

Open Access and the Research Excellence Framework: Strange bedfellows yoked together by HEFCE

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When the Higher Education Funding Council for England ([HEFCE](#)) announced its open access policy last March the news was greeted with great enthusiasm by OA advocates, who view it as a “[game changer](#)” that will ensure all UK research becomes freely available on the Internet. They were especially happy that HEFCE has opted for a [green OA](#) policy, believing that this will provide an essential green component to the UK’s “otherwise one-sided [gold OA](#) policy”. The HEFCE [policy](#) will come into effect on 1st April 2016, but how successful can we expect it to be, and what are the implications of linking open access to the much criticised Research Excellence Framework ([REF](#)) in the way HEFCE has done? These are, after all, strange bedfellows. Might there be better ways of ensuring that research is made open access?

What OA advocates particularly like about the HEFCE policy is that in order to comply researchers will not have to find the money needed to pay to publish in gold OA journals (as they are asked to do with the [OA policy](#) introduced by [Research Councils UK](#) in 2013). Rather, the HEFCE policy states that only those papers that have been deposited in an open repository (*on acceptance*) can be submitted to REF2020, and that it is agnostic on whether researchers opt for green or gold.¹

HEFCE assumes that since no UK academic will want to risk not being submitted to the REF, they will ensure that copies of all their peer-reviewed papers and conference proceedings are made freely available on the Internet, regardless of whether they publish in OA or subscription journals.² As we shall see, not being submitted to the REF can have serious consequences for a researcher’s career.

Will HEFCE’s assumption prove right? At the time it announced its policy the funder cited some [research](#) implying that compliance levels will be very high. As it put it, “Our analysis of a sample of journal articles and conference proceedings submitted to the current REF shows that authors could have achieved 96 per cent compliance with the access requirements in this policy, had the policy been in place for REF2014. The remaining 4 per cent of outputs would have remained eligible for submission to the REF as exceptions.”

Does this mean we can anticipate that 96% of journal articles and conference papers produced by UK researchers will become freely available on the Internet? Not necessarily.

The first point to make is that, as the quote from HEFCE above indicates, the policy has a number of exceptions. We won’t go into the details here, but clearly time will tell how many exceptions researchers claim, and how effective HEFCE proves in policing the legitimacy of these claims in order to meet its 96% target.

¹ The policy [states](#): “to be eligible for submission to the post-2014 REF, authors’ final peer-reviewed manuscripts must have been deposited in an institutional or subject repository on acceptance for publication. Deposited material should be discoverable, and free to read and download, for anyone with an internet connection.”

² Although HEFCE’s is a green policy, for a number of reasons many researchers can nevertheless be expected to comply by means of gold OA (If, for instance, the research was funded by RCUK). The point is that the choice is theirs.

Second, the policy also allows publisher embargoes of up to 12 months for STM papers and 24 months for HSS. As such, many papers can be expected to languish behind paywalls for a period of time — in some cases for up to two years in fact.³

Could is not the same as would

The third point to make is that *could* is not the same as *would*. Even if 96% of the papers produced by researchers submitted to the REF could be made OA it doesn't mean that all of them will be, or that if they were most UK research would be made open access. This point was [made to me](#) last September by [Dagmara Weckowska](#), a lecturer in Business and Innovation at the [University of Sussex](#). "I believe it is feasible that there will be near 100% compliance with the HEFCE policy — nearly all the papers submitted to the REF will be accessible from repositories after an embargo period [green OA] or from publishers under a CC BY licence [gold OA]. However, in my opinion, this does not mean that nearly all papers published by UK scientists will be open access."

Explaining her reasoning, Weckowska pointed out that researchers do not have to submit all their outputs to the REF (just 4 over the 6 year span of the REF). As a consequence, she suggested, they may "strategically choose to make 4-6-? papers open access (green or gold) and keep the other papers behind a paywall."

OA advocates dismiss this as highly unlikely. [Charles Oppenheim](#), for instance, [argues that](#): "Since a researcher has no idea what, at the end of the REF period, will be considered their best four papers (and indeed, the decision will probably not be taken by the researcher, but by some institutional committee), they will want to play safe and make all their outputs OA."

Weckowska nonetheless is sceptical. "Scientists have their ways of judging the quality of a paper (e.g. on the basis of a journal's [Impact Factor](#) [unfortunately] or the quality of a journal's editorial board) and having gone through the last REF exercise researchers are aware of departmental strategies and criteria for a 'REF-able' paper."

For that reason, she says, "I believe that many researchers may develop strategies for identifying REF-able papers and making them open access and leaving other papers behind a paywall, particularly if the process of depositing papers in repositories is time-consuming (e.g. due to complicated repository systems or copyright issues)."

When I put Weckowska's argument to a HEFCE spokesperson he replied, "Yes, our OA policy only applies to outputs submitted to the REF. If researchers do not make their work OA and are not submitted to the REF then there would be no effect on our policy."⁴

However, he added (echoing Oppenheim), "Researchers don't know yet whether they or their work will be submitted so it will make sense to make it OA to be on the safe side. It is not an onerous task for them to deposit their work in a repository — it takes just minutes."

This claim that self-archiving is a quick and easy task is one green OA advocates frequently make. Like HEFCE, they insist that depositing a paper in an institutional repository can be undertaken by authors in minutes — or more precisely [40 minutes per year for a highly active researcher](#).

³ OA advocates argue this does not matter since most repositories include a so-called "[request eprint](#)" button. This allows researchers to request authors to send copies of their papers to them privately. Personally, I am sceptical about this — for reasons better explained in a separate text.

⁴ I am thinking perhaps he meant to say, "If researchers do not make their work OA and are not submitted to the REF our policy will have no effect on them."

More recently, a [survey](#) commissioned by [SPARC Europe](#) and [London Higher](#) estimated that it takes more like 48 minutes per output to deposit works in a repository. However, time is not the main issue here: self-archiving is proving sufficiently complicated that the task is having to be handed off to intermediary librarians trained in copyright and metadata issues, rather than being done by researchers themselves. The use of intermediaries has important cost implications, as we shall see. Moreover, if researchers see it as someone else's responsibility they will surely be less likely to take the initiative, or even perhaps co-operate.

This takes us back to Weckowska's point: for what we have learned is that getting researchers to comply with OA policies is difficult. Both the [Wellcome Trust](#) and the US National Institutes of Health ([NIH](#)), for instance, have struggled with their OA policies, even after introducing sanctions for fundees who fail to comply.⁵ Consequently, nine years after they introduced their OA policies neither funder could claim to have reached compliance levels as high as the 96% figure that HEFCE anticipates. Last April *Nature* [reported](#) that they had achieved levels of, respectively, 69% and 82%. Moreover, these levels are certain to be an overestimate, since neither organisation knows exactly how many papers are generated as a result of the grants they disburse.⁶

What also casts some doubt on these claimed compliance levels is that a good number of researchers appear still to be unaware of any OA conditions attached to their funding — last year, for instance, Nature Publishing Group's "Author Insight Survey" [reported](#) that 17% of Wellcome Trust and 25% of NIH-funded authors were unaware that their grants required their papers to be made open access.

A fourth, and significant, point to make is that only a surprisingly small number of UK researchers are submitted to the REF. As the Higher Education Statistics Agency ([HESA](#)) explained to me, "According to the REF the [FTE](#) of staff submitted for assessment was 52,061. According to the HESA contextual data the FTE of eligible staff was 94,455. This gives a proportion of 55% submitted and 45% not submitted."

To put it another way, nearly half of researchers eligible to be submitted to the REF were not submitted. Why? HEFCE says it does not know. But it is common knowledge that universities routinely exclude faculty members if they believe that including them would impact negatively on a department's REF grade. This decision will inevitably be based on things like whether or not the researcher's works were published in journals with a high Impact Factor and/or by prestigious publishers.⁷

⁵ [Point 12](#) of the NIH FAQ reads, "A grantee's failure to comply with the terms and conditions of award may cause NIH to take one or more enforcement actions, depending on the severity and duration of the non-compliance. NIH will undertake any such action in accordance with applicable statutes, regulations, and policies. NIH generally will afford the grantee an opportunity to correct the deficiencies before taking enforcement action unless public health or welfare concerns require immediate action. However, even if a grantee is taking corrective action, NIH may take proactive action to protect the Federal government's interests, including placing special conditions on awards or precluding the grantee from obtaining future awards for a specified period, or may take action designed to prevent future non-compliance, such as closer monitoring." See [Point 11](#) of the Wellcome Trust's guide.

⁶ A recent [EU Report](#) indicated that the compliance levels of the NIH policy are "difficult to ascertain given that the overall number of articles published as a result of NIH-supported research for this period is unavailable." (page 14).

⁷ REF panels are told not to use impact factors, but it seems that this advice is not always followed. In any case, universities still use impact factors when deciding whether to submit a researcher — see [here](#) for instance.

So nearly half of those eligible to be submitted to the REF are not submitted. Beyond that we also need to consider the number of research-active academics in the UK deemed non-eligible by HEFCE in the first place. HESA estimates the total number of academics in UK HEIs at 194,245. Of these (see below) 140,060 have contracts requiring them to do research (either research only or research in conjunction with teaching). Yet only 94,455 were eligible. This would seem to suggest that only 37% of research-active academics were submitted to the REF last time.

Academic staff by academic employment function 2013/14			
Function	Full-time	Part-time	Total
Teaching only	12475	40100	52575
Teaching and research	77170	17310	94480
Research only	37455	8130	45580
Neither teaching or research	1075	535	1605
Total	128170	66075	194245

In addition, most if not all researchers on teaching-only contracts will also be doing research, if only because failure to do so seriously limits their career prospects. Yet these academics are classified as ineligible to be submitted to the REF. One academic I spoke to on a teaching-only contract reported that he had produced five outputs during the last REF period (three book chapters and two articles), none of which were submitted to the REF because the contract he is on disbars him from being submitted.

If we include those on teaching-only contracts (taking the number of UK academics likely to be doing research to 192,635) then the percentage of UK academics engaged in some form of research who were submitted to the REF would seem to fall to 27%.

Small percentage

Unfortunately, we cannot be categorical here. Even after we have acknowledged that our calculations are somewhat finger in the air, we are confronted with the fact that we are not really comparing like with like — because HEFCE's figures are based on FTEs and HESA's are based on headcount. In addition, the time periods used differ.

As HESA explained to me, "Comparing an FTE to a headcount isn't really possible to do as with a headcount you are simply counting the contracts of staff at each HE provider. As standard we use our contract population which relates to staff who were active on 1st December on an academic year. FTE however is the proportion of a full-time year being undertaken over the course of the reporting period of 1st August to 31st July in an academic year. The FTE is therefore counted using a population of staff who were active during the reporting period, not just on a given snapshot date, and uses the HESA staff contract session population. Since these are using different populations they are not directly comparable."

That said, we can be reasonably confident that 45% of those eligible for the REF were not submitted, since HESA also publishes what it calls its contextual data. As it explained to me, "HESA has published two sets of data about HE staff — [Statistical First Release 209](#) showing the number of staff employed on 1 December 2013 using the [HESA staff contract population](#) — and [Contextual data for](#)

[REF 2014](#), using an FTE calculation intended to match (as nearly as possible) the eligibility criteria for REF.”

The second set of data, HESA adds, is intended to be comparable with the REF FTE data published by HEFCE.

But whatever the exact numbers, and however comparable HEFCE’s figures may or may not be with HESA’s, it is safe to say that the number of individuals submitted to the REF represents just a small percentage of research-active academics employed in UK HEIs. And given the large numbers that are excluded, it is fair to say that those who are submitted are members of an elite. This must surely have implications for the percentage of UK research made open access?

Some will perhaps argue that the vast bulk of research undertaken in the UK is in any case done by this elite group of academics. Another explanation, however, is that HEIs are now sufficiently *au fait* with the REF process that they know how to play it to their advantage — by, for instance, submitting only those academics whose research they expect to attract a high grade, and discarding the rest. This kind of gaming is encouraged by HEFCE in any case, since it only asks for 4 outputs per researcher. Cherry picking is built into the system.

We also know that as the REF deadline approaches “well-published” researchers are routinely [poached](#) from other institutions in order to inflate departmental grades.

What this means, suggests the academic I spoke to on a teaching-only contract, is that the assessment exercise is not really about evaluating the quality of the research being done in a department or university at all. “I think it shows that the REF has as much to do with different forms of projection of power (by funders over institutions and individuals, and by institutions over individuals) as with actually evaluating what research is done in institutions. It depends, of course, on what people really *want* to measure and influence.”

Either way, he added, if the aim was to assess the level and quality of the research being done in any particular department or university everybody would be submitted.

As HEIs improve their ability to game the system we are also seeing “grade inflation”, a point made on his blog in December by the Head of English at the University of Exeter [Andrew McRae](#). As he [put it](#), “My first view of our figures left me with a warm glow — but only until I saw the tables. There are six English departments with grade-point averages over 3.4, which is almost unbelievable.” And in January the *Times Higher* [reported](#) that the results of the last exercise had “revealed a big leap in the proportion of research rated 3* and 4* (“world-leading”), from 54 per cent in 2008 to 76 per cent in 2014.”⁸

Another effect we are seeing is that the elite created by the REF — both of individual researchers, of departments, and of universities — is consolidating over time, another point [made](#) by McRae. In other words, the select club is getting smaller.⁹ Presumably that is why the number of staff submitted to the REF in 2014 was 340 less than in 2008 (52,401).

In passing, we might ask whether it is possible to test whether most UK outputs are produced by the small group of researchers submitted to the REF. To answer this question we might presumably want to ask three further questions. First, how many UK-based researchers are there? Second, how

⁸ The potential absurdities of grading and ranking exercises were revealed when in 2013 the then UK education secretary Michael Gove [said](#) that all UK schools were expected to exceed the national average!

⁹ In January the UK government [sought to quash rumours](#) that funding would be consolidated even further.

many papers are produced in the UK each year? And third, what percentage of the latter are produced by those submitted to the REF?

On the first question, as we noted HESA's figures suggest that there are 192,635 academics in UK HEIs. A [study](#) undertaken by Elsevier for the UK Department for Business, Innovation and Skills (BIS) in 2011, by contrast, estimated that there are 256,124 active researchers in the UK (2009). So we have conflicting answers to our first question.¹⁰

With regard to the second question: Elsevier estimates the number of papers produced in the UK in 2010 was 123,594, a number it said was growing by an average of 2.9% per annum. This suggests that the UK is currently producing around 142,584 papers a year, and that by the time the HEFCE policy goes live in 2016 it will be producing 146,718 papers per annum.

Which brings us to the third question. Elsevier's figures suggest that over the six-year period of the REF nearly 900,000 papers are likely to be published. The [Times Higher](#) reports that there were 191,000 research outputs submitted to the last REF. Superficially this would seem to imply that around 21% of the papers produced in the UK are written by those who are submitted to the REF. Again, however, we cannot be categorical. We do not know, for instance, how many papers those researchers who were submitted to the REF produced beyond their required four outputs.

Further muddying the water, Elsevier's figures on research outputs do not cover monographs, which are an important publication format for humanists. As such, we can assume that many of these are submitted to the REF.¹¹

Finally, Elsevier's assessment of the number of papers produced in the UK is inevitably an underestimate, since the tools available for locating published papers — e.g. [Web of Science](#), [Scopus](#) and [Google Scholar](#) — do not identify everything. As PLOS' [Cameron Neylon explained](#) last year, "There is no comprehensive public database of research outputs".

All of that said it seems highly unlikely that the vast majority of papers produced in the UK are written by the elite group submitted to the REF.

Cameron's point about the lack of a comprehensive database of research outputs is important for another reason: it tells us that effective and accurate OA policy compliance monitoring is currently not possible. As he [says](#), "In many cases there are no mechanisms to monitor [open access policy] implementation at all."¹² As such, we might be tempted to agree with Weckowska that the HEFCE policy is unlikely to see all research produced in UK HEIs made OA, let alone all UK research. Either way, the elitism inherent to the REF process would seem problematic, as we shall discuss.

¹⁰ Clearly Elsevier was counting in a different way, perhaps including some researchers who work in industry. But if we are interested in the UK's total output (and how much is likely to be made OA as a result of the HEFCE policy) Elsevier's figures might seem more relevant. On the other hand, HEFCE's policy relates only to publicly-funded research.

¹¹ The HEFCE policy does not include monographs. But the funder did commission a [report](#) on open access and monographs. Amongst other things, this concluded that "If a book is published with a well-regarded press, whether a major university press or a high-reputation commercial publishing house, that would seem undoubtedly to help its cause". In other words, [notes](#) Martin Eve, the report assumes that "Publisher brand is a dominating factor in the assessment of publication quality."

¹² JISC has, however, been tasked with [developing the tools to make it possible](#).

It is no surprise therefore that funders are having to accept that [the complexities](#)¹³ of managing OA policies means that even compulsory policies are unlikely to achieve OA as quickly and easily as most assumed. And for this reason perhaps we are seeing a new emphasis on the need to engineer a cultural change in academia, and an acknowledgement that this will take time.

As Higher Education Policy Adviser at HEFCE [Ben Johnson put it](#) in October: “I think that the culture of academia needs to change, to make ‘doing OA’ as obvious and prevalent as doing ethical research, with the same community pressures, rewards and sanctions. I think this is achievable, and the REF policy certainly helps, but it may well take some time for OA to become fully embedded as the norm.”¹⁴

So the key question becomes that of how UK funders and HEIs can ensure that this cultural change takes place. And in considering this question we are tempted to suggest that HEFCE will at some point have to concede that sanctions are not the best solution.

If that is right then the HEFCE policy is problematic — because the REF process has little or nothing to do with rewards, but a great deal to do with sanctions and punishment. As such, the HEFCE policy could turn researchers away from open access rather than towards it. For this reason amongst others we might want to question the advisability of linking OA to the REF.

In addition, we should note that the principles inherent to the OA movement are those of sharing and egalitarianism, not elitism and sanctions. A quick scan of the seminal [Budapest Open Access Initiative](#) text demonstrates this. The goal of open access, it states, is to, “share the learning of the rich with the poor and the poor with the rich, make this literature as useful as it can be, and lay the foundation for uniting humanity in a common intellectual conversation and quest for knowledge.” OA advocates have also long argued that open access is a [moral issue](#). How can the elitism of the REF be considered compatible with the idealism of open access?

For a sense of just how antithetical the REF is to the inclusiveness that OA advocates espouse let’s explore the kind of things that can happen to those who are excluded from it.

Culture of exclusion, elitism and punishment

University departments who fail to obtain what is deemed to be an adequate [grade](#) in the REF not only face the threat of reduced funding, but of [closure](#). For their part, individual researchers who fail to be submitted to the REF may be subjected to severe punishment, and even the loss of their job.

As the *Times Higher* [explained](#) last December: “With both funding and prestige hanging on the results [of the REF], the implications for institutions and individual academics are significant. Indeed, according to more than 1,800 academics who have so far responded to the 2015 *Times Higher Education* Best University Workplace Survey, almost a quarter (23 per cent) believe the REF results could lead to redundancies in their department. Among the 448 academics who identify as working at Russell Group institutions, this figure increases to 25 per cent.”

A year earlier, in October 2013, *The Times Higher* [reported](#) on a survey undertaken by the University and College Union ([UCU](#)) which revealed that “More than 10 per cent of academics at eight UK universities have been told that failure to meet their institution’s expectations on producing work for the research excellence framework will lead to redundancy”.

¹³ David Crotty refers to it as “[The Coming Storm](#)”.

¹⁴ See also Johnson’s recent tweet [here](#), the sentiment of which appears to be incompatible with the HEFCE policy.

Or as one scholar [put it](#), anyone who is not submitted to the REF “is marked for assisted dying.”

Clearly this is not conducive to a happy working environment. Last December *The Guardian* [painted a gloomy picture](#) of the fear and oppression the REF has created in UK universities: “[A]part from job losses, critics say the REF has affected the culture in universities, creating divisive hierarchies within departments and fuelling bullying. ‘REF exclusion of a number of staff, myself included, has created a group of academic staff who are second-class citizens in the department,’ one academic told the survey. ‘This leads to being assigned low-status, time-consuming admin, and to being treated disrespectfully by some [“first-class”] colleagues’.”

And with gaming of the REF now routine bright young researchers are being pulled into the politics of research assessment and exploited as a result. This point was made to me by [Eleanor Dickey](#), professor of Classics at Reading University: “The way the REF works is that a department is evaluated on the research produced by everyone they submit who is employed on a particular date. What government research money is provided for the next 5-6 years is allocated on the basis of that evaluation. In order to be submitted, an academic has to have four good pieces of research published in the last 5-6 years, and the people who are not submitted are ones whose institutions felt that they did not have four good items.”

To address any perceived shortfall in the number of REF-able faculty, Dickey added, universities hire in young researchers on short-term contracts. So, for instance, “if a department has 7 permanent members, 5 of whom have enough research to submit and 2 of whom don’t they can get a good score by not submitting the 2 who don’t and hiring a few more short-term staff with good publications.”¹⁵

As soon as the REF date has passed universities let go the short-term staff they have hired, and “hire in their place other short-term staff on teaching-only contracts; these people can be ruthlessly exploited and overworked with teaching because research isn’t part of their job. Since they are doing most of the teaching, the permanent staff have more time to publish and can be submitted to the next REF. Come the next REF the teaching-only temporary people are let go and people with publications are hired in their place.”

The brutal economics behind all this, explains Dickey, are actually quite simple: it is cheaper to do this than have longer-term contracts that allow time for research. “This is very hard on the people who are always losing their jobs and having to move around, plus it makes the REF results less meaningful: the department can say that it engages in research-led teaching because it gets great REF results, but the people doing the teaching have nothing to do with those REF results.”

Dickey is sufficiently concerned about this kind of exploitation that last year she launched a [petition](#) protesting against the use of short-term contracts.¹⁶

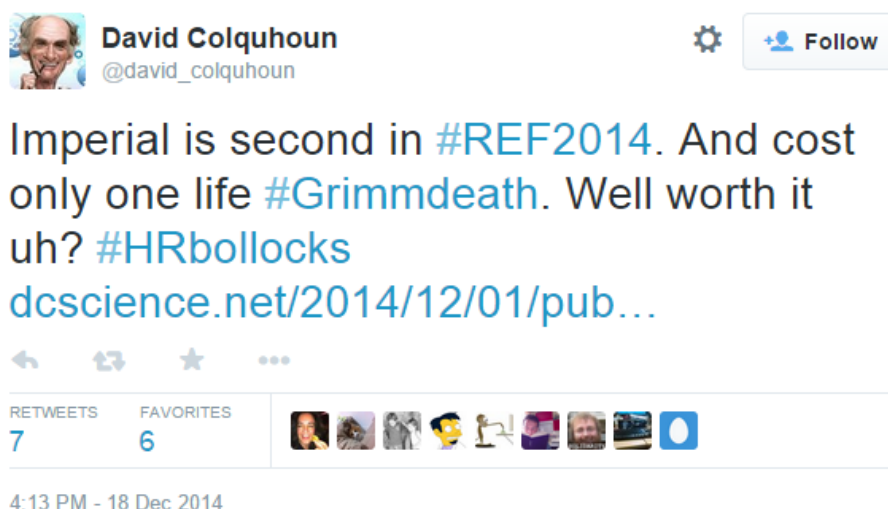
However, as we have indicated, it is not just the young who have become victims of this harsh regime. Mature and well regarded researchers can also find themselves targeted and harried by the new breed of university managers that has emerged to police the REF. Indeed, some believe that REF-generated managerial bullying has played a part in at least one death. Last September, for

¹⁵ This allegation was made about [Cardiff University](#) in 2013 for instance. See also [here](#).

¹⁶ That the petition attracted so few signatures is instructive.

instance, professor of toxicology at Imperial College [Stefan Grimm](#) was found dead after being harassed by his university managers. His colleagues [believe](#) that he killed himself as a result of this.¹⁷

Emeritus professor of pharmacology at University College London [David Colquhoun](#) has written about this on a number of occasions (e.g. [here](#)), and last December he made a direct connection between the REF and Grimm's death in the [tweet](#) below.



But what makes this culture of fear and exclusion all the more reprehensible, argue critics, is that the REF doesn't even do what it claims to do: maximise the use of public money by ensuring the production of excellent research. In reality, [says](#) Colquhoun, the REF (previously called the [Research Assessment Exercise](#), or RAE) tends to lower the quality of UK research by encouraging "short-termism, intellectual shallowness, guest authorships and even dishonesty". It is, he says, "a plague of our age" but a process "loved by politicians, 'human resources' people and university managers."

Colquhoun is no lone voice. [Derek Sayer](#), professor of history at Lancaster University, is another critic. The REF, he [says](#) is simply "not fit for purpose". It costs too much, he argues, it discourages risky, innovative research in favour of safer bets, and it creates "enormous divisiveness and negative impact on staff morale at the level of individual universities".

Moreover, Sayer adds, its claim to be a peer reviewed process is simply not true. "[T]he REF falls very far short of international peer reviewing standards in other academic contexts like publication, research funding, or promotions."

He explains: "The 36 REF disciplinary subpanels that assess outputs rely entirely on in-house assessment, by panellists drawn overwhelmingly from British universities. On some panels just one assessor may read each output. While panellists are undoubtedly eminent in their disciplines, they often lack the specialist expertise to evaluate many of the outputs falling under their remit — a problem compounded by a reduction in the number of panels from 67 in the RAE to 36 in this year's REF."

¹⁷ This has not been confirmed however. In early December Imperial's student newspaper Felix Online [reported](#) that a West London Coroner's District had adjourned an inquest into Grimm's death on October 8th. When at the time of writing I called the Coroner's office I was told that no date had yet been set for the inquest to reopen. Only after an inquest has taken place is the exact cause of death made public.

The claim is, therefore, that the REF is not even organised in a way that permits adequate evaluation of research quality. Sayer adds: “panellists do not have the time to do a proper job anyway. One RAE panellist told *Times Higher Education* that it would require ‘two years’ full-time work, while doing nothing else’ to read the 1,200 journal articles he had been allocated.”¹⁸

Commenting on the RAE (the previous name for the REF) Colquhoun [has said](#): “The problem is not so much the RAE itself ... but rather it is the effect that the RAE has had on university managers, who try to shape the whole university in their misperception about its methods. It is another example of [Goodhart’s law](#). The problem arises when people with little understanding of scholarship, or of statistics, attempt to measure numerically things that cannot be so measured.”

Given the many criticisms of the REF we might want to ask whether OA advocates really want open access to be associated with it. Not only does it fail to do what it claims, but it creates a culture of exclusion, elitism and punishment. This certainly makes open access and the REF very strange bedfellows.

Measuring the immeasurable?

But Colquhoun’s point about measurability raises a bigger issue: leaving aside the failings of the REF is it even possible to measure the quality of research? Could it be that the REF, or any grading and ranking system that tries to assess the value of research, is doomed to failure? Is it a case of trying to measure the immeasurable?

This question is regularly asked, but I am not aware that it has ever been satisfactorily answered. Writing on his blog last year professor of structural biology at Imperial College [Stephen Curry said](#): “it is hard to measure the value of public spending on research. As shown in classic studies like those of [Salter and Martin](#) or the Royal Society [The Scientific Century](#) report, this is in large part because the benefits are multi-dimensional and hard to locate with precision.”

Curry addresses this issue in terms of whether it is possible to assess if public money being invested in research is being well spent, but I think we are asking the same question: is it ever *possible* to assess the quality of a particular piece of research, and therefore of the researcher who produced it? Doubtless history will always be able to make a judgement, but many believe that it is not generally possible to do so within the timeframe of, say, the REF. “[M]ost ground-breaking work is often not recognised as such at the time,” argues assistant professor of information studies at the University of Ottawa [Heather Morrison](#). “[Mendel’s](#) work sat on the shelves for decades. [Kuhn’s](#) work on the structure of scientific revolutions is well known throughout the world and was often cited shortly after publication, but few (besides Kuhn) know of the work of [Ludwig Fleck](#) that inspired Kuhn. Six copies of his work on the genesis of scientific ideas, in German, sat gathering dust on shelves in US academic libraries for decades before Kuhn happened upon one of them.”

Let’s put that question aside for the moment and explore further the background and implications of the REF. While critics are surely right to question its processes and its ultimate value we need to see it in the broader context of some fundamental changes taking place in UK HEIs. In doing so we might also want to question whether the REF can really be said to be implicated in the death of Grimm. As Colquhoun points out, Grimm had a [good publication record](#)¹⁹, and that was not the reason why his managers targeted him anyway. Rather, he attracted their unwelcome attention because he had

¹⁸ Clearly, panellists must therefore rely heavily on the Impact Factor and the prestige of the publishers used by the researchers they are assessing.

¹⁹ Specifically, he had [published](#) over 70 papers covering cell signalling and anti-cancer genes in high-impact journals during his career, alongside two books and several review articles.

made several unsuccessful attempts to obtain funding — as [pointed out](#) by the *Times Higher* in December. In light of this failure Grimm was told that he was “struggling to fulfil the metrics” of a professorial post, which requires bringing in an “attributable share” of £200,000 pounds a year in research income. For this failure he was to be put on “informal review”.

This is important because it draws our attention to the fact that the REF is symptomatic of a larger process of change that UK universities are going through, as they come under increasing pressure from government to behave like for-profit businesses. With this objective in mind, in 1998 the [tuition fee](#) was introduced. And in 2010 the fee was [controversially](#) increased, when the cap was removed.

We might therefore want to suggest that the real purpose of the RAE (first introduced in 1986) and the REF that replaced it (in 2008) has been to acclimatise the academic community to “market forces”. As such, the REF needs to be viewed as a component part of a root and branch revolution taking place in the UK’s research and education environment. And as that revolution unfolds expectations of researchers’ duties and responsibilities are changing and becoming more demanding. Today, for instance, it is no longer sufficient to belong to a department with a 4* REF ranking. To retain their jobs professors must also bring in regular external funding. At the same time, many are finding that their teaching loads are being increased

Nevertheless, the REF remains key, not just because it is an effective way for managers to exert power over faculty, but because UK HEIs are desperate to achieve or maintain a high rank in the [REF tables](#) for prestige and branding purposes.

It was this new harsh environment that last year saw internationally-regarded historian [Marina Warner](#) (DBE, FBA FRSL) pushed²⁰ into resigning her post at Essex University. Writing about her experience in the *London Review of Books*, Warner [explained](#) how she had suddenly been given a teaching “workload allocation” that conflicted with a number of research activities she had previously agreed with university authorities.²¹ When she demurred she was “asked to take a year’s unpaid leave instead, so that my research could still be counted [towards the REF]”. In retrospect, Warner confessed, she had failed to appreciate the significance of hearing the new [Vice-Chancellor](#) say “aloud but to nobody in particular: ‘These REF stars — they don’t earn their keep’.”²²

What this tells us is that being submitted to the REF merely gets a researcher a seat at the table today. To keep that seat they are expected to do more and more each year. UK HEIs now expect researchers not only to generate a constant stream of publications, but a constant stream of cash too. In effect, they are being asked to find someone other than the university to pay their salary (along with the salary of any research assistants they have).²³ This means they have to behave more like entrepreneurs organising continuous funding rounds than researchers working in a lab.²⁴ And

²⁰ “I felt I had been pushed”, [wrote](#) Warner.

²¹ Including a prestigious [All Souls fellowship](#) at Oxford.

²² She added, “I thought Forster’s remark odd at the time, but let it go. It is now widely known – but I did not know it then – that the rankings of research, even if much improved, will bring universities less money this time round than last.”

²³ One researcher likened this to the way individual hair stylists rent a chair in a hairdressers. But the difference, of course, is that these stylists are self-employed, whereas researchers are legally employed by the university that now expects them to find someone else to pay their salary.

²⁴ When the Labour Part announced recently that it [hoped](#) to reduce tuition fees from £9,000 to £6,000 if elected in May instead of applauding the move, UK VCs [complained](#) that it would lead to “cuts to universities that would damage the economy, affect the quality of students’ education, and set back work on widening access to higher education”. This demonstrates how thoroughly universities have absorbed the neoliberal mind-set.

like entrepreneurs, they have to present a “business plan” in order to get each round of funding. And a key part of that business plan is evidence that they are being published in high impact journals and/or with prestigious publishers.

In short, the pressure on researchers is increasing year by year, while becoming more diffuse. And the REF continues to sit at the heart of this process, even though it has become clear that it fails to do what it claims. It is no surprise therefore that bullying and harassment by university managers is growing apace. Colquhoun has drawn attention to a number of other victims of bullying on his blog. There is also a [blog](#) wholly dedicated to the topic of bullying in higher education.

Contrast and contradictions

The regime change we are seeing doubtless owes much to the growing pressure on government finances. But this pressure is itself in part a consequence of the strong market orientation of the UK government’s [neoliberal](#) agenda, and the concomitant [hollowing out](#) of government. In this new regime the REF is not about rewarding academics for producing excellent research, but a stick with which to beat then into ever greater “productivity” — as though universities were industrial factories and academics were blue collar workers on an assembly line. It has also spawned an audit culture in which researchers are constantly monitored and policed by increasingly demanding overseers.

So where does open access fit into this brave new world?

One answer would seem to be that linking open access to the REF holds out the promise of allowing UK universities to ratchet up the bureaucratic scrutiny that academics are now subject to, not least because it provides a whole new justification for micromanaging them — to the point with a compulsory open access policy where every piece of work done will be traced, tracked, graded and ranked. This is inherent in HEFCE’s insistence that all outputs are deposited in an institutional repository. (Regardless of whether it has been published in a gold OA journal, and so already freely available on the Internet).

There is a problematic contradiction between the aspirations of the OA movement and the way in which OA is about to be appropriated by university managers. As the academic on a teaching-only contract put it to me, the REF today is about “the projection of power”. This is certainly not the vision of open access that OA advocates sold the world.

Another answer to our question is that the UK government has decided that making research freely available will (as HEFCE [puts it](#)) “drive economic growth”. This was [the message](#) former Science Minister [David Willetts](#) gave to the Publishers Association in 2012, and the message inherent in his frequent claims that the UK would become a leader in open access under his watch. Here too there would seem to be a problematic contradiction: the goal of open access, we were told, was to enable scientists to share their research more effectively with one another, not about monetising it through commercial exploitation.²⁵ It was this contradiction that professor of ancient history at the University of Cambridge [Robin Osborne](#) tried to draw attention to in his much-criticised 2013 essay “[Why open access makes no sense](#)”. As he [put it](#) to me when I interviewed him:

The one thing that most amuses me about the indignant responses to my piece is the assumption that my last paragraph was saying that you needed a PhD in ancient history to understand what I write. The point was simply about the contrast between a government

²⁵ This is not to suggest that research should not be commercially exploited. The problem is that the UK government behaves as if that were the only purpose of research.

that makes people pay for their post-18 education and a government that makes researchers provide their technical research to everyone free of charge.”

Osborne’s point was either not well expressed, or simply misunderstood by OA advocates, which is perhaps why in speaking to me in December 2013 he said, “If I had a regret it is that I did not entitle the article “Why compelling Open Access makes no sense”.

What has become clearer since then is that the UK government is bent on capturing open access for its own ends. Today the goal is not just to commodify higher education but to commodify the research produced in HEIs too,²⁶ in the expectation that this will save the British economy. So the contrast Osborne referred to is not a contradiction between the government’s decision to charge tuition fees while making research freely available, but a contradiction between the government’s view of the purpose of open access and the view promulgated by OA advocates.²⁷

We are bound therefore to ask: In lobbying for and applauding the HEFCE policy have OA advocates unwittingly facilitated a development that they will come to regret? Have they, for instance helped advance a governmental agenda that will not only make their lives more difficult, and further oppress them, but one that could also threaten a value long held to be sacrosanct in academia — academic freedom?

Why does the UK government’s strategy for higher education threaten academic freedom? Because, it is argued, making universities subject to market forces inevitably has that effect. As director of [Amherst College Press](#), [Mark Edington](#) has [written](#), “for centuries colleges and universities have carefully built systems for protecting scholars from the vicissitudes of market forces; this is at least one of the things we mean when we speak about ‘academic freedom’ and the purposes of tenure.”

As previously noted, the OA movement has always advocated for open access in terms of co-operation, inclusiveness and equity. The problem raised by the HEFCE policy is that the REF is antithetical to this ethos, as is the governmental agenda that informs it. What the REF promotes is not equitable sharing or academic freedom, but the pressurising and sweating of researchers to increase productivity, for almost exclusively economic reasons. And as a result of the HEFCE policy, researchers will be subjected to greater scrutiny and bureaucracy — within a culture of fear and exclusion. How can the OA ethos fit comfortably with this?²⁸

The University of Cape Town’s [Laura Czerniewicz](#) (and OA advocate) [drew attention](#) to this tension on her blog last year, pointing out that the mainstreaming of open access has seen it undergo a dramatic shift “from being the vision of idealists who believed (and still believe) in fair and equal

²⁶ The assumption is that this research will be commodified not by those who produced it, but by external commercial organisations.

²⁷ The same dilemma is faced by advocates for open data, as delineated by [Jo Bates](#), a lecturer in information politics and policy at the University of Sheffield. Writing on the Democratic Audit blog she [said](#), “by making the core of the [Open Government Data] agenda a focus on the transparency of public spending data, the government were also able to use OGD to help bolster a broader public discourse that framed public spending as wasteful and unaccountable, and thus pave the way for the implementation of a policy of long term austerity. Beyond these political ends, policy makers also saw Open Government Data as a means to leverage policies aimed at the further marketisation of public services and the deepening financialisation of climate instability.”

²⁸ As one researcher has [put it](#) in the context of gold open access, “I’d like to ask: open access publishing is frequently discussed in very idealistic terms, with lofty goals for the future. But is it so egalitarian? If you lack funding, for instance if you are early in your career – not coincidentally the point where open access to your work might be extremely beneficial – there seems to be a clear message: open access is not for you. Finding a broader audience for your publication might be unattainable, as is your hope of sharing knowledge with all.”

access to knowledge production and dissemination to the language of bureaucracy as new policies quickly transformed great intentions into a mass of mind-numbing regulations.”

Contradictions aside, linking open access to the punitive REF process will surely increase researcher antagonism towards OA. And even if the HEFCE policy does, as Johnson expects, play some part in creating a culture in which open access comes to be viewed as the norm, tying it to the REF seems more likely to lengthen the time it takes to achieve that culture rather than accelerate it.

We might also want to wonder about the costs of the UK’s approach, both in terms of what we might call the scholarly/scientific costs, and in terms of the financial costs.

Counting the cost

We noted that the *raison d’être* of the REF is to maximise the use of public money by ensuring the production of excellent research. And we suggested that, in practice, it often fails to do this and indeed can have the opposite effect. In this context, consider the following two comments made by academics.

First, when I asked a Classics professor about a book she had published that recently won two prestigious international prizes, she said: “That book represents 25 years of research and concentrated thought. The tragedy is that in the world of the REF I can no longer afford to devote that much time to a subject.”

Second, in 2013 Peter Higgs, the British physicist who gave his name to the [Higgs boson](#), [suggested](#) to *The Guardian* that no university would employ him in today’s academic system, because he would not be considered “productive” enough.

Fortunately, he added, the university authorities decided to take the view that he “might get a Nobel Prize²⁹ — and if he doesn’t we can always get rid of him”.³⁰

And if the REF encourages (to quote Colquhoun) intellectually shallow and even dishonest research should we not question the value of tying open access to it? Might we not rather want to suggest that research like this is probably better kept behind a paywall than made freely available to the public?

What about the financial costs of the compulsory approach to open access being taken in the UK? The bad news here is that managing and policing OA policies is an expensive business. The costs already being incurred by UK HEIs just to comply with the RCUK policy are proving somewhat higher than either OA advocates or funders anticipated. This is important not least because the more money spent on administration the less money is available to do research, or hire researchers.

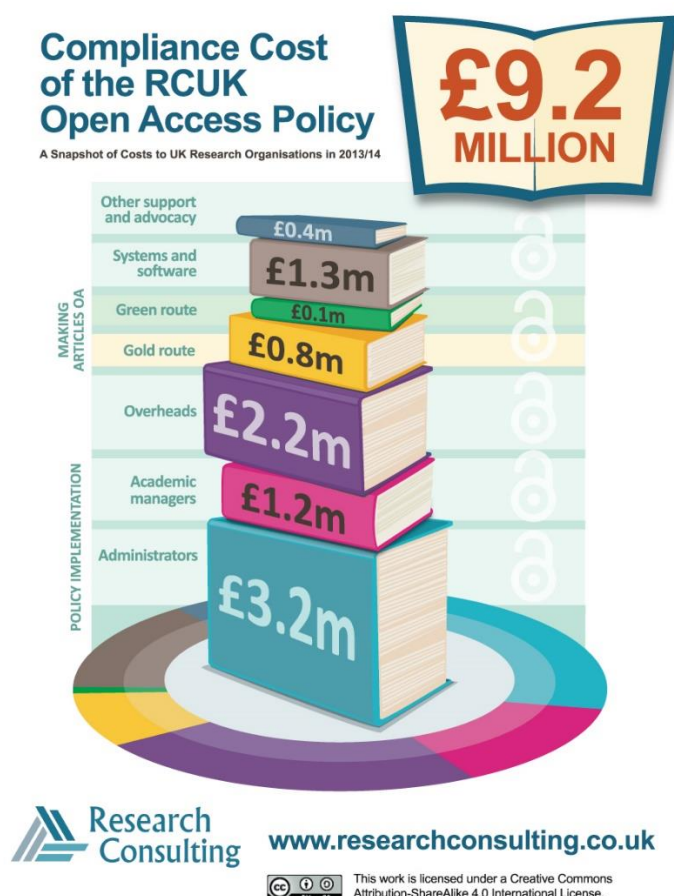
Concern about the cost implications surfaced at the end of last year, when universities were confronted with the difficult task of producing their RCUK compliance reports.³¹ It was in response to

²⁹ In 2013 Higgs was [awarded](#) a Nobel Prize in Physics, “for the theoretical discovery of a mechanism that contributes to our understanding of the origin of mass of subatomic particles, and which recently was confirmed through the discovery of the predicted fundamental particle, by the ATLAS and CMS experiments at CERN’s Large Hadron Collider.”

³⁰ Fortunately for Higgs he is now [safely retired](#), although Edinburgh University keeps a [web page](#) dedicated to his achievement.

³¹ Difficult not least because they have no way of checking compliance, as Neylon noted: “There is no comprehensive public database of research outputs”.

this concern that the SPARC Europe/London Higher [study](#) was undertaken. Its conclusion: the costs of managing the RCUK policy alone during 2013/2014 were £9.2 million. “The time spent on increasing open access to research within UK research organisations in 2013/14,” the SPARC report notes, “is equivalent to more than 110 full-time equivalent staff members.”



We cannot yet know what the HEFCE policy will add to this bill as it does not come into force until next year. However, the SPARC report estimates that it costs £33 per item to deposit research papers in a repository. This suggests that the costs of depositing just the 191,000 outputs of the 52,061 researchers submitted to the last REF would have been £6,303,000.³² If all 146,718 papers that Elsevier estimates will be produced in the UK next year were to be deposited the cost would be £4,841,694 per annum — just for archiving papers, remember, not producing or publishing them.

It also turns out that administrative costs account for a surprisingly large proportion of the money spent on implementing a compulsory OA policy. That is, the costs of paying managers, administrators, compliance officers, librarians etc., and all the overheads that go with that. The SPARC report estimated that administrative costs represented 45% of the total that HEIs spent on OA during 2013/2014.

If we add APC costs to the 2013/14 figure it increases by another £11 million — giving a total of £20 million in new costs. In other words, the RCUK policy has added £20 million a year to the existing UK bill for scholarly communication. Currently, of course, the bulk of these costs are journal subscriptions³³ (around £175 million a year).³⁴ However, to get a full picture we would need to add

³² Some of the outputs, of course, would be books, which are currently not covered by the HEFCE policy.

³³ This of course means that HEIs now pay both APCs and subscriptions — a phenomenon known as “double dipping”. While JISC has begun to negotiate offset arrangements with some publishers to reduce this, it seems

whatever it ends up costing to manage and police the HEFCE policy to this. That there will be further new costs should not be doubted: HEFCE has already [announced](#) that it is funding the development of a new shared service to support compliance with its policy. The costs were not disclosed, but we can be confident that this is just the beginning, as universities confront the difficulties inherent in having to comply not just with the HEFCE and RCUK policies, but a growing number of other funder policies (including the [NIHR](#), [Wellcome Trust](#), [Cancer Research UK](#), the [European Research Council](#), the [EU's Horizon 2020](#) etc.)³⁵ And once OA becomes an integral part of the REF, we might want to add the [£59 million](#) it costs to manage that to the bill. (Although one academic has [calculated](#) the real cost of the REF at nearly £1.2 billion).

To put these costs in context, HEFCE currently distributes around [£1.6 billion](#) per annum³⁶ the majority of which is distributed on the basis of the REF results. (RCUK provides around [£3 billion](#) a year).

All in all, the UK's attempt to create an open research culture by compulsion looks set to be pretty expensive, and with no guarantee of success. We have to wonder if this is money well spent. Moreover, these new costs come at a time when the HE budget faces the possibility of further cuts in the post-election spending review.

Symbolic capital

They also come at a time when it is widely agreed that the REF has become too expensive, too time-consuming and too unwieldy. For this reason HEFCE has been [looking at](#) how metrics could be used in the REF process (see also [here](#)), including altmetrics.³⁷

Metrics, however, are controversial in their own right, not least because there is no reason to assume that they are any better at assessing the quality of research than the panel-based system used by the REF. As Morrison says, whether one's research is widely read, cited, discussed etc. in the short term is generally determined not by its intrinsic value, but "by such factors as whether one is working within the prevailing paradigm or not." In other words, research quality is often determined as much by fashion as by intrinsic value or usefulness.³⁸

It is worth recalling that the most common use of metrics today is the Impact Factor, or IF — a system based on counting citations to articles in a particular journal. The IF is responsible for the

unlikely that double payment will be eradicated. The deal JISC negotiated with Taylor & Frances, for instance, still seems likely to see [25%](#) of double dipping costs remain (at best). See also David Prosser's comments [here](#). As well as Eve's [response](#) to Elsevier's [claim](#) that the concept of double dipping is meaningless.

³⁴ This is based on a conservative estimate of increases since 2010/11, when SCONUL statistics show [expenditure on serials was £160m](#).

³⁵ The plethora of mandates might be expected to increase the likelihood that most UK research will be made OA. But if we are correct to argue that there is an elite in UK HEIs, and this elite gets all the money and perks, these mandates could all apply to the same small set of UK researchers and outputs that are submitted to the REF. In other words, a single paper is likely to be subject to a number of different OA policies, further increasing compliance costs.

³⁶ *The Guardian* talks of a £2 billion pot.

³⁷ [Altmetrics](#) certainly cannot claim to measure quality. As [Ernesto Priego](#), Lecturer in Library Science at the Centre for Information Science, City University London points out, they "cannot and should not be used to assess either impact or 'excellence'." Certainly altmetrics will be of interest to authors, but funding and tenure decisions should not be made on the bases of such data.

³⁸ In addition, papers can be referenced and cited not for positive reasons, but for negative ones.

creation of the highly controversial “hierarchy of journals”.³⁹ It has also led to a situation in which the brand or prestige (measured to a great extent by its IF) of a journal is treated as a measure of the value of individual papers published in it (and thus of individual authors).

Due to the inherent absurdity of trying to judge the quality of a sweet (a research paper) by its wrapper (the journal in which the paper is published), it is no surprise that the IF has become sufficiently controversial that two years ago critics launched the San Francisco Declaration on Research Assessment ([DORA](#)). This calls for an end to the practice of correlating the journal impact factor to the merits of a specific scientist’s contributions.

As we have noted, the IF/brand of the journal in which a paper is published nevertheless continues to be widely used for assessing researchers, even for REF selection purposes. However, the point we need to make here is that those who advocate for the use of metric systems to assess researchers are making the same assumptions as those inherent in the way the REF is used to assess researchers and those inherent to the impact factor. That is, they assume a) that it is possible to measure the quality/value of research in the short term and, b) that you can therefore legitimately grade and rank researchers and reward or punish them accordingly.

As we have argued, both assumptions are highly questionable, and doubtless erroneous. Of course, it is no surprise that HEIs and governments want to grade and rank researchers, since it allows them to apportion finite resources in a way that appears objective. Unfortunately, neither the REF nor metric approaches appear able to do this in an accurate or fair way, let alone in an objective way.

So while metrics may offer a cheaper way of grading and ranking researchers than REF panels, there must be serious doubts as to whether they would be any more accurate or reliable at assessing the quality of research. And like the REF, metrics have the effect of monetising research. Or as [Martin Eve](#), lecturer in English at University of Lincoln (and OA advocate) has [put it](#), metrics are “a quantification of a symbolic capital that maps onto material capital.”

In practice this means that grading and ranking systems like the REF, the IF and other metrics like the [h-index](#),⁴⁰ encourage academics to view their research as a token currency able to buy promotion, tenure, grants, or just continued employment etc.⁴¹ Essentially, the goal shifts from producing excellent research, to generating what a commercial organisation might refer to as [cash cows](#). And since there are far more losers than winners this grading and ranking creates elites — 4* research, 4* departments, 4* universities, and 4* researchers.

And as we have seen, the deepening market orientation of UK universities means that researchers now have to acquire not just symbolic capital but real capital — in the shape of research grants.⁴² Indeed, for many professors the ability to acquire external funding has become a prerequisite for continued employment.

³⁹ When the IF was devised it was intended only to help librarians decide what journals to subscribe to. But it was subsequently adopted by universities and funders as a metric for the quality of the articles published in a journal, and therefore of individual authors. This, of course, is nonsense.

⁴⁰ A recent study attempting to predict REF grades using the h-index failed, with one of the paper’s authors [concluding](#), “Managers would get more accurate predictions by tossing dice.” Make what you will of that.

⁴¹ In talking about the drive to publish in high impact journals Ivan Oransky, founder of the blog [Retraction Watch](#), [talks in terms of](#) the “currency of the realm”.

⁴² [Sir Fergus Millar pointed to](#) the counter-intuitive consequence of making researchers compete for grants in the way they have to in the UK now in a letter to *The Times* in 2013, “in the modern British university, it is not that funding is sought in order to carry out research, but that research projects are formulated in order to get funding. I am not joking when I say that a physics lecturer called Einstein, who just thought about the Universe, would risk being sacked because he brought in no grants.”

Moreover, since those who are successful at acquiring symbolic and/or real capital gain power and influence as a result, the likelihood that this broken system will be fixed is low. This point was recently made by professor of developmental neuropsychology at Oxford University [Dorothy Bishop](#). Writing in the *Times Higher* in January, Bishop pointed out that the elite created by the grading and ranking systems that now dominate academia is inevitably a conservative one, one more often focused on self-preservation than on producing excellent research.

As she [put it](#), “The system of valuing high-impact publications and expensive grants has rewarded those who achieve these goals, and who have a vested interest in perpetuating the status quo. In effect, we may be driving out the very people we need to retain: those who are interested in science as an end in itself, rather than as a way of achieving personal advancement.”

Importantly, due to the many flaws in grading and ranking systems like the REF they cannot even claim to create meritocratic elites. Rather, they create self-perpetuating elites. What we see today in UK HEIs, therefore, is a class system in which the majority are powerless second class citizens with little or no power and dispensable at the drop of a hat. In addition, as McRae points out, the elite is getting smaller over time. Essentially, the rich are getting richer — in a way analogous to the growing wealth divide that has emerged around the world in recent years, a world in which [the 85 richest people are as wealthy as the poorest half of the world](#). Such, it seems, are the fruits of neoliberalism.

How does it feel to be a second-class citizens in a UK university? In an email message timed to be delivered after his death, Grimm said of Imperial College: “This is not a university anymore but a business with very few up in the hierarchy ... profiteering and the rest of us are milked for money.”

Elsewhere, Warner has [described](#) the brave new world that has descended on Essex University in this way: “What is happening at Essex reflects on the one hand the general distortions required to turn a university into a for-profit business – one advantageous to administrators and punitive to teachers and scholars – and on the other reveals a particular, local interpretation of the national policy. The Senate and councils of a university like Essex, and most of the academics who are elected by colleagues to govern, have been caught unawares by their new masters, their methods and their assertion of power. Perhaps they/we are culpable of dozziness.”

And as Warner points out, although they contribute little or nothing to the value produced in universities, the administrators are to a great extent immune from the punitive regime that they oversee. Their salaries are generally higher than the academics they police, and their job security greater.

In passing, we should note that the increasing elitism we have described is not unique to the UK; it is discernible in a growing number of countries, and regions today. Writing recently in *Nature*, for instance, [Colin Macilwain says](#) of science funding in the EU: “[Horizon 2020](#) will mainly finance countries and regions that are already doing well, but it will not do much for the other half of Europe, which has steadily weakening research and innovation capacities. This conflicts with a central mission of the EU Framework programmes, of which Horizon 2020 is the eighth version”.⁴³ [i.e. to develop closer, deeper ties across Europe’s diverse research community].

On the international stage the growing obsession with grading and ranking routinely excludes researchers in the developing world, not least because the IF-created hierarchy of journals, combined with ingrained bias on the part of the predominantly Northern-based editorial boards,

⁴³ Horizon 2020 also has an open access [policy](#) attached to it, a policy some green OA advocates have [likened](#) to the HEFCE policy.

makes it extremely difficult for those in the Global South to get published in prestigious (high IF) journals. Open access promised to level the playing field.⁴⁴ But while it may allow those in the Global South to read more research produced in the North than previously, the use of article-processing charges by OA publishers will make it even more difficult for them to publish their own research, since they don't have access to the necessary funds to pay them.⁴⁵ They will become passive consumers of third-party research unable to pay to publish their own.⁴⁶

If the goal of grading and ranking systems like the REF is to produce more and better research then creating ever smaller elites seems irrational, especially if these elites are often able to attain and maintain their privileged position less by producing excellent research, more by being better able to play the system.

And given the inability of the REF to live up to its own claims, would it not make more sense to spread research funds evenly around UK HEIs?⁴⁷ Or even perhaps to prioritise the non-elite in order to give them a leg up? This thought appears to have occurred to Eve in December, when he [tweeted](#) the following:



Quite apart from the inherent injustice of the growing elitism we see in academia today, it is a massive waste of talent and human resources. Moreover, given the increasingly complex nature of science and scholarship, effective research demands more and more collaboration, not more competition. Certainly the competitive environment we see in UK universities today is antithetical to the ethos of open access. In fact, it is the very opposite of what the OA movement promised — a more equitable research environment and a fairer scholarly communication system. Eve's suggestion would certainly be more in the spirit of open access than is the REF today.

⁴⁴ In his book [The Access Principle, The Case for Open Access to Research and Scholarship](#), John Willinsky quotes [Helen Longino](#), 'The exclusion of women and members of certain racial minorities from scientific education and the scientific professions constitutes not only a social injustice but a cognitive failing. Similarly, the automatic devaluation in Europe and North America of science from elsewhere constitutes a cognitive failing.' We are saying that it is far from clear that open access will address this problem.

⁴⁵ Publishers argue that this is not a problem because they offer waivers for those in the Global South. This is not a solution — as Raghavendra Gadagkar [pointed out](#) in 2008.

⁴⁶ Indeed, it is not only those in the developing world who could be locked out of the publication process. See [here](#) and [here](#) for instance.

⁴⁷ By for instance simply apportioning it in line with the number of researchers.

Excellence vs. quality

Our argument then is that the grading and ranking inherent to the REF (and to metrics-based systems like the IF and h-index) has become a widespread problem in academia — not least because the stated goal of such systems is invariably undermined by the gaming that the process they use immediately attracts (What Colquhoun calls Goodhart's Law). And in the case of the REF, instead of incentivising the production of better research it tends to have the opposite effect, while creating an unhealthy elitism in the process, and this is antithetical to the ethos of open access.

This grading and ranking also tends to give rise to a degree of hypocrisy, since it quickly becomes apparent that whatever system is being used is failing to do what it claims. Such hypocrisy (or perhaps self-blindness?) is underlined by the increasing use of terms like “excellence” (as in Research *Excellence* Framework). That at least is the conclusion I reached after reading a 2013 [paper](#) by Hebe Vessuri, Jean-Claude Guédon, and Ana María Cetto called *Excellence or quality? Impact of the current competition regime on science and scientific publishing in Latin America and its implications for development*.

Vessuri *et al* argue that the term excellence (a word, they say, whose meaning is pretty slippery) has been silently substituted for quality. “Nowadays, the whole of science is dominated by a relentless quest for excellence, i.e. a generalised race that seeks to identify the best scientists by counting citations in a particular way or another. Mistakenly presented as a synonym for quality, the quest for excellence dominates the scientific enterprise through and through.”

They add that, “instead of evaluating whether a piece of work satisfies a certain threshold of scientific know-how or not, rankings were introduced, ostensibly to identify the best rather than the good.”

This paper primarily targets the Impact Factor and other citation-based indicators, and the focus is mainly on the way in which these end up excluding the developing world. But the problem it highlights is now widespread. Moreover, as we have suggested, such grading and ranking systems, including the REF, appear to be trying to measure the immeasurable.

To make their point Vessuri *et al* ask us to imagine a country in which it is decided to improve the level of its citizens by promoting physical activities. Imagine further, they say, “that only intense competition is used to achieve this goal: the process relentlessly selects (including promoting and financing) the best, but it leaves the overwhelming majority behind. Such a policy will undoubtedly improve a country's standing in the Olympics, but the general health level of the population will not significantly improve. In fact, it may even decrease because most people, quickly left out of the competitive process, would lose all incentive to exercise.”

In the context of seeking to encourage excellent research, they add, advocates of these systems forget that science “works mainly with a very long tail of ‘good’ scientists. As work-horses of the labs, they produce the results and the observations that can then be synthesised by the best among them. They are the foot soldiers of, in Kuhn's words, ‘normal science’. And science needs them.”

Grading and ranking systems work well enough for the scholars and scientists who profit from them but, as Vessuri *et al* point out, the price paid is that, “the general quality of entire scientific communities may stagnate, or even decrease (loss of vocations, loss of interest, etc.). Such a competition regime also works against creativity and *originality* (so crucial for genuine scientific progress): when competing with each other, most scientists will prudently select currently fashionable themes and ideas in the hope of publishing more easily. Finally, those who compete

without owning what it takes to win may even seek unacceptable shortcuts: currently, cheating and plagiarising are on the rise and a [recent study](#) disquietingly suggests that the higher the impact factor of a journal, the larger the number of tainted articles that have to be withdrawn.”

Vessuri *et al* contrast excellence with quality. However, we might want to add a few more adjectives to the pot, including, say, utility, usefulness and value.⁴⁸ We might want to ask, for instance, whether a particular science paper is likely to make a valuable contribution to improving food security or human health, or mitigating climate change. Likewise, we might want to enquire whether a humanities paper is likely to improve our understanding of how a particular social or political system, or model of citizenship, could help reduce conflict, war and poverty — by, for instance, encouraging inclusion rather than exclusion. Whatever the quality of a piece of research, do we not also want it to help us understand the world and/or contribute new knowledge to enable us to improve it?⁴⁹ After all, a piece of research could have great technical quality, but offer nothing beyond that technical quality.⁵⁰

However, as noted, it is far from clear that the REF, or any grading and ranking system currently in use in academia, can generally make the kind of judgements described above, certainly in the short term.

The second part of our argument is that given these problems linking OA to the grading and ranking, star based elite system of the REF is both contradictory and counter-intuitive. Not just because the REF is antithetical to the ethos of OA, but because its punitive approach is more likely to alienate researchers from open access than win them round.

OA advocates will doubtless say that the pressure academics are under to earn stars, get cited and obtain grants was very high before OA came along, and would remain very high even if OA disappeared. To argue that OA is in any way responsible for the negative effects of the REF is therefore to scapegoat it.

That, of course, is our point, and it is a point to stress — by being linked to the REF open access will be scapegoated. It will be found guilty by association, and its image tarnished as a result. As such, it would be likely to delay rather than hasten the cultural change that both HEFCE and the OA movement say they want to see. Weckowska could therefore be proved right: the HEFCE OA policy could see researchers comply, but in only the most minimal way. And if that were to happen it would somewhat defeat the purpose of making the policy compulsory. At the same time the not

⁴⁸ The word quality is also often challenged. In a [tweet](#) earlier this year Neylon commented, “‘quality’ has become code word for (not) admitting we don’t know what we’re talking about”. This would seem to be further reminder that trying to measure the value of research is probably to try to measure the immeasurable.

⁴⁹ The last REF included 20% for research that contributes to “demonstrable economic and social impacts”. There must be a suspicion here that this is about commercialising research, not addressing the issues raised here. Those who welcome it make [statements](#) like, “If successful, this will generate much needed jobs at regional scale, along with revenue that will help institutes weather public cuts.” It is hard not to see this as expecting universities to make up for the fact that central government is withdrawing funding. It also [turns out](#) that many universities were unable to come up with enough good case studies. This led to a new kind of game. As Tim Horne, head of the Research Excellence Unit at Coventry University [told](#) the *Times Higher*, what happened was what “everybody knew would happen anyway: that you would get institutions determining the number of people going into a submission by the number of case studies they had that they thought were good”. In other words, more selection and cherry picking.

⁵⁰ If this appears too end-focused, bear in mind that even abstract maths papers can help in the development of real world practical solutions — e.g. [topology](#) has applications in [biology](#), [computer science](#), and [robotics](#).

inconsiderable costs associated with compulsory OA policies look set to siphon off money that could otherwise be used to do more and better research.

OA advocates applauded HEFCE for introducing a green OA policy because they believe it will act as a counter balance to the [widely-criticised](#) gold OA policy introduced by RCUK. As one put it to me, “REF added the essential green component to the UK’s otherwise one-sided gold policy. If the UK OA policy had remained one-sidedly gold, it would have been far more expensive and worse for academic freedom than a gold policy complemented by a (well-executed) green policy.”

But that assumes HEFCE’s policy won’t simply add to these expenses. So rather than maximising the use of taxpayers’ money it could end up wasting more of it. It also assumes the HEFCE policy will not have the negative effects we have suggested it might. When I put this to the OA advocate cited above he responded, “I’m in no position to say whether the green mandate within the REF is well-implemented. But if it’s not, it’s a pity, partly for alienating academics who might otherwise support OA, and partly for missing a beautiful opportunity to make OA faster and less expensive.”

But lest anyone misunderstand: we are not saying that open access policies are a bad thing. They are an excellent thing. Nor are we saying that *compulsory* policies are necessarily a bad thing. They doubtless have a role to play. We are, however, saying that linking open access to the REF seems unwise for the reasons discussed. We might also want to ask if a voluntary approach is not sometimes preferable, in the form perhaps of an OA policy introduced and managed at the institutional level.

A better way?

OA advocates have always argued that open access is [inevitable and optimal](#). If that is right, then the issue is not *whether* open access will become a reality, but *how* and *when* it will. This goes to the question we raised earlier: how does one create an open culture? Is it better to try and win hearts and minds by engaging people in a debate about open access, telling them about the benefits, and creating incentives to encourage them to embrace it? Or is it better to try and force them to embrace it by tying it to punitive regimes that end up excluding the majority, and micro-managing everyone to a standstill.

Green OA advocates argue that since most researchers are uninterested in open access, or even directly antagonist towards it, compulsory policies are essential. But might it simply be that achieving open access will inevitably take longer than OA advocates would like? Would it not be better to settle for gradual progress by obtaining the consent and buy-in of researchers than to inflict on them a harsh compulsory policy in the hope that doing so will deliver open access more quickly, while taking the risk that you may just make researchers resent open access and so drag their feet?

Either way, it may be that funders and institutions will eventually have to accept that trying to beat researchers into submission is not the best way of changing academic culture, and certainly not the most cost-effective way. One OA advocate rephrased the question posed above in this way: “Is progress at a certain pace with more consent and less resistance better or worse than progress at a faster pace with less consent and more resistance?” He did not, however, answer the question.

So let’s try to explore the question a little. First, let’s note that the HEFCE policy is modelled on the [much-celebrated OA policy](#) introduced in 2007 at the University of Liège. This was the first policy to make deposit in an institutional repository a requirement for researcher evaluation. Whether the consequences of not complying with the University of Liège policy are as harsh as those implicit in

the HEFCE policy is not clear. What is clear is that there is an alternative approach — the so-called [Harvard-style OA policy](#).

What is distinctive about the Harvard model is that it is not a top-down edict thrust upon researchers, but one that faculty agree to and vote on themselves. What also distinguishes it is that it includes rights retention — whereby faculty assert ownership over the copyright in their research outputs (while simultaneously granting their institutions the right to post copies of them in the institutional repository). Importantly, this prevents publishers from acquiring legal control over the papers they publish, and so (in principle) prevents them from requiring the long self-archiving embargoes that HEFCE has felt obliged to accept.

The policy introduced by Harvard's Faculty of Arts & Sciences (FAS) [expresses the last point](#) in this way. "Each Faculty member grants to the President and Fellows of Harvard College permission to make available his or her scholarly articles and to exercise the copyright in those articles. In legal terms, the permission granted by each Faculty member is a nonexclusive, irrevocable, paid-up, worldwide license to exercise any and all rights under copyright relating to each of his or her scholarly articles, in any medium, and to authorize others to do the same, provided that the articles are not sold for a profit."

The Harvard-style policy is less aggressive towards researchers than many other OA policies, and *much less* aggressive than the HEFCE policy. Adoption is by faculty vote, not administrative diktat, and its use of rights retention means that authors (or their institutions) are not put in the position of having to go cap in hand to publishers to seek permission to self-archive papers. This has the added benefit of simplifying the process of deposit (and so presumably lowers costs). Vitally, researchers can request a waiver from the policy for any of their papers.

Unlike the HEFCE/Liège model, therefore, the Harvard-style policy is focused on persuading researchers of the merits of embracing open access, not forcing them to do so. There are no sanctions imposed on those who do not comply, and often waivers can be automatically asserted simply by completing an [online form](#).

This is not to say that some at Harvard would not like to embed open access into the evaluation process. In October, for instance, Harvard's School of Engineering and Applied Sciences ([SEAS](#)) [announced](#) a "pilot project recommending to faculty engaged in a review, promotion, or tenure process to use Harvard's open-access repository [DASH](#) (Digital Access to Scholarship at Harvard) as part of their preparations." But consider what a gentlemanly approach this is in comparison to the HEFCE policy, not least its entirely voluntary nature.

In passing, we should note that both the Harvard and Liège policies are institutional policies, whereas the HEFCE policy is a funder policy. Universities and funders inevitably face slightly different challenges when introducing OA policies — e.g. funders are probably not in a position to adopt the rights retention model pioneered by Harvard. It could also be argued that waivers are less justified with funder policies. But telling researchers (as does the NIH) that if they want to receive further funding in the future, and not risk "one or more enforcement actions, depending on the severity and duration of the non-compliance" they need to make the outputs arising from their current grant freely available, is not of the same order as telling them (as does HEFCE) that non-compliance will likely trigger severe punishment, and even potential redundancy.

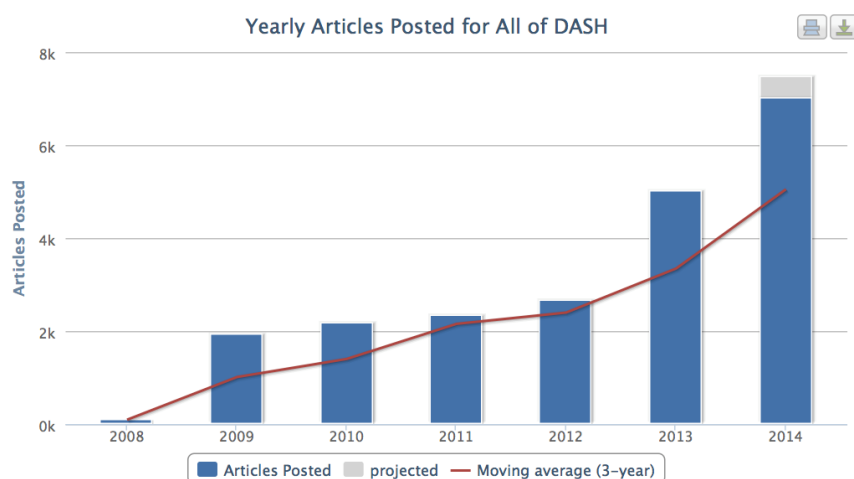
In other words, in tying compliance to the REF, HEFCE reaches directly into academics' lives and (in effect) threatens to damage (even curtail) their careers if they don't comply. After all, HEFCE says that non-compliance with its OA policy will make a researcher's outputs ineligible for REF

submission. In practice this would make the researcher ineligible — and we have seen the consequences for researchers of non-submission to the REF. And we must assume that non-compliers will be deemed ineligible however earth shattering their research is judged to be. If that threat were not real then what would be the point of making the policy compulsory and tying it to the REF in the first place? Of course this makes a mockery of the stated purpose of the REF, but that is what the policy says. Doubtless non-compliant authors will nevertheless seek waivers,⁵¹ on the grounds of the excellence of their research. But if such waivers were granted that in turn would make a mockery of the policy. (Remember, HEFCE is anticipating a 96% compliance rate).

So we have two models, one compulsory and punitive, the other voluntary and *sans* threats. Which model is more likely to win the hearts and minds of researchers? Which model is likely to prove more efficacious?

On the first point, the answer is surely obvious. On the second point, advocates for compulsion argue that the efficacy of the Liège policy (and by implication the HEFCE policy) can be clearly demonstrated by looking at the number of papers deposited in the University's repository ([ORBi](#)). At the time of writing ORBi contained [118,747](#) items. By comparison, at the time of writing the Harvard repository ([DASH](#)) contained 22,073 deposits. Is this compelling evidence of the superiority of the Liège/HEFCE policy?

Superficially it might appear to be. But brute deposit numbers are probably not the best way of judging the efficacy of an OA policy. In comparing DASH with ORBi, for instance, we would have to take account of the fact that ORBi had a two year start on DASH (which was not launched until 2009).⁵² We might also want to wonder how many papers being deposited in a repository are current research, rather than historical papers being loaded by librarians in order to boost the number of items held. Moreover, even if ORBi is experiencing higher levels of deposit than DASH, the latter is nevertheless growing at a satisfactory rate. In fact, it is growing at an exponential rate: DASH received over 7,000 deposits in 2014, almost as many as in the previous two years combined. As the graph below shows, the slope of the upward-sloping curve has never been steeper.



As of December 2014

⁵¹ The fact that papers have to be deposited “on acceptance” suggests that many authors may find they are already non-compliant by the time they are aware what the next REF requires in terms of open access.

⁵² Moreover, Harvard has 9 schools, not all of which introduced policies at the same time. In fact, a couple are still so new that implementation steps are only just beginning.

However conscious of the limits of raw deposit counts, green OA advocates tend nowadays to apply a different OA policy efficacy test — it is better, they say, to calculate the percentage of a university's current output being deposited in its repository each year. Here again, the University of Liège would seem to [stand out](#), with deposit levels said to be approaching 90%. But the weakness of this approach is that (as noted earlier) universities don't know how many papers their faculty are producing each year. Consequently, when a university says that it is capturing 90% of its research output it can only be an estimate, as it does not know the denominator.

When I put this point to the Rector of Liège University [Bernard Rentier](#), he [replied](#): [W]e are not really looking for accuracy here, we are looking for a general trend ... Whether ORBi's compliance level is 70, 80 or 90% is not a major concern to me ... I am satisfied to observe that it is very high and not in the 15-30% range which is what happens when a mandate is not being enforced by a link to assessment procedures."

So far as I am aware Harvard has made no claim about the percentage of its current research that is being deposited in DASH. But as we have seen, the deposit growth trend at Harvard is perfectly healthy.

So let's suggest a third measure of success: How about counting not the uploads, but the downloads? After all, is not the *ultimate* test of an OA repository the extent to which the papers it hosts are being read (rather than lying inert in the repository)? If we compare DASH's downloads with ORBi's, we discover that last year twice as many papers were downloaded from DASH as from ORBi — 2 million as opposed to ORBi's [1 million](#). Once again, DASH's growth is exponential: the download total is more than the previous two years combined, and the slope of the upward-sloping curve has never been steeper. In total DASH has seen over [4.7 million](#) downloads since it launched in 2009, from every country on Earth. By comparison ORBi has received [3 million](#) downloads, despite having a two-year start on DASH.⁵³

The Harvard brand may go some way to explaining DASH's higher downloads. But most DASH users find what they're looking for by searching Google, not by searching directly on DASH (which is true of all repositories). Users are, therefore, looking for relevant research based on keyword matching, not research from particular institutions. That doesn't rule out the possibility that some might favour articles with Harvard URLs, but we can assume this to be only a small factor.

By this measure we might be tempted to conclude that Harvard's voluntary policy is proving more efficacious than Liège University's compulsory policy. However, it would clearly be wrong to suggest that repository download numbers are in any way determined by an institutional OA policy. Nevertheless, DASH's success does question the assumption of green OA advocates that compulsory policies are essential.

Of course OA advocates would rightly argue that there is a limit to what a comparison of just two OA repositories can tell us. After all, they might say, there is no shortage of universities with weak OA policies and empty repositories. That is true, but what this tells us is that open access advocates in

⁵³ It might be argued that faculty numbers are also an important factor. The Wikipedia page on Liège University reports that it has 2,800 faculty members. Harvard's Shieber told me in 2012 that there were around 2,000 faculty members. However, we might find we are trying to compare apples and oranges, given the structure of Harvard (The Wikipedia page, for instance, says there are 16,000 staff and faculty, presumably because the number includes the Harvard Medical School. This has some 11,000 faculty employed in affiliated hospitals). But however you look at it, Harvard's downloads appear more impressive.

those institutions have failed to make the case for OA to their peers?⁵⁴ It is for this reason that they have turned to funders and governments to force OA on their colleagues. We're suggesting that this is a dangerous game to play.

OA advocates might also argue that whatever the merits of the Harvard-style OA policy it is more natural to the US, which has a strong tradition of faculty governance. To this we would respond that if it is true that top-down policies are more difficult to achieve in the US, then perhaps OA advocates there have had to be more creative, and in doing so have come up with a voluntary solution that not only works just fine, but which better respects the rights of researchers. In any case, the Harvard-style policy model is not confined to North America. To date it has been adopted by [52 institutions](#), including [Bifröst University](#) in Iceland, [Jomo Kenyatta University of Agriculture and Technology](#), in Kenya, and the [King Abdullah University of Science and Technology](#), in Saudi Arabia.

It is also worth noting that [the first academic group in the world to adopt a self-archiving mandate](#) was the University of Southampton's School of Electronics and Computer Science in 2001. This was a result of effective advocacy by members of the department, not of a top-down decree.

It is surely no accident that what Southampton and Harvard share in common is that both institutions have high-profile committed OA advocates on their faculty — [Stevan Harnad](#) in the case of Southampton University and both [Stuart Shieber](#) and [Peter Suber](#) at Harvard. This suggests that the secret to creating an open access culture in an institution lies not in top-down compulsory policies, but hard work and dedicated advocacy on the ground. Such an approach also has the merit of being more democratic, and more in the spirit of academic freedom.⁵⁵

So while the open access movement can rightly boast today that it is persuading more and more funders to force fellow researchers to embrace OA, this is not a victory for advocacy so much as a victory for top-down compulsion, and in many cases can be expected to lead to a further erosion of researchers' rights.

Missteps?

Let's end by speculating about how historians of the open access movement may in the future characterise recent developments in the UK. As things stand, they might be inclined to conclude that in its determination to be an open access leader the country took two missteps. First, it made the mistake of treating publishers as equal stakeholders in scholarly communication (rather than the service providers they really are). Since publishers are both wealthy and powerful, inviting them to sit at the table was to give them undue influence, and has allowed them to direct the development of open access in ways that suit them more than the research community. So, for instance, a dominant group of publishers was invited to sit on the [Finch Committee](#). This enabled them to shape the RCUK policy and so effectively [appropriate](#) gold open access for their own ends. As a result, today we can see them migrating their journals to an open access environment on their terms, and in a way that locks their current profit levels into the new OA environment; profit levels, remember, that are universally held to be unacceptably high. Sadly, many joined the OA movement precisely because they believed open access would reduce the costs of scholarly communication.

⁵⁴ Consider, for instance that Isidro Aguillo of [Webometrics](#) estimates there are 292 HEIs in the UK. ROARMAP lists just [38](#) OA policies. ROARMAP also shows no obvious growth in UK policies. There were 5 in 2012, 4 in 2013 and just one in 2014.

⁵⁵ Shieber is said to have spent many long hours persuading his colleagues of the benefits of open access before the first Harvard policy was passed.

Second, in making open access a prerequisite for REF eligibility, HEFCE has surely opened the door to university managers appropriating green open access for their own darker purposes. Since the culture of the REF is not one of openness, sharing and equity, but of fear, elitism, and bureaucratic scrutiny, open access in the UK looks set to be accompanied by increasing micromanagement, and the introduction of new policing powers to enable this. This in turn will support the larger government strategy of turning universities into for-profit businesses focused on bottom lines and productivity, rather than on the creation of high quality research in an atmosphere of academic freedom.

Since the open access movement promulgated a very different vision of scholarly communication we might be inclined to conclude that OA advocates made a fundamental error when they sought to co-opt government to their cause. In urging politicians to impose open access on their colleagues, they overlooked the fact that government has its own agenda, and so would inevitably seek to capture and mould open access to fit that agenda. In the UK today, this means promoting and extending neoliberalism — by, for instance, compelling universities to embrace market forces and adopt commercial practices, and by commodifying research in the hope that doing so will help solve the UK's economic ills (with mere lip service paid to the non-economic social and humanitarian values of research). This is a process some refer to as the [proletarianisation of academic work](#). Ironically, it turns out that it also means protecting the incumbent publishing industry from the disruptive nature of the Internet, and thus from those same market forces that researchers and HEIs are now subject to.

Finally, we might want to conclude that the wider open access movement took a strategic misstep too, and early on. Rather than seeking to reinvent scholarly communication for the digital world, it limited its ambitions to encouraging publishers to migrate the traditional journal model to the Web (a process in fact that publishers had already begun). In doing so, the movement sought only to persuade publishers to levy their fee at the start of the publication process (via APCs) rather than at the end of the process (via subscriptions). While this makes research freely available it fails to take advantage of all the other things the Web now makes possible, and it leaves profit-maximising publishers in control of scholarly communication. Even green OA advocates tend to view this as the end point, with self-archiving envisaged merely as a tool with which to force publishers to make the switch (and in the vain hope that they would downsize in the process). History will surely judge this to have been far too unambitious.

In his review of Eve's [book](#) on open access and the humanities [Tim McCormick comments](#): “Eve argues that ‘there is nothing in the concept of open access that means anything must be done differently except to lower price and permission barriers to research’. I would argue this is a highly reductive reading of the open access movement, severing it from the motivating principles which all along have animated action and linked specific proposals to broader movements for open knowledge.”

McCormick is not strictly correct here.⁵⁶ Eve is only repeating what most OA advocates have always argued. However, he is right to call it too limited a view. In setting the bar no higher than lowering price and permission barriers the OA movement has allowed others to capture open access and bend it to their own agendas. One consequence of this is that the cost of scholarly communication is unlikely to be any lower (certainly in the near term). At the same time, it is in danger of being set in aspic rather than re-imagined for a networked world. And in the UK open access may end up playing an ignominious role in the triumph of bureaucratic scrutiny — to the detriment of the research process, and in furtherance of the proletarianisation of researchers. Open access should have been

⁵⁶ Nor is McCormick's review a fair one.

about sparking a revolution. It sold a story of liberation, but has ended up facilitating the agents of oppression.

We should stress that none of this is to imply that good scholarship and good science are not taking place in the UK today (Although any claim that the REF has improved research quality is surely [erroneous](#)). However, this is happening despite the now widespread use of grading and ranking systems like the REF, and despite the increasing precarity of researchers. Moreover, while UK academics may still be doing good research today, the problems we have discussed are putting huge pressure on their ability to continue doing so. The deepening market orientation of the academic environment and the ever more oppressive audit culture is starving scientists and scholars of the oxygen they need to thrive.⁵⁷ If nothing else, the debilitating bureaucracy they have to negotiate is keeping them away from their research and out of the lab — inevitably making them less not more productive.

The current situation also seems to have created a degree of double-think. Consider, for instance, that one of those treated as dispensable by the new lords of Essex University was Marina Warner. Yet in the recent New Year Honours list Warner was [made a Dame](#) — for “services to higher education and literary scholarship”. Likewise, despite playing an important part in a significant advance in our understanding of the universe, Peter Higgs reports that the only reason he was not forced out of Edinburgh University was because it was thought that he might be awarded a Nobel Prize. In the event he was. And in 1999 he was offered a knighthood (which he turned down).⁵⁸ But what is odd here is that while both Warner and Higgs were deemed dispensable by their institutions, they have both been offered honours by the State. Has the world gone topsy-turvy? Or is it just that UK universities have lost sight of their mission? Either way, it appears to make a mockery of the current obsession with grading and ranking exercises like the REF.⁵⁹

As a further irony, an increasing amount of good science is now taking place outside the academy, under the rubric, for instance, of [citizen science](#). Additionally, scientists and scholars unwilling to sell their souls for a good career are choosing to dedicate themselves to their science, or scholarship, *instead* of seeking advancement (many of these also inevitably find themselves working outside academia now). Consider, for instance, the case of Russian mathematician [Grigori Perelman](#). In 1994, Perelman proved the [Soul conjecture](#). In 2003, he outlined a proof of [Thurston’s geometrisation conjecture](#), of which the [Poincaré conjecture](#) is a particular case. As a result of this latter work, the Poincaré conjecture was able to be confirmed. Posed in 1904, before its solution the Poincaré conjecture was viewed as one of the most important and difficult extant problems in topology.

To my knowledge Perelman has never worked at a UK university, but he would surely scoff at the REF. Indeed, he has pointedly shunned approval or prizes. Wikipedia reports that in 1996 he declined the [EMS Prize](#), in 2006 he declined the [Fields Medal](#) and in 2010 he declined the [Millennium Prize](#). “I’m not interested in money or fame; I don’t want to be on display like an animal in a zoo,” he [told](#) the BBC in 2010.

⁵⁷ Sadly at the same time we can see a [similar process](#) of deterioration taking place in the world of corporate science.

⁵⁸ He did, however, accept membership of [The Order of the Companion of Honour](#) in 2012, having been [wrongly assured](#) that the award was in the gift of the Queen alone.

⁵⁹ The contradiction here is that two gifted academics were viewed as dispensable by their institutions, while being lauded by the UK establishment as excellent scholars. What complicates the picture a little is that Higgs [told](#) the BBC that he was not only no longer writing papers, but that he had retired from full-time teaching 17 years ago. The BBC adds, however, that he “remained active in sharing his knowledge with other scientists”. Either way, it makes a mockery of the REF.

Note also that Perelman did not publish his work on the proof of the geometrisation conjecture in prestigious journals, but instead shared his ideas with the world in a series of eprints that he deposited in the physics open access preprint server [arXiv](https://arxiv.org/). Whether Perelman is an OA advocate I do not know. But he has all the qualifications for being a poster boy for what open access should and could be.

The level of dedication to one's subject that Perelman has demonstrated ought to be at the heart of the scientific and scholarly endeavour everywhere. But grading and ranking systems like the REF have to a great extent replaced this with a culture of obsessive careerism. The pity of it is that linking open access to the REF could turn out to be the kiss of death for many of the good intentions and idealism that inspired so many to join the OA movement.

Richard Poynder



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