

ANU HERITAGE OFFICE
ORAL HISTORY RECORDINGS

INTERVIEW WITH DEREK WRIGLEY, OAM

12 FEBRUARY 2014

At Mr Wrigley's home, Mawson, ACT

Interviewer: Dr Judith Winternitz

Also present: Ms Amy Guthrie, ANU Heritage Officer

SUMMARY

INTERVIEW PART 1

(figures= interview time counter points (hour and minutes); DW = Derek Wrigley)

0.00– 0.10 m

- Family background – born Oldham, close to Manchester, England, on 16 February 1924; turning 90 in the week following this interview; Manchester is the home of cotton mills and the industrial revolution.
- Father – Harold Wrigley; born into a family of 10 children; a self-made man. Was placed into a “blue coat” school because his mother could not support him; did well at school; good at poetry, shorthand; his mother decided he should not go to work in the mills or the mines.
- DW’s mother – a housewife.
- DW’s father started out as a clerk in Oldham Public Assistance Office; this looked after pensions and the workhouse in the area; father rose to become chief of the office. Father supervised reception and placement of evacuated children from London during the war: thousands came north to Oldham. DW remembers assisting his father at the railway station when children arrived.
- DW lived through the Depression but has no memory of it.

- 1928, at age 4, DW experienced a major problem – a mastoid [infection?] in his right ear. He was operated on at home – the operation took out a part of the inner ear and was performed without anaesthetic. He has been totally deaf in his right ear ever since: a continuing problem he has lived with. DW was also cross-eyed; was given glasses at 4 years old to correct this, and has worn them ever since. These were determining factors in his life.
- Due to these factors, was declared medically unfit for war service.
- Childhood memory of an airship flying low over school playground.
- Had a normal education at school; was not very good in some subjects – English, literature, history – and remained poor in those areas.
- DW stresses the importance of good teachers (which he did not have in these subjects). For example, he was put off Shakespeare altogether due to his teacher.

0.10- 0.13 m

- DW was good at physics, art, geometry, geography. His career has depended on these.
- DW failed School Certificate entirely. Had other interests at home – electricity, his bicycle.
- Left school and became an indentured apprentice in an electrical manufacturing firm in Manchester. Stayed 9 months but did not like it.

0.13 – 0.19 m

- Had done a measured drawing of his bicycle at 16 years old. On the basis of this, despite having no School Certificate, was able to enter Manchester School of Arts and Sciences in 1940: the head of the College identified him as having the makings of an architect.
- Started at the School at Manchester at 16 – a 5-year full-time architecture course. In year 4, entered an architectural measured drawing competition and won first prize. Also did extra courses at Manchester University.

0.19 - 0.22 m

- In 1945 went to London to take his final exams to qualify as an architect. Did his thesis on acoustics and sound insulation in buildings. Awarded a prize for coming first in all-England architectural exams – but was not formally told about the win, finding out about it later. Received 20 pounds and books.
- Then, since the war had ended, took a holiday and was able to go to The Netherlands, looking at the buildings and architectural style there; comments on different use of brickwork.
- On return got a job in an architectural firm in Manchester, right across the road from Manchester University, where Alan Turing was developing the first computer in the School of Mathematics. Never met Turing.

0.22 – 0.26 m

- Building materials were scarce following the war and not much architectural work was being done.

- Father suggested move to New Zealand. Instead, DW became interested in Australia; wrote to the Institute of Architects in Sydney seeking penpals; 3 people responded and DW corresponded with them to learn more about Australia.
- Applied under the assisted passage scheme to Australia but did not want to wait for result and ended up paying for his own passage with money he had saved up – 64 pounds.

0.26 – 0.30 m

- Arrived in Sydney by ship, December 1947. Was met by penpals and lived with them in Manly for about 3 weeks.
- Landed in Australia with 100 pounds. Used this to buy an old quarry in Dee Why - two narrow adjacent blocks of land and started to build his first house on one block.
- Did all the building himself: took a couple of years to build. Has built 5 houses over his life.
- Designed the building himself as well. Designing and building is his way of expressing himself.

0.30 – 0.40 m

- Hands-on building experience in Australia was an invaluable basis for understanding the local environment. Finished house on first block and sold it for 2,000 pounds.
- Got first job in a big architectural firm in Sydney when he first arrived – a job in ship reconstruction. Comments on challenge of working on ships, structures where there are all curved lines, not straight ones.
- Then met Professor Towndrow, who was running the first course in architecture at Sydney Technical College (later University of Technology, Sydney).
- Towndrow was looking for someone to teach architectural design and construction and found out about DW's background. Invited DW to join the College; DW left architectural practice in 1952/3 at the age of 23/4 to become a lecturer.
- Backtracking chronologically, explains that he went back to England 1951 to see his father who had had a heart attack. Went back to England on one of the first Super Constellation aircraft: his first time in an aircraft. It took four days. When he returned to Australia, started to build his second house on the second block.
- After seeing his father, who recovered from his heart attack, DW continued round the world to return to Australia: went to London, Boston, met and talked with Walter Gropius at Harvard, Philip Johnson in New York, Mies van der Rohe in Chicago; went to San Francisco, Hawaii, Tokyo, Singapore.
- On return to Australia continued to build his second house.
- In 1952 also met his wife when he joined the Young Liberals – had no interest in politics and joined the group for social reasons. Still has no interest. Married in 1954.

0.40 – 0.54 m

- Around this time, DW was experimenting with furniture making for his house and made a fibreglass chair: the first such chair in Australia.
- Became interested in industrial design and furniture design. Started the NSW Chapter of the Society of Designers for Industry, using his own house as a base.
- The group supported the need for an Australian Industrial Design Council – a local version of the UK Industrial Design Council - to help create possible quality exports.
- At the same time, DW heard about a speech by Nugget Coombs supporting the need for better local industrial design for this purpose. Wrote to Coombs about the Design Council idea.
- Received no response from Coombs but instead was contacted by Fred Ward who had already started a Victorian Chapter of the Society of Designers for Industry in Melbourne. They discussed the setting up of an Australian Industrial Design Council.
- Fred had recently (1952) moved to Canberra to head the ANU's Design Unit. Fred invited a number of key figures to the ANU to discuss the Design Council idea, including Derek himself and people such as Mark Oliphant. The group asked Derek to run a survey of architects in Sydney asking whether they supported the idea of such a Council – they supported it.
- Fred, then starting to staff the ANU Design Unit, suggested that DW join him in the Unit in Canberra. The role of the Unit was to furnish all the buildings at ANU – but Fred couldn't do it alone. In the early days, there were three of them in the Unit – Fred Ward, DW and Hans Pillig, who was a cabinet maker from Munich.
- Fred Ward was able to bring in Pillig because he was one of a group of 150 skilled German cabinet makers and woodworkers who had been brought to Canberra early in the 1950's to help the A.V. Jennings company build housing projects in Canberra; thus there was a group of talented furniture makers available for the Design Unit just when they were needed: a remarkable serendipity.
- DW states that it is better to make furniture for Canberra in Canberra, due to the effect of the dry climate on furniture made in the more humid climates of Sydney and Melbourne.

0.54 m -1hr.04 m

- DW moved to Canberra with his wife and son to join the Design Unit in 1957. Sold his second house in Dee Why, including the furniture.
- Settled in Narrabundah and rode his bike to the university every day.
- The Design Unit was physically housed in wooden huts near the current site of the Law Faculty. No air-conditioning – very hot in summer. (Amy Guthrie comments: they were old temporary buildings used for the university administration around the time of the merger with Canberra University College).
- The Design Unit's main purpose was originally furniture; other design aspects like site planning, architecture, were added after Fred Ward left in 1961.
- The furniture work was too much for the small Design Unit – had to call tenders for manufacture of chairs, cabinets.

- Firms in Fyshwick and Queanbeyan would tender for the manufacture of the furniture, following designs created by the Design Unit.

1hr.09m – 1hr.17m

- The Design unit did all the designs for manufacture in full-size drawings, particularly for the chairs which cannot be produced from scale drawings. DW explains why. The Unit would send out the design prints to three manufacturing firms for quote and tender, then choose the best tender.
- The Unit would later also develop colour schemes for University building interiors. The University Architect would be responsible for contracting outside architects to design the buildings as a whole: then DW would work with the architects to refine and design the interiors, especially the lecture theatres – which was not a common skill. Sight lines, lighting, acoustics all had to be worked out according to the academics' requirements.
- DW discusses lecture theatre seating design issues and firsts – the design of the first tablet armchairs in the A.D. Hope Building – an idea which had never been produced before. DW designed these from scratch and had 100 made in Canberra before they were adopted in Sydney and Melbourne for university lecture halls.
- The big expansion in such seating came with the expansion of universities in the early 1960's. Other ground breaking design work for lecture theatres included long desks with loose chairs in order to be able to use the space better in smaller lecture theatres, instead of fixed seating.
- When a building had to be designed, the Design Unit would sit down with the academics to work out what specifically was wanted for teaching and research. Furnishings and fit-out would be tailored to suit a particular discipline and its type of needs. The Design Unit input was what differentiated the ANU from other Universities all over the world – they had no such specific or tailored design input from their own unit. Design Unit was a trailblazer.

1hr.18m – 1hr.30m

- After Fred Ward, who had essentially been a furniture designer, left, the Design Unit grew in staff numbers and scope of responsibility.
- DW's training as an architect led him to see himself as a designer: he was always asking questions of design in any situation – general design concepts and overall design.
- DW was interested in Industrial Design as a whole, which would include all types of design sub-specialities. Thus his interest in setting up the Industrial Design Institute, with Fred Ward.
- In London in 1951, DW had met and talked to Michael Farr, a design consultant, and founder of the Industrial Design Council of the United Kingdom, and had been influenced by Farr's concept of total design. These ideas set DW thinking about architecture as just a subset of design as a whole.
- DW was consciously trying to set up a total design facility for ANU. He saw the ANU Design Unit as providing part of the necessary basis to a university education:– helping the

university to teach and research well by providing university buildings and landscape which themselves would be educational.

- Through the institution of total design concepts, students could intuitively absorb good design and ideas of total design in the course of their attendance.
- After Fred left, the Design Unit under DW took on more and more design aspects in the construction of the ANU. Its staff grew: it ultimately became a unit of almost 30 people.
- The University became a little worried about it, possibly because it grew too big. The University had incredible value from the Unit but never realised it.
- The ANU Design Unit under DW included landscape and site planning: for example for the Science Faculty, or specifically the Chemistry School. This would include consideration of guidelines and needs from the academics.
- It was DW's job to identify such specific needs within the concept of total design – for example, the total design approach to a science faculty would include use of central shared teaching spaces across multiple subjects/schools.
- External site planning advisers would develop drafts, but DW had to fit their ideas within the reality of ANU requirements and the whole ANU campus and site.
- Before this, buildings had just been constructed wherever, without thinking of an overall ANU site plan. Under DW in the late 1950's and into the 1960's, ideas started to develop around a whole ANU site concept.

1hr.30m – 1hr.42m

- Some particularly successful ANU buildings DW and the Design Unit were involved with/responsible for included the Academy of Science Building (1957-60). Fred Ward was responsible for the offices in this building, while DW did the seating in the Conference Room (although Fred is credited with the whole thing). This work posed challenges in terms of acoustics and visual/sightlines.
- Another was the Coombs Theatre seating (circa 1963) which had several innovations. In this Theatre vinyl fabric was used for the seats for the first time, but this squeaked when people moved in their seats, leading to complaints, and it had to be changed. The more significant aspect was the development of "continental" seating – long rows of seats without an aisle in the centre – but with enough room to allow students to move in and out.
- The Forestry Building was another interesting one – includes timber from all over the world.

1hr.43m – 1hr.50m

- DW comments on later years of his responsibility for the ANU Design Unit:– additional layers of ANU management and economic rationalism made things more difficult for him. At first DW had been directly responsible to senior management (Professor Ross Hohnen) and had found him very understanding and accommodating, but later DW had to work with and report to lower level managers who were basically accountants with no understanding of design issues or needs. They forced decisions for immediate financial reasons which were not right in the longer term. Internal politics also intervened.

- DW left in 1977, when he was offered a job designing furniture for the High Court of Australia. The Design Unit had already started to be broken up: the graphic designers had been hived off. The idea of integration of design across various sub-areas was breaking down. The Design Unit lasted only until 1980 – Hans Pillig was the last to leave.

1hr.50m – 2hrs.00 m

- DW comments about modern design: general public still doesn't understand what design is about. Does not like "showy" "look-at-me" design: design should be for the purpose, not for novelty and appearance.
- Comments on effect of technology change: in the '50's a designer would only have simple equipment to do drawings in pencil, on paper and with a scale rule or a 3 foot rule for full-size design. A chair can't be designed on a computer – how to design a chair in full-size.
- When DW left the Design Unit, there were no computers. Originals of designs would be kept flat in special plan cabinets. Many were lost when DW left the Unit. DW left instructions that the Powerhouse Museum in Sydney should get all his design originals from the Unit but this has not happened yet.
- His own and also Fred Ward original designs are still in ANU storage somewhere. Concerned that the tracing paper may have started to degenerate: it needs to be kept cool. [*Amy Guthrie indicates she knows where these originals are*]. If the originals do not go to the Powerhouse, DW wants them to go to RMIT design archives: DW is sending all his own personal originals there.
- DW has learned to use a computer for design work since leaving the Design Unit. Comments on changing technology. Explains how earlier blueprints were used to get manufacturers to build furniture. DW still designs a few pieces of furniture: some are in his home (points them out).

2hrs.00m – 2hrs.12m

- Post ANU, DW developed his architectural interests further into the use of solar energy in house design and construction. His own house is designed on solar principles – has designed 9 such solar energy houses altogether. Has built 5 houses himself, all experimental – developing eco-solar/sustainable housing concepts.
- DW remained a member of the Design Council for 30 years. Also went into the field of design work for the disabled (this started while he was still at the ANU Design Unit).
- In 1979, DW was able to gather together 100 volunteers to form the ACT chapter of Technical Aid for the Disabled and continued with this until he retired in 1991, designing for many technical aid projects.
- Comments on poor modern housing design in Canberra.
- Comments on design of his book on Fred Ward.

2hrs.12m – 2hrs.14m

- Cites some key achievements/key work at ANU: Academy of Science building.

- Comments that design work has to be fun: if you don't enjoy doing it, don't do it. Every design project is a challenge: you need to do research, know the parameters and limits. Designers welcome limits.
- An example, the housing of the Tandem Accelerator for Research Physics, under the direct interest of Sir Ernest Titterton.

[END OF INTERVIEW RECORDING PART 1]

DEREK WRIGLEY INTERVIEW

CONTINUED

[INTERVIEW RECORDING PART 2]

00.00m – 05.00 m

- Continuing discussion of working on the housing for the Tandem Accelerator: the Accelerator was actually a big tank 14 feet in diameter, 17 feet high and had to be housed vertically.
- DW had to build the housing around it – built concrete ribs around the tank, which also required 1 metre thick concrete walls to prevent radiation. Needed an aluminium chamber on top and a lift in it. Had never done anything like this before.
- Sir Ernest Titterton had the idea that it would just be a plain concrete box but DW wanted to make it “graceful” to soften the outside appearance. Describes the making of the concrete “ribs”.

05.00m-15.00m

- The period of the existence of the ANU Design Unit coincided with the formative period of building of the ANU – late ‘50’s – ‘70’s – and the Design Unit would have had a hand in most of the buildings constructed at that time. There is a relationship between these central older buildings – the Chancellery, the Coombs Building, the Chancellery Extension, the Pauline Griffin (Old Union) Building – which no longer exists among the newer buildings. DW considers the campus has lost its integrity since that time.
- The Design Unit would work closely with academics to understand the needs of those who would use the buildings. This kind of closeness with the academics and integrated approach not continued now. Things have changed completely.
- A campus should have an integrated look about it – the buildings should hang together. Some of the newer buildings are ugly. The University needs a Design Unit to ensure integration of one building to another to form a whole.
- Only the landscaping saves the situation: mentions John Stevens’ landscape design work within the Design Unit and how DW would walk around the campus looking at the relationship of trees, land, buildings.
- Mentions that he was not then aware of how the wrong trees could impede solar energy use in buildings. Has become more aware of this and has designed for this factor – for solar energy and low energy use - in his current Mawson home – it has no need for air conditioning.
- Comments that industry is not interested in these ideas, although he has sent developers copies of his book on designing low energy housing.

15.00m – 17.06m

- DW has been ahead of his time in solar energy issues and others for many years: thinks of better ways of doing things. That's what a designer does. Wants to be remembered as a designer – a term that has only come into existence in his lifetime. Architects were originally designers – concerned with function and form and melding the two together.
- DW's principles for design: when you design something, it doesn't matter how good it looks, if it doesn't work. Appearance is not as important as functionality – the balance in good design should be 51% functionality, 49% looks.

