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Editorial

Goodnight and Goodluck[1]: The End of a Building at the Australian National University [2]

May 31 marked the end of the old Applied Maths Building at ANU.

We moved into it in 1971, 47 years ago. For about twenty years before that it had already been home to the famous Department of Geophysics and Geochemistry. Before the war, when both Lake Burley Griffin and ANU were dreams, there were nurses quarters close by and the old hospital. This building has been a center of research for 70 years: there from the very beginning of ANU. With a magnificent view over the Lake and the Brindabella mountains, the building occupied a prime site on campus, where the Freeway crosses the creek. Before that the Ngunawal peoples who owned this country forever caught fish where the Molonglo river turned and passed by Black Mountain. There was no asbestos. The building worked very effectively for collaboration between scientists. It had been declared a major heritage site twice. No building will replace it for the foreseeable future. Academics will just have to double and triple up.

Its demolition is a significant, symbolic act of barbarism.

As Henry Lawson suggested: "Something ought to be said. We should have a party or something".

There are some lines from Hamlet that are apt.

"*My words fly up, my thoughts remain below; Words without thoughts never to heaven go*".

Thoughts, not words. That's the thing .

Apart from lamenting the good old days, as one does, why on earth could it matter - for the future of universities?

First of all remember that in those early times the ANU was an Institute of Advanced Studies, a place of cutting edge research, a place in which undergraduate teaching was a diversion from the main game, and not allowed.

And research was done in this building of a quality no one imagined.

It was first the ANU Dept. of Geophysics and Geochemistry founded by the eminent applied mathematician, John Jaeger. Later it became the Research School of Earth Sciences, one of the leading Schools in its disciplines in the world. For nearly twenty years they did their work here.

Ted Ringwood's high pressure laboratory was the Tower block in the center.

From that work Ted invented Synroc, a new way of disposing of nuclear waste.

Then there was Bill Compston who developed mass spectrometry that began in Western Australia and measured the age of the Earth. Then Merv Patterson was there. And Ross Taylor, known for his analysis of rocks that came back from the moon, and for work on the origin of planets. Paleomagnetism research was so important for Carey's theory of continental drift. It was still heretical even in the early 1960s.

Ted's idea was to put the nuclear waste back into synthetic rocks which resembled those that the uranium originally came from. The competitive technology was to put it inside solid glass and bury it in the ocean. Ted missed out because the competition was owned by Rockwell International which is an organization that makes hydrogen bombs and whose CEO was a friend of President Reagan. Reagan and the Head of Rockwell had adjoining ranches in California. Rockwell pushed glass disposal. Glass won but to no good purpose because the sea water cracked the glass. If Ted had won, the world would have been a better place.

After Earth Sciences moved, our Department of Applied Mathematics came in. It made a lot of remarkable contributions in the Natural Sciences over the years. And a lot of applied experimental and development work was done over and above only mathematics. We were scientists and engineers who worked in the enabling disciplines, physical, colloid and surface chemistry that underlie all of biology and chemical engineering.

For example the Department's laboratories did the first measurements on molecular forces, something Isaac Newton tried to do in the 1600s and failed. It did

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outstanding pioneering work in fibre optics, on porous media which got the equivalent of the Nobel prize in chemical engineering. These things were commercialised too. It brought strange new non Euclidean geometries into science. They turn out to be common geometries of nature; from inorganic chemistry to biology. It made major contributions to membrane biology and changed the face of physical chemistry. Mark Oliphant, one of the five eminent founding fathers of ANU, was our first research visitor for two years after being moved on from his position for being too old, at age 65!

The Applied Maths Building was optimal for personal engagement and collaboration. Everybody including myriad overseas visitors, loved it. It had all the right stuff, call it the wisteria, open corridors or a psychoceramic environment, as well as the old Staff Centre. This was a pub without peer, famous world wide, great for collaboration.

Whatever, it worked. It attracted visitors from many countries around the world. It produced over 100 full professors so far in all kinds of fields, in this country and overseas. There were many PhDs. The Department gained all kinds of awards and distinctions. Four of its members or colleagues mentored were Chairs of the Nobel prize Committee in chemistry.

It is all forgotten now, but what we all did will stand. And it will be remembered elsewhere.

At the end of every speech that the elder Cato gave to the Roman Senate, he always finished with: *Carthago delenda est.* CARTHAGE MUST BE UTTERLY DESTROYED.

Something like that is happening here. We are bemused. Why erase the past?

Why bulldose a perfect working building when funds are being cut?

There are plans for a new building in three or five years time. But if you believe that you believe in fairies. Meantime academics will have to double and triple up in cramped quarters. Not so bad really?

There is no reason advanced here for the abolition of a twice declared heritage site with so many triumphs. And memories. Imagine if some administrator decided to abolish a College at Cambridge, including say Newton's old rooms. It could not happen. And it ought not to have happened here. From the old Applied Maths Building a wide range of immeasurably new technologies came forth based on fundamental research.

The life of the Building spanned a gentler time for scholarship and learning in Universities.

With thanks to Jan Morris of Farewell the Trumpets, a poem of E.W. Horning after the Great War catches a whiff of it, and the ghosts of those who were here.

'Who are the ones that we cannot see, Though we feel them as near as near?

In Chapel one felt them bend the knee, At the match one felt them cheer.

In the deep still shade of the Colonnade, In the ringing quad's full light,

They are laughing here, they are chaffing there, Yet never in sound or sight'

The lights are going out in Universities across Australia, with the triumph of a grim political correctness and the death of history. The old Australian larrikin dipped his "lid" to no man. He is gone. The Enlightenment has gone and with it Science itself.

So remember Ozymandias, and what we used to think Universities stood for, as John Molony has so elequently expressed further in a following piece.

Ozymandias
By Percy Bysshe Shelley

I met a traveller from an antique land,

Who said – 'Two vast and trunkless legs of stone Stand in the desert. . . Near them, on the sand, Half sunk a shattered visage lies, whose frown, And wrinkled lip, and sneer of cold command, Tell that its sculptor well those passions read

Which yet survive, stamped on these lifeless things, The hand that mocked them, and the heart that fed; And on the pedestal, these words appear:

My name is Ozymandias, King of Kings; Look on my Works, ye Mighty, and despair! Nothing beside remains. Round the decay Of that colossal Wreck, boundless and bare The lone and level sands stretch far away.'

Vale Applied Maths Building

Canberra, 2 July 2018
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