

PAUL JEANS

SPEECH TO NBHSOBA AUGUST 2016

Thank you John for your introduction. I am very appreciative and greatly honoured to have been asked to speak tonight, speaking to one's peers is always a privilege even if somewhat daunting!

I'd like to talk tonight about how I came to do what I've done and the role NBHS and NUC had in that. I don't want to dwell on what I've done – that's on the record and John has done a good job of summarizing it in his introduction. I would like, however, to give you my perspective on two important Newcastle icons; BHP's Newcastle Steelworks and Newcastle's Port.

Finally I'd like to talk about Newcastle's ongoing transition into the 21st Century and the role the University of Newcastle should continue to play in that.

I was brought up at Teralba on the western side of Lake Macquarie. My family had lived there for a number of generations, having come from Northern England and Wales to be involved in coal mining. I now realise that they exhibited many of the traits that I associate with Novocastrians – hard working, dour, modest to the point of being self-effacing. I also now recognize that the environment nurtured some of my own characteristics – determination, patience, persistence and not getting ahead of myself.

Life was idyllic in our little self contained village with adventure always close at hand. We had an almost Huckleberry Finn existence, and it is interesting to reflect on the degree of freedom we were given and how that may well have contributed to our sense of self confidence. I went a few years ago to a reunion of our primary school and it was very interesting to observe that memories of 'adventure' played a significant part in the recollections of both girls and boys of my era.

Primary schooling for us was at that 'Eton on Macquarie', Teralba Public. I remember very little about primary school except for a strict but fair Headmaster and a couple of outstanding maths teachers [this will be a theme throughout my schooling].

My mate Johnny Drury and I were both chosen to go to NBHS in 1954. That meant joining the rowdy Toronto bunch on the train to Hamilton, changing to a second train to Waratah and the walk past the oval to NBHS. On occasions we rode our pushbikes to school, having by that time become very keen competitive cyclists.

NBHS had a very great influence on me and it is interesting to consider why that was so. I was not an outstanding student, plugging along in the 'B' classes and I certainly wasn't a great school sportsman [preferring the individual sport of track cycling which I pursued quite seriously]. I think, first and foremost, NBHS opened my eyes to a much larger world – Frank Beard's current affairs talks took me from Teralba to Europe, America and Africa, to Dag Hammarskjold and the infant United Nations. They opened my mind and gave me both perspective and a lifelong interest in global affairs.

We certainly had an interesting group of teachers during my time at Boy's High. For me the outstanding ones were in the Maths, Science and English disciplines, the former building in me an appreciation of scientific method and the precision and usefulness of maths.

I do, however, have a particular soft spot for Charlie Goffett. He was different in the best possible ways. He battled on trying to teach me French. He assured me that a 'fool could pass French in the Leaving Certificate' but I turned out to be an exception to that rule! I have thought of Charlie often while I've been in France over the years. He would be pleased to know that I've been complimented for my French language skills, particularly late at night by Parisian taxi drivers! I also learned that one can get by in France with only those universal expressions 'pourquoi pas' and 'd'accord'.

NBHS was special, it influenced all of us more deeply than I suspect many of us realise. There certainly was an 'esprit de coeur' and it still exists otherwise we wouldn't all be sitting here tonight.

Then came our next piece of great good fortune – entering the workforce at a time when the Australian economy, after a recession in 1961, enjoyed a much higher than trend annual real GDP growth of over 5% for the next 10 years and not another recession for 20 years.

Australia's economy was booming, and our generation was the beneficiary with jobs and opportunities aplenty in the critical early years of our careers.

I received an offer of employment from BHP just before taking the Leaving Certificate to undertake an engineering traineeship. At my interview when asked what sort of engineering interested me, I replied 'civil'. After finding that I didn't know much about civil engineering, one of the interviewers explained to me that civil engineers put concrete under machinery and what I really wanted to become was a mechanical engineer. I appreciated that last minute vocational guidance and took his advice!

I did my mechanical engineering degree part time for the first couple of years from 1959, the rest full time at Newcastle University College at Tighes Hill, by then a college of UNSW. We were also indentured as fitting and turning apprentices, the ever pragmatic BHP taking the view that, if we failed engineering, we might make good tradesmen!!

In 1964, when I graduated, 62% of Newcastle University College students were enrolled part time and of them, 60% were trainees or apprentices in heavy industry or the public service. That nexus between employers and academia, with very strong community support gave rise to the establishment, the following year, of the autonomous University of Newcastle.

I have never regretted those early part time years and my time 'on the tools'. Aside from giving me a deep understanding of industrial practice, it gave me confidence to make decisions and learn from my mistakes as well as giving me a wonderful opportunity to learn how to get along constructively with people at all levels. Besides being fundamental to good leadership, it has always given me pleasure to see success come from teamwork and to see individuals grow their capabilities.

I regret that the interdependence between industry and academia has changed since those days when higher education was seen essentially as the prerequisite to a career in industry, commerce or the public service. Today, 70% of the recipients of university higher degrees stay in academia, the converse of the situation in the 'innovative' nations around the world. More on this a little later when we talk about the future of Newcastle and the Hunter.

Just as the Australian economy boomed during that period, so too did BHP. During that period, a significant number of the 'elephants', the 'company makers' were developed – Pilbara Iron Ore, Bass Strait Oil and Gas, and later, Bowen Basin Coal and Escondida Copper. Newcastle Steelworks became a centre which provided technical know how and management for these and other developments at Whyalla, Kwinana and Groote Eylandt.

BHP and its associated companies [Lysaghts, Stewarts & Lloyds, Ryland, Commonwealth Steel etc] trained a great many people in Newcastle, a number of them coming from country NSW [bringing their work ethic with them]. As a consequence, a number of BHP's senior management came from Newcastle, Maitland, Cessnock and places further afield. It is a fact that there was a 'standard specification' for a BHP executive which included schooling at NBHS!

My time at NUC Tighes Hill was busy [work plus four nights pw, part time] and lively [impending university autonomy, an occasional lecture at the Cross Keys Hotel etc] but enjoyable. We had good lecturers and interesting curricula. Under VC Auchmuty's encouragement, we had such luminaries as Godfrey Tanner and Brin Newton-John, even trying to give us budding engineers a taste of the humanities! Our engineering lectures were certainly pragmatic. I had a real interest and some talent in engineering design and I remember our lecturer, Merv Hallinan, telling me the importance of making two mistakes on every drawing – one for the checkers and one for outplacement. As a consequence, I not only later improved the job satisfaction of a number of drawing office checkers, but also became the mine manager of a significant mining company at age 26.

After graduation and a short time as a construction site engineer at Newcastle Steelworks, I was asked to go to Groote Eylandt in the Gulf of Carpentaria as the site engineer on its development as a world class manganese mine and processor.

Groote Eylandt provided me with a great career step and a very interesting place to start raising our family. It is geographically remote and with very poor communications in those days, even more isolated. It gave me a wonderful opportunity to develop management skills and to work in a tight community [a 'company town'] with a very diverse group of people. It also gave me the opportunity to work with indigenous people and to better appreciate their capabilities and issues. [25% of workforce were Aboriginal]. I have continued my interest with indigenous affairs through my life and it's a particular pleasure to now be associated with the great work UoN does in this area. The UoN has the largest cohort of indigenous students of any Australian university and has trained more than half of all Australian indigenous medical doctors.

GEMCO had provided me with a wonderful launching pad to continue on with a career in the minerals industry, but in 1970 I was very conscious that as an engineer,

I'd really not done much engineering and I was keen to do so! I asked for an opportunity and was appointed as a Project Supervising Engineer, working for Phil Scott on a major capital expansion of Port Kembla Steelworks.

Phil Scott, also a Novocastrian who had been Engineering Manager at Comsteel, became a great mentor of mine and I worked for him until his retirement in 1984. On his retirement, I succeeded Phil as General Manager BHP Engineering.

In 1989, John Prescott realized that I was having too much fun in engineering and decided that I should come back to the Steel Division. I was GGM / CEO of BHP's Steel's Wire Products Division for a year from 1989 and then Rod and Bar Products Division [which was centred on Newcastle Steelworks] from 1991 to 1993.

I would like to dwell on my experiences at Newcastle Steelworks both to illustrate its importance in Australia's industrial history and to later discuss the notion of deindustrialization and its impact on Newcastle and the Hunter.

When I started as a trainee at Newcastle Steelworks it had been in operation for around 45 years. It had supplied steel for Australia's early industrial development, armaments for two world wars and during that time had been the largest integrated steelworks in the British Empire. Its founders, and in particular Essington Lewis, had established a network of 'daughter industries' [Stewarts and Lloyds, Lysaghts, Rylands etc] which ensured both the consumption of its production and also the growth of local industry and employment. At that time approximately one in ten of Newcastle's population worked in the steel industry.

I came back in the mid seventies to manage some of the capital expansion projects in train at that time. The Steelworks had been in operation for around 60 years at that time and some crucial things had changed:

1. BHP's decision to concentrate the production of flat products at Port Kembla had seen that plant benefit from the post war boom and higher margin

products going into white goods, automobiles etc, Newcastle produced lower value / lower margin long products which were prone to competition both domestically and from cheap imports.

2. Steelplants of much greater scale were being built internationally and particularly in Asia. Newcastle's capacity of 2 mtpa was smaller than Port Kembla, which was to grow to 5 mtpa and significantly smaller than the large Asian plants of 10 to 20 mtpa. The International steel trade was growing and barriers falling.
3. New technologies were threatening the integrated steel producers, particularly in long products – electric arc furnaces using scrap steel as feed and continuous casting were seeing the emergence of lower cost, simpler 'mini mills'.
4. We had experienced the first of the 'oil shocks' which, along with other changes, fundamentally changed the cost structure of the industry. The steel industry is of course, very energy intensive.

When I was appointed GGM and came back to run the Newcastle plant in 1991, it had been operating for around 75 years and was struggling. We were able to significantly increase the plant's productivity and improve its operating cost structure. By focusing on higher value products [the so called "Special Bar Products"] using the quite sophisticated production facilities at Newcastle, we were able to partially differentiate ourselves from the domestic and international competitors, and grow our own international business. This would not have been possible without the very strong support and involvement of the Steelworks labourforce. We could not, however, overcome the fact that as a small integrated steelplant, we could not justify the ongoing levels of capital investment necessary to support its complex

facilities. When I left Newcastle in 1993, only about 1 in 100 of Newcastle's population [given that 'Newcastle's population' had swollen as a consequence of the improved transportation linkages with the Upper Hunter and Central Coast].

Psychologically though, Newcastle was very fearful of the impact of a Newcastle Steelworks closure and when the iron and steelmaking sections of the plant did close in 1999, I sensed there was considerable relief that the transition to a 'post BHP' Newcastle was less painful than perhaps feared.

I get a great deal of satisfaction seeing the 'new' Newcastle with its vibrant, optimistic outlook.

After many other exciting roles, including responsibility for Port Kembla Steelworks, all of BHP's Service Companies [Engineering, IT, Transport, Power, Insurance and Associated Companies] and all of its Iron Ore businesses, I retired from BHP in 2000. I returned from Melbourne to Sydney, built a house on Pittwater, got even more serious about fishing and teaching my grandsons to fish and swear, and took on some non-executive directorships.

In 2002, one of our colleagues, Wilton Ainsworth, arranged a visa for me to return to Newcastle and join the Board of NPC, of which he was the Chair. One of the reasons for Wilton's approach was that a gentleman had put to the then State Premier Bob Carr, that he wanted to build a steelworks on Kooragang Island and that this would provide, dare I say it 'jobs and growth'. Neither Wilton nor I thought there was any chance at all of it happening and it didn't. The gentleman's name was Clive Palmer.

I was very impressed with the look and feel of Newcastle at that time. People seemed positive and new buildings were starting to appear. The Honeysuckle development had clearly demonstrated what was possible in terms of urban renewal. I succeed Wilton in 2008 and had that role until the long term lease of the port occurred in October 2013. The port had expanded considerably over that period, not only in coal but also in relation to some of the other 40 commodities which are

handled here. It is true there were frustrations, none greater than our inability to create a major container operation at Port Waratah which would mean so much to Newcastle, the Hunter and Northern and Western NSW. I am hopeful that it may still become a reality in the future. the port remains one of newcastle's real competitive advantages and we must encourage its ongoing development.

Earlier in 2013, I had a very unexpected phone call from UoN which led me to being asked to take on the role of Chancellor. Unexpected because, while I had had a series of involvements with universities in Sydney and Wollongong, the Chancellors role was much more senior than anything I'd done. i remember thinking that there must be some sort of statute of limitation on academic records and after 50 years, mine must have been lost.

I phoned a close friend, a retired eminent Vice Chancellor of another University, who suggested I take it on, advising me that he had two rules when it came to the appointment of Chancellors:

- a) Never appoint someone who lives in the same city as the university, and
- b) Never give them an office – just in case they try to help!

While having some trepidation over the ceremonial part of the role, I felt I could add some value in the area of governance generally and strategic positioning in particular. I also had a very great desire to give back to the University and Newcastle something of the great contribution they'd made to my life.

I was appointed Chancellor of UoN on 1 July 2013 and officially installed some time later. I was perfectly happy with being 'installed' until I learned that bishops are 'enthroned'! After all, being installed does put you in the same category as a dishwasher!

I should mention that I have subsequently grown to enjoy the ceremonial side of the role and graduations in particular. I'd encourage anyone to attend a graduation ceremony – they are joyous, uplifting occasions with very good occasional speakers.

(As has been mentioned), many of you will have been students of UoN over the past 50 years or its antecedent, the Newcastle University College at Tighes Hill. It is of interest to note the role NBHS played in establishing the autonomous UoN. In 1942, NBHS P&C, with Headmaster Ross Mearns as its spokesperson, resolved that a University College of Sydney University be established in Newcastle in 1943. Mearns added fuel to the fire by actually publishing fees for the proposed college in late 1942. In December 1951, the Newcastle University College commenced at Tighes Hill as a college of the then NSW University of Technology, later the University of NSW.

The autonomous UoN began at Callaghan in 1964 and from humble beginnings became the globally recognized University we have today.

Let me give you a brief description of the University now;

- Over 38,000 students [over 25,000 EFTSL], including
- Over 7,000 International students [over 4,300 EFTSL]
- 5 Faculties [Eng & Built Env / Health & Med / Sc & IT / Ed & Arts / Bus & Law]
- Over 2,600 FTE staff [excluding casuals] – very major employer
- Annual budget of over \$700m
- Net Assets of over \$1,250m
- Campuses in Newcastle [Callaghan and CBD incl NewSpace], Ourimbah, Sydney, Port Macquarie, Singapore with a presence in other regional communities and a growing set of relationships with overseas universities.
- 2 major research institutes [NIER & HMRI]
- Annual research budget of approx. \$100m, over 30% of which comes from industry

- Top 8 in Australia for research ‘well above world standards’
- 3 of the last 4 years winners of NSW Scientist of the Year are at UoN
- Ranked 2015 #1 in Aust under 50 yoa [#27 in the world]
- Ranked 2015 top 3% of universities globally [around 10,000 universities]
- 39 universities in Aust, UoN in top quartile of most KPIs including teaching and student satisfaction

I’ll finish by talking about my perception of eight trends and conditions which are relevant to Newcastle and the Hunter. The way in which we deal with them will significantly influence our future prosperity. I believe the University of Newcastle has the potential to very positively influence those outcomes.

1. DEINDUSTRIALISATION

Is a global phenomenon affecting mature economies

Just as our region has been pivotal to Australia’s industrialization, so we are very directly impacted by its passing.

Some historically heavily industrialised cities and their regions have transitioned successfully – Pittsburgh, Newcastle on Tyne

Some existing businesses will succeed by increasing the service component of their offerings or incorporating more proprietary knowledge into their products.

There will have to be new businesses, they may be smaller and will depend heavily on innovation and entrepreneurship [both of which are now incorporated into UoN’s coursework]. Some will be derivatives of the traditional industries of this region [alternative energy, smart energy control etc] and many will be start ups driven by smart people and a nurturing local environment.

The University's NewSpace campus and proposed Innovation Hub in Newcastle's CBD will be focused on facilitating interaction with business and community.

2. GLOBALISATION

Improvements in communication, logistics and the digital revolution have created a "smaller world" with competition for products, services and talents having no borders. This of course brings both challenges and opportunities to our region. Quite clearly enterprises here have the opportunity to market their goods and services to a global marketplace in which, even a small niche is significant [SA nano surfaces plastic rear vision mirrors]

3. GROWTH AND IMPORTANCE OF SERVICES

There has been for many years already a migration to Tertiary and Quaternary Industries [The services and Knowledge Industries].

Foremost amongst them are Health, Education and Tourism – driven by our Aging population and personalized medicine, need for more advanced education [Australia's third largest export earner] and Australia's reputation as a very desirable tourism destination. Newcastle and the Hunter has a competitive advantage in all three of these areas.

4. ECONOMIC DIVERSITY

We have the advantage of a very diversified region [compared with regions addressing similar challenges, such as the Illawarra and Geelong].

Such diversity not only offers more opportunities per se, but also offers some interesting bridging fields [UoN's Centre for Balanced Land Use and Global Centre for Environmental Remediation]

5. GROWING IMPORTANCE OF STEMM CAPABILITIES

It has been estimated that 40-50 % of today's jobs will be gone in the next 10 to 15 years, to be replaced by EVEN MORE NEW jobs, MANY OF WHICH WILL REQUIRE TERTIARY TRAINING in the STEMM disciplines.

UoN has clear strengths in all STEMM discipline areas and is currently expanding interdisciplinary cooperation across the faculties involved.

The challenge for our region is whether people here will respond to the need for further training and thus whether the higher value jobs of the future and the industries and businesses which employ them will be located in Newcastle and the Hunter.

6. REGIONAL ATTRIBUTES AND OPPORTUNITY

When I think of this region's competitive advantages, the capability and attitudes of its workforce are high on the list – hard working, skilled, practical and experienced with an historical interest in education and 'bettering oneself'.

However, participation in tertiary education is lower in the Hunter and Central Coast [UoN's footprint] than both the NSW AND Australian averages [circa 17% cf 24%].

Reasons are not obvious – lifestyle, socio economic circumstances, past industrial security...?

As noted in relation to the STEMM disciplines, the nature of work will continue to change [as it always has] and it is important that people in our region are able to participate in the whole range of available jobs. We must continue to ensure that lack of access to higher education does not preclude their participation.

- Equity in access and excellence are part of UoN's DNA [Mature age, ATSI, low SES all well above sector averages].
- Three preparatory Alternate Pathways for entering – Open Foundation – since 1974 over 35,000 enrolments – Newstep Program – since 1980 over 11,000 enrolments – Yapug – a program which prepares ATSI students for HE.

- Our experience is that people with ability and determination, regardless of their background and with appropriate preparation, succeed equally at tertiary level [BE Hons1, UoN medal forklift driver].

7. POOR CONVERSION OF RESEARCH TO COMMERCIAL OUTCOMES

In 2012 Australia contributed 3.6% of the world's research publications from 0.3% of the world's population, ranking 9th in the OECD. Our research sector also demonstrably produces high quality outputs – improving its share of the top 1% of highly cited publications from 3.6% in 2005 to 6.3% in 2014. Despite this strong performance in producing excellent research, our ability to translate publicly funded research into commercial outcomes lags behind comparable countries.

In 2013, we ranked last in the OECD on the proportion of businesses which collaborate with research institutions on innovation. Australia ranked 23rd out of 32 countries on the percentage of total research publications that are co-authored by industry and the research sector.

One of the reasons for these outcomes is that in those countries where a high proportion of GDP is generated by knowledge, about 70% of PhD graduates go to work for industry and 30% stay in Academia. In Australia, we have the reverse. Our challenge is to convince business and Industry of the importance of research to their bottom line. For the University's part that requires a cultural change, including a more outward facing attitude, enhanced responsiveness etc which is underway.

Finally:

8. LEADERSHIP

Strong local leadership and a shared vision have been a feature of the former heavily industrialised regions which have made successful transitions.

Pittsburgh is a good example and we have now hosted a couple of visits from some of those leaders who made a difference in Pittsburgh. One of them,

former Mayor of Pittsburgh Tom Murphy, addressed a capacity audience in this hall and put it quite succinctly – 'YOU must decide what you want Newcastle to be, don't leave it to others to tell you!'

The importance of strong local leadership and a shared agenda cannot be overstated and all of us should do what we can to provide and support it.

Thank you.