

Peer Review

It started not long after I arrived at university.

You'd have thought I'd uttered outrageous heresy, given officialdom's reaction to an article I wrote in a student newspaper.

How dare I question the very foundation of universities keeping the academic standards high?

You see, when it comes to endorsing high-level academic work, I don't buy into that established reverence for **peer review**.

Well, they are sitting right in front of me now – three of them, senior staff from the faculty. I've been called to account for myself.

I might have smirked, so I respond slowly to let their astonishment adjust.

I say, 'If your peers only thought of the world as flat, what chance would there be for a peer review to accept that the world might be round? Yet it has been round since before man walked on the planet. You'd be reinforcing falsehood – not truth.'

Astounded expressions – the three seem stumped for a comment. I, the precocious first year student, am in the room to be severely admonished by these venerable scholars and yet, here I am challenging them.

Eventually, one senior lecturer says suspiciously, 'Well, there would need to be justifiable evidence to prove an alternative case.'

'To whose satisfaction?' I ask, quickly.

Well, I swear another one of them is turning puce, in outrage. 'Pah! You come here, a freshman, to engage in undergraduate studies and you have the temerity, indeed the damned impertinence, to challenge the credentials of our university peer reviewers.'

I know I'm very close to being drummed out of the university with my card marked as a pernicious trouble-maker.

So I say, 'Peer review might work satisfactorily for students who are only required to demonstrate extensions of what they've been taught. But isn't that just reinforcing the status quo – extrapolating what we already know? In fairness, a supervisor could accredit that in a few minutes. It doesn't actually need independent peer affirmation.'

The third interviewer adjusts his half-lensed spectacles, coughs and glances at whatever notes he has in front of him.

He speaks deliberately and quietly. 'Am I to assume you are insinuating that our students and staff are only required to regurgitate what they've been taught? I find that deeply offensive and I doubt we should spend much more time having you in our institution.'

My mind flits briefly to thoughts of my mother who would be appalled that her only son could confront the academic establishment in such a way – and, presumably, sacrifice any hope of ever gaining a degree.

My father, on the other hand, would have told me to give the pompous oafs both barrels.

Sadly, I'm not as cocky as I might appear.

I'm comfortable enough with their criteria for assessing the taught course work. But it was probably a naïve mistake on my part to write an opinion piece in the university student newspaper, *Semper Animo*, where I questioned the process for validating **new research work**.

I want to do research at university. That's my long-term purpose. I want to explore fresh ideas. I'm only expressing an opinion so that my path to post-

graduate research can be developed through my undergraduate years, by being able to chat routinely with research fellows.

Eventually, I want access to the pathfinding trailblazers and I'm frustrated that my first year at uni seems just a routine extension of school. I want to mix with people who are challenging accepted norms of understanding.

But I'm being told to get back in my box, be humble and follow the accredited path until I've demonstrated that I can jump through the undergraduate hoops, with honours.

Even at school, we had pathways for able students to explore ideas beyond the accepted curriculum. But I appear to have chosen to enrol at a faculty in a modern version of the Dickensian era. *Tradition! Obedience! Reverence for the academic icons of the past!*

I say to my interrogators, 'If you train, school or drill people long enough in how they should think, eventually it will be internalised – a programmed response, hard to think outside the square. Is that the approach that a leader in tertiary education should be advocating?'

The first inquisitor speaks calmly. I pick him as the negotiator – the leader. 'No, and that's not what this university is advocating. But there is a basic foundation of learning, of methodology and of knowledge to be acquired before a student can venture successfully into new research.'

I absorb his words and avoid asking why.

Instead, I say, 'So, by learning the basic foundation, do you mean **brainwashing the students** to rehash what is already accepted?'

I know the language will get a reaction – but they're trying to intimidate me into following the calf path like everyone else. *Conform, you disobedient lout!*

The puce-faced man exclaims, ‘I don’t believe what I’m hearing. Where’s the respect for the achievement of the scholars of the past? The alumni of this institution became world leaders in their fields. This is preposterous.’

It’s the response I expected. I know I’m goading them. But, in this situation, I’d prefer to die as a defiant ram rather than a meek lamb.

I vary the tack a little. ‘Would you agree that what we hear and see as we grow up tends to stay with us for life?’

All three appear confused that I’m even asking questions – of them. They look at each other, puzzled. Goodness, they’ve been sent here to reprimand this deviant and perhaps throw him out of the faculty. Yet here he is – not backing off at all.

‘Unless ...’ I add, just to rattle them a bit more.

‘Unless what?’ Their eyes are wide in question.

‘Unless we are given the freedom and encouragement to think beyond our upbringing. How do we change the habits of a lifetime – that is the question?’

The first interviewer gives his reflex answer. ‘You have to learn to think critically. That’s what we do at this level.’

‘But what does that really mean?’

The bespectacled man answers in his slow pedantic voice, ‘Using evidence that can be tested independently. If a theory can be tested and retested following the same procedures and it produces the same results, then the likelihood is that it is true. That is the scientific method and it follows a logical mathematical process that one step leads to the next.’

It’s like he’s speaking to a very young child.

We all know the scientific method. Don’t patronise me!

I ask, ‘So there’s no leap of faith involved – such as believing something when there **is** no testable evidence, even if it suits someone’s argument? That’s what I’m saying.’

They all manage more flummoxed blinking. ‘No. Certainly not.’

‘There’s no blind obedience, then?’

‘What are you getting at?’ the bespectacled one asks.

‘If you drill people for long enough in the expected responses, then they’ll be convinced they have to conform in order to belong, to have any sense of worth – indeed, to be commended in a peer review as being academically worthy.’

All three sigh!

With frustration in his voice and a flick of his hand, the first interviewer asks ‘What is it that you want to research?’

I reply softly. ‘The topic is less important than the process to me. How would an Einstein or a Hawking or a Schrödinger even get heard if the influence of an Isaac Newton were the only acceptable view? How does Darwin’s theory of evolution pass peer review when Holy Writ claims creationism has been endorsed for centuries? You say – evidence. I say, how do you establish the **evidence standard** of valid new creative research?’

‘Wow!’ They all stare at me.

I continue, very gently. ‘Objective standards are easy. We can establish physical measures of length, weight, currency or time. Subjective standards applying to behaviour – good, bad, right, wrong, brave, cowardly – can be defined in comparative language on a rubric. For theories, hypotheses, some can be tested experimentally and mathematically.’

I pause and fix them with my gaze. ‘But for those that are outside that, what is the acceptable testing standard? Independent repetition isn’t always possible – even in a person’s lifetime – when, for instance, dealing with the enormity of the cosmos or the minuteness of the quantum world. Yet, we certainly do ask peers and professional journals to review such theories – as acceptable. What do they use as the standard? That is my question.’

Puce-face shakes his head in disbelief. ‘Is that what this is all about? Standards? Is that why you wrote in *Semper Animo* and caused all this bother?’

I smile. ‘So, it’s a bother to examine our processes for confirming knowledge – truth as opposed to unverifiable belief. Half the problems in the world seem to stem from our inability to separate truth from fabrication.’ My questioning smile passes the discussion back to them.

‘So what do you recommend?’ the mediating first interviewer asks.

‘Courts of justice have a form of peer review using a logic that it’s always a challenge to get twelve people on any jury to agree unanimously on a verdict. So, if they do, they are probably correct.’ I smile. ‘Sadly, there are also many dozens of documented cases of juries convicting innocent people who are later acquitted on appeal.’

I know I’m trying their patience.

It is I who is supposed to be getting grilled.

I continue. ‘I prefer the idea of a judge who is skilled in legal practice and precedent to deliberate over the evidence in a difficult case. She or he then has to give a very lengthy justification for the decision, knowing that it could be appealed later. Juries never have to explain – they just have to agree. So, if we extrapolate that to research topics, if a thesis is presented for a PhD qualification,

there would have been significant explanatory checking for academic merit along the way. Agreed?’

They give condescending waiting glances – they all have doctorates.

‘Now, if the thesis is research at an even higher level, I would favour an academically competent “judge” to logically assess such ground-breaking research – and to give a thorough justification as to **how** it has reached an acceptably **new standard of validity**, subject to appeal.’

‘Isn’t that just what peer review is, you ... you upstart?’ puce-face says.

‘So what is the **new** acceptable standard?’ I ask – and follow up by parroting a generic definition in a haughty robotic tone. *‘Based on testable evidence in a practical or theoretical sense, it should have internal cohesion and advance the understanding of knowledge in future exploration. Is that it? And, in the case of contentious assertions which might defy previous understandings, the onus would be on the presenter to explain convincingly. Is that the standard? **Convincingly?**’*

They seem cast in stone.

I try again. ‘My view is that past knowledge is important – but we shouldn’t be drilling unquestioningly into narratives of the past without confidently exploring the future possibilities. For example, in this faculty, we have inherited economic customs from a world of less than one billion people, where plunder, slavery and inherited entitlement enabled the “empty planet” to be colonised – *Terra Nullius, Manifest Destiny.*’

They look uncomfortable.

I say, ‘Now we have eight billion people and growing. We have ecosystems bursting under the strain, the planet is warming and we are still worshipping past practices with blinkers on – not seeing anything different for the future.’

I'm on a roll. 'The blinkers may be the Holy Writ of some entitled belief system. They might be rules for a society to survive – perhaps written as a constitution or passed down verbally over generations. Whatever they are, you are talking about blind subservience to practices of the past. Aren't you? How do you break that cycle?'

The mediating one says, 'Don't discount our ability to think for ourselves. We're not prisoners of our history, are we?'

'You may think you have free will ... but do you really have the freedom to think independently?'

'What do you mean?'

'We're back to standards. In academic circles and professional journals, a research thesis is usually endorsed by other academics of similar standing.'

'So what's wrong with that?'

'Nothing – for routine ratification. But, it is Caesar judging Caesar. How does someone thinking differently, outside Caesar's square, ever get validation?'

'Well, Einstein managed it!' roars puce-face.

'Well, did he though? As you'd know, his 1916 general relativity theory predicted the presence of gravitational waves generated by two black holes colliding. But the first tested proof of his hypothesis – using binary pulsar measurements – didn't happen until 1974, decades after Einstein's death in 1955. And it was not confirmed by a sensing recording at America's LIGO facility until 2015 – a century after the proposal. That's a pretty slow endorsement of his thinking outside the square.'

Puce-face throws his arms in the air in disgust. 'So,' he says, 'what is the process that is better than peer review?'

I'm surprisingly relaxed. I no longer care. 'I return to our fixation with constraining the investigations within the parameters of past experience.'

Bespectacled man peers over his glasses. 'Young man, we build on the accepted knowledge of past generations to push the research boundaries of the future.'

I respond. 'I've cited our blinkered use of colonial models of economics. They're not sustainable. There should be enough recyclable or renewable resources in the world for us not to dig up fresh raw materials. Where's the research into new viable commercial thinking?'

'You're in the world of environmental politics now. Our reality is what is doable. We are academics, not politicians.'

'Okay. Is the academic role only to flag that the planet's climate is heating fast and inducing more extreme natural disasters?' I pause to take a deep breath. 'Let's be even more controversial. What would peer review say to research into strategies that restrict global population growth – a major mathematical contributor to the current problems? Our dependence on atrophied business designs plus moral views about rights and freedoms would quash any serious "heads above the parapet". So we choose not to buck the system. We don't challenge the established rules or,' I smile tauntingly '... the expected standards.'

I continue. 'Do we wait until the fabric of commercial trading life is so disrupted that defeatist chaos ensues? Is there no role for the brightest and best to delve into the really difficult challenges for the world – even if they are political?' Another deep breath. 'My argument is that the sanctity of ethics committees and the inertia of peer review, together, restrict research into the very areas that the world needs to address – **now**. But universities are loath to tackle them.'

The mediator clears his throat and refocuses the discussion. ‘So, what you appear to want is to be able – in your undergraduate years – to mix with innovative staff researchers so that you can break the bonds of what you see as restrictive indoctrination. Do I understand you correctly?’

‘Yes – and I want the pathway for free thinking not to be dismissed out of hand as offensive disrespectful twaddle.’

‘We certainly don’t do that!’

‘So what is this?’ I laugh. ‘Haven’t you brought me here to pull me into line?’

Bespectacled man is back. ‘There is a difference between being pulled into line, as you put it, from us responding to your behaviour which has disrespected the very institution to which you want to belong. You wrote a provocative opinion piece for the whole university to read, the world too. You expected a reaction and you have it!’

I shrug. ‘Well, you’ve listened – but have you heard? Am I to be drummed out of the university now?’

Puce-face says, ‘Bloody good idea!’

But the mediator responds with, ‘I don’t think that’s really what we want. Perhaps the faculty dean can provide a better avenue for student suggestions and opinions to be expressed in the future – ways that don’t bring the huge wheels of the university machine into action. Let’s use other processes first.’

Bespectacled man grudgingly acknowledges me with, ‘There may be some merit in your suggestions. We will talk at the senior level to find a way forward.’

‘So that’s it?’ I ask.

I take the silence as agreement.

I add, so that my mother would be proud of me, ‘Thank you all for your consideration. I look forward to the creative researchers of the future having a clearer pathway forward.’

Puce-face says, ‘I really hope I’m judging any research piece that you bring forward.’ He can’t hide the snarl.

‘And,’ I respond, cheerily, ‘I look forward to your lengthy considered justification – for analysis at appeal.’

‘Well, are we done?’ the mediator asks of the others – and then to me, ‘Can we take it you will abide by the decorum expected of our institution in future?’

‘Indeed.’ I smile. ‘You needn’t worry yourselves about me. I’ve said my piece. You are correct that other universities read *Semper Animo*. Since the publication, I’ve actually been offered a place at two other research-focussed universities. Apparently, they’re impressed by me being prepared to challenge the status quo. So’ – I direct my grin at puce-face – ‘I will quietly watch how the processes we’ve discussed here will advance before I make any decision. Have a good day!’

I’m not sure if I’m smirking but I get out of the room before puce-face explodes in frustration. Mum and Dad should both be happy that their son will be able to finish his degree – somewhere, with whatever will follow.

I tap the mobile phone in my pocket to stop the recording and I say to the skies, ‘Just in case the later narrative turns out to be different from what has been said.’

Job done. I’m off to collect my bet from *Semper Animo* now. They didn’t think anything could change and I’m sure they will publish plenty more from me if the faculty reneges on its agreement. The recording will guarantee that!