlands), and Castle Bromwich Hall Gardens (West Midlands), was conventionally archaeological; in 1991 I joined GGAT[1] as a Project Officer, concentrating on desk-tops and evaluations, and in 1992 became Project Manager, responsible for costing and managing developer-funded work in an increasingly competitive marketplace.

In 2003 I moved out of archaeological project management into generic project management, and delivered a series of projects

[1] Glamorgan-Gwent Archaeological Trust, based in Swansea: www.ggat.org.uk

for the National Library of Wales in Aberystwyth, including Archives Network Wales[2] and Welsh Journals Online.[3]

In 2011 I returned to archaeology, as Senior Project Officer for the Strata Florida Project at the University of Wales Trinity Saint David in Lampeter, Ceredigion.[4]

I recognised at an early stage that project management wasn't strictly speaking archaeology, needing a different set of skills and attitudes, and I have sought out techniques and learning opportunities to equip me for the role, including the Institute of Leadership and Management's Certificate in Leadership and Management, the PRINCE2 project management Practitioner training, and Public Service Management Wales' annual conferences on leadership, engagement and change management.

Not that this experience or training makes me an expert. I have undertaken no formal analysis or research; I have sent no questionnaires, conducted no surveys. What I present here are observations and anecdotes based on what I have encountered, at first or second hand. But I am not intending to lay down a set of rules that you should follow: I am hoping to ask some interesting questions for you to consider.

All urls cited in footnotes are included as live links on the *10 simple steps* blog (10simplesteps.blogspot.com) in the post entitled Book Links, as are pdf versions of the exercises.

[2] www.archivesnetworkwales.info

[3] welshjournals.llgc.org.uk

[4] www.strataflorida.org

Why reading management books won't help archaeologists

It is common for those working in any specialist industry to claim it is too abstruse to benefit from generic business analysis. Usually, they are wrong.

Every business deals with issues of training, administration, personnel, workflow, planning, monitoring, reporting, delegation, and quality control. It is hard to believe that none of the hundreds of books giving advice and road-maps to its implementation have anything to teach archaeology.

While archaeologists have in general avoided management training, there has been a quiet revolution in the nature of that training. In the 1980s, it was about processes and structures, decision making and critical path analysis.[5] As such it was essentially mechanistic: problems were defined as administrative, technical or organisational issues.

This was fine as far as it went, but rather lacked the human dimension. In response to the disjuncture between the difficulties managers faced in the workplace and the solutions being offered, there emerged a spate of books like Kenneth H. Blanchard and Spencer Johnson's *The One Minute Manager* (1982) and Mark McCormack's *What They Don't Teach You At Harvard Business School: Notes From A Street-Smart Executive* (1986) which addressed the reality of trying to work better within a system that was effectively fixed.

The shift towards soft skills is now reflected in training. The key words now are empowerment, consensus building, and fostering creativity. The MBA course at Bath University, for example, includes ethics and action learning alongside its more conventional content. One result of this shift is a focus on the actor as agent, on how you personally influence outcomes. Therefore, rather than proposing the restructuring of organisations, the achievable objective is to change oneself. This may be defined very broadly, taking in improving personal effectiveness by using tools and promoting self-management, but also covers attitudes, beliefs and social skills.

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[5] www.mindtools.com/critpath.html

It has been estimated[6] that the balance between 'people work' and 'tasks' is:

Executives	80% people; 20% tasks
Senior Managers	65% people; 35% tasks
Middle Managers	50% people; 50% tasks
Operatives	15% people; 85% tasks

Purely on this basis, middle managers who ignore the importance of interaction with people are going to fail.

It is interesting to see that the Archaeology Training Forum's Roles and Skills project (2002) identify these core skills needed by archaeologists:

- Manage team *(by talking to people)*
- Manage projects *(by talking to people)*
- *Manage and develop yourself*
- Develop and promote the organisation *(by talking to people)*
- Resource and control finances

Thus personal development should not be seen as a matter of an individual's career progression: it lies at the centre of their professional performance at their current level.

But it must be said that archaeology faces a different set of problems to those that bedevil commercial management.

Most organisations are stable: they and their staff have settled into a routine to cope with the flow of work. This leaves managers with the challenge of how to introduce change to respond to new circumstances, while working within a fixed and resistant structure. In archaeology, not so much - when most work is on

[6] Public Services Management Wales *Leading for Wales Directory 07/08*

finite projects, there is a constant turnover of staff, subcontractors and responsibilities. Change is normal, stability the problem.

Another major problem faced by normal businesses is disengagement of their staff.[7] According to Gallup:

> *'in average organizations, the ratio of engaged to actively disengaged employees is 1.83:1.'*[8]

This is to say more than one third of staff are having a negative impact on the work of the company.

In archaeology, the problem presents in a different form. It can be assumed that almost all staff are actively engaged (matching Gallup's definition of world-class, a ratio of 8:1) with the aims of the organisation. In practice, this may not always be apparent: sometimes people are not happy in their roles, and of course archaeologists retain the right to complain in any case, but the problem is one of channelling energy rather than creating it.

The relevance of management theory to archaeology is discussed below, in section 5.

[7] www.davidzinger.com

[8] www.gallup.com/consulting/52/employee-engagement.aspx

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Bad habits of archaeological managers and where they came from

Some of the stranger attitudes displayed by senior archaeological managers are inexplicable without some reference to the changing nature of archaeology as an activity and a business over the last 30 years.

1982: old-style Rescue

I started my archaeological career as a 'paid volunteer'. This status needs some explanation to younger readers.[9] The archaeological bodies at the time used the term 'volunteer' as a legal manoeuvre, so that technically the site staff were not employees, and thus did not have to have things like NI, sick pay or holidays. It was just about possible to work full-time as a digger on the circuit of government-funded rescue digs around the UK, although it wasn't comfortable: the only accommodation provided was a campsite. This rigorous apprenticeship weeded out all but the fanatical would-be diggers. So summer excavations (in particular) had very large numbers of very poorly paid staff that would be expected to leave after a fairly short period. Which leads to:

Myth 1: It's not worth training people, you won't get the benefit

This sorry state is perhaps well-enough known. Less well-known is the other side of the coin: the supervisors and directors, in contrast, were quite well-paid and enjoyed generous subsistence allowances. As a result, those diggers who did make it into their ranks suddenly enjoyed a transformed lifestyle.

[9] Prior to the introduction of PPG16, there was no mechanism to force developers to pay for archaeology, and so they didn't. It was left to a combination of central government, universities, amateur groups and others to do what they could to investigate sites before their destruction. Funding was minimal.

Myth 2: You don't have to treat people well now, they will get rewarded later

The natural rhythm of the rescue year was an alternation of a short and intense period of excavation and then a quieter post-ex time for the core staff.

Myth 3: Don't let the diggers get near recording, they won't be around to analyse it

1986: MSC Schemes

The economic problems of the early 1980s led to the creation of Manpower Services Commission and its Community Programme, aimed at using the long-term unemployed to do some socially useful work. Archaeologists found that projects which would have attracted no other funding were suddenly viable; having large teams was a positive benefit. There were some downsides to this: the proportion of supervisory staff was limited to less than 1 in 10; the diggers, drawn from the local unemployed, were completely unskilled in archaeology, and were in some cases unwilling draftees.

One of the principles of the Community Programme was that the staff had to be paid the rate for the job; since councils didn't employ field archaeologists, the nearest equivalent was chosen (unskilled manual staff). A paradox resulted, in which experienced graduate diggers were being paid less than their MSC counterparts, who also enjoyed employment rights.

There were some very good results of this enforced contact with the general public. It sowed the seeds of the emphasis on outreach and education that eventually created the TV archaeology boom of the recent past. The certain knowledge that new staff were unfamiliar with the excavation process meant that induction and training were formalised. And the social background of archaeologists was diversified, as it was discovered that being a middle class graduate was not a necessary qualification.

But because of the structuring of the funding, anomalies in tasking arose. Anything that could be done by non-archaeological staff was effectively free. Anything that could only be done by archaeological staff unencumbered by people to supervise was almost impossible. Anything that involved spending money on equipment or external staff was severely restricted.

Most projects found themselves caught in a cycle of running an excavation team to provide the funding for some post-ex work on the previous excavation, and then needing a new excavation to fund ... and so on

Myth 4: Keep digging, never mind the post-ex

Restrictions on funding for specialists led to a healthy tradition of DIY finds work, and an unhealthy tradition of ignoring finds and environmental work completely.

Myth 5: Specialists? What do they know?

1989: PPG16 and contract archaeology

PPG16 was a shock to the established archaeological structures, the county archaeologists and the regional units. It is not surprising that it was met with suspicion and indeed outright hostility. It is unfortunate that the terms of debate, such as it was, took place in an information vacuum, in which few understood business or commercial practice. Those that did echoed the words of Sir Humphrey Applebly: if you must do this damned fool thing, don't do it this damned fool way.

The closest that county archaeologists had come to the private sector within councils was the then-current process of floating off the direct labour departments as separate businesses, driven by CCT: Compulsory Competitive Tendering. Since this was what they had heard of, they assumed that the best, or perhaps only, way by which developers would procure services was by competitive tender, heedless of the few voices that pointed out that this was only appropriate when the task could be clearly specified and quantified in advance.

Myth 6: Competitive tendering is how business works

This is nonsense. Most archaeological evaluations fall well below the threshold for public bodies to run an open tender; private bodies wouldn't think twice about using their preferred supplier for such a paltry sum.

There was also a paranoia about standards, or more particularly cowboys. I recall the baffling sight of archaeologists who had previously complained bitterly about the poor excavation standards, inadequate records, and nonexistent publication plans of their local unit desperately defending them against outsiders who might, well, ok, do the job, and write a report, but they weren't *local*.

Myth 7: Only the locals can do archaeology properly

The question then arose of how you can define good practice, now that it was something to worry about. The answer was to specify in precise detail the way to dig (even though in the past considerable freedom had been granted to excavators to select their own approach). A long and comprehensive brief was answered by a longer and more comprehensive specification. The fact that, prior to excavation, nobody knew what would turn up, or how to deal with it when it did, was simply ignored.

Myth 8: Specifying methods in advance ensures correct outcomes

Sadly the tendency towards long briefs has eroded the idea that somebody digging a site has a duty to familiarise themselves with the context of the site by reading about nearby sites, attending lectures and conferences, and talking to other archaeologists.

Myth 9: Archaeology is about digging, not understanding

Discussion

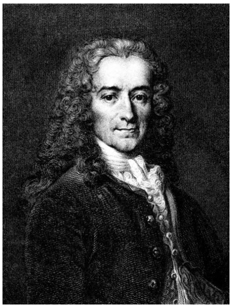
The myths I have listed above emerged from the particular circumstances of the time. I have implied that many were recognisable as myths, or at best partial truths, at the time; but they certainly form poor insights into modern practice. But the senior archaeologists of today will have been exposed to those conditions in the past, and unless they have unlearned them they will still hold sway subconsciously.

This is an important point: it is only by trying to articulate the beliefs now that I have recognised their source; you would be hard pushed to get anyone to say any of these out loud, but that doesn't mean that it doesn't inform their thinking.

Keep this list to hand, and see how many myths you recognise as someone tells you why you don't need a finds budget, or you have to write a 20 page specification for a three-day evaluation, or you shouldn't worry about junior staff's employment conditions.

Isn't good management just common sense?

In general, of course it is.



Moreau le Jeune, *Portrait Voltaire*, 1846 (Source: Wikimedia).

But as Voltaire says *"le sens commun est fort rare"* (Common sense is very rare) (*Dictionnaire Philosophique*, 1764). And in any case, there are some things which are counter-intuitive:

- If you have two tasks to do, start with the hard one
- If you are negotiating with two people, and one is arguing and the other is silent, it is the silent one that needs convincing
- Do the most important thing not the most urgent

The argument usually comes from those who would call themselves good managers, having learned the hard way. It's almost as if they think that telling people how to do it is cheating in some way.

The foundation of successful projects is management science, not rocket science.

Exercise 1: your beliefs and assumptions

One of the principal indicators of the scope for you to improve your effectiveness is the amount of time you spend reviewing your performance, examining your assumptions in the light of experience, and identifying areas of concern.

Most people will say that they are so busy coping with constant urgent demands that they have no time or energy to spare for anything else.

In the short term, this may be true. But in the longer term, it is unsustainable -- at some point the work and pressure will become too much of a burden. By reading this book, and thinking about the questions it asks, you will be reflecting on your practice. It is likely that this reflection will lead you to increased understanding; in order to measure this progress for yourself the following exercise will capture the baseline of your current situation.

There are no right or wrong answers. You will not be showing your responses to anyone else, so be as honest as possible. The exercise consists of 14 statements, which you are asked to score from 1 (disagree strongly) to 5 (agree strongly). It is best to mark the answers with a pen.[10]

You should undertake the exercise in two stages: first, quickly read each statement and tick your immediate answer , then after looking at all of the statements, go back and think about each one to see whether your considered opinion differs from your snap judgement. The answers here will be re-examined at the end of the book.

Start the exercise ►

[10] A pdf version of the exercises are available from the *10 simple steps* blog.

	Disagree		Neutral		Agree
Health and Safety is the responsibility of the company, not me personally	1	2	3	4	5
I know that 'good enough' IS good enough	1	2	3	4	5
I support my staff's personal and professional development	1	2	3	4	5
My current post satisfies my professional ambitions	1	2	3	4	5
I am frustrated by administrative tasks	1	2	3	4	5
I have all the skills I need to perform effectively	1	2	3	4	5
My business contacts understand my job title and role	1	2	3	4	5
I am free to dress however I please	1	2	3	4	5
I have to juggle management tasks and archaeological work	1	2	3	4	5
I understand my company's financial situation	1	2	3	4	5
I find my day-to-day work fulfilling	1	2	3	4	5
I expect others to maintain and provide equipment	1	2	3	4	5
I would rather my company did good work than made a profit	1	2	3	4	5
My projects exceed the client's quality requirements	1	2	3	4	5

In completing the exercise, you have probably spent longer reflecting on your beliefs and practices than you have in the previous twelve months. We train ourselves to respond instinctively to circumstances, applying the usual solutions to the usual problems, without enquiring very closely into the nature of the problems.

This approach will often result in repeating past mistakes or misapplying past experience.

Regardless of the practical advice presented below, which you may adopt or disregard depending on its applicability to your situation, your performance will improve if you decide to spend more time reviewing and reflecting on how you behave.

Section 2: the 10 simple steps

As you read through the next section, each step asks a question, followed by: # # #. When you reach this point, you should close the book and think for a few minutes about your immediate and considered responses, before returning to the text.

Step 1: identity

The relationship between archaeologists and their trowel is powerful. As Matt Lemke's collection of testimonies (in "Trowels", in *Assemblage* **2**)[11], shows, the trowel is not a tool, it is almost an extension of the digger's self. 'Having-a-trowel' is assumed to be identical to 'being-an-archaeologist'.

Or see Chapter 4 of Matt Edgeworth's *Act of Discovery: an ethnography of archaeological practice*[12]), where he says:

> "A well-worn trowel is taken to symbolize the experience and skill of the digger . . . Clearly it is not just a functional implement . . . but also an object of significance in itself" (p. 94).

But what do you call an archaeologist who doesn't use a trowel? Here I think, is the explanation for the historical antipathy between diggers and people like geophysics, finds and environmental specialists, who may appear on site but don't quite belong. That is perhaps a minor issue of politics; more important is

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[11] www.assemblage.group.shef.ac.uk/2/2trowel2.html

[12] Matthew Edgeworth 2003 *Acts of Discovery: an ethnography of archaeological practice*. BAR International Series 1131. Oxford, Archaeopress PDF available from leicester.academia.edu/MattEdgeworth/Books/174815/Acts_of_discovery_an_ethnography_of_an_archaeological_excavation

the effect it has on the diggers as they progress through their careers.

It is common to meet senior managers who feel, and even say, that they belong on site, digging things up, and would still be out there if they could only get all this management stuff out of the way. This is a recipe for disaster: any sane analysis of the skills and training that someone needs should be based on what their role is, not what they wished it was.

As a starting point, you could consider the following questions:

Do you excavate?

Do you record?

Do you analyse?

Do you interpret?

Do you administer?

Do you monitor?

Do you manage?

Do you enable?

You could then, if you wish, have a rather sterile debate about which activities were still 'real' archaeology, and which were not. More importantly, those who have drifted to the latter end of the list, in search of status, security, and power, must recognise that they are no longer directly involved in investigating the archaeological resource. Until they face up to this, a process which may well involve some mourning, they will fail at their new role, since they will place no value on managerial tasks, will be uninterested in fulfilling them efficiently, and will instead embroil themselves in interfering with the archaeological conduct of excavations at the slightest opportunity.

If, after careful thought, you realise that you are still at heart a digger, but your job title says manager, you will probably be happier and more effective if you change jobs. If you decide you want to be a manager, you should equip yourself for that role as best as you can.

Step 1: What is your current role?

# # #

There is often a mismatch between our self-image and our selves. Typically there is a time-lag - we convince ourselves when starting out that we are fully competent even when we are not, while later on we may assume that we have stayed the same but have in fact changed, and perhaps even learned. So the question of who we *are* is more profound than it seems.

When we think about our current role, we may conclude that it does not provide us with the satisfaction we seek. This may not mean that you are in the wrong job - we should not rely on our employment for all of our worth. People obsess about switching jobs, gaining promotion, or changing careers, seeking the perfect fit, when they might be better focused on what they are missing and how this might be addressed.

Does your current role meet all your needs for:

- creativity and self expression
- respect and recognition
- challenge and achievement
- stability
- responsibility and influence?

It is likely that you have some unmet needs; I have deliberately tried to broaden the issue from straightforward ambition for advancement, since promotions will not make you happier or better if they do not meet your needs better.

In an ideal world, any organisation seeking to make the best use of its staff would tap into these potential areas and allow individuals to develop their roles, but for the person involved the adoption of a coping strategy can make an enormous difference to the way they feel about themselves and their work.

Specifically in the field of archaeology, the most common refrain from senior managers is that they wish they could dig more; this was, after all, what they had signed up for. Rather than live with a continuous tension between what you want to do and what you have to do, recognize this, and find some way to incorporate some primary archaeological work in your life.

Step 2: labels

So we have seen in Step 1 that archaeologists are a little unclear about who they are and what they do. It is not surprising to find that this confusion extends to what they are called.

In Kenneth Aitchison and Rachel Edwards' *Archaeology Labour Market Intelligence: Profiling the Profession 2007-08* (2008) (available from the IfA website[13]), there is the sobering statement:

> "The survey collected information on 2,733 archaeologists and support staff working in 808 jobs with 519 different post titles. This represents one post title for every 5.3 individuals" (p. 89)

This is, amazingly enough, progress: the 2003 report had stated:

> “Details relating to 2,348 archaeologists and support staff working in jobs with 428 different post titles were received. This represents one post title for every 5.5 individuals and indicates that there is little consistency in the use of post titles across the UK.”. (p. 38)

It is therefore hardly surprising that non-archaeologists are baffled by the hierarchy of personnel they encounter: it defies understanding. Can it really be the case that (on average) there are only five people in the UK who share the same role?

To bring some order to thinking about roles within the profession, in 2002 the Archaeological Training Forum commissioned a National Occupational Standards mapping exercise to identify which activities and skills were engaged, regardless of post titles. The study was undertaken by Q-West and Headland

[13] www.archaeologists.net

Archaeology[14] The report provides a functional hierarchy allowing multiple job titles to be grouped together.

There are further difficulties which have arisen from changes in usage that have occurred outside archaeology. In the mid 1990s, when the shift from 'field officer' post titles to 'project' titles in archaeology was largely complete, there was a general agreement on the level of responsibility they implied:

> a **project officer** was, in archaeology, somewhere between a supervisor and field officer, in charge of a small team for fieldwork projects such as evaluations, and responsible for writing the report

> a **project manager** was an office-based senior officer with overall responsibility for the project, among others, and costing and tracking the work

This is the situation outlined by my 1995 paper "Project management in a changing world: redesigning the pyramid".[15]

This arrangement was probably fairly comparable to project officers in other fields at the time.

But in the outside world, the meaning of these terms has shifted. **Project Officer** these days is seen most frequently in the public and voluntary sectors, defining an entry-level post with limited freedom of action and no supervisory role; typical requirements will be a degree unrelated to the type of work, and generic office skills. Project Officers, as the name suggests, are hired and fired with their project lifecycle. It will be seen that this is some distance from the expectation of an archaeological Project Officer.

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[14] www.archaeologists.net/development/nos

[15] In M A Cooper, A Firth, J Carman and D Wheatley (eds.), 1995 *Managing Archaeology* (Routledge, London: EuroTAG series), 208-215). Available on the *10 simple steps* blog.

A parallel shift has occurred with **Project Manager**. While the term has always straddled the line between overseeing and undertaking projects, under systems like PRINCE2[16], the role of Project Manager has become fixed as the senior person involved in undertaking the work, reporting to the line manager (in PRINCE2 parlance the Project Executive) from day to day and to the Project Board for strategy. Such project managers are brought into the project after it has been planned, costed and procured.

These days project management has developed its own identity as a skill and in practice most Project Managers have little knowledge of the substance of the project they are responsible for. There is a running debate within the PRINCE2 community about the advisability of expecting Project Managers to take on responsibility for areas of project delivery, alongside their managerial and administrative functions. Pragmatists argue that someone who understands the project's needs and has the necessary skills can quickly handle tasks which would require significantly more effort if defined, documented, assigned to somebody else, tracked and checked. Purists point at the tensions of project management, the need to shift focus and cope with the unexpected, which preclude taking time to become immersed in a single activity.

This is perhaps a point for archaeologists to ponder: would projects benefit if the administrative tasks were separated from the archaeological?

The demotion of Project Manager has left a gap for the senior role, the person with responsibility for devising and overseeing several projects and their managers. A term becoming common for this is **Programme Manager**.

Step 2: Review your current post titles.

Do they describe what the role is?

[16] The PRINCE2 technique is discussed in Section 5.

Do they give others the correct expectation of their seniority and experience?

# # #

In the light of the confusion of terminology shown in the *Profiling the Profession* reports, it is a good bet that you have concluded that your organisation's job titles are idiosyncratic, inconsistent and impenetrable.

In the short term, this cannot be directly remedied. But you can learn that others who encounter your staff will be unable to guess at the hierarchy of roles and authority by which you operate. Therefore you should be ready to wave an organizational chart at your clients and include it on your website.

In the longer term, it would be simple to rationalise the job titles you use to make them clearer, and in the past I have recommended doing so. Now, I would be less certain. Messing around with people's job titles, even when done in an open and fair way for the best of reasons, is deeply unsettling. If you think about your own job title, you will realize that it tells you who you are (this is why we are so touchy when someone gets it wrong, and why merger processes leave people in limbo). Stress and unease are the inevitable by-products of a re-labelling exercise, even if the actual structure is unchanged. There is therefore a trade-off between the advantages of a new set of job titles, and the cost in terms of staff happiness.

Step 3: image

One of the lesser-known impacts of PPG16 was on archaeologists' dress code: all across the country, favourite jumpers were consigned to bonfires or dog bedding, as the strange new world of short hair and clean clothes opened out. For the die-hards, it only took a couple of occasions on which their opinions or assistance were dismissed by busy developers, because they looked like the people who cleaned the site toilets, to recommend a change.

This is perhaps a simplistic view. To understand the complexities of archaeologists and their clothes, we need to go back to first principles: what is the function of clothing?

A recent study reported:

> "… students indicated why an item of clothing they particularly valued was important to them, including perceived functional and mood-related benefits, but also clothes as means for expressing personal and social identity."[17]

If you ask people about the clothes they choose to buy or wear, they will talk about aesthetics (*they look good*, or *make the wearer look good*, or *feel nice*), practicalities (*keeps me warm*, *handy pockets*), status (*makes me look rich*), and personal identity (*expresses my personality*). What they don't often say is that it expresses their group identity.

For example, IT workers would consider themselves a fiercely independent and individualistic bunch who reject the norms of business fashion and wear what they, individually, want.

What then are we to make of a fashion range of geek chic like Cafe Press's range of clothes labelled 'geek'?[18] It seems that, like skaters, Goths and punks before them, their individualism is expressed by wearing the same clothes as their friends.

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[17] Jason Cox and Helga Dittmar, "The functions of clothes and clothing (dis)satisfaction: A gender analysis among British students" *Journal of Consumer Policy* **2-3** (1995).

[18] www.cafepress.com/buy/geek

I found an interesting photograph of a group of countryside rangers and volunteers, dressed (with one exception) in green tops and blue trousers. On closer inspection, it is clear that only half of them are wearing a uniform. The others have adopted the green shirt and jeans as a form of protective coloration. The only person wearing 'normal' clothes, in this context, appears as an outsider.

I was at a large informal meeting of local government employees recently where one could immediately identify the biodiversity officers, because they wore fleeces, and the sustainability officers, because they wore woolly jumpers. People with similar interests do end up wearing similar clothes. Partly this might be explained by shared tastes, but it is also partly because we choose to dress like people we identify with. This is the power of clothes to express group identity.

However, like all such expressions, there is a price to pay. Signalling to your colleagues that you are like them also signals to others that you are different.

Tony Robinson, Professor Mick Aston and Guy de la Bedoyere
(photo by *Guy de la Bedoyere* licensed through Wikimedia)

Time Team *want* to look like archaeologists. But if you were a businessperson, would you trust them with thousands of pounds to deliver a critical part of your development?

Step 3: Are you creating the image you want?

# # #

Time and fashion march on; after years of people predicting the Death of the Tie, it may actually be happening, its user-base shrinking to the senior, the old, and the traditionalists. Business casual is now standard across whole swathes of the public and private sector.

But do not be fooled. The standards have shifted, not vanished. Old woolly jumpers are still beyond the pale, unless part of some hipster's ironic costume. When meeting business clients, self-expression should not be guiding you: it is their impression of you that matters, and if they are traditionalists then you risk your credibility if you fail to demonstrate your adherence to their code. We know that the stereotype is out there, and can gain an advantage by not conforming to it.

One project I worked on was a good example of this: a watching brief on a construction project had ballooned into a major excavation, and the relationship between the building project manager and the excavation team had broken down completely (mainly because the mutual client failed to take a lead in defining respective roles). The excavation was waterlogged and muddy, and the team spent the day in grimy overalls. I was brought in to manage the relationship with the construction staff; I turned up in suit and tie and entered the site office to meet the manager, who was taken aback. Although the substance of what I said, about what we needed and how we were working, was identical in substance to what had been said before, this time it seemed more believable, and we were able to establish a dialogue.

Step 4: Invest in training

A short argument for training:

• New roles need new skills + learning by trial and error involves trials and errors >

• Invest in training + prioritise training needs

You might think this hardly worth saying, but there are many reasons why people are hostile to the idea that they might benefit from training.

"I'm too busy to go on a time management course"

"I can't afford to go on a finance course"

"I can't go on a leadership course when my team's morale is so low"

I've heard something like this a lot. I think it's partly a generational thing: when I was doing my degree in the 1980s, the courses seemed to be intended to provide everything you would ever need for your subsequent career, including directing excavations, which would have lain 20 years in the future for most students (or so it was thought at the time, before PPG16). Of course, this creates problems in a changing world, but what happens when you encounter something new? You obviously hadn't been paying attention when this was covered in your degree.

By the early 1990s, the rhetoric had changed and everyone was being exhorted to follow lifelong learning, developing a portfolio career for several employers, and to need training no longer necessarily signals weakness. There is a downside to this, though: what the librarian blogger Caveat Lector has labelled the "Training wheels culture"[19], where any innovation is met with cries

[19] meredith.wolfwater.com/wordpress/2007/10/07/should-we-take-off-those-training-wheels/

of 'I need training'. Archaeologists used to be largely self-taught in ICT; although this may mean that we have gaps in knowledge, it also means that we are used to getting to grips with innovation by using it to do things.

From a corporate point of view, the reluctance to push for training can prove convenient in the short term, since it reduces the cost of providing it, but the general shift towards Investors In People, ISO 9000, and the IfA Registered Organisations scheme has meant that they are becoming more active in identifying and meeting the training needs of their key staff. With the inclusion of mandatory Continuous Professional Development in the responsibilities of IfA members, at 50 hours over two years, the question is becoming what type of training, rather than whether to train at all. Some options are given in Section 3 below.

Reasons not to train

There are, however, rational grounds for individuals' reluctance to engage in training.

Irrelevance

Most skills are generic skills, but it helps if they are presented in a recognisable context. Management courses tend to be either business or public body focused, and it is not always easy to see their usefulness. I hadn't thought that "Negotiating" was a skill I would have much use for, but in fact I need it every day.

Lack of corporate support

If an employer is reluctant to support its staff in their pursuit of opportunities, it is easy for a vicious circle to develop where instant pay-offs are demanded: "You need to prove to me you've learned something useful", which is hardly conducive to a fruitful learning experience, and leads to a focus on nuts-and-bolts How To training when it may well be that personal development is the greater need.

Timetabling

Finding time within a work programme is never easy. But training these days need not be a formal taught course: you could always do a distance learning modular course, or read a book. It's unreasonable for an employer to expect all training to take place in your own time, but you should be prepared to stretch a little.

Culture

Some workplaces despise training. Some do not. If yours does, you're in for a long battle.

Lack of interest

Some people don't want to learn new things; they are happy where they are. Except they're not, of course. But even so, there's no point pushing people who aren't interested.

Lack of information

If it is left for would-be trainees to identify suitable opportunities, most will not.

There are a lot of tools out there, ranging in cost from expensive to free, that could have immediate results in efficiency: see Section 3.

Invest in tools not systems

It's easy to be tempted by the prestigious, complex, formal training opportunities; deciding which to pursue requires thought.

How much more would you achieve if you spent 50% less time dealing with emails?

So look at Getting Things Done

How often will you use the knowledge gained from a Palaeolithic rock art conference in Australia?

So unless you are a full-time specialist in rock art, don't go.

Is your organisation ready to adopt PRINCE2 throughout?

If not, don't get PRINCE2 accredited.

Step 4a: Do you know everything already? If not, get some training.

Step 4b: Start with the tasks you spend the most time doing, or the ones you do worst

# # #

Perhaps the above has made the point that everybody might benefit from some sort of training. It is surprisingly hard to move from this general statement to the specifics, especially if you are unclear about your future career path. If you have a fairly simple plan (to move from Project Officer to Project Manager, for example), then the Personal Development Plan tool created for the IfA Continuing Professional Development scheme is well-suited to identifying and then filling the skills gaps.[20] If you are less sure of your path and need to reflect on your aims and abilities, Section 4 of this book will lead you through a process of analysis.

These days most organisations have structures in place to support and deliver the development of their staff, including having a nominated Training Champion, regular appraisals and reviews, and perhaps coaching and mentoring schemes. You should take full advantage of these opportunities in order to improve your performance.

Not all training has to involve sitting in a classroom: reading a book or discussing methods on-site may be more productive.

Fairly quietly, and fairly uncontroversially, the IfA has transformed the way that professional archaeologists must behave, by making it compulsory for their members to undertake 25 hours of CPD a year in line with a Personal Development Plan. From a vague statement in the code of conduct that archaeologists have a duty to

[20] www.archaeologists.net/development/cpd

keep themselves well-trained and informed, identifying training needs and fulfilling them has become one of the key responsibilities of a professional worthy of the name. This is good news - I believe that those who claim to be unable to locate any skill gaps either are already in fact managing a lot of CPD or haven't thought about it enough, or at all.

The impact of the rule change will vary - in organisations which are Investors In People, employees will already have PDPs which cover both employment-focused and personal development. For others, employers will probably have to accept that training their staff is something they will have to do, and possibly pay for.

But what if the employer can't or won't? Here are some suggestions for CPD activities that will cost little or nothing but will have a instant payoff:

- Read the legislation and guidance - Planning Policy guidance, the Copyright Designs and Patents Act, the Ancient Monuments and Archaeological Areas Act, the Valetta Convention, Environmental Information Regulations. These are quite interesting once you get into them, and will equip you with a much better grasp of the overall context of your work.

- Read some journals. *Medieval Archaeology*, *PPS, Britannia*, and *Post-Medieval Archaeology* contain interesting book reviews and reports as well as excavation accounts - now reading them is *work*.

- Attend one or two day-schools or events. Maybe ones you wouldn't normally go to.

- Generic skills: negotiation, assertiveness, project management, team leadership, effective meetings, report writing.

- Presentation skills: Powerpoint, html, Word

- Master digital photography - find out what all those buttons actually do, and see if you can take some photos that show what they are supposed to

That should keep you busy for the first two or three years.

Step 5: communication

Communicating with non-archaeologists is something that archaeologists are not, in fact, very good at. Talking archaeology at them, fine. But that isn't the same thing.

Don’t expect them to share your viewpoint

Don’t expect them to know your terminology

Do tell them how it affects them

Do give them bad news clearly

Some golden rules

• Consider your audience: what matters to them?

• Provide a clear message: don't tell them 'we don't really know'

• Avoid wishful thinking: don't say you might be finished next week if you won't

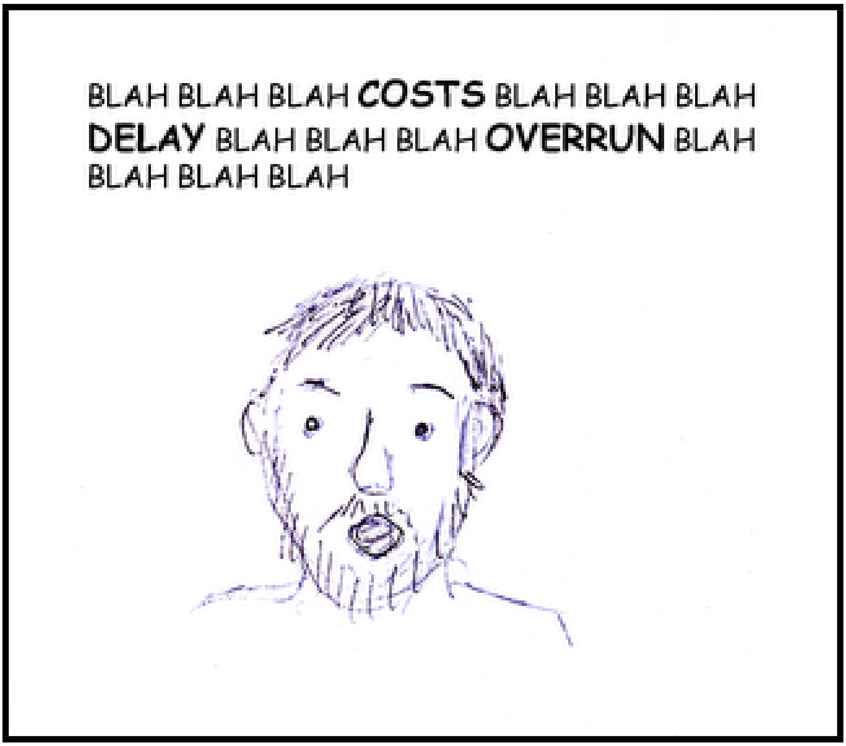
• Don’t get bogged down in detail: they don't care about feature 1099

• Check they understand: ask them; listen to the answers

• Don’t be misled by politeness: they may be humouring you

WHAT THE ARCHAEOLOGIST SAYS

WHAT THE DEVELOPER HEARS



Step 5: How well do you communicate?

# # #

I have highlighted in-person communication here as a potential weakness, because it is one of the things that many archaeologists do poorly but think they do well. It is true that enthusiasm and eloquence can make a good impression on the general public, even if little information is successfully conveyed.

But in the specific context of dealing with clients, buildings contractors, and planners, who have limited interest in the substance of archaeological findings but a very real concern with the implications, clarity is needed. This will often involve starting a long way back - most developers won't have encountered archaeology as an issue before (fewer than 1% of applications have a heritage dimension - discussed further in Section 5), and therefore it will be necessary to recite the 'polluter pays' principle, planning guidance, the development of rescue archaeology and the structure of responsibilities.

Wearisome as it is, it is better to resign yourself to repeating this once more than to skip straight to the results and find that they are still assuming that it is a research exercise being carried out for free.

But the real trick to effective communication is checking for feedback; this is why writing is even harder.

Step 6: costs and risks

Who should be taking the risk?

The relationship between risk and profit in business is well established. Venture capitalists who support fledgeling enterprises whose success is uncertain reap the rewards when one of them takes off. Speculative investment of this kind is a highly specialised activity, restricted largely to those with sufficient spare cash to afford backing a run of losers without feeling the pinch. Most businesses are not aiming for the big kill; they are happy to make a small regular surplus above their costs.

When a decorator is asked to price up re-painting a house, their uncertainty is quite limited: they may find that the cheapest paint is not available, and they overspend slightly on materials; or their painters are lazy, and they overspend on labour. But they can commit themselves to finishing the job for the price, being aware of the factors under their control they need to consider. The house's walls will not suddenly double in size after the quote was submitted.

Yet that is what archaeology does all the time. The level of certainty prior to excavation, even for fully evaluated sites, is set very low. Somebody is taking a big risk in signing up to deal with it (whatever may turn up). It could be argued quite strongly that if anybody is having to take such a risk, it should be the developer, who is in some sense a speculator, rather than the archaeological unit with limited margins and cash reserve.

Price for a completed project, or rate for work done?

Thus as a starting principle archaeologists should limit their exposure to uncertainty. The 'open book' model of simply charging for work done is much healthier all round. (It should be noted that it is even, on average, cheaper in the end, since the archaeological contractor does not need to load in allowances for possible but rare circumstances such as human remains or ships).

But if you do get locked into providing a single price, don't explain, don't break it down. For all the client knows you may be a bunch of eccentric millionaires undertaking the work as occupational therapy, and the cost covers the caviar and champagne at tea break. But the more detail you provide the more they will haggle.

Mike Heaton[21] has argued for much greater transparency in costing[22] in line, ironically with usual practice in the construction industry whose expectations of competitive tendering archaeologists say they are meeting.

Archaeology is expensive, but have you hired a plumber recently?

Sometimes developers will be shocked at the costs. But they shouldn't be. Everything costs a lot these days; anything that is labour intensive especially so. No building contractor would dream of moving tons of spoil by hand, because it would *take too long* and *cost too much*. In which case they should understand where the money is going.

Don’t cut corners in pricing

If you are, reluctantly, pricing for a whole job, be clear about the likely final cost. Trying to sweeten the pill by putting in contingency sums is a recipe for future trouble: who decides when these are triggered? If the answer is you, you may as well just say the total, and if you feel like it at the end under-charge them. Not that that's a good idea, since you cannot recover overspends from other projects.

For most clients, certainty is more important than price

Archaeology is a headache. If the developer knows that it will go away at a specific time for a set amount they can stop worrying about it and just wait, chequebook in hand. Only the seriously mean

[21] www.archaeology.demon.co.uk

[22] 'Costing the earth' in *The Archaeologist* **59** (2006), p. 34-5; available from www.archaeologists.net/publications/archaeologist .

or financially troubled will be desperate to shave off a little on a subcontractor cost. It's best to act as if the price is completely fixed.

Overheads are expected

If you quote day rates, quote them all in. Don't give a basic wage and then add in extras to cover holiday, tax, and admin. Even after including overheads, developers will be astonished at archaeologists' low pay. Cost all inputs: office support, attendance at meetings, senior staff visiting site, travel. If you weren't doing the project you wouldn't incur the cost, so this is legitimate.

Post-project review

This is the most important tip of all. Every project should end with a debriefing where lessons are learned: was it costed right? Which risks weren't allowed for? Where were the underspends: could they have been trimmed? Unless you actively review performance over time, the same mistakes will continue to recur.

Step 6: Are you costing projects realistically? Who pays if you get things wrong?

# # #

Perhaps the most common failing of Project Officers is that they focus exclusively on their own project as the measure of success: they are given a budget and a task and will attempt to match the two. As a result they will carefully track the remaining surplus. The problem is that they take no account of the hidden costs of running a project: servicing the survey equipment, printing of context sheets, and provision of PPE. From their perspective, these are just 'overheads' which, if thought about at all, are considered to be covered by the mysterious core budget.

Everything a project uses is a potential cost, and the company will benefit if this forms part of everybody's consciousness. That way, every tool which doesn't get broken or left behind on site is as real a saving as a cash underspend.

Uncosted time is another area where waste is endemic. Unfortunately there is no way to charge for the hours spent explaining to a potential client about archaeology from first principles; there may be some way to charge an existing client for multiple progress meetings, i.e. by writing this into your pricing structure. Archaeologists invest a lot of time into keeping their clients on-side, but there is a cost.

Step 7: don't over-perform the spec

Most project specifications include a clause that says something like:

"A minimum of 10% of the area will be excavated to the base of the archaeological deposits."

This is a gesture towards limiting the commitment of the contractor to dealing with *all* of the archaeology on the site and defining a measurable task. Except, of course, that when you look at it, it doesn't provide any form of certainty to the contractor, since the 'base of the archaeological deposits' is unknowable in advance. (There is a separate point that quantifying archaeological work by depth or volume pays no attention to complexity.) It might be better to phrase it as 'to a depth of 1.2m or the base of the archaeological deposits, whichever is the least', and then all you need to argue about is what an archaeological deposit is: does a prehistoric peat deposit count? An interglacial gravel terrace?

But people write these things all the time. What doesn't happen is that people on site pay any attention to them. If this is you, and you have fulfilled that basic minimum, you need to ask yourself in earnest:

Why do more?

There may be a good reason, if the purpose of the project has not been met. If the specification cites the *IfA Standard and Guidance for archaeological field evaluation*,[23] and it probably does, then there is another criterion:

> "Purpose of field evaluation
>
> The purpose of field evaluation is to gain information about the archaeological resource within a given area or site (including its presence or absence, character, extent, date, integrity, state of preservation and quality), in order to make an assessment of its merit in the appropriate context, leading to one or more of the following:

[23] From www.archaeologists.net/codes/ifa

- the formulation of a strategy to ensure the recording, preservation or management of the resource
- the formulation of a strategy to mitigate a threat to the archaeological resource
- the formulation of a proposal for further archaeological investigation within a programme of research" [emphasis added]

But even so those aims are limited: enough information to make an assessment of merit. Not all of the archaeology, or all the archaeology exposed, or most of the archaeology exposed; *enough* of the archaeology.

When to stop:

- When you have met the quantification required
- When you have achieved the purpose of the work

Sounds simple. So why do people carry on? Because they want to do a good job, because their unit may not get any subsequent contract, because they are interested. True; laudable, even; but a luxury. Teams will argue that since their time is committed in any case they might as well carry on; but if the site closed early, they could be working on the report, and would not spending money on travel and plant.

However the project has been structured, over-performing costs somebody money. It might well be you. If the developer is paying for work done, then they are paying more than they should. If not, the contractor is spending its own money on unnecessary work. Some argue that since the work was overestimated (=overcosted), it does no harm, but that is only true if the occasions when it is underestimated do not incur losses.

Step 7: How often do you do more work than necessary?

# # #

Scope creep is a recognised issue in project management; those involved will identify new opportunities and potential developments in the course of their work and will want to implement them to produce a better final product - the term 'gold plating' is used to describe the process by which desirable but non-core functionality ends up being seen as essential. Under a project management framework such as PRINCE2, this tendency is policed by someone within the project team whose responsibility and loyalty is to the company, not the project or end-user. In PRINCE2 this role is the Project Executive, and they are charged with continually monitoring whether the continuation of the project still serves a business need, and if not, to initiate closure.

In archaeological organisations, roles are rarely so clear-cut, and as a result there is nobody to make the tough and unpopular decision to draw a line under the work and say it is time to stop. The problem is accentuated by the background of senior staff in fieldwork: they may be just as willing to let a project continue as those on site.

But keeping a field team on site for a week or a day longer than necessary is an expensive business. The Project Officer should be reviewing work regularly to decide whether they are nearing satisfaction of the specification, and be willing to act if the answer is yes.

Step 8: archaeology isn't just excavation

Everybody knows this, in theory. But if you listen to archaeologists talk about their work, they will describe their fieldwork as if it's the only thing that matters. And websites list in loving detail every site dug, with scant mention of the contractors' work on post-excavation analysis and publication.

Analysis, reporting, archiving are part of the process

If archaeologists have such problems acknowledging this, it is hardly surprising that non-archaeologists fail to appreciate it.

Uh-oh, we've got some finds

Digging is going to produce finds. To treat them as if they are some unforeseeable calamity is inexcusable. One of the major demerits of the 'roving contractor' is that they cannot develop any familiarity with local typologies and chronologies; they will therefore be less efficient than a local unit.

Unreported excavation isn't archaeology, it is wilful destruction of the resource

Fieldwork that results in 'breathtaking discoveries that will transform our understanding' only raises the stakes higher in terms of eventual publication. If it's so important, produce the evidence.

To be fair, the discipline of work in the planning process has led to dramatic improvements in this area: even the least interesting projects will produce a basic factual account on OASIS and a summary for the HER.[24]

But there is another side to this question. Publication is important because it is supposed to add to knowledge. Excavators therefore have a duty as professionals to research previous work before they start a new excavation. Unfortunately many seem to believe that as long as they do their work properly they can ignore

[24] archaeologydataservice.ac.uk: Archsearch holds the index data, reports held under *Archives / Grey Literature reports*

evidence from nearby, or rely on short summaries in the project brief.

Read past reports before digging

A few weeks of fieldwork can save hours of reading reports (based on Westheimer's Discovery - "A month in the laboratory can often save an hour in the library." - Frank H. Westheimer, chemistry professor; Runyon's corollary: "A couple of hours on the Internet can frequently save a couple of minutes in the library.")

Step 8a: Do you plan for the whole project?

Step 8b: Do you read enough before you dig?

# # #

There is a paradox about the relationship between the internet and knowledge. In the past, information was scarce and valuable: simply finding copies of key texts was hard work, and people would gradually amass expertise by following the chain of references back to primary evidence. As a result someone would actually know the detailed history of comparable sites.

Now there is much more information available, too much for anyone to keep track of. Alongside the monographs and journals there now sits a flood of field observations from the planning process, of varying significance and relevance. Simply put, a culture of browsing in advance has been replaced by a culture of querying when required. A side effect has been that people no longer try to keep up with the data - it is there when needed. Unfortunately this means that sources which are readily found (on the web) are more heavily used than authoritative sources that have to be consulted physically.

Historic Environment Records are not intended to be a definitive description of the archaeological resource; few have been well-funded, and most consider themselves to be an index providing a short summary. Accepting the HER information at face value is laziness: it is worth examining the references, the reports and site visit records, to see whether more can be gleaned. If a desk-based assessment uses the HER data uncritically, it devalues the whole intent of the planning system.

Step 9: take Health and Safety seriously

One of the areas where the influence of leadership by example is strongest is in Health and Safety. The construction industry used to accept that its workers would be injured or killed in the course of their work, and there are still issues to be addressed; hence the introduction of the Construction Skills Card Scheme.[25]

Archaeologists tend to be lax about safety; partly this is an instinctive anti-establishment reaction, and partly it is a result of the history of archaeology. There was a time, not that long ago, when most excavations were on rural summer sites, where, once people had been told how to hold a spade, the most serious risks were alcoholic poisoning, STDs, and scurvy.

Working alongside the redevelopment of a brownfield site isn't quite the same: once you have looked at the issues of chemical exposure, plant, groundwater, scaffolding, shoring, ladders, lighting, old services, sanitation, and security, maybe you can do some work if you have your PPE in place. In such a constrained environment, a team will take its lead from, well, its leader: if he/she obeys the restrictions, wears the clothes, insists on conformance, then they will do the same; if he/she only wears a hard hat when an inspection is due, so will they.

You might think that archaeologists who set such great store by being 'professional' would respect H&S as a matter of course; having a site team behaving like a rabble can hardly help their cause.

You might well think that.

Step 9: Do you take H&S seriously?

# # #

The regulation of Health and Safety has followed an interesting trajectory - from an unrestrained free-for-all, through initial

[25] www.cscs.uk.com

legislation, to the accretion of increasingly complex guidelines and documentation. Recently the HSE has recognised that the administrative regime was leading to a box-ticking culture that was nominally compliant but removed management of the major risks from workers' consciousness.

Thus both ends of the spectrum are meeting at the middle: safety is an issue, it requires active consideration, and it is best to focus on reducing the major risks.

Step 10: treat your junior staff better

In *Archaeology Labour Market Intelligence: Profiling the Profession 2002/03*,[26] there is the sobering statistic that 25% of those aged 40-59 earned less than £18,000 per year. What this means is that low pay (low even by archaeological standards) is not a short-term problem for recent graduates. Somebody who graduated 15-35 years ago might still be at this grade. If you wish to retain your trained and experienced staff, you need to make sure they can actually afford to live on what you pay them.

Increasingly, though, money is not the only issue. Many other people manage on £18,000 per year. What is critical in the long term is the overall package that employment brings: issues like arrangements for travelling time, holidays, pension scheme, healthcare, and training, may be just as important to retaining staff.

The IfA has recognised that pay is not necessarily the biggest problem: it now expects employers to offer:

> "• 37.5 hour average working week
>
> • Employer pension contribution of 6%, subject to any reasonable qualifying period
>
> • 20 days annual leave excluding statutory holidays
>
> • Minimum sick leave allowance of 1 month on full pay, subject to any reasonable qualifying period"[27]

Step 10: how do you treat your staff?

# # #

[26] There is no equivalent analysis in the 2007/08 report, but it notes that "84% of archaeologists were aged 20-50, 56% were between 30 and 50, and 16% were over 50 years old. The average age of a professional archaeologist was 38." (p. 127)

[27] www.archaeologists.net/practices/salary

The question of pay and conditions in archaeology is not one that individuals or single employers can have much influence on. IfA has aimed, through a combination of benchmarking and established minima, to improve the position of workers across the board, with a degree of success, most recently by looking at zero-hour contracts and travelling time.

But what is needed is for employers to value the staff for their skills and experience, their contribution to the business, and pay them appropriately. Following this logic through, it is the middle managers who are most underpaid - somebody who is delivering a £0.5 million project is under a lot of pressure and ought to be recompensed accordingly. The conundrum of differentials, minima, and performance-related pay is not specific to archaeology and has few solutions.

But if wage levels are difficult to control, junior staff can be valued and developed by their employers in other ways. In particular, supporting their training and professional development is an investment in a future asset and a way to bind them into the organisation. There is nothing worse for morale than being treated as expendable trowel fodder, and nothing worse for project completion than losing your most experienced staff.

Section 3: the manager's toolkit

The key to being a successful manager is personal effectiveness: if you can't do your work efficiently them you will have no time to spare on monitoring that of others.

This section highlights some readily-available tools which can be adopted to smooth your everyday work.

Email is your friend not your enemy

A recurrent feature of any discussion about time management and working practices is the feeling that email is *out of control*; people say that they have to check it constantly and yet know that the old messages stack up, and they can never deal with it all. As a result, they say that if only they could handle the email mountain and have confidence that they'd seen the important stuff, they'd be able to cope, leading to the desperate arbitrary expedients of 'email free Fridays' or 'no email after 3.00' rules.

This self-analysis may not, in fact, be accurate: an overflowing inbox may just be the symptom of a wider malaise. But since handling email forms such an important part of modern working, it is worthwhile thinking a little to get it right. Unfortunately, most of the problems come from other people, sending **you** stuff, but you can at least try to make life easier for your recipients.

A project manager will have to keep up with emails as they arrive in case one is time critical. But often the messages are completely irrelevant, routine, or non-urgent, yet they will still have intruded upon the flow of thought. Studies have shown that after such an interruption it is likely to take 5 minutes before the worker returns to the original task.[28]

So how to fix it? One answer is to make good use of filters and folders so that important messages can be spotted immediately (see below). But the single simplest change you can make is to notifications. The defaults for Microsoft Outlook were devised at a time when email traffic was rare and messages were important, so a window pops up to say a new message has arrived; in such circumstances it takes an iron will to deliberately leave the message unread while you finish the sentence you were typing.

It doesn't have to be this way. Under *Outlook > Tools > Options > Email options > Advanced options*, it is the work of a few

[28] www.drthomasjackson.com has extensive resources on the use of email at work, including Jackson, T., Dawson, R., and Wilson D., 2002. Case study: evaluating the effect of email interruptions within the workplace. In: *Conference on Empirical Assessment in Software Engineering, Keele University, EASE 2002, Keele, UK, April 2002*, pp. 3-7.

seconds to change the notification to something less distracting, like an envelope on the task bar. Making this one simple change will give you back the feeling that you can control the way you use your time to best advantage.

Writing emails

Use the subject line

. . . to say *what the subject is*. The actual subject, preferably. Anything sent under a generic heading, or [no subject], will be difficult to locate later when you're trying to find it. Don't use ALL CAPS, and start the subject with the key words.

It's often possible to put all the necessary info in the subject.

Not:

Subject: Re: Meeting tomorrow?

Text: Yes, 10am is fine.

But:

Subject: Meeting 10am ok

Text:

Email conversations tend to drift onto new topics; if this happens it's best to re-title messages periodically, rather than end up with:

Subject: re: re: re: re: re: re: Dinner tonight?

Text: Will you marry me?

For similar reasons, it's much easier to keep track of threads if you stick to **one subject per email,** so that if there are three issues you want to raise with someone, send three messages: this will allow them to respond to each on its own timeframe. Otherwise it's likely that only the first, or most urgent, issue will actually be addressed.

But there is an even more basic question: should you be writing an email at all? Email is great for short, quick, transient and non-controversial communication with people with whom you have an established relationship. It is not good for arguing, or explaining at length. A good rule of thumb is the **10/5 minute rule**: if it will take longer than 10 minutes to write or 5 minutes to read, don't send it by email. Turn it into a Word document, or talk on the phone. Few people read long emails carefully, so don't expect them to.

Think hard before you use 'reply all'

It is annoying to be copied into a two-sided debate in which you have no interest. Much better to have the debate in private and then circulate the conclusion to all.

If you are going to forward an email, it is helpful to **add some sort of gloss**: "Do you want to go to this conference?", "See the comment in para 2 which we might want to respond to", or even just a simple "any use?".

I would discourage the use of automatic read receipts. Somebody who has read the subject of an email, and decided to open it, is ready to read the contents, and the intrusion of a pop-up that they must read and click on before they can do so breaks the flow. There are a few occasions when a positive response is needed: I would just add a note in the text: "please confirm you've had this message".

In theory it should be possible to use priority markers (red text, !) to gain the reader's urgent attention to a particular message, but unfortunately these tend to be used only by spammers, and will therefore make people **less** likely to read it. Instead, start the subject line with "Urgent!"

Having a corporate **signature** text with phone number and a web address is a good idea. Having one which is bloated with legal disclaimers and vague threats against unintended recipients is a bad idea. Often these disclaimers are so broad that anyone wishing to conduct serious business would be justified in refusing to respond and insisting on dealing with someone whose word could be taken as some form of official sanction.[29] It would be better to train staff

[29] www.mcsweeneys.net/articles/alright-fine-ill-add-a-disclaimer-to-my-emails

in what they should say than to rely on these probably unenforceable clauses. Similarly, asking "do you really need to print this email?" may be ineffective. You could argue that the environmental impact of adding to the size of a message that has to be collected and stored by multiple recipients might outweigh the tiny number of trees saved by indecisive readers who were persuaded not to print it.

Don't apologise for cross-posting

The days when you only got messages you wanted have, alas, gone. Wasting everybody's time by making them read this before getting to the substance is more annoying than getting the same message twice. But equally, **don't circulate needlessly**. Reading irrelevant emails can absorb an enormous amount of staff time, especially if they are labelled (unhelpfully) "Important notice to all staff" but in fact are of interest to three people in the organisation.

Finally there is the question of **tone**. It used to be common for people to treat email as if it were an electronic letter, written in the fairly stiff and formal language adopted in many businesses. Increasingly, though, it is coming to resemble speech, and it is hard to maintain that it should necessarily be any more formal than would be used in, say, a telephone conversation. In general, people would rather receive an instant response, even if brief, slangy and mis-typed, than wait half an hour for one which said the same thing but in more coherent prose. I have seen a professional communicator propose that we should routinely be using emoticons in our work emails as a way of conveying the tone more effectively, however little we might like the idea.

Reading emails

So maybe your readers will start being glad to get messages from you. But right now, that isn't really much help with your inbox. What can you do?

Break your messages up into folders

A good way is have folders for individuals or groups. When you're looking for an old message, you may have forgotten its subject or date but probably can remember or guess who had sent it.

Use message rules and filters

It is worth setting up rules so that new messages are moved straight into the relevant folder. You can then, at a glance, spot responses you were waiting for while leaving others to one side.

Have a folder for newsgroups

Those messages can go straight there and wait for your leisure; alternatively you can periodically use 'mark folder as read' so you can forget the rest. If the newsgroup has an accessible archive (as JISCmail groups do), you can safely delete these messages *en bloc*.

Process your emails

Leave non-urgent unread messages in their folders. Scan the messages in the active folders, open the important ones, and respond to the simple ones straight away. Then go back and deal with the important complex ones. Whether you then go on to deal with the others is up to you, but you can be confident that you know about everything you need to for now. (For more advice on this see inboxzero.com).

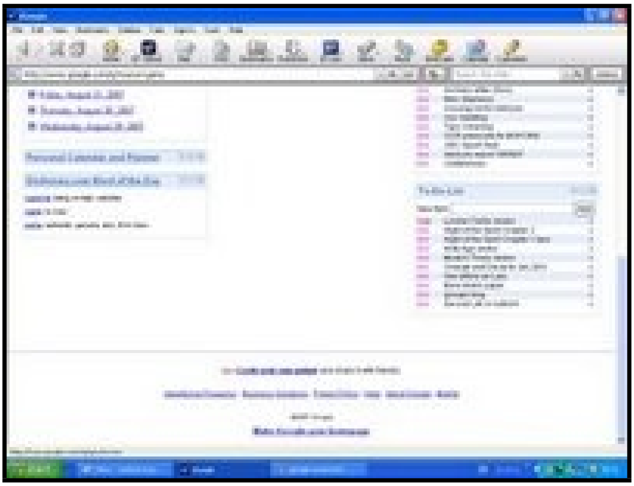
iGoogle can change your life

I have never been a great fan of customisation. While others were merrily swapping their Windows wallpapers weekly, mine stayed default blue. The only gesture towards personalisation that I made was changing the homepage to Google, as soon as I realised that I visited it 10 times more often than any other. So when Google started to offer add-ons to their classic white screen by showing the small iGoogle option, I wasn't very interested at first: what could it deliver? I eventually had a look, in pursuit of an RSS feed reader (of which more later), and found a wealth of little tools which seemed useful and simple. Now I don't know how I coped before: I certainly wasted a lot more time, effort and nervous energy beforehand.

The process of signing up is straightforward: if you a Gmail.com or Googlemail.co.uk account you just need to log in, if not there's a minute's registration. You should be aware of the fact that you are giving Google even more information about your web activities. At present the worst they seem to threaten is showing you more targeted Google Ads, but it's worth thinking about.

You are then shown a list of possible features to add to your Google page, which could transform it into a virtual desktop.

Here's mine. You'll notice that I've left a fair amount of white space down the middle, but the content runs down further.



This is a deliberate trick; if you fill the screen with tools you will commit the fatal error of making the page slow to load. Similarly some tools are best kept rolled up to the taskbar if not needed. Here is my explanation of what I have chosen:

RSS feed

I don't read a lot of blogs, but spent a lot of time visiting them in turn to see whether anything new had been added, what RSS feeds are designed for. Although other feed utilities are available, Google Reader is the simplest I have found. Every time I use Google I can check to see which blogs have new posts. This can become a distraction; I have to be strict and say:

- use 'mark all as read' even if they're not (you can always go back to read them all at a quieter moment)
- exclude blogs which are updated more than a few times a week (otherwise the list will be overloaded): instead these are bookmarked and visited at leisure (if any)
- exclude blogs where comments are important (you don't see the comments unless there is a separate feed for them)

Wikipedia search

One of the key benefits of Wikipedia is that it gives you information rather than trying to sell you things. I find Google searches for things like information about file formats frustrating because the first two pages of results are effectively commercials.

Gmail (Googlemail in the UK)

Much the same applies to email: if this were your main email account it would be swamped too quickly to keep track of. Gmail can be used in clever ways, though: it is a good way of transferring files around as attachments (so that a Powerpoint can be sent to a Gmail address and will be available at any conference venue with Internet access); it is also possible to copy all your emails to Gmail to act as a back-up store.

Personal calendar and planner

Google has its own Calendar system, which I now use instead of my paper diary. Having this on the desktop means that I can access it remotely, a trick not easy to replicate with the diary.

To-do list

This is perhaps the single most powerful yet simplest tool. Create a task by typing it in (carefully: the *edit text* option doesn't work); then assign it high, medium or low priority. You can change priority at any time. Once a task is complete, click on the X to delete it. I haven't completely abandoned paper lists for very short-term tasks (finished that day), but it is a good way to see at a glance the things that need doing beyond your current task. At one point I found the list getting longer and longer and more and more urgent, until I was spurred into delegating as the only way to deliver; having handed out the jobs to the team it was manageable once more.

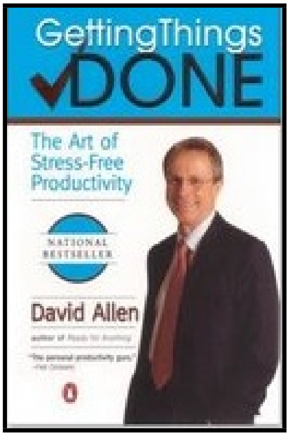
I use two lists at the moment, for work and non-work activities; it would be possible to use one per project.

Some negatives

The documentation provided for the tools is minimal and unhelpful; you have to explore how to use them yourself. Many of them are buggy and slightly unreliable; some are slow (the calendar should be kept rolled up for this reason).

But iGoogle is the closest that anyone has yet come to bringing together all the tools you need to operate effectively; once set up, it feels like a rational and effective utility.

Getting Things Done



David Allen[30] has developed personal effectiveness and productivity into a business, under the slogan "Getting Things Done". He provides a range of timesaving tips for efficient working, focusing particularly on habits of filing and storing data and prioritisation. If followed in full, GTD™ is not so much good practice and more a way of life, but many people find that adopting some of his techniques can transform their work-rate and makes them feel that they are in control of their work rather than the other way around. There are expensive options to pursue this but a cheap place to start is the Penguin book.

You may find the relentless enthusiasm and optimism a little wearing in large doses, but you are bound to learn something useful along the way.

There are some difficulties in applying the GTD approach to work which is essentially reactive, so if you find that you have too little control of your tasking to apply it in detail, the next subsection provides a hands-on approach.

[30] http://www.davidco.com/

Time management

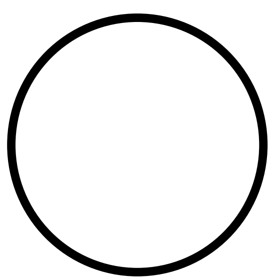
Tips on time management often focus on tricks such as standing up when answering the telephone to deter long chats. Although these may have a marginal impact on your productivity, they are unlikely to improve the main issue: the feeling that there is too much to do and your work is out of control.

The bad news is that there is always too much to do – even with all the time in the world, you would never reach the bottom of the to-do list.

The good news is that you can, nevertheless, regain control, so that you don't do everything, but you do the most worthwhile and important things. As David Allen explains, what is needed is a change in attitude. What follows is a programme of activities which will leave you in a much better position to cope with the inevitable flood of work.

1 Exercise 2: Review your current time-use

Thinking back over the last week, how much of your time has been spent Planning (preparing for activities), Doing (undertaking activities) and Reviewing (reflecting on activities after completion)? (To clarify: if your work involves planning projects, then that is doing: planning would be preparing to plan projects).

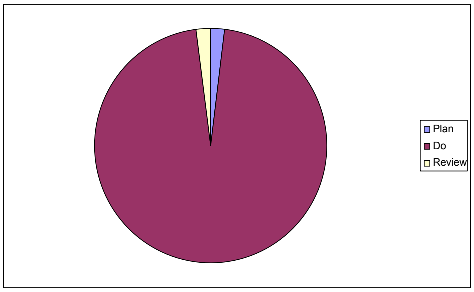


Your current time-use

Allocate the proportions in the circle above (the circle represents a week's work).[31] As a guide, 2 hours per day would equate to 1/3 of the area.

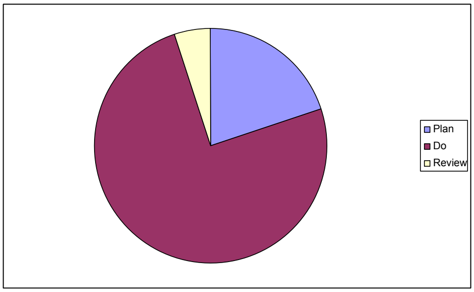
There is no correct solution for everyone: the question is whether you are finding your current work pattern productive and enjoyable. Although individual figures will vary, it is possible to classify three main types of time use.

Type A



This is the most common type, in which almost all time is spent on activities, with no spare capacity for planning or review. Some people find that they can work in this way without stress, but most will become frustrated at never having time to finish things properly, constantly juggling priorities and switching tasks, and having no chance to invest in long-term development.

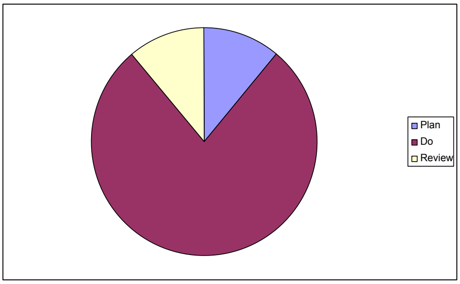
Type B



[31] A pdf of the exercise is available as a download from the *10 simple steps* blog.

Under the Toyota quality management approach, activities are not started until they have been carefully planned. If you follow this pattern you will invest time in ensuring that you understand fully the desired outcomes and have tested the methods to be used before embarking on actual delivery or production. This approach gives you control, but there is a risk that in circumstances where information is incomplete, time spent planning may be wasted.

Type C



This pattern is typical of a PRINCE2 approach, characterised by the inclusion of a significant amount of time spent in gathering lessons learned as part of each activity cycle.

In practice, almost everyone who tries this exercise reports themselves as an unhappy Type A, and recognise that they spend too little time on planning and reflection. Immersing yourself in activity in order to deal with an overwhelming workload is a natural response. But it should be resisted: although time will be spent doing stuff, some of that time will be wasted because you are doing things badly, doing things without understanding fully the requirements, and doing things that are not needed or not a priority. You would work better, and feel calmer, if you made the commitment to yourself to spend 10 minutes each day on planning and reflecting.

A good morning routine is, on arrival at the office, you don't immediately turn on your computer (unless it takes a while to start up). Instead, take a scrap piece of paper and list four or five tasks you hope to complete in the day ahead.[32] Don't try to list all the things you might do, or need to do: the whole idea is to capture a realistic target, allowing for interruptions. Now look through the tasks and consider whether you are in a position to start them all: it is likely that for some you would in fact need some information from someone else before you could get going. Therefore as a priority you should make quick contacts to request this. Now turn on your computer, and work on your tasks, crossing them off as you go.

Towards the end of the day, again, turn off the computer early. Allow yourself five minutes undistracted time before you leave to look at your task list and think about how well you performed: if you had a meeting, did it end successfully? Were you authoritative on the phone? Did you write clear text? The great value of thinking along these lines is that for the rest of the evening you will be mulling this over in a positive frame of mind, focused on the quality of your work not the quantity. Leave the list on you desk: any incomplete tasks will be dealt with tomorrow.

2 Protect your golden hour

Some people are 'larks', at their best in the morning and listless later in the day, while others are 'owls' who only really come alive in late afternoon. You can probably work out which you are, and what time during the day you have most energy. Once you have worked this out, you should make a conscious effort to protect it from encroachments (don't schedule a routine meeting for that time), and you should try to ensure that you handle the most complex task when you are most able to cope with it. It is surprising how many people leave checking of budgets to times when they are unable to give them the attention they deserve. It is a good idea to actually mark your 'golden hour' of high productivity in your calendar to remind yourself to use it for the best. You will probably find that you achieve as much in your peak hour as in the entire rest of the day.

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[32] According Richard Wiseman's (2009) *59 Seconds*, the mental process involved in the physical act of writing has a powerful effect on the way that the brain treats the content.

3 Use the right media

Before you start on a communication task, make sure that you choose the best method: is a short email sufficient, or is a phone call necessary? Invest time in setting up RSS feeds and email filters to reduce the need for browsing. If a report has an Executive Summary (and it should have), read just that unless you need the detail.

4 Dealing with new tasks

Be willing to block interruptions for your golden hour: divert the phone, turn off email, and close the office door to deter visitors. You cannot, alas, cut yourself off for long, so you will have to deal with new tasks. Deal with, not necessarily do them: the following flow chart may help.

Does the task need doing?

If it contributes little to the organisation's aims and core business, don't do it.

Do you need to do it?

Are you the only person who could do it? Are you the person in the best position to do it? If not, pass it on to someone else.

Do you need to do it now*?*

Is it so time-critical that it must take priority over your existing work? If so, do it. If not, add it to your task list and get back to your previous task.

5 Coping with overload

However rigorously you screen new tasks, and however much you plan and reflect, there will be times when there is just too much to do. Recognise that this is a problem, and that working harder is not going to fix it.

Prioritise what you do, so that the least important get dropped or left for later.

Pass tasks on- delegate down, delegate upwards, shift them sideways.

Renegotiate timing: with any luck some of the deadlines are less fixed than you thought.

Stretch time: as a short-term approach it is possible to work longer, but it is dangerous to normalise this.

6 Forgive yourself

We want to perform well and complete all of our tasks, and if we can't, we will consider ourselves to be failures. We shouldn't. Nobody ever said that the workload was a reasonable match for our available time and effort.

If there are capacity issues, by all means raise them, but in the end this is the organisation's problem, not yours.

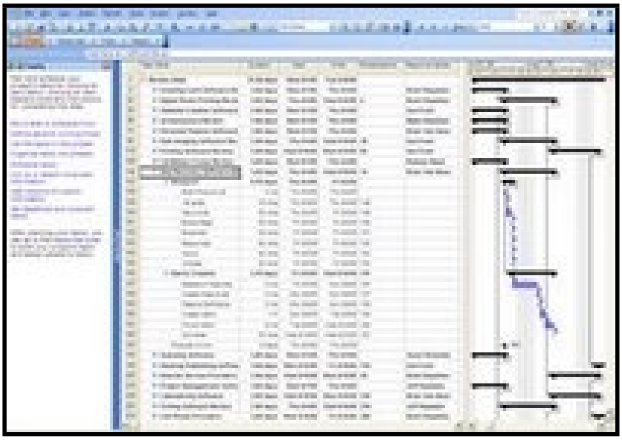
7 Protect yourself

Stephen Covey in his *7 Habits of Highly Effective People* (1990) uses this analogy: how much of our time do we spend cutting down trees, and how much time do we spend sharpening the saw?

It is all too easy to drive ourselves into the ground working extra hours and days, foregoing breaks and holidays. You put the time in to trying to achieve the impossible, even while you are aware that your efficiency, accuracy and workrate is suffering, along with your health and diet.

You will be more effective, as well as more relaxed, if you make sure that you were physically and mentally refreshed. The financial sector may have believed that 'lunch is for wimps', but look where that got them.

Microsoft Project



Microsoft Project is a sophisticated Office application that can be used to plan, estimate, and monitor projects, tasks, and resources. It is fairly cheap for a piece of business software (£400 or so), although licensing may be an issue (there is a free Project Viewer to allow others on the network read-only access).

Inputting the data into Project takes some time, and this investment is best rewarded if the program is used for the whole life cycle of the project, rather than just planning or implementation. It is possible to use multiple installations across a network to share information about resource availability (so that allocating the same person to work on two projects at the same time would raise a conflict flag, alerting users that action was needed).

The usefulness of the program decreases if it is only employed on a single project; it should not be seen as way of drawing Gantt charts. It can do that, but if that's all you want there are simpler options.

On a final point, this application is unlike most Office programs in requiring professional training to make much use of: trying to teach yourself to use it is hard.

Microsoft Excel cheatsheet

Excel is a powerful and flexible program; the Help area is also well-presented and tells you most things you need to know. Here's a few tips, though.

Excel is not a database. It isn't. It doesn't pretend to be. It might look a bit like a data input form, but that is not the same thing. (It is common these days in interviews for people to mention Excel when you ask them about database experience). It does, however, have some clever text-handling properties, as well as dealing with figures.

- Problem: cell showing no data, just ########. This perplexes new users and looks fatal. It is completely harmless: this is displayed when the content for a cell is longer than the column width. Widen the column, and the data is shown. (There is a fairly good reason for this feature of the program: if you are showing financial data then you wouldn't want a column showing a deficit of £1003 when the figure was actually £100,300,000).

- Use 'Print area selection' and define the area of interest unless you want pages of blank squares

- Use 'Hide columns' when you are working on two widely-separated groups of data (unfortunately this part of the program is not very well developed: an alternative is to copy the data to a new worksheet and delete the unwanted columns from there) (note also that copied and printed data will show Hidden columns) (for this reason it as well to think about the sequence of data elements when you are setting up your worksheet)

- To quickly sum a group of figures, highlight the area; the total is shown at the bottom right hand corner of the screen

- Entering repetitive data: enter the same data in two rows, then select those rows and a block of subsequent rows: it will be entered in all

- Be careful with column/cell properties: unless set to ***text*** then any leading zeroes will be dropped (eg an entry listing context "0096" will become "96"). If a column is set to ***text*** it will be displayed as entered, but mathematical functions will not work.
- The formula bar should be used for any calculation which may be needed more than once. It is possible to copy a formula into another cell. The default behaviour is if you have created formula "=sum(a2.a12)" in cell a13, to total the column, and then paste it into b13, it will automatically alter the formula to "=sum(b2.b12)". This is very useful but may cause problems if you lay out the data in an unusual way.
- The formula bar can also be used to assemble text strings (for example generating a series of urls by combining the elements: a_href="http://domain.name.com/ | pagename.htm"/ | Page title text | /a using "=concatenate(a1.a12)" to create the string a_href="http://domain.name.com/pagename.htm"/Page title text/a for each row).
- Make sure you save changes when you close the file; it is easy to discard them by mistake
- Excel data can be readily shared and imported into databases by saving as a .csv format file

360 degree evaluation

However good we may be at evaluating the performance of others, we are poor judges of our own effectiveness. Bosses blithely assume they are loved and respected by their staff, even when they are not. This isn't pure egotism: it is a recognised psychological phenomenon that those areas of which we are most ignorant are where we feel most confident (the Dunning-Kruger effect).[33] So how can we identify priority areas of our behaviour to improve? In an ideal world this could be done by asking your colleagues how you are doing. But this is hardly practical - you are unlikely to get honest and helpful feedback from your peers and subordinates, or the unvarnished truth from your bosses (positive or negative).

The solution is the 360 degree evaluation, which has developed into a separate area of personnel and performance metrics, with sophisticated online tools and strict criteria. This can cost a good deal in time and money and is aimed at the organisation level. As a quick fix, however, it is possible to highlight the major areas where your perception differs from those of your colleagues using a simple set of questions.[34] As a minimum you should involve two of your superiors, two peers and two subordinates; you should start by asking them for their help, and explaining what is involved. You should emphasise that the results are anonymous, since otherwise their responses may be affected. The best practical method is to write out SAEs yourself and distribute them with the forms.

[33] Kruger, Justin, and Dunning, David, (1999). "Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessments". *Journal of Personality and Social Psychology* **77** **(6)**: 1121–34. doi:10.1037/0022-3514.77.6.1121.

[34] See below. A pdf of the exercise is downloadable from the *10 simple step* blog ("Book links" post).

Evaluation form

As part of my Continuing Professional Development I am undertaking an evaluation of my current Leadership Competencies to identify the areas where I need to make the most improvement, using a 360 degree evaluation to gather the views of my superiors, peers, and subordinates. I am therefore sending the attached questionnaire to you for your response, and I would be very grateful if you could complete and return it by the end of the week.

One of the key principles of 360 degree evaluation is that the responses should anonymous and honest; when I have the responses I will compare them to my self-analysis in order to establish what my priorities for learning should be (moving information from the Blind Spot in the Johari window (below) to the Arena).

Known to others, not to me (my Blind Spot)	Not known by me or by others (the Unknown)
Known to me and to others (the Arena)	Known to me and not to others (the Façade)

Johari window model of knowledge about myself

The form is intended to be self-explanatory; I would like you to score it on the basis of my current performance as you perceive it:

1	You recognise very little of this behaviour in me
2	I could improve his performance significantly
3	I am as competent as his peers
4	I usually do this well, but could improve
5	I consistently does this well

You need not spend a long time agonising over which absolute scores to assign: the important thing is the pattern of poor, fair and good scores which will allow me to check my self-assessed priorities.

Martin Locock

I enclose a self-addressed envelope so that the responses remain anonymous.

Thank you for your help.

Please circle your score for each statement.

	Disagree		Neutral	Agree	
I am good at explaining the purpose of the work to my team	1	2	3	4	5
My written work is clear, correct, understandable and persuasive	1	2	3	4	5
I provide opportunities for others to contribute ideas and feedback	1	2	3	4	5
I take time to care for my staff as individuals	1	2	3	4	5
I cope well with change and the need to be flexible	1	2	3	4	5
I am well-organised and efficient	1	2	3	4	5
I am tactful and courteous	1	2	3	4	5
I seek advice when I am unsure how to proceed	1	2	3	4	5
I find creative solutions to problems that emerge	1	2	3	4	5
I focus more on getting the job done than on making sure the team understands it	1	2	3	4	5
I am a good ambassador for my employers	1	2	3	4	5
I confront poor performance and conflict	1	2	3	4	5
I provide enthusiasm to the team	1	2	3	4	5
I give credit to others for their contribution to the success of my work	1	2	3	4	5
I do not let my mood affect my interaction with staff	1	2	3	4	5
I expect and display high professional standards	1	2	3	4	5
I am patient with staff learning new skills	1	2	3	4	5
I give clear instructions	1	2	3	4	5
I keep myself informed about progress	1	2	3	4	5

I delegate important tasks to others	1	2	3	4	5
I protect my staff from criticism	1	2	3	4	5
I blame my staff for failure	1	2	3	4	5
I encourage my staff's personal development	1	2	3	4	5
I help staff with their problems	1	2	3	4	5
I understand and promote my organisation's strategic aims	1	2	3	4	5
I contribute to the development of the organisation	1	2	3	4	5

# # #

While you are waiting for the replies to arrive, you should go through the questionnaire and score it honestly yourself.

The next stage is to transcribe all the scores onto your copy (with a different colour pen), so that you can see at a glance the following areas:

- Areas you score yourself **high** and others agree: no action needed
- Areas you score yourself **high** and others score **low**: priority for action - you need to establish whether you are deluding yourself about your ability, or failing to communicate
- Areas you score yourself **low** and others agree: priority for action - this is an area you need to improve
- Areas you score yourself **low** and others score **high**: no action needed, but have more faith in your performance!

You will probably find a surprising gap between your views and those of others, and this should prompt you to devise ways of addressing this mismatch. It could be something a simple as writing a note on your desk "Remember to explain", or it could be a formal programme of skill development and training.

It is possible to re-run this type of survey on a regular or annual basis, but with diminishing returns since the low-hanging fruit will have been harvested in the first iteration.

A training buddy

One of the biggest barriers that people encounter when undertaking a programme of personal development is that it is a lonely and time-consuming activity. Finding the time away from work and family is never easy, and there are always other things to do. It is therefore not surprising to find our initial commitment to ourselves draining away, however convinced we remain of the theoretical benefits.

An easy way to reinforce this commitment, and provide a focus, is to recruit a training buddy or critical friend - somebody to whom you must answer on the progress you have made. It is best to schedule a regular half-hour meeting or phone call, perhaps on the last Friday of each month, to talk about what you have done and plan to do next.

You might think that an arrangement like this, with no power of compulsion, would have no effect on your success, but it does: the simple act of making our commitments out loud means that we are much more strongly tied to their fulfilment.

It is best if your buddy isn't your boss, because you need to be completely honest and frank about yourself (including problems with your boss). Although there are benefits if your buddy understands your role, this isn't necessary, and it can be a useful exercise to explain what you do to a non-specialist. In recruiting your buddy you should consider:

- are they sympathetic to you?
- can you rely on their discretion?
- will they be able to commit to regular meetings?

Putting a little of you effort into fining a buddy will pay dividends in actually carrying your plans through.

Section 4: action plan

Most readers probably dipped into this book looking for a couple of tips for specific but minor problems they had encountered. I hope they will have found something useful, or at least got some pointers to possible solutions. But to stop there is to miss an opportunity. Transformational change requires commitment from the individual, and maybe you are at the point where you are ready to take that step. If so, this section will provide a template for a personal action plan, through which you will identify your goals, define a plan, and subsequently monitor your progress and review your plan.

It is interesting to look at the IfA's CPD scheme of 2002, which covered similar territory. The focus there was on knowledge and experience, directly related to current or near-future work, rather than skills; but it is improved skills that provide the best pay-off, and are more likely to be transferable in the future.

Stage 1: preparation

Projects are usually planned in great detail, even if they are short and simple. This is in complete contrast to how those involved handle their career development, which is left to chance or whim. Obviously it isn't possible to control which jobs fall vacant, or where and when, but it is possible to have a concept of what your next move is likely to be and what would be needed to succeed. But your career development is something worth investing some time in, so treat it seriously.

Before starting the actual process, it is worth exploring whether there is someone you can share it with. Then you'll need a journal or file where you can assemble your thoughts, and copies of your cv, job descriptions, and organisational documentation. And some time, undisturbed: getting up early in the morning is a good approach.

Stage 2: analysis

The first stage is to look at your current work and skills. It is easy to define a post in terms which become a shopping list of tasks, but this isn't very productive. A much better idea is to draw up a **Love/hate map**.[35]

Write a list of the ten aspects of your current post you feel most strongly about, with a one-word title. This may be a major functional element of your job, or a small task that excites a reaction (foreboding or anticipation). For example:

Meetings	Negotiating with developers and curators
Lectures	Formal public speaking
Admin	Timesheets, expenses and order forms
Writing	Writing publication text

It is quite likely that the things that bother or please you the most are 'soft' skills like interpersonal relations, which tend to fall through the gaps in job-focused training.

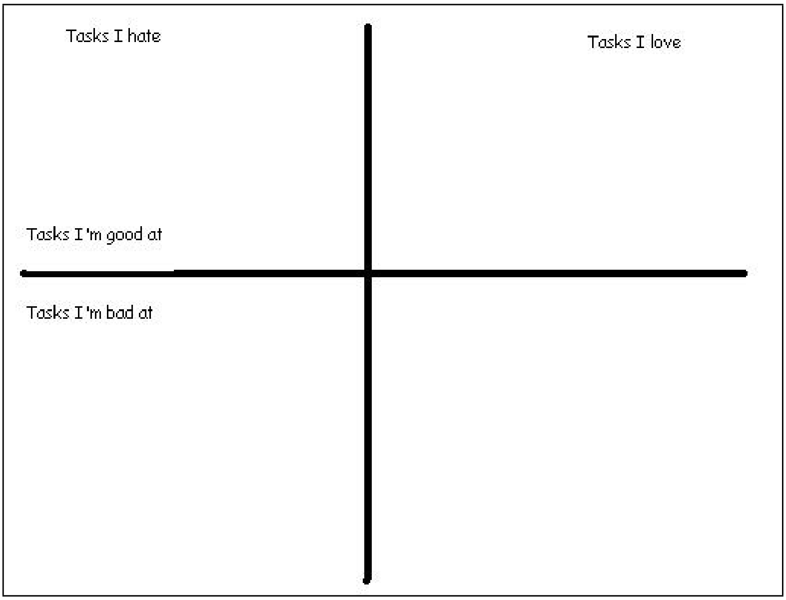
Go through the list putting between one and three ticks against those you enjoy, and crosses against those you dislike.

The next stage may require external input (where your buddy/mentor might help, or your last performance appraisal), since you now want to try to decide how effective you are at those tasks, independent of whether you like doing them.

Assign ticks and crosses as before, with a different colour pen. (Note that the number of ticks is not crucial and it is pointless to obsess over precise measurement).

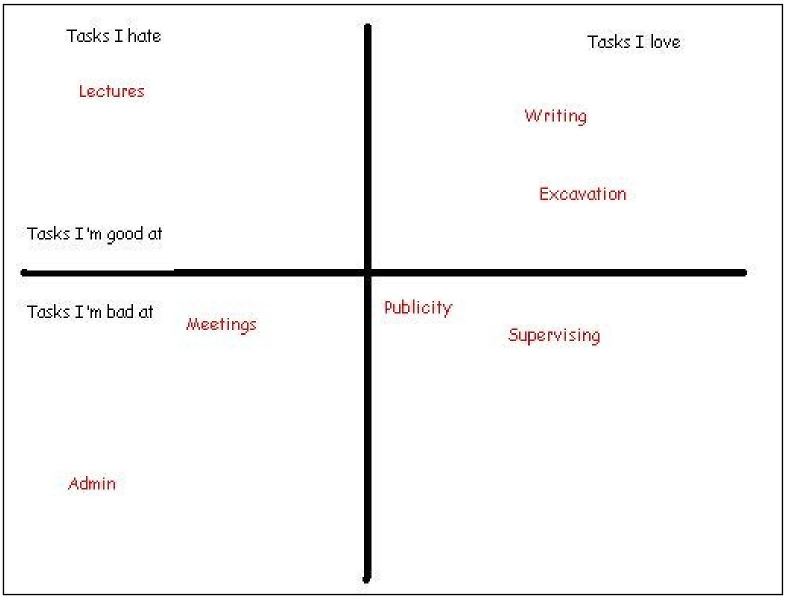
Draw a large cross on a piece of paper: label the righthand side "Tasks I love", the lefthand side "Tasks I hate"; the upper half "Tasks I'm good at", and the lower half "Tasks I'm bad at".

[35] A pdf of the exercise is available from the *10 simple step* blog.



Grid for Love/hate map

Now write onto the grid your ten tasks in the correct position.



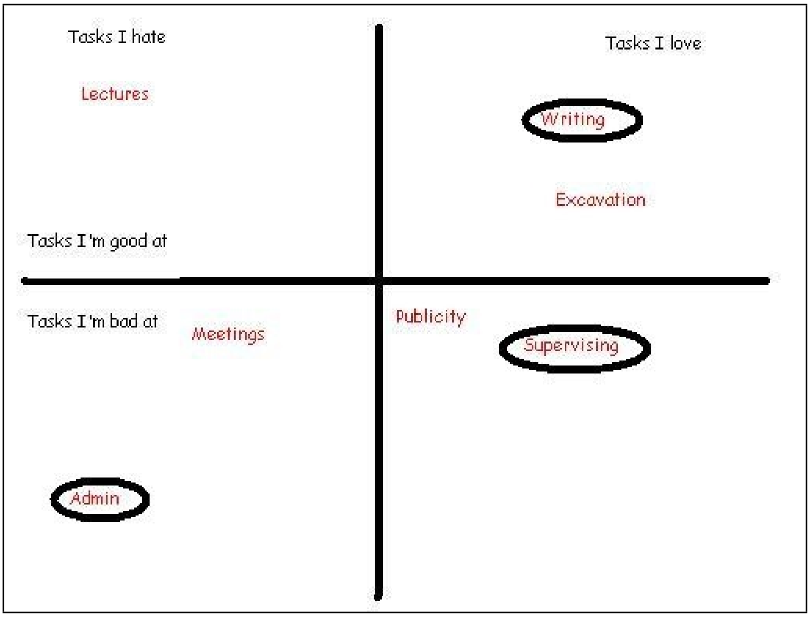
Love/hate map showing tasks

This map by itself shouldn't be telling you anything you don't already know, but it may help you understand your strengths and weaknesses.

If the bottom left box is full and the top right box is empty, you are in the wrong job. You shouldn't spend your time doing badly the tasks you hate.

You should be reassured about the tasks in the top left: you may worry about them but they are not damaging your performance.

The tasks in the lower half are the ones which need action. To prioritise them, you should now circle those tasks which are most central or frequent in your work.



Love/hate map showing frequent tasks

Any circled tasks in the bottom left box need to be looked at first; next would be circled tasks in the bottom right box.

This exercise is not dissimilar to other methods of analysis, except that by bringing your feelings into the equation it makes the outcomes much more focused, because moving tasks out of the bottom left box will not only improve your output, it will also make you feel much better. The word 'happiness' is not much used in traditional management theory, even though it is critical to performance.

Stage 3: improving performance

Now you know which tasks need attention, you will have to explore ways to improve. This may be as simple as asking your manager or colleagues for advice or help, or reading a book or website; or it may involve formal study. Most managers leave the identification of training needs to the individual, and as long as you have a clear idea of what you want and how to get it, it shouldn't be difficult to obtain their support. It is worth noting that even for the most expensive taught courses the main expense is your time.

It is a good idea to draw up a timetable:

Aspect	**Current performance**	**Priority**	**Action**	**Date**
Admin	Poor	High	Inhouse training from secretarial staff	by May 2013
Meetings	Fair	Medium	Remote learning course	by July 2013
Supervising	Fair	Low	In house training or formal course	by Dec 2013

The timetable should also have a review date (6 months or a year in the future): write it here, and put it in your diary.

Stage 4: future plans

It will be seen that the action plan has so far dealt with your current work, not the future. This is deliberate: people's instincts about the past and present are quite reliable; their guesses about the future are not. It is possible to use the map to assist in informing your future plan.

Think about your ideal next job; be as specific as possible ("a Project Officer doing watching briefs for a commercial unit", rather than a "Project Officer"). Find a job description of a similar post, and then compare how many of your 10 mapped aspects will be relevant. If they lie mainly in the love/do badly quadrant, you should seek training to address your performance. If they lie mainly in the hate half of the map, you should look for other possible posts with a better fit.

This can then be developed into a timetable as for Stage 3, with a review date.

If you feel that it is time to move on, you should also think about the sort of application an ideal candidate would submit: what qualifications? experience? skills? attitudes? This may well reveal gaps in the evidence you can provide, which you should try to address before you start applying in earnest.

Stage 5: review

At regular intervals (the last day of the month, or payday, are good milestones), take five minutes to look at your action plan. Are you making progress? Have you changed your mind or found new areas to explore?

Soon enough, your review date will arrive. If you find that your attitudes have changed completely, re-start the process from Stage 1. If not, consider how far you have come. Discuss your plans with your training buddy. Unlike most conversations about people's so-called careers, this should turn out to be a positive and inspiring exercise.

Discussion

It is easy for introspection to become daydreaming, and debate to become whinging. This action plan is intended to provide a structure which should clarify your goals; it contains no great insights, beyond the obvious one that people enjoy jobs which involve doing things they like and are good at.

Section 5: practical management

Although it may not feel like it, changing yourself is easy, at least when compared to changing an organisation. But in the long run you can only succeed if your employer succeeds, and therefore you will need to promote better commercial and archaeological practice to the organisation as a whole.

This section provides case-studies of specific professional issues, alongside contributions from management theory.

Company health check

Accountants have developed a range of measures of the financial health of an organisation (the liquidity ratio and current ratio), but these are clumsy global tools which can mask the true efficiency and performance of its constituent parts, and therefore gloss over warning signs of trouble to come. As an alternative, here are four simple questions which will allow you to focus on the weaker parts of your operation, with suggestions about actions that could be taken to improve them.

How well is your team working as archaeologists?

Are site records incomplete, missing, inconsistent or confusing? Are excavation and reporting processes being undertaken in a mechanical and poorly-informed manner? Are staff incurious about the aims of the project? Are finds being lost, mislabelled, and mis-identified?

If so, something has gone seriously wrong with the team.

The vital link between day-to-day activities and the overall outcome has been broken. This may be the result of inadequate supervision, laziness or ignorance, or the result of Chinese whispers as practices are passed on to new staff without their rationale.

But it may also come from a misunderstanding about corporate values -- they may have taken to heart senior managers' rants about profitability and the need for speed, without noting the caveats which probably followed about the need to maintain quality and professional standards.

Your response should be to examine the extent and cause of the problem, and to reinforce the company standards. It may be necessary to reconfigure the team structure to disrupt its maverick tendencies; at the very least closer supervision will be required.

How well is your company operating as a business?

Are projects routinely over-running on time and cost? Are core costs and overheads making the company uncompetitive? Are consumables and equipment costs exceeding estimates? Is cash flow poor leaving the company with low reserves?

These symptoms reflect a different kind of problem. Typically they reflect poor liaison between the site team, focused on delivering a fieldwork project to meet the specification, and central management whose main concern is in financial estimating and control.

Alternatively, it may be that projects are not being properly closed, so that the team is moved onto a new project without fully completing reporting, leaving the company unable to submit final invoices.

Your response should be to review outstanding and incomplete projects to decide on priorities. This may mean that new projects have to be delayed while the staff are busy completing old ones. You should also look back over post-project reviews to check whether the costings are being prepared in the light of previous out-turns. An expensive project that runs to budget is better than a bargain one that overspends.

Is legacy work accumulating or decreasing?

Every submarine film features a scene in which it sinks slowly beyond its designed depth and everyone stares intently at the needle on the pressure gauges: the needle flickers down and the crew relaxes. Your shelving is your pressure gauge. If you regularly have to find more shelf space, then something is going wrong. Your process to complete projects and hand over the archives is not working, and as a result you are storing zombie collections of material which require no more analysis.

Your response should be to ensure that there is a nominated person to act as champion for completion, responsible for pushing through the tedious and precise series of operations required (confirm transfer with landowner, prepare archive, liaise with museum). The suggestion that somebody should be expected to spend a significant proportion of their time on this work is often met with a shrug and the comment that there is no money to cover it.

There may be no magic wand to wave, but undeposited archives are not just unwanted liabilities taking up space: the work required to deposit them is an unfulfilled professional commitment which should appear on the company's balance sheet. Even if is not calculated in this way, you should at least maintain a list of material you hold, where it is heading, and which stage it has reached.

Is staff development helping individuals?

Are people being asked about their training and development needs? Is the company ensuring that these are being met? Do staff understand roles within the organisation and have a clear idea about career progression?

It is easy, or at least relatively easy, to devise company policies to support training and staff development, but it is hard to implement them. Training takes time and money, and there are always more pressing things to do. In many organisations, staff will passively wait to be sent on courses of dubious relevance, rather than proactively seeking out opportunities, and for managers this makes life simple.

In the long run this is counter-productive. To meet the challenges of the future your company will need to draw on the current skills of staff, and there will be no time to rapidly acquire them overnight.

Your response should be to explore why policies were not being implemented - were they misunderstood, impractical, unwieldy or poorly highlighted?

Quality systems in archaeology

On an excavation, the need for robust, explicit, and consistent procedures to ensure the successful creation of records as a surrogate for the destroyed physical remains has been recognised ever since 'scientific' excavation became an aspiration. By the late 1960s context recording systems had become standard; in some cases (as with the Central Excavation Unit and Museum of London) these were fully developed with accompanying documentation and training, while in others the context sheet became a self-describing system - purely by providing a series of prompts it required individual excavators to conform to a preconceived schema defining what is measurable or significant. It is sobering to consider exactly how much time has been spent in the last forty years rubbing worms of soil between our fingers, and how useful the resulting descriptions have been. On the other hand, attempts to develop a reflexive archaeology, as Hodder has at Çatalhoyuk, have done more to make the act of recording explicit than suggest alternative approaches.[36]

A context recording system is a good example of a quality assurance system:

- it has a defined output or product, the site record, or the recorded site (there is a slight conceptual difference between the two)
- it has an agreed process to be adopted in creating that product, the shared understanding of the team on the nature and sequence of activities to be undertaken
- it has defined roles and responsibilities within the site hierarchy for different parts of the process
- it has an audit trail allowing tracing of individual contributions

[36] I. Hodder (2000) *Towards Reflexive Method in Archaeology: The Example at Çatalhöyük* Cambridge, McDonald Institute for Archaeological Research and British Institute of Archaeology at Ankara.

- it has quality control procedures including self-checks such as reciprocal entries and cross-references, and checks by others
- it has documentation (of some sort) explaining these elements

Such a system provides a degree of certainty that whatever archaeological deposits or features are encountered, they will be recorded in a suitable way. However, it does nothing to ensure that excavations take place at the right place, at the right time, and are reported in the right way (it is notable that post-excavation arrangements are much less well documented). Therefore there have been several quality management approaches used in archaeology to apply an equivalent level of assurance of outcome.

System	Sponsor	External validation?	Cost[37]	Outline	Focus
PRINCE2[38]	OGC	No[39]	Low	Project management methodology	Product
Lean management	n/a[40]	No	Low	Process redesign method	Customer
Investors In People[41]	IIP	Every 3 years	Medium	Embedding training and staff development in strategy	Staff
ISO 9000[42]	BSI	Every 3	High	Service and	Product

[37] Cost of accreditation/training. Cost of implementation and cascading training will be much greater.

[38] www.prince-officialsite.com

[39] Individual staff can be accredited through training but the use as a system is not.

[40] Lean management and lean thinking are a field of practice without a single controlling body.

[41] www.investorsinpeople.co.uk

[42] www.bsigroup.com

System	Sponsor	External validation?	Cost[37]	Outline	Focus
		years		product standard	
Registered Organisation[43]	IfA	Resubmit 2 years, inspected 6 years	Medium	Policy- and standard-driven	Process
MoRPHE[44]	English Heritage	No	Low	Process methodology (based on PRINCE2)	Process

Some quality systems and related schemes used in UK archaeology

The adoption of this type of system can involve the investment of large amounts of resources in documentation, training and certification, in addition to the recurring costs of implementation and validation. The principal benefit to such a system is not in quality of output (although that should improve), but in quality of service: those commissioning archaeological work will feel much more comfortable in an anxious situation if there is some external indication of competence from their contractor.

[43] www.archaeologists.net/regulation/organisations

[44] www.english-heritage.org.uk/professional/training-and-skills/training-schemes/short-courses/project-management-using-morphe/

Succession planning and career development

In mainstream businesses, effective succession planning is vital to the long-term survival of a company. The more inspirational and exceptional the leader, the harder act they are to follow. Much of the recent difficulties of News International can be characterised as the search for the member of a new generation to replace a unique individual. Such problems are exacerbated by an authoritarian, centralised, and hierarchical style of management, since this will leave more junior staff without experience of decision making and strategic planning.

Archaeological organisations are not immune from these issues, although typically they are small and cohesive enough to survive for some time with no or poor leadership. The big question always arises whether to appoint by promoting from within or externally. There is a strong particularist tendency in archaeology that promotes the idea that local conditions are so unlike those elsewhere that incomers would be unable to cope, and hence a preference for internal candidates. This may be a mistake: if you are appointing somebody for 10 years then a three month acclimatisation period for the right person can be a worthwhile investment. Organisations also can become insular and conservative, and existing staff may not be the best people to promote change and innovation.

But succession planning is rarely a major problem. Archaeological organisations are remarkably static. In the mid to late 1970s the UK profession was creating a professional landscape still recognisable today, with the foundation of SMRs/HERs, council curatorial services, the Welsh trusts, and county units. Each of these have since grown in scope and complexity, but even so it is sobering to note that most of those leading this development were under 30. It is hard to envisage a circumstance today when such responsibility was handed to such youngsters. More sobering still is the thought that this generation has remained in charge of the profession ever since, and is only now reaching retirement. It is hardly surprising, therefore, that the Wild West of rescue archaeology in the early days has solidified into conformity and prescription.

Organisations which see little turnover in senior staff have a lot of strengths, but once serious weakness - the possible frustration, disaffection and loss of their juniors. It is one thing to ask people to accept demanding but unrewarding roles, and another to ask them to accept these roles for a long period. It is therefore beneficial both for the organisation and the staff to ensure that professional development is accommodated within a fixed structure.

If these staff are given opportunities to develop specialist expertise, take on new aspects of the business, and contribute to its strategic direction, then they will find their existing roles fulfilling enough to maintain their commitment. If not, they may move elsewhere, or else reduce their level of engagement to doing just enough to get by.

How to fix a failing project

Identification

So how do you spot a failing project?

Although this question is framed as if it were about the project, it is really about the project team. Some projects will fail because they are too big, too complex, or too under-resourced to achieve their aims despite the best efforts of a fully functioning team. Here the issue is rather: how do you spot when a project threatens to fail even though it should succeed?

Teams are astonishingly flexible and powerful. Humans are by nature social animals; if you put people in a room and give them a task they will become a team. As Big Brother has shown, this may not be a pleasant or wholly positive process: the missing element in the House is leadership. Most failing teams reflect a failure of leadership. There are a lot of warning signs indicating that such failure is imminent.

Site visit to a failing project

- Workers will be focused on specific tasks or areas, reluctant to share equipment or lend staff

What this reflects is a lack of belief in the project as a whole. It isn't necessarily a conscious effort to avoid blame.

- Untidy tool store, site and cabins

People feel too busy or too tired to do anything that isn't their direct responsibility: it's easier just to leave the rubbish on the chair or put the tools away dirty.

- Minor accidents, incorrect or incomplete records

People who feel under pressure won't have their usual air of calm competence.

- Minor sickness, lateness and slowness

One of the prime motivators is feeling that you can't let your team down by not playing your part: so these symptoms reflect that the central identity of the team is weak.

- Poor morale and working relationships

Arguments are to be expected when people work together, but in normal circumstances they would be brief and soon forgotten. One common phenomenon is the development of a strong site v office antipathy where senior managers are seen as the enemy.

It will be apparent that 10 minutes of wandering around the site and talking to a couple of the team will probably be enough to assess these warning signs. It should perhaps be emphasised that although it is often said that conditions like the weather or the nature of the work are responsible for poor morale, this isn't true: an enthused team will cope with an adverse situation positively.

Talking to the team leader (Project Officer/ Project Manager)

The team leader will be aiming to deliver a successful project completed on time. They will normally do their best to avoid admitting to uncertainty.

Phrases such as "I'm not sure...", "I don't know... "and "I can't decide ... " should be taken as red flags that they have reached the point where they are no longer able to take effective decisions. This is usually because they feel swamped by the work to be done and therefore cannot plan ahead.

Another warning phrase is the response, when asked for the likely completion date for a task, is "As long as it takes" or "I can't tell". This is not because people should be able to predict the future accurately, but rather because it's telling you they haven't even got a plan for how it might work out.

When people get to this state they cannot prioritise effectively, but more importantly they cannot direct the team, who will sense whether their leader has a grasp on the project.
Action is needed ... but what?

Houston, we've got a problem

The first step you need to take it to recognise that there is a serious problem. Accept it. If you spend all your time complaining that it isn't going as planned, you will not be in a positive enough state to drive through any improvement.

We are where we are

If saving projects was easy, none would fail. There are losses; some will be irrecoverable; not all outcomes will be achieved. You should be thinking about damage limitation: what are the key outcomes? How could we get there from here?

It is important to remember that whatever you plan, it will probably have to be delivered by the existing team, the team which is already performing poorly.

If they have taken 50% of the time and resources to do only 40% of the work, you have two problems: there's 60% of the work still to do, and at the current rate that will take them 75% of the total time (i.e. more than you've got left).

Do something now

Every week of underperforming creates a bigger problem to be addressed. Minor changes early on may do as much as drastic actions later.

"Do" and "Don't"

Don't tell them it's easy

There is no point saying that you could do it quicker or better, or somebody else could. They are finding it hard; unless you are intending to actually do the work yourself, the fact that you could do it standing on your head is irrelevant.

Don't apportion blame: leave the autopsy until the patient is dead

There is a time and place to work out what went wrong. Surrounded by frazzled staff who have been quietly panicking about how it is going isn't one of them. Save it for the post-project review, which will usually conclude that decisions were made with the best intentions in the circumstances as they appeared at the time.

The review may well show that the problems were caused by a combination of bad research, bad planning, overoptimistic costing, remote management, bad luck and bad weather, as well as project implementation. Often such problems only become obvious at the fieldwork stage, but that doesn't mean that's what caused them.

But even if it is true that the fault lies with the field team, who are no doubt demoralised and unmotivated, telling them this is hardly likely to inspire them.

Don't tidy up

You could clean up the cabins and tool stores and make the site look a bit smarter. But it won't help: although a dirty site is a symptom of a failing team, the obverse isn't true. The problems with the team need to be addressed if anything is going to change.

Don't work overtime and weekends

The extra work done won't compensate for the administrative and logistical problems caused, and productively in core hours will suffer.

Maybe send people on holiday

This will be good for them, and good for the site, since it provides a break which will alter the team dynamics. It's actually a good plan to include a break in projects on purpose: the need to hand over to someone else is a very good discipline.

Maybe replace the field officer

This might seem the obvious solution, but it is fraught with difficulties. For a start, it seems to personalise the issue into a matter of their competence. It will probably irreversibly damage their working relationships in the future. And it will be resented by the staff (paradoxically, this is true even if they have spent the last month complaining about how useless they are), the staff you are hoping to lead forward to success.

Maybe provide more staff or more time

Again this may seem an obvious solution. But throwing more resources into the mix will have little effect unless the fundamental problems are addressed; in no time any new staff will have gone native and be just as unproductive as the rest. And adding a few weeks to the project may be felt to be extending the prison sentence.

Even if this doesn't happen, there's likely to be friction between old and new staff, especially if the new members have been labelled as 'the ones who are coming to sort it out'.

Do make hard decisions

In general, problems arise because people defer hard decisions, rather than because they choose wrong. But archaeologists will be understandably reluctant to depart from accepted methodology. If you are going to abandon stone-by-stone planning, the decision should be made by the senior archaeologist involved, after careful thought. The team may well be reluctant: it is important to explain to them the rationale, not just the outcome.

Do support your field officer

Help them by smoothing any practical issues, listening to their views, respecting their opinions. And make sure you are available and visit site often: long distance management only works when projects are running well.

Do talk to the team

Give them information about the background to the project, what your priorities are, and how they fit in. They should be made to feel part of the company, even if they are only there for a single site.

Do listen to the team

You never know, you might learn something.

What if it's your project?

Don't panic, act

or rather

Don't act, think

Have you really got a problem? It is notoriously difficult to predict how much longer an excavation will take. The best way to visualise the timescale is to think that if you stopped digging now, and all you did was record, sample, and close down the site, how many weeks would it take?

If your project is in any sort of trouble and nearly halfway through, the answer is likely to be "most of the remaining time". Which means that, unless something dramatic changes, you have very limited scope for further excavation if it is to be dealt with properly. And so the answer is "Yes- you *have* really got a problem".

This may be a deeply troubling revelation; on the other hand, you should take some comfort in the fact that maybe you can do something about it.

Am I to blame?

The honest answer is "perhaps", but that's not important right now. It may be that the tasking and resources were so mismatched that equating the two was completely impossible. That's not your fault (unless you did the estimating). Or it may be that you were treating the stratigraphy carefully hoping that there would be time to deal with the whole sequence that way. It may be you were unlucky with the weather. But whatever it was, just leave it. The important thing is how you react now; delivering projects when it's easy is easy; it's the hard stuff that's hard to do.

If at first you don't succeed, review your success criteria

Re-read the spec and brief to remind yourself what the key interests are and what you are committed to delivering. You may find that a problematic recent feature can be ignored, or left *in situ*. Or that full excavation is not expected. There are a lot of clauses about variations and unexpected discoveries which may provide a way out.

Renegotiate

If you can't deliver the narrowly-defined success criteria, you'll need to negotiate with your client and curator. Complete honesty is vital to this process: in most circumstances an extension can be agreed, but if the site still isn't finished then you will be stuck.

Pass the buck

Your managers are paid more than you, because they are responsible for your projects among others. Most of the time this is a hands-off role that involves them in little more than tracking and the occasional flying visit. But their most important role is when things go wrong: they are the cavalry. Call them. Tell them you're stuck and need help. If they understand their job, you will find that it ceases to be your problem and has become a company problem.

Tell your team

Keep your staff informed as the strategy changes, explaining the thinking behind it. Do NOT blame it all on head office or the developer or the curator. You should present it as *your* plan. If you can't do this then you shouldn't be on site any longer: go on holiday. There will inevitably be objections about whether it is proper to depart from conventional archaeological practice. Face them head on.

Don't spread despair

One definition of leadership is "transference of emotion". What emotion will you be transferring to your team? If you spend your time bemoaning the past, criticising your bosses, and doubting whether the work can be finished, they will end up too depressed to work effectively.

The role of the field officer always involves the difficult balancing act of representing the office to the site team and the site to the office staff. This becomes even harder when projects start to go wrong. But don't give in and stay positive.

My indecision is final

Even the best people need to be told what to do. The worst, even more so. You should expect to be asked at regular intervals all through the day, every day, what needs doing next, how, who by. If you're not being asked that doesn't mean that you're safe. It probably means people are choosing themselves, and they are probably unaware of the wider picture. Nothing destroys a team's morale quicker than uncertainty at the centre (even making wrong decisions is better).

If you find yourself saying "I'll have to think about it" more than twice in a day, you need to do some planning. The best solution in the short term is to spend half an hour in the evening, at home in peace and quiet, making a list of the next tasks to follow completion of the current ones. Then if inspiration fails, use the list. All of a sudden it will look like you know what you're doing.

Martin Locock

What is Prince2™ and should I be using it?

These are two separate questions, of course. PRINCE2™ (**Pr**ojects **in C**ontrolled **E**nvironments)[45] was developed as a project management tool in UK government IT applications. It was then rolled out as a generic approach to project implementation, and has been taken up by many public bodies in the local government and HE sectors, as well as in business.

PRINCE2™ provides a structure and terminology to manage a project from initial identification through to completion with clearly defined stages and targets. There is an emphasis on explicit terms of reference and governance through Project Boards, intended to ensure that mission creep is prevented. As such it formalises good practice.

Unfortunately its terminology is precise and counter-intuitive: a clear distinction is made, for example, between a *task* and a *process,* and a *principle* and a *theme*. As a result, PRINCE2™-speak may be unintelligible to outsiders, although some phrases have gained wider currency, including:

- **management by exception:** focus on the things that are going wrong, and leave successful areas alone
- **lessons learned log:** this is where PRINCE2 projects report their mistakes in order to avoid them in future
- **PID:** Project Initiation Document

PRINCE2™ practitioners can gain accredited qualifications; this process is fairly intensive and expensive. Partly as a result, there has developed a distinct field of practice called PINO (Prince In Name Only) projects, where the broad terminology and structure is adopted but day-to-day implementation is less formalised.

[45] www.prince2.org.uk/home/home.asp

It has also been argued that much of the process is excessively time-consuming and the key issue leading to past project failure is in fact lack of clarity and purpose from the client group.

Should I be using it?

The short answer is no, not least because the adoption of PRINCE2™ as a method has to be a decision taken at a corporate level. To implement elements of its process within an individual project is pointless and will almost certainly result in duplication of effort.

Whether organisations should be adopting it is less clear. If they are to do so, they must commit themselves to getting their staff accredited and following through on the paperwork that will result.

In practice, PRINCE2™ works best in organisations whose projects are:

- partnerships between different bodies with equal power
- long-term (2 years +)
- delivered by a third party contractor
- subject to frequent change of approach
- closely defined at the planning stage

This suggests that archaeology is not its most fertile ground.

However, it is worth picking out the key PRINCE2™ principles for what makes a project work:

- define a management structure with clear terms of reference
- define the level of autonomy you are giving the project manager
- have a reporting schedule and distribution list for progress reports
- record changes in plan, with reasons

All projects involve risk

If this is true of something like decorating an office, how much more true of projects where the nature and complexity of the archaeological resource is unknown, and the work is subject to weather conditions and logistical complications. So how can we manage the risk? We can minimise it, by ensuring that we exploit all available information, but we cannot eliminate it. If we expect the unexpected, our best strategy is to empower those on the spot with the authority and resources to respond to the emerging situation, while being ready to provide support when needed.

Manage by stages

Every project in MAP2[46] and the IfA Standards starts with a big meeting of all the specialists who may be involved, from palaeo and flint expert to illustrator and archivist. Luckily, in reality these meetings do not take place, because otherwise people would get even less done, without having any effect on the 90% of projects which do not in fact produce material requiring special consideration. There are planning horizons beyond which the imponderables become so great that time spent planning is not just wasted, it's actually harmful, since it distracts from what *can* be planned for.

Product-led planning

The end results of a project are the archive and reports. Activities which do not contribute to either may well be pointless. Activities which do not lead to report content may also be pointless.

Continuing business justification

Commercial archaeology is a business. Projects which have ceased to contribute positively to the business (especially financially) should be closed down. Projects which have achieved their objectives

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[46] English Heritage's MAP2 (*Management of Archaeological Projects 2nd edition*) has now been superseded by their MoRPHE framework. www.english-heritage.org.uk/professional/training-and-skills/training-schemes/short-courses/project-management-using-morphe/ which is based explicitly on PRINCE2.

should be closed down. It is easy to allow projects to run on to their allotted end-date, but doing so is wasting time and money. Your time and money.

Learn from experience

Archaeological businesses live and die on the quality of their estimation. Yet very few employ a formal process to review projects after the event to see whether the estimation was accurate. It is notorious that some types of project (e.g. desk-top studies and watching briefs) are very difficult to complete to a professional standard within the level of funding usually available. After a few have gone over-budget, maybe the lesson is that prices must rise or that this type of project should be avoided. Was it not Santana who said that those who don't remember the mistakes of the past are condemned to repeat them?[47]

[47] No it wasn't, it was George Santayana.

Why do good Project Officers make bad Project Managers?

In my "Redesigning the pyramid" paper I argued that the role of Project Officer was the hardest job in archaeology, owing to the punishing combination of archaeological, supervisory, administrative, legal, and managerial responsibilities, combined with stress, travel, isolation and weather.[48] That is still true, and therefore the aim of the parent organisation should be provide all possible support to assist them.

You might think that somebody who can cope successfully with the Project Officer role would therefore be well-equipped to take on a managerial role with a significant office-based element to the work. It doesn't seem to work that way: often they find the role unrewarding, difficult, tedious, and even more stressful. Partly this may be because the Project Officer has been impelled upwards by a desire for job security, money or status, rather than a desire to become a manager as such. But partly it may be because being a Project Officer is an apprenticeship that teaches some unhelpful lessons.

The Myers-Briggs personality Type Indicator is a widely-used tool to identify the different approaches that people have towards life in general and work in particular.[49] It has been criticised but remains in use mainly because it is simple and is felt to reflect some real differences within the workforce.[50]

I have devised the following exercise with a similar intent. Below are listed a series of pairs of concepts, and you should choose one from each pair that you prefer on the grounds that it is important or easy or something you handle well.

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[48] Martin Locock "Project management in a changing world: redesigning the pyramid", in M A Cooper, A Firth, J Carman and D Wheatley (eds.) 1995, *Managing Archaeology* (Routledge, London), pp. 208-215 (digital version on 10 simple steps blog).

[49] www.personalitypathways.com/type_inventory.html

[50] skepdic.com/myersb.html

List A	List B
Improvisation	Planning
Pragmatic	Principled
Short-term	Long-term
Completion	Sustainability
Risk tolerant	Risk averse
Innovation	Maintenance
Flexible	Programmed

If you have a background in successful project work, you are likely to have chosen answer A in most or all cases; the B answers sound at best irrelevant and sometimes actively negative. This is a natural result of the tunnel vision that project work encourages: focus on delivering the key targets to the exclusion of all else is (in that context) exactly what is required. But managers are expected to take a broader view: there are times when a project has to take a hit for the benefit of the organisation as a whole.

Improvisational responses may, with their side-effect of exhaustion and panic, deliver successful management, but in the long term (aha!) a more structured and considered planned approach is needed. It is sometimes said that the job of managers is to tell their staff things they don't want to hear; there will be a tension between the managers' priorities and those of others. The conflict between 'site' and 'HQ' that seems an unavoidable part of archaeology reflects this: the Project Officer will want three more days to finish sampling, while being told to close the site so the team can move on to the next site and the invoices can go in.

So part of becoming a manager involves re-orientating your attitudes towards the interests of the organisation as a whole rather than your team and your projects. It is hardly surprising that this takes time: some senior managers never quite get there.

Being positive about business meetings

Archaeologists involved in fieldwork projects spend most of their time thinking about archaeology, and talking about it to other archaeologists. This is, unfortunately, poor training for dealing effectively with non-archaeologists. But meetings are a critical part of the relationship between an archaeological contractor and their client; if done well, they can ensure that the project runs smoothly and any problems are resolved in a sensible and fair manner; if done badly, they can negate all the work on marketing, branding and image and lead to misunderstandings and costly delays.

So it is worth getting them right, and needs non-archaeological skills: there is therefore good reason why office managers will usually handle this part of the work. But eventually any project manager will have to attend a meeting. How they can they ensure that they come away with the right result?

Be Prepared

Print out the agenda and minutes. If you have little time, check the minutes to see whether there were any action points relating to your work: you can be certain that you will be asked about these. Also make sure that you know where the meeting will be held, and how to get there.

If have more time, it is worth looking at the list of attendees in order to work out who they are, and which firm they represent, and to think about whether there is anything you might want to discuss with them.

You should also prepare, preferably in writing, a short account of your progress in terms designed for a non-archaeological audience.

Be On time

It sounds obvious, but you'd be surprised. The people you meet may have no interest in or understanding of your work, may never listen to a word you say or read a report, but they will notice if you are late, destroying all the effort that your company has invested in appearing as an efficient and businesslike contractor.

You should also bear in mind what they will expect to see: if you want to confirm their opinion of archaeologists as bumbling eccentrics this is a good ay to start.

Be Smart

Don't look like an archaeologist. In most professions, status is demarcated by dress codes: important people wear ties. So if you want them to think that you're important, wear a tie. Again, confound their expectations: you want to be treated as an equal.

Be Informed

This development is probably the first time they've had to deal with archaeology. Having an archaeologist there will be an excellent opportunity for them to find out about planning policies, archaeological methodologies, recent legislation, and anything else they can think of (they may well as about fossils and dinosaurs too). So it's best to be able to respond in a coherent way, at least to the more directly relevant questions.

Be Tactful

You may work for a lot of different developers; you may undertake work on adjoining plots for different clients. Although (from your point of view) there is no conflict of interest, the developer may feel that you are not 100% loyal if you spend a lot of time talking about your other work. It is important to remember that you may have been given access to commercially sensitive information (completion date, for example), and you should respect confidences.

Be Interested

Other specialists involved may mention things which are directly relevant (the ecologist may be doing some work on hedgerows; the engineer may be planning geotechnical work). But even if not, it is worth keeping your ears open so that you can understand their role better.

Be Vague

You will probably be asked questions that you cannot answer: "How long until you're finished? How much would it cost to extend the excavation? Can you move to seven-day working?" Don't feel that you have to offer guesses. If it's beyond your expertise or mandate, say so. It's better to say that you'll check back and let them know than to give a misleading or wrong snap response.

Be Efficient

After the meeting, sit down and tidy up your notes, taking special care on anything that relates to your work. Tell the office about anything substantive that you have learned.

What not to say at a client meeting

Scenario:

Your unit's evaluation has revealed well-preserved stratigraphy on the development site; there is a real possibility that the archaeological impact of the proposal will be enough for the application to be refused. So what should you say? Or more to the point, not say?

Well at least we managed to resolve the question of when the Town Ditch was finally filled in.

They don't care. It's not their job to care, and they don't. You're not there to sell archaeology; you're there to advise your clients. Even if you've spent the last ten years worrying about exactly this issue, now is not the time to say so.

Tell you client, instead, that the evaluation has performed its function but has left them with a possible problem.

Perhaps you could get Professor Withington to comment?

Well, yes, if you want them to think that you don't know what you're doing or what you've found. Most developers will at some point have come across a local professor with no understanding of the planning process and an axe to grind (hydrology, bats, electromagnetism) and they will hardly jump for joy at the suggestion.

It is in any case a bad move: the credibility of 'authorities' in a public forum may dissolve under astute questioning ("When did you last consult the HER?" is a good starter for ten), and for all you know he has been writing mad letters to the council since the Thatcher era.

Even if you do think he may have something to say, he should be YOUR advisor, not your clients. If he is advising your clients, what are they paying you for?

The archaeology is too precious: you'll have to re-think.

Sometimes you do have to say this. But under the present framework, it's up to the planners to say this, not you, most of the time. The judgement of whether preservation by record is an appropriate response is always a finely balanced one.

I'm sure you'll get permission

Don't say this unless you really are sure. Your clients are used to the vagaries of the planning process, and ill-advised certainty at this point brings potential liability (they may go around taking up options on leases on the basis that the development will be going ahead).

What you should say

- Provide a forward plan: what's next? Meeting the case officer's a good place to start.
- Look at contingency plans.
- Suggest changes to design to minimise risk and cost.

Above all: be the advisor they want: be clear, well informed, judicial, and open.

Copyright for archaeologists

Copyright is a complex issue, even for specialist lawyers. Fortunately, there is a lot of good advice on copyright, and other intellectual property (trademarks and patents), from The Intellectual Property Office.[51]

How to manage your Intellectual Property Rights issues

Head in the sand

"We don't have any IPR issues because we're just doing research"

"We redraw the OS base maps so we don't have to worry"

"We've never really thought about it"

If you're not worried about IPR then you're not paying attention.

If you are creating or using text, images or data, on paper or electronically, you have IPR issues: maybe you just don't know it yet.

Hope for the best

"Nobody's ever complained"

"It's good advertising for them anyway"

"We don't sell our reports commercially"

"It's out of print"

In many ways this is a worse position than the first one: you sort of know that there is an issue and you shouldn't really be doing what

[51] www.ipo.gov.uk/copy.htm

you are doing, but can't be bothered to do it properly. IPR litigation is a growth industry; rights holders employ teams of lawyers whose sole job is to track down and fine hapless mis-users.

Do you feel lucky? Are you sure?

Some clarity about copyright[52]

"My reports are research so I can include copies of maps"

Wrong. Copyright law changed in 2003 to amend the old phrasing which allowed copying for 'private study or research': it became explicitly limited to non-commercial research.

'Commercial' is a broader term than 'profit-making'. 'Commercial' is in practice synonymous with 'directly or indirectly income-generating'. It is also clear that the purpose at the time the request for a copy is made is what is important, and so some genuinely unforeseen income at a much later date is not relevant to the question. Your intention at the time must be unambiguously non-commercial.

This will mean that non-profit institutions will need to obtain permission for some copying. You will be able to obtain copies of maps for your own use, but if you are paid for putting the report together, by any mechanism, you will need a licence from the copyright holder to reproduce them.

"If it's submitted as part of the planning process the report is in the public domain."

Half wrong. There are two different meanings to the term 'public domain'. There is a general meaning of 'not confidential', 'open to public scrutiny'; this is true, of course. The planning process is a public process, and reports will be available to consult. Even where report commissioners seek to control access, public bodies may well under FOI or the Environmental Information Regulations have to

[52] This is for general information purposes and is not intended to constitute legal or other professional advice. You should seek specific legal advice in relation to any particular matter.

provide access to them. But this is access, to view and read, not to copy. The second meaning, of 'not copyright protected', is a US legal concept which has no direct application in the UK.

"Information wants to be free"

Debatable. Information users certainly want data to be free, but then they would say that. Users are in no position to dictate. The question that has to be asked is whether the information creators want it to be free. They have invested time and resources into creating it; they may feel that, having been paid by someone once, they can release it to the benefit of the world. Or not.

It is interesting to note that the most vociferous advocates of 'free' data are HERs wanting to collect the reports submitted to them into a digital treasure trove, yet they are the ones who are most restrictive about what people can do with their data.

"It's an estate map from the 19th century: it can't be in copyright."

Half right. Old maps probably are out of copyright (although 70 years after the death of the creator might catch a young surveyor's work in the 1880s), unless they were transcribed later (in the 1930s) or were unpublished (in which case they will be protected until 2039). But if they are held in an archive, you will also need permission to reproduce the photographic image of the map, which may still be in copyright. If it has been published since 1945 it may be out of copyright: photographic copyright is even more complicated than usual.

"I bought an old postcard, so I own the copyright."

Wrong. No you don't. It may be out of copyright, but if it's in copyright, having a copy of it confers no reproduction rights on you.

"Crown copyright means it's public."

Wrong. Crown copyright means that its protection runs for 50 years.

"I write the report for my unit. It's my copyright."

Wrong. Copyright belongs in the first instance to the creator. Unless, that is, you were doing the creating as part of your employment, in which case it is automatically transferred to them (good contracts of employment say so explicitly). There is a slight grey area if you created say a popular guidebook in your own time based on data from your day job.

Freelance workers would hold the copyright and would have to explicitly transfer it to the commissioner if they wanted to own it. One unexplored complexity is that copyright duration is determined by the creator's death date, even if they no longer hold the copyright. Good record keeping long into the future is a necessity to allow rights to be managed.

"It may not be my copyright, but I still have moral rights."

Half right. The main moral rights (which are inalienable and held by the creator (only)) are attribution and protection from derogatory treatment. Attribution is the right to be identified as the author; this right must be asserted. Protection from derogatory treatment provides some recourse for uses which are contrary to the creator's wishes.

Moral rights do not arise for material created as part of employment, so in most circumstances this wouldn't apply.

"Joint copyright solves problems."

Wrong. Joint copyright (between several authors or between an author and a publisher) makes problems, because the permission of all of the owners is needed to allow re-use.

"I can use a photo from a book because it's a good advert so people will buy it."

Wrong. It may be a good advert. But nobody appointed you as their agent, and you will not get anywhere by arguing you did it for their benefit, when you should have been asking. Politely. With your chequebook out.

"I've traced off the OS map, but the new map is mine."

Wrong. If it is derived from OS data, it's still theirs. Only if you can demonstrate not only that you could create an equivalent image using no OS data, but actually did so, are you safe.

"OS data is public data: I've paid already in my taxes."

Wrong. The Ordnance Survey is self-funding: its survey work on behalf of the government, and everybody else, is paid for by its licensing and products.

Whose copyright in the first place?

As noted above, copyright belongs to the creator initially, automatically, unless it is being created as part of your employment, in which case it is usually the employer's. So for most commercial archaeologists, it isn't their own personal property.

Things may be complicated by the inclusion of other material (illustrations, maps and photographs) with their own rights owners. And even more complex if the original developer was one of those who require their contractors to assign copyright to them - so that a unit and its staff may have to ask permission to publish their report.

Publishing agreements

The terms on which a publisher agrees to publish a work vary considerably. In commercial scientific publishing, it used to be standard to require authors to sign the copyright over to the publisher (this is now changing significantly as the open access movement[53] has led to pressure to allow authors to keep or share

[53] www.earlham.edu/~peters/fos/overview.htm

copyright), while in archaeology, particularly for one-off volumes, authors were asked only for a licence.

In most cases, until recently, the question was never raised: if there is no signed agreement ceding copyright to the publisher then it would still with the author (or employer or client). It is administratively convenient for publishers to hold copyright, allowing them to republish, sell in other markets, and handle incoming re-print requests without a lot of correspondence. On the other hand, it may mean that authors are (or feel) precluded from re-using their work themselves (in a book or on a website) or granting others the right to re-use it.

Authors faced with a strict demand for assignment of copyright have limited room for manoeuver - it may be completely non-negotiable (or said to be)[54], or the author may be allowed to retain a licence so that they can do stuff in the future.

Economics of IPR

Aside from the question of what you might want to do (or authorise others to do) with your work, there is the question of who makes money out of it. The short answer is, alas, nobody.

Most journals and book series rely on institutional subscriptions from universities around the world as the main market - a few hundred at most. Although the rates may be high, these need to compensate for the high start-up costs for printing and distribution (it is only in the thousands when unit costs drop, being spread out over so many). So most journals do not pay their authors, editors or reviewers for initial publication rights. And they don't make a lot more from selling rights on, either - £50 or £100 for reprint rights.

Relying on archaeological publication fees for your pension is not a good plan. There is one possible route for income, though: the CLA Sticker scheme[55], which collects fees from people who photocopy articles and distribute them to registered authors. Unfortunately, you have to register your publications with them, and

[54] savageminds.org/2007/12/19/an-open-access-case-study/

[55] www.cla.co.uk/licences_available/library/

pay a small fee, to be included, and of the course this is only worthwhile if you expect there to be a fair number of copies made (in which context it is worth pointing out that only twice in my life have I ever met anyone who has said they read one of my articles, let alone copied it, let alone paid a fee).

The archaeological marketplace

In times like these, effective marketing can make all the difference between survival and closure. Does your current strategy deliver business? Or are you wasting time and money?

If you're relying on repeat business from your existing developers, you will starve

There were 4,500 developer-funded reports per year sent to HERs in England before the credit crunch (source: Archaeological Investigations Project)

There were 500,000 planning applications per year (source: Planning Portal)

So, on average, 1 in 100 planning applications leads to archaeological work of some sort. So even if a developer is highly active and submits a lot of applications, they are unlikely to need archaeological assistance more than once in a blue moon.[56]

If you're relying on word-of-mouth you will starve

Developers don't talk to each other very much, and certainly don't share their commercial secrets. They won't recommend you to their competitors. And in any case, given the low incidence of archaeology, it won't be often that someone who has had a problem meets someone who has got one at the moment.

If you're relying on your reputation you will starve

You can't rest on your laurels and wait for work to turn up based on your reputation. The only archaeologists likely to be recognised outside the archaeological community are Time Team (and maybe Bonekickers).

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[56] Environmental Assessments are different: developers for types of development that require these *will* be repeat customers and *will* know about archaeology.

Every project is a first date

You need to make a good first impression. It's no good muddling along and then producing the best report in the world at the end: they won't hang around. But managing that impression is difficult.

What will be noticed

- Price
- Answering emails and phone calls quickly and politely
- Having professional-looking stationery, staff and premises
- Professional and quality accreditation
- Friendliness, enthusiasm and efficiency
- What curators say about you

What won't be noticed

- Academic credibility
- Specialist knowledge
- Previous experience
- What past customers say about you

In many ways, this is depressing, since it means that the qualities we value highest are least effective. But it's probably better to recognise that.

Martin Locock

Commercial archaeology and the ethics of development

Archaeologists have a very strong ethical sense. Despite what Indiana Jones and Bonekickers imply, it's not about the fame or the treasure: it's about the Knowledge. Having signed up to the disinterested service of knowledge, archaeologists are hypercritical of any of their colleagues who appears to be swayed by other concerns.

It is hardly surprising, then, that the development of commercial archaeology has involved some self-analysis, soul-searching and mud-slinging. Especially the mud-slinging: it is slightly bewildering to see the debate about the merits of the IfA as a professional body which seems to judge its performance solely on its ability to police and punish those whose practice falls below the required standard. It is important, granted, but there are other things to consider.

I have commented on the impact of PPG16 in the UK on archaeological attitudes earlier: the present, over-prescriptive, over-curated, arrangements for developer-funded work can be seen as a response to the deep distrust of a situation where financial or other pressure might push excavators into misrepresenting their findings.

> You cannot hope
> to bribe or twist,
> thank God! the
> British journalist
>
> But, seeing what
> the man will do
> unbribed, there's
> no occasion to
>
> *Humbert Wolfe*

Irish archaeology is now in the process of commercialisation, and this has led to similar issues being raised. Maggie Ronayne has published a paper in the journal *Public Archaeology* reflecting on the archaeological response to the M3 motorway and its effect on Tara and other sites.[57]

Her argument can be summarised as: an inadequate supervisory framework for the archaeological investigation, put in place by metaphorically and literally corrupt politicians, and implemented by metaphorically corrupt government archaeologists, led to fieldwork of varying standards by well-meaning individual archaeologists whose results were watered down to ensure that the development proceeded as intended.

Specifically she draws on the experience of her sister, who was a licensee for part of the evaluation (p. 121), who hoped that if enough important archaeology were to be found on the route "it might stop the motorway". Similar statements have been made about the Thornborough Henges, the Rose Theatre, and the A34 Newbury bypass.[58]

They are based on a misconception of the role of the archaeologist in assessing impact. The archaeologist is being asked to determine what the impact might be, by characterising the nature of the archaeological resource affected, and assigning a value of significance to that resource and the level of impact. The conclusion of a study may be (as it was with the M3 initial desk-based assessment) that the proposal would have major impacts on very important archaeological sites.

But that is not to say that the development should proceed. The relative weighting given to archaeology alongside other factors (such as economic benefits, ecology, and employment) is not an archaeological question: it is a question for the wider community, society, or their appointed or elected representatives. Ronayne

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[57] Ronayne, M "The state we're in on the eve of the World Archaeological Congress (WAC): archaeology in Ireland vs corporate takeover", *Public archaeology*, Vol. 7, No. 2, Summer 2008, 114–129 DOI 10.1179/175355308X330016

www.nuigalway.ie/faculties_departments/archaeology/documents/ronayne_wac.pdf

[58] www.friendsofthornborough.org.uk/; www.rosetheatre.org.uk/discover/the-history/

argues that the local community's wishes were ignored: that is a democratic deficit, not an archaeological one.

The question most often arises at the field evaluation stage, when developers ask nervously "Is it important? Nationally important? Will it be Scheduled?": to which the answer is usually "Yes, maybe, no". The news that 20% of existing Scheduled Monuments are at risk suggests that even if the answer to the last question is "Yes" there may be wiggle room.[59] In many ways it would be easier to manage the resource coherently if protection were more draconian: it would certainly be easier to advise clients if the position were clearer. PPG16 started from the point that preservation *in situ* is the preferred option; preservation by record may be an acceptable alternative. This results in the paradoxical situation where mediocre archaeology found on development sites is carefully protected while sites like Stonehenge are dug up by students as part of a media exercise.

It remains the case that the ascription of value is the most important and most contentious part of any evaluation exercise. It is generally poor tactics for a developer to seek to underplay the archaeological value affected, since it calls into question the validity of the evaluation exercise: it is much better to say "yes, it's important, I realise that: this is what I want to do about it". Which is not to say that there aren't silly developers who think that they can override any concerns by shouting loud enough or relying on political pressure. Although there have been attempts to systematise the assignment of value, it remains a highly individual and subjective process; it is common, for example, for 'sexy' archaeology (Roman and Bronze Age) to be scored higher than industrial and recent sites.

It is best for commercial archaeologists to see themselves as barristers for their clients: sometimes you have to tell them to plead guilty.

[59] news.bbc.co.uk/1/hi/uk/7494474.stm

Preservation and ethics

Timothy Darvill has written some interesting papers on the concept of value in heritage management.[60] He distinguished between *Use value* (what we get from using a resource now, by, say, digging it up with some students), *Option value* (what we get from keeping a site for now for possible use later) and *Existence value* (the vague feeling of well-being derived from knowing that something is there, without actually using it [as many people feel about libraries or, perhaps, the Royal Opera House]). What he skirted was the question of how these values affected heritage management practice.

The IfA *Standard and Guidance for Stewardship* says that:

> "Stewardship protects and enhances what is valued in inherited historic assets and places. It responds to the needs and perceptions of people today and seeks to have regard for the needs of those in the future. The stewardship role includes undertaking conservation management tasks, communicating the public value of the heritage, promoting community awareness of the historic environment and encouraging active engagement in protection and enhancement."

This is a longer way of explaining the key planning principle which PPG5 (2010) words as: "A documentary record of our past is not as valuable as retaining the heritage asset" (HE12a), or in the old PPG16, that preservation *in situ* was the preferred option for archaeological sites.

So archaeologists and planners are agreed: sites are best off looked after, not dug up. This can lead to some strange outcomes, where an early 20th century shed in a development site is lovingly

[60] Value systems in archaeology, in M A Cooper, A Firth, J Cartman and D Wheatley (eds), *Managing Archaeology*, 1995 (Routledge, London); Value systems and the archaeological resource, *International Journal of Heritage Studies* **1.1**, 2007.

protected, while Scheduled Ancient Monuments continue to be ploughed (because they have been before, so that's all right) or dug up by students, or washed away.

It's interesting to consider what would happen if restrictions on excavation of SAMs were to be lifted (on the reasonable grounds that in 50 years time they will be underwater or enduring arid conditions anyway), so that archaeological activity could focus on investigating the best-preserved and most-interesting sites rather than the marginal ones. True, we would have to endure the scrutiny of our descendants, just as we criticise the Egyptologists who trashed the pharaoh's tombs, but we could at least say that we found out some useful stuff.

Coping with the crunch: hard times are coming[61]

It isn't yet clear whether we are currently going through an adjustment, a correction, a downturn, or a recession, but what is clear is that the good times are over for development. I want to highlight some of the likely effects of a worsening economic climate on the practice of archaeology in the UK.

Less development means less archaeology

Housing is the first sector to be hit, but that will have a knock-on effect on infrastructure schemes and minerals; a poor economy will reduce the appetite for shop and industrial constructions; government income will fall and so capital projects will be curtailed.

There will be fewer developments, and those that do go ahead will pay much more attention to marginal costs: it may be worthwhile reconfiguring a design to avoid triggering expensive archaeological mitigation works.

'Bonus' aspects of work like educational, display or publication will come under pressure if they are not a core planning requirement. Competition between archaeological contractors will increase, with a focus on price as the determinant.

Developers are exposed

Some will fail. Projects with phased programmes may see later phases stalled or abandoned. If they run out of money, some archaeological contractors won't get paid. Some companies will go bankrupt.

Archaeological employment will get harder

One way or another, a significant proportion of the current archaeological workforce will become surplus to requirements. The job marketplace will be full of people trying to get on board the surviving companies.

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[61] Written 2008.

In general, mobility of employment will increase, and as a result companies will draw back from long-term training and investment in staff development.

Curators will become laxer

When different planning authorities feel that they are competing against their neighbours to attract the few developers with money to invest in the local economy, they will be reluctant to 'put them off' by stringent conditions; the result will be a Dutch auction where L.A.s try to minimise the entry costs.

To summarise: the economic downturn threatens to wipe out many of the advances in commercial archaeological practice, if the profession lets it, and we know how good it is at looking after its interests.

But what can you do? The key first step is to reconsider the extent to which the interests of you and your employer coincide. How likely is it that in five years time, the company will still exists, and you will still be working for it?

How to protect your career

Get accredited. Get round to joining the IfA, or upgrading your membership. Go on accredited training courses. You need to have a portfolio of qualifications and experience that will make sense to other companies. This may mean you have to spend your own money. Do so.

Get noticed. Talk at conferences. Go to conferences and talk to other participants. Write articles for The Archaeologist, CBA Newsletter etc. Join the regional IFA group and go to meetings. This may mean you have to invest your own time. Do so.

Get ready to go. Think about other employers: what would you like your next job to be? Are there loose ends (old projects, publications) that you need to sort out? Update your cv and your CPD log. Get in touch with contacts elsewhere.

Pay attention. Listen out for economic forecasts, business news; check your company's financial statements. If you can jump ship three months before it all goes wrong, you'll be able to choose where you end up. If not, not.

How to protect your company

Prevention is better than cure, and the safest and best way to weather a recession is to ensure that your employer survives intact.

Deliver for your clients. On time, on cost, on quality. At least it won't be your fault if it all goes wrong. Just hope they've got another project coming along soon.

Don't exceed the task. Either by over-performing the spec or by undertaking work in advance of formal instruction. Anything you do that doesn't get paid for is a cost the company will have to bear, if it can.

Be competitive. It's hard to insist on quality if others are charging less, but in the long run, there is only room for one cheap and cheerful bargain contractor. If that isn't going to be you, stick to quality.

Don't be proud. If another contractor is going to win a dig in your own office car park, live with it rather than revise your costing to make sure you do the work. If the work isn't making you money, it's a bad thing to be doing it.

Don't be sentimental. Managers have to sack people. It's their job. Keeping people on without paid work for them to do is a path to certain disaster: the company will fold and everyone will be out of a job.

Reduce waste. Try to minimise machine hire costs, travel, consumables, cabin hire ... the less money spent on these, the more there is for wages.

Hard times economics[62]

Any doubt about the impact of the recession on commercial archaeology was removed by the IFA/FAME reports on *Job Losses in Archaeology*.[63] Depressingly, this news has already led to the re-emergence of rhetoric about cowboy contractors and dodgy freelances. It is sad that archaeologists instinctively think that any organisation that operates more cheaply than them must be transgressing established standards of practice, when these are probably the least threatened area.

It is worth thinking, though, about what a mature commercial archaeology industry would look like. The starting point must surely be that a unit should conduct its main operations within, say, one hour travelling time from its base. It can make no sense in the long term for field teams to commute or live in accommodation: either that becomes very expensive (if those involved are properly compensated), or very demoralising (if they aren't). The logic of 'super units' like Wessex and Oxford is debatable. From the starting point of a unit covering a radius of 30-50 miles, you can work out how much archaeological work can be expected, and therefore how many staff are needed. If the current capacity is more than the work available, the unit is unsustainable even in times of high economic activity.

One question that seems mystifying to many diggers is how one-man-bands (OMBs) and freelances can undercut established units. Maybe they do turn up on site in sparkling new 4x4s and use gold-plated trowels, or maybe they don't.

What the successful ones do is:

- work hard - not 8 hours a day, 10 or 12 (office work gets done in the evenings)
- limit overheads - minimal office staff
- cost carefully

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[62] Written 2009

[63] www.archaeologists.net/profession/recession

- work locally
- know their area well
- don't pay themselves much

There will always be a market for OMBs alongside larger units. OMBs offer personal service and cheapness: to compete, units need to offer something more, in terms of reliability, range of skills, track record, professionalism and scale. Some clients will go for the certainty of outcome of an established unit; others will take a risk. Perhaps the hardest thing for OMBs to handle is contingencies: if a minor watching brief suddenly turns into a Roman cemetery excavation, where can they find a digging and specialist team to deploy in a hurry? Having said that, units might have problems responding too, but since they have more than one project at once there is at least the possibility of switching resources when needed.

The real problem for units faced with a drop in workload is cutting back. The idea that less digging means fewer diggers is one that most managers can grasp. But unless overhead costs are reduced, they will become ever more disproportionate as the volume of work drops.

How to cut overheads

Archaeologists expect admin support, facilities, and management. Hard luck: they may be luxuries.

As turnover drops, the ability to resource secretarial and administrative support shrinks. Because archaeologists don't pay themselves very much, it is often cheaper to get them to do this work. There was a time when the hassle of sending faxes, typing letters and routing phone calls was a distraction for archaeological staff, and it therefore made sense to employ office staff to handle them, but perhaps these days with email and mobile phones that is no longer true. Most units are stuck in a 1980s organisational model of who does what.

One of the problems with project work is that the team involved pays little attention to the wider organisation: it's 'just there'. 'Why aren't there any more context sheets?', people ask, not expecting the answer 'Because you didn't get any more printed.' Tools, PPE, cameras, surveying equipment, vehicles, finds bags, computers: it's all stuff that someone has to resource. It may well be that the stock of material cannot be maintained, and projects may end up having to cost for new purchases instead. This may be wasteful and expensive, but it does have the benefit of forcing managers to consider the full historic cost of their work rather than the incremental costs.

Cutting management costs is hard, partly because this is managers deciding to put themselves out of a job. But it is worth thinking from scratch: how large does an organisation have to be until it can support a chief executive who undertakes no chargeable work? It depends how much they get paid, of course. But most unit are top-heavy with not one but several senior managers. This may have been sustainable in the days of large project volume, but if the volume goes down, it isn't any more. Not that they need to be sacked, but they **do** need to change their work pattern so that they carry out their management tasks in gaps between chargeable work.

Finally, it must be faced that many of the things that units like to do may not be possible: outreach events, open days, conferences may have to be dropped unless they come attached to their own income streams.

The secret of painless downsizing

The secret of painless downsizing is that it is impossible. Even if done well, it is a negative, distracting, unsettling, upsetting and stressful experience, not just for those directly affected but for the whole organisation. Any downsizing will absorb enormous amounts of unproductive time in meetings, paperwork, and gossip. If done badly, it will be all of this, and more, and still fail to solve the problems of the business. So what are they keys to doing it right?

Be open

Everybody involved will feel terrible. Those who suffer will blame you, the organisation, the profession, the economy, themselves. This is not the time to forget politeness, or play favourites. Information should be clear and shared transparently. How you behave can have a determining effect on how those who are made redundant feel about your organisation, and in general.

Planning ahead

Being bounced by a sudden crisis into taking snap decisions about staff is hardly the right approach. Well before things reach that stage, you should be looking at your core business area, at trends in the marketplace, and at your staff's skills. The temptation to keep going and hope for the best should be resisted.

Take the right action

Be as drastic as you need to be. Wishful thinking isn't a business strategy, so you may have to close down entire teams or operations. What you don't want to do is have successive rounds of cuts because you couldn't face them at first.

Keep the right people

Ideally, you should have a forward plan, of how your core business will survive and in due course grow again. This should define what people you need to keep: their value to you now, and in the future, rather than in the past.

Be fair

Last in first out is a clear system: at least people know who is at risk. But it isn't likely to be the best way of deciding who best fits your business needs. Any alternative needs to be fair and transparent: this is not a chance to get rid of the people who have annoyed you at some point in the past. This is hard work, but essential. If moral arguments aren't enough, maybe the prospect of an employment tribunal would help.

Look after your leavers

It's not their fault. You should do everything you can to smooth their transition, to find new jobs, providing references. They will be talking about your organisation wherever they go: what will they be saying?

Bridging the skills gap and rethinking evaluation

The worst of the recession appears to be over, at least for archaeology. The concern now (for the remaining members of the profession) is whether it can cope with a rise in demand for work, needing more staff, and in particular if the lack of specific skills will prevent or delay projects. I don't think it should.

There may be a pool of archaeologists, laid off in summer 2008, who would be available for recruitment. This may prove harder than expected; it is surprising how quickly people realise that archaeology may not in fact be the only way they want to spend their lives. Quite apart from the fact that they can probably earn more for doing less demanding work, the basic level benefits may prove hard to resist - the prospect of long hours in the van to be dropped in on some random site may appeal less to people who've got used to being paid from the moment they walk into the office.

But even so, that leaves a smallish gap. Even if the 600 or so posts which were lost were re-created, there have been 8,000 new graduates in archaeological subjects since September 2008 (based on the figures in the *Profiling the Profession* report). Doing some analysis of the figures for age profile and length of contract, there were 1,000 archaeologists in the age range 25-29 who responded, representing a cohort of about 600/year. (It's a shame that the websites advising would-be archaeologists about degree courses don't point out that 1 in 10 of graduates in normal conditions end up working in the profession.) So any shortfall in available existing diggers could be readily filled by new staff.

Of course, for many years now archaeologists have been unwilling to employ such people, leading to the dilemma that only those with experience will be employed. This makes life easier, since even new staff will be able to work from the start, but obscures the fact that someone somewhere must have provided some training. You hope so, anyway, although the fact that someone has been on lots of sites may not mean they have contributed much or learnt anything. Rather than rely on this informal apprenticeship, an employer would be better served by audited the skills of its new staff, identifying any gaps, and maybe, you know, provide some training. This need not be a series of lectures on the theory of stratigraphy - it could consist of being shown common local pottery types, or how to start a sludge pump.

Although it is hard to extract this directly from the report, it appears that most of these recent graduates working on commercial fieldwork projects up to the age of 29 then move on, either to other roles within archaeology, or leaving the profession. As a result, employers should expect that there will be turnover, so there will be new recruits, so there will be training needs. So plan for them.

But the other side of the concern is the loss of specific specialist skills, such as building survey. How can an organisation deliver a project without the necessary trained specialist staff?

The answer is, the same way they used to, before 41% of staff had masters degrees, before Investors in People, before CPD. If you need someone to record a building, send them out with some drawing stuff and cameras, and tell them to get on with it. Archaeologists used to be good at devising, developing, and refining methodologies for new areas of work - so as soon as the *Hedgerow Regulations 1997* defined the need to determine which hedgerows are historic, projects came in and were done. And desk-based assessments as a formal exercise were created overnight by PPG16- and again, they were done. Not perfectly. But archaeologists are capable flexible people with a strong grasp of recording and reporting. It may be that some silly errors are made, that buildings are misclassified or misunderstood. But a record will be made: possibly a different record, possibly a better record, than one that would have been made by a buildings expert with tunnel vision for a specific feature or type of building.

It is interesting to note that East Lothian Council assume that it would be archaeologists who would be dealing with recording buildings (see their excellent *Historic Building Recording guidance* (2006)),[64] a view that would have been anathema to Conservation Officers in the 1990s who thought architectural historians should be relied upon.

[64] www.eastlothian.gov.uk/downloads/HBRGuidanceFinalDraft2.pdf

And finally, it must be said that a break in continuity, and a return to first principles, might be a good thing. Commercial archaeology before the bubble burst had become a frantic, mechanical process yielding isolated factoids. OASIS now has 4,000 grey literature reports for download.[65] A random example is Wessex Archaeology's report on The Wickets (the report is clear and detailed).[66] A planning condition, a written scheme of investigation, a specification, an evaluation, a report, an archive, to commemorate the fact that trenches were dug and nothing was found. Perhaps it was worthwhile.

But for the planners to require developers to fund the excavation of 6% of the site area on the basis of: residual flints found in the general area (but not the site), residual Roman pottery and medieval found in the general area (but not the site), and the possibility that medieval tenement plots might run back 100m from the High Street (although there are no topographic grounds for expecting they might, or that they would yield significant archaeological remains if they did), seems bizarre.

The report describing this evaluation says "No archaeological research, either desk based or intrusive has previously been undertaken for this Site." Perhaps some map work might have been a simpler and better way to decide on the burgage plot question? Surely this 'dig a hole just in case' mentality should be rethought? How about assessing on some real basis the likelihood that archaeological remains might be affected before swinging into overkill mode?[67]

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[65] archaeologydataservice.ac.uk/archives/view/greylit/index.cfm

[66] www.wessexarch.co.uk/reports/66260/wickets-cherry-orchard-close

[67] I should note that I have no particular issue about or knowledge of this development and its archaeology, but it does seem an exemplar of everybody working very hard to prove that nothing was there, when there seemed few grounds for thinking there would be.

Martin Locock

Curatorial practice after the crunch

They tell us that the recession is over. Over the next few years, the rate of development will increase, and commercial archaeology will be back in business, and even if it doesn't reach the frantic heights of the recent gold rush, curatorial archaeologists will be kept busy (unless the new government decides that heritage is an impediment to economic growth).

There is now a breathing space in which curators have a chance to consider whether any changes in approach are needed. I think the answer is yes, based on how it worked before (excessive documentation, delays in response, inconsistency), but also because of changes that can be foreseen. The next decade will see a revival in construction and its associated archaeological activity at the same time as savage cuts in local government budgets, falling especially heavily on non-statutory functions. It will be a lucky curatorial service that retains its current staff while facing a doubled workload. Something's got to give - but what? An answer which would work would be a shift to light-touch regulation. The Corgi gas servicing scheme had training and accreditation for workers, but very limited inspection of work done. Maybe this is a model that could be considered for archaeology. What would this entail in practice?

Trust the record

In assessing the possible impact of a development on archaeology, it is possible to spend an enormous amount of time wondering "if there's a flint over there, and a flint in that field, surely there must be a henge here?", or "Fred's been fieldwalking round there for years - I wonder if he's got anything in his notebooks?", or "I'll just check the early OS map and the tithe map and the APs to see if anything turns up". You should rely on the HER to tell you where the known archaeology is. If the reason you can't is because the HER is an inadequate record of known archaeology, then you should a) hang your head in shame that after 35 years it still isn't doing what it was supposed to do, and b) invest significant resources in enhancing it.

Focus on important stuff

Every development might affect archaeology, known or unknown. These days, Total Archaeology runs up to the present, so any development will have an affect - removing a fence or a lamp-post. Obviously we cannot hope to save, monitor or record it all. There will be losses. Focus on the major stuff - big holes in important sites.

Rely on Standard Operating Procedure

Don't re-invent the wheel. Almost all of curatorial and contractual archaeology involves applying a standard set of principles and practices to the specific requirements of an individual development. Most of these principles and practices are shared with the rest of the UK archaeology community, so you should think twice before developing local variants, and three times before tailoring them to single projects. There's no shame in saying "do the same as usual".

Trust the contractor

The contractor is being paid to examine the development, to identify the main impacts, think about the archaeological effects, and devise a programme of mitigation. They are being paid to provide a professional service. Let them. If they are accredited organisations or people, they have passed a gatekeeper test and are subject to monitoring by the IfA. You don't need to check whether they have costed for Portaloos or have chosen the right Roman pottery specialist. So don't check. Reserve the right to inspect if you wish, but do so sparingly.

Communicate quickly

Telephones eat time. Writing eats time. Handle all possible communications by email: a one-sentence message confirming a spec can be written in 10 seconds (after allowing 5 minutes to scan through the key archaeological elements). If you get FAQs from developers or planners, put a FAQ page on the website or send it to them.

Don't stretch a point

What also eats up time is arguing about things like landscape character. Preparing an argument takes a long time if you are having to justify a largely arbitrary and personal view. So don't do it. If you have managed to protect the hard archaeology then you've done the most important part of your job. Heritage has become an easy piece of ammo for NIMBYs, leading you into controversies in which the impacts on archaeology are negligible. Any time that you find that you are having to do a lot of research before you can comment, you're probably trying too hard to find something to complain about.

Any claims from curators that they are under-resourced and over-worked should be ignored unless they can claim to have followed the above. Yes, it's hard work, but it's your job, so get on with it.

Management gurus and the 10 simple steps

The last lecture

In 2007, Randy Pausch, a computer scientist, gave a talk about time management, work, life and everything, conscious that he had an inoperable cancer. The lecture has been turned into the book *The Last Lecture* and is also available on Youtube.[68]

Drawing mainly on the work of Stephen Covey and his own experience, he suggests that changing our priorities will make us more effective and happier. The whole thing is worth watching; but the following five points are the key learning for archaeologists.

Mentoring is powerful

We look back fondly on places we did good work. We **love** places where we learned new things. It's not surprising, therefore, that our emotional connection to our alma mater is so powerful. How can we replicate this level of engagement and loyalty in a company?

By replicating the core relationship of mentor and mentee, possibly as a formal structure, but at the very least as a key corporate value. An organisation in which people at every level are clear about their future development paths and can depend on the interest and advice of their superiors is incredibly powerful and resilient, and doesn't even cost much to implement.

Share success with the team

It is inevitable from the shape of archaeological teams that only the senior staff are visible to the wider world of clients, media, and the profession. Some egalitarian managers attempt to overcome this by dragging their staff in to share the limelight, but this is a mistaken approach - what they want is to be respected and valued for the work they have done, not to be given the credit for work they haven't. But make sure that if a project is a success, they know it - share the praise.

Don't skimp on tools and equipment

[68] www.youtube.com/watch?v=ji5_MqicxSo

Almost all the cost of archaeology is the cost of staff time. If someone is idle for an hour because there aren't enough buckets, you've lost the price of a bucket in work. The same goes for computers, screens, everything else: against a year's salary almost all kit costs are trivial. Buy everybody a mobile phone, a GPS, a camera: anything that means they will be able to work smoothly.

Delegate

There are enough management tasks that must reside in a single individual. Everything else should be ruthlessly delegated. As with mentoring, this does not just improve efficiency, it changes the atmosphere of the organisation from one that is static with defined roles, into a dynamic place where people can take on new responsibilities in a supportive environment.

Life's too short

If an archaeological organisation has reached the point where it is mechanically completing projects to a standardised methodology without generating new ideas and perspectives, it is wasting its time, and that of its staff. We should be bold enough to ask fundamental questions, to explore new topics that are thrown up by our work, to develop new methodologies and abandon old ones. Life really is too short to spend it doing work that has no value to you or others.

Lean management

Lean management was defined as a concept in the 1990s by Daniel T. Jones, focused on assembly line industrial processes, but has since developed into a mini-discipline and has been extended into service industries and the public sector. The approach is based on mapping your business processes, identifying waste, delays and bottlenecks, and re-designing your workflow to aim for perfection, building quality in rather than adding it on.

Define value in customer terms

Archaeologists have two customers: the one that pays the bills, their clients, and the one they are answerable to for their conduct, future researchers. Activities that benefit neither should be dropped.

Follow the value stream

Where do we do work that leads to customer value? Mostly at the report stage. Where don't we? At the data collection stage, creating multiply-redundant images and over-detailed records of deposits of little or no significance. Every recording activity carries a cost in creation and subsequent processing - we should be bold enough to tailor our records to the needs of the resource (as we routinely do for watching briefs and test pits).

Reduce waste and failure demand

The culture of quality auditing leads to the erosion of personal responsibility: there's no need for me to check the text because the manager will anyway. And does the manager spend their time trying to reinterpret the site or rewrite the description when they should be auditing the process? Yes. They shouldn't: they should trust and empower the staff who have direct contact with the data.

Reduce inventory

For most projects. the site is excavated and reported fairly quickly as a burst of activity, and then there follows a half-life while specialist reports are commissioned, written, and collated, and eventually tidied up for archive deposition and publication. As a result, archaeological contractors live surrounded by large numbers of nearly-complete projects along with their current work, which isn't good for anybody. Get stuff off the shelves and into museums.

Reduce time

The long timescale also means that cash-flow can be problematic, since there will be fees outstanding until it's all wrapped up. In which case, wrap them up.

Dragon's Den

It's not surprising that archaeologists are, on the whole, pretty poor business people: they don't want to be business people. But an industry that employs thousands of people in hundred of companies, partnerships and freelance operations, turning over £100m a year, is a business: the question is whether we embrace that fact, and see what we can do to improve, or we ignore it and trust to luck.

It is possible to learn a lot about business from Dragon's Den: not so much from the revolutionary rubber hammers, innovative chocolate teapots, and re-engineered sliced bread that hopes to be the best thing since the original sliced bread, but from the pooled practical experience of the entrepreneurs. After a while their questioning starts to form a pattern.

Has it been done before?

Businesses based on innovation need to think about this all the time. Archaeology, less so, at first blush. But of course we build out work on existing knowledge. We should be prepared to invest in analysing results of previous work in the area before firing up the JCB on a new site.

What's the IPR position?

Working with ideas and information intrinsically raises a whole range of issues about ownership, protection and licensing. Specifically, archaeologists generally use, as part of their commercial work, mapping, structured data and images created by others. They should be clear about what copyright they own and what copyright they use.

Turnover is vanity, profit is sanity

It's depressing to see how hard archaeologists work, yet leave to chance whether their businesses produce a surplus. Typically they rely on estimating the likely work and charging accordingly, unaware that they are effectively gambling on the absence of complex archaeology, and gambling with the company's money. Don't do that.

It's the people not the product

Every successful business is built on its staff. If flint-hearted Gordon Gecko clones know this, archaeologists should too.

Are there hidden costs?

Most organisations carry along with them a lot of baggage - time and resources that have been sunk into things which have yet to bear fruit, or uncosted commitments that there is a contractual or moral obligation to fulfil at some point. Maybe archaeologists don't need to tell others about them, but they certainly ought to be aware of them. These loose ends should be reviewed, quantified and allocated to someone to take ownership of, even if they're not actually being progressed.

The Apprentice

The Apprentice is a reality TV entertainment show, with the emphasis on entertainment rather than reality. But it is, nevertheless, instructive to those, like archaeologists, who are isolated from the day-to-day business environment, its culture and values. It may not present a wholly representative picture, but it is still possible to learn a little about how the world seems to those with a business role.

They don't care

Not just about heritage, about anything. Business appears to be one big game, with money the way of keeping score. Someone who is willing to swear blind that their additive-filled product is organic in order to close a sale is unlikely to be trouble by the moral issues raised by not obeying a planning condition.

They know nothing

They stopped reading when they discovered money. They may vaguely recall Elizabeth I, but don't count on it. Archaeologist will need to explain from first principles about Planning Guidance, types of project, curators and contractors, post-excavation, archives and publication. Don't assume that they know what you, or they, should be doing. They don't.

"Project manager" means nothing

There was a time when being a project manager implied a level of experience, competence and responsibility, and to introduce oneself as the archaeological project manager meant something that should be respected. This has been eroded recently, and when fitting a kitchen or washing cars can be 'project managed' then clearly the term has lost much of its meaning.

They wear the uniform

Although no dress code has ever been formalised, grey suits and black dresses have emerged as the uniform of business. These days there is much more tolerance of idiosyncrasies such as weird hair and jewellery, but it is still true that business people will only respect people who dress like them.

Results are what matters

If money is the yardstick applied to success, you can expect an uphill struggle trying to persuade them to spend more than necessary. At a certain level of maturity and seniority, company staff may be willing to consider the soft benefits of feel-good spending, but the default mode is cost minimisation. Expect this.

Afterword

Project managers are the unsung heroes of commercial archaeology. They cope with vague or prescriptive briefs, the weather, the site contractors, health and safety, plant hire, equipment, staffing, welfare facilities, transport, and the clients. In between, they try to understand, investigate and record the archaeology as well as they can under pressures of time and resources, always conscious that a single mistake might destroy a unique part of the archaeological resource. No wonder they worry.

The impetus behind writing this book has been my desire to clear away some of the clutter and confusion of the non-archaeological factors that go with the territory of managing excavation projects, and to leave you better able to focus on the really interesting and hard questions of archaeological interpretation.

If you go back to Exercise 1 (p. 14) you can review what your attitudes were when you started reading: have you changed your mind? It is easy to become immersed in the archaeological process and to lose sight of the need to step back and think. With any luck this book has provided some pointers to areas worth pursuing the next time you find yourself wondering whether you are getting anywhere.

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