

RESEARCH ARTICLE

The Bartlett, Architectural Pedagogy and Wates House – An Historical Study

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As Wates House, the Faculty building of the Bartlett School of Architecture, is soon to be completely refurbished, stripped to its bare bones and rebuilt upon its current foundations, the physical trace of what the Bartlett School was supposed to embody in Wates House will soon be lost. Using historical archives from the architectural press, UCL literature, oral interviews, carried out in 2013–14, as well as personal experience of using the building as a student, this article provides an explanatory overview of how the history of architectural pedagogy and its reform in the 1960s came to design a very specific building, reflecting not only pedagogy, but the cultural and economic climate of Britain at that time. Ever since, Wates House has created both resistance and harmony towards the practice of architectural education at the university.

Introduction

Through an historical study of the pedagogic methods at the Bartlett School of Architecture, this article hopes to unfold the mystery of the design of its current Faculty building, Wates House, 22 Gordon Street, London (**Figure 1**). The building was purpose built for the School during a time of revolutionary change in architectural training in British universities during the 1960s and 1970s. Thus, Wates House can be viewed as an historical trace of the period, helping us to understand what theoretical ambitions a particular segment of the architecture profession had for architectural education at the time the building was commissioned in 1971.

The article is divided into three sections: the first section outlines the history of the Bartlett School of Architecture since

architecture was first established as a subject at UCL. This provides the necessary context to address the pivotal architectural pedagogic shifts that took place at the Bartlett when Richard Llewelyn Davies took up Chair of Architecture in 1960, an appointment that instigated the commission and design of Wates House in 1971. Before this time, UCL's architectural education had always leaned towards a Beaux-Arts approach, a style that had become so out of favour by 1958 that a national conference was called at Oxford to discuss the architectural curricula in Britain. Adhering to the conclusions of the conference, Llewelyn Davies introduced a modern, social, and professional approach to the architecture course at the Bartlett. Other notable influences on the design of Wates House, discussed in section two, were the Wates House Committee, a body of Bartlett staff and students; the economic and cultural climate of Britain; and the influence

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Figure 1: Wates House, photographed on Gordon Street, photograph by author 2013.

of Jane Abercrombie, who was producing a ten-year report with Sara M. Hunt, covering the progress of the school between 1960–70. Section three discusses the commission and design of Wates House. The concluding paragraphs touch on the legacy of Wates House up to 2014, which addresses a further pedagogic shift at the Bartlett, the Unit System for teaching design, initiated by the arrival of Peter Cook in 1991. This period deserves an essay in its own right, but for the purpose of this article it is mentioned in order to return to the historical overview of the Bartlett. This research has been based on historical archives from the architectural press, UCL literature, and oral interviews carried out in 2013–14 with Bartlett staff and students, as well as personal experience of using the building as a student.

The aim of this essay is to uncover and explain how the Bartlett School of Architecture created the Faculty building, which it recently

inhabited (1975–2014), and to discuss whether the design of the building had any relevance to the architectural pedagogy that was being practised at the time it was commissioned.

1841 — 1958: Historical Background of the Bartlett

In 1841, UCL became the first university in Britain to appoint a Chair of Architecture to start a course of higher education for training architects. At first, UCL only provided evening courses in architecture, the primary use of which was to supplement the training of apprentices. This was the first step away from the traditional apprenticeship system, previously the only route to the architect profession, as it was placing architectural training in an academic environment. The architecture course was principally linked to the Department of Engineering, which was already offering a full-time, three-year long degree.

The first Chair and Professor of Architecture at UCL was Thomas Leverton Donaldson (1841–65), also the co-founder (1843–4) and President (1863–4) of the Royal Institute of British Architects (RIBA). He stated: 'the more I have since studied the subject, the more difficulty I have felt it to construct a lucid and sound theory for the guidance of the student' (Abercrombie & Hunt 1977: 1/5). For Leverton, the crux of the problem was: what theory and book of principles could an architecture course use? How was the creative aspect of designing buildings to be learnt academically and, more importantly, how was it to be examined and graded? As we shall see, architecture professors throughout the twentieth century were continually trying to resolve these dilemmas.

Donaldson's method of teaching was through illustrated lectures, taking students on site visits around London and explaining construction methods with practical presentations (Abercrombie & Hunt 1977). (This is similar to how first year BSc Architecture students are taught today.) Thomas Hayter Lewis, who took over as the Chair in 1865, encouraged the student to '...omit, choose and supplement his subjects from all the Departments of the College' and equally emphasised '...studies in the office of a Civil Engineer or Architect' (Abercrombie & Hunt 1977: 1/5). Then, in 1890, the Department was renamed as the 'Art and Science of Architecture and Building Construction' (Abercrombie & Hunt 1977). The course was further developed in 1892 when the Carpenters' Company provided specialised classes in architecture and building construction (Abercrombie & Hunt 1977).

In 1903, the next Chair was F. M. Simpson (1903–19), who finally formalised the architecture department with a full three-year course. It was in 1904 that the Royal Institute of British Architects' intermediate examination was granted to the school, a necessary exam to gain the qualifications to call oneself a chartered architect. However, the Chair still encouraged a combination of training in an

office alongside university architectural education as the best preparation for practice. University education alone could not prepare a training architect. Simpson observed that 'the student has to think for himself [sic] from the first, and not merely to interpret the thoughts of others, and yet he receives far more personal supervision than can ever be given by a busy architect in practice' (Abercrombie & Hunt 1977: 1/6). Here was a valid justification for architectural university training: to provide a nurturing environment for an aspiring architect to learn and practise their skills without professional pressure. In addition, Simpson thought architectural education would not just be training in the practical and aesthetic sides of architecture, but also be an opportunity to educate architects generally in other subjects as well. Further to this, he said architectural history lectures was for the student to 'enlarge his mind, stimulate his imagination, and interest him in his art' as opposed to filling the brain with facts (Abercrombie & Hunt 1977: 1/6). Still closely linked to engineering, the first year of study at this time consisted of: building construction, chemistry, drawing from 'antique', English, French, German, history of architecture, modern and antique history, mathematics, and mechanics (Abercrombie & Hunt 1977). In addition, students were required to undertake studio work in each year. Thus, it was a combination between an engineering degree and a liberal arts degree with studio work in architectural drawing. However, with the vast range of subjects being assessed, design did not yet dominate the workload of a student as it does today.

The School expanded in 1913 when it merged with King's College London's Department of Architecture under the initiative and financial support of Sir Herbert H. Bartlett, an engineer and building contractor, who offered £30,000 in 1911 to construct a new Department Building. It was built in the Wilkins Quadrangle at UCL between 1912 and 1913 and opened in 1915. In 1920, the department building was then named 'The

Bartlett Building', after its benefactor (Harte & North 2004). This is the origin of 'The Bartlett' name that is often used today when referring to the school, despite the fact that the school is now housed in Wates House. The Bartlett Building was made up of large open studios for students and shared offices for staff. There were three levels, one for each year group. By 1937, it accommodated 250 students (UCL 1937).

In 1914, Town Planning was introduced into the curriculum of architectural education at UCL with the appointment of the first Professor of Town Planning. A separate department was set up for the course but the departments continued to work together in the same way that architecture and engineering had done from the beginning. This provided another dimension to the architectural discipline, as it showed an interest in large-scale design and the wider context of buildings. The brief of Wates House was to carry through this side of architectural pedagogy

After Simpson, Sir Albert Richardson (1919–46) became the Chair of Architecture. For Richardson, architecture was the 'visual effects of light and shade, graceful geometry, unable to live without the aristocratic client' (Abercrombie & Hunt 1977: 1/7). If this is the case then architects are only useful for a minority of society; they are designers of the grandest objects one could own. This idea conflicts with Modernist ideas emerging on the Continent at the time, ideas concerned with designing for the masses, using architecture as a social tool rather than seeing architecture as a commodity for the rich in the form of private estates. For example, in Stalin's Russia, a Modernist concept, architectural determinism, was employed in social housing, with the aim of conditioning the masses to live in a certain way (Buchli 2002). These ideas in architecture had to be viewed and studied in conjunction with social and human sciences, anthropology, psychology, and physiology, not just the hard sciences such as maths, mechanics, and chemistry. So far, UCL had not incorporated these social

aspects of architecture into its curriculum, and it would not until the 1960s.

Architectural education under Richardson encouraged the student to design traditional and classical architecture for conservative clients. The course guide of 1937–38 illustrates this. First year B.A. students would take lessons in mathematics (pure and applied), history of ancient architecture (Greek and Roman), studio work (drawings of Greek and Roman orders and ornament), and two languages, one of which had to be either Latin or Greek (UCL 1937). Examination papers and tests would be taken in all of these subjects. It was only in the third and fourth year that the course balanced out with more practical science-based topics that were specific to the built environment, such as sanitation, hygiene, lighting, structural engineering, heating and ventilating, and land surveying (UCL 1937). In the fifth year, students were to enter an architect office and attend evening lectures in the Department of Town Planning. Parts I and II could be taken at the end of the fourth year's course, and Part III at the end of the fifth year's course (UCL 1937). Overall, the focus was very much on draughtsmanship, particularly on drawing composite elements of pre-established architectural elements.

It is noteworthy that Sir Kenneth Adam, the production designer for the James Bond films who studied architecture at the Bartlett during Richardson's time, expressed in an interview how he was personally more Bauhaus-orientated than the Bartlett, which was in those days 'extremely traditional' (Frayling 2005: 17). He describes how Richardson looked at his drawings in preparation for the RIBA examination, which Adam claimed was a modern project, and he drew all over them with red pencil, commenting 'it's interesting, but if you want to pass your inter-RIBA I suggest you design in a style like Queen Anne or Georgian' (Frayling 2005: 18). This anecdote exemplifies the traditional and restrictive nature of design pedagogy during this time. Not only was this a barrier to an individual's expression, but also a barrier to

architectural research for the university, as a student was not encouraged to progress or deviate from the norm.

Professor Hector Corfiato (1946–60) succeeded Richardson and placed even greater emphasis on the formulaic assemblage of classical orders, which brought architectural pedagogy into a climactic state of dissatisfaction, leading to a small revolt by Bartlett students in 1960 (Forty 2013). Two years prior to this revolt was the 1958 Oxford Conference, in which architectural education, as set within a university institution, was reassessed. This was a pivotal moment in the history of architectural pedagogy as the curriculum was then being assessed nationally.

The universities will require something more than a study of techniques and parcels of this or that form of knowledge ... knowledge will be guided and developed by principles: that is, by theory. 'Theory' as one speaker said, 'is the body of principles that explains and inter-relates all the facts of a subject.' Research is the tool by which theory is advanced. Without it, teaching can have no direction and thought no cutting edge. (Martin 2013)

Along with demanding that the 'intellectual level and scope of architectural education' must be generally improved (Abercrombie & Hunt 1977: 1/2), the conference focused on the importance of bringing the social sciences into British architectural education. It hoped the course would train students with more than just a qualification in architecture, enabling other career options for architect graduates. In addition, the conference demonstrated a desire to bring the profession and the architect school closer together.

1960 — 1969: Llewelyn Davies's Influence on Bartlett Pedagogy

1960 marked the beginning of what was to be an historically pivotal moment in revolutionising the Bartlett, when Lord Richard

Llewelyn Davies was appointed to the Chair of Architecture (1960–1969). Llewelyn Davies was a prominent delegate at the Oxford Conference and was co-founder of Llewelyn-Davies Weeks, an architectural practice focused on master planning and hospital design, and future planners of Milton Keynes (Edwards 2013; Fraser 2004). Having studied at the Architectural Association in the 1930s, Llewelyn Davies adhered to principles of modern architecture. 'The experience of working alongside medical and scientific specialists in the 1950s led Llewelyn Davies to the conclusion that architecture was intellectually undeveloped compared with the physical and social sciences' (Murray 2004).

As well as Llewelyn Davies, there were several other influential academics who contributed to the post-Oxford Conference pedagogic movement. Most notable was Minnie 'Jane' Abercrombie, a British psychologist who had a strong interest in educational methods, as demonstrated by the studies she had published. As well as studying the pedagogy of UCL Medical students, she, in collaboration with S. M. Hunt, worked on a report spanning the next ten years of the Bartlett's development from 1960–70, which became a comprehensive account of the Bartlett's development, published in 1977. The research was done as part of the Architectural Education Research Unit, under the aegis of Llewelyn Davies. The report explained the changes made in course structure and departmental structure, and was supported by statistical data. The fact that a report was even initiated at the beginning of the 1960s reveals the expectations people had for developing architectural education at UCL. It was as if the Bartlett was to become a model for other schools to follow.

Llewelyn Davies's inaugural lecture in 1960 showed a man with intent to create change, at least theoretically. For example, he disliked nineteenth century attitudes, particularly as represented by the *École des Beaux-Arts*, where architecture seemed defined 'as an art of assembly' due to the fact

that students learnt and worked from a 'prescribed catalogue of building elements and geometrical rules' (Llewelyn Davies 1960: 5). The Bartlett had been heavily 'Beaux-Arts' up to this point. Instead, Llewelyn Davies greatly admired the Bauhaus School, founded and led by Walter Gropius between 1919–1928. The Bauhaus utilised the workshop in architectural education, a facility that Llewelyn Davies saw as allowing students an escape from the 'isolation of design on paper, and [thereby] achieve a direct feeling for form and material' (Llewelyn Davies 1960: 7). He also noted how students were taught the psychology of vision and the physics of light. His particular observation of the practical and theoretical aspects of the Bauhaus pedagogy was to fully influence the design of the basement in Wates House. 'Instead of trying to teach design we must go back to the lessons of the Bauhaus, and consider how best we can free students from the things that stop them being able to design' (Llewelyn Davies 1960: 14). This attitude was a step away from the Bartlett that Kenneth Adam had described (above). Llewelyn Davies wanted the Bartlett to have a Modernist Bauhaus-orientated approach to architectural pedagogy, as well as to promote research within a university institution in order to develop the subject theoretically, as decided at the Oxford Conference. Supporting this, Abercrombie and Hunt noted that 'professional progress had been based on the experience of practice – now it must be based on organised research' (Abercrombie and Hunt 1977: 4/7). Essentially, architectural pedagogy was striving to transfer from the 'scholar' architect to a 'scientific' and 'professional' one. Ironically, the new ambition for research to create a theory for architectural pedagogy was, at that point, only a theory.

Llewelyn Davies tried to apply the ideas and ambitions for architectural education in two ways: He changed the course structure for architecture and also created a whole new Faculty in which the discipline was to be taught. He amalgamated Town Planning

and Architecture, along with other research groups, to form a new Faculty for UCL in 1969. Llewelyn Davies linguistically diffused the significance of the architecture school at UCL by blurring it with all disciplines related to the broad field to which he believed architecture belonged, changing its name to: 'The Bartlett Faculty, School of Environmental Studies' (the Faculty was renamed the 'School of the Built Environment' in 1992). This change in itself represents the totality of his reform project – to make architecture sit within a wider context from the very beginning of studying the subject. This project then developed into organising the commission (1971) and construction (1973–75) of a new purpose-built building for the Bartlett: Wates House. The building was to physically reflect the newly established ideas in architectural pedagogy, which would, it was hoped, facilitate those very ideas in practice.

The undergraduate degree was changed to a BSc in Architectural, Building, Planning and Environmental Studies, which was a three year long degree in which architecture students could select modules from the various subjects offered at the new Faculty. This allowed students to take a wide range of subjects that all related to the professional industry. Michael Edwards, a member of the Wates House Committee and lecturer in the Planning School during this time, noted that the old professional boundaries between architecture, planning, and engineering were seen as a barrier to progress; these rigid boundaries needed to be overcome (Edwards 2013). The real trade of architecture was believed to require a collaborative process amongst disciplines and so architectural education needed to provide a foundation for this. However, it was not until 1975, when Wates House opened, that the Faculty could be centralised physically into one building and the desire for highly concentrated, multi-disciplinary teaching in environmental studies could supposedly take place. Prior to the commission of this building, the Architecture school was still housed

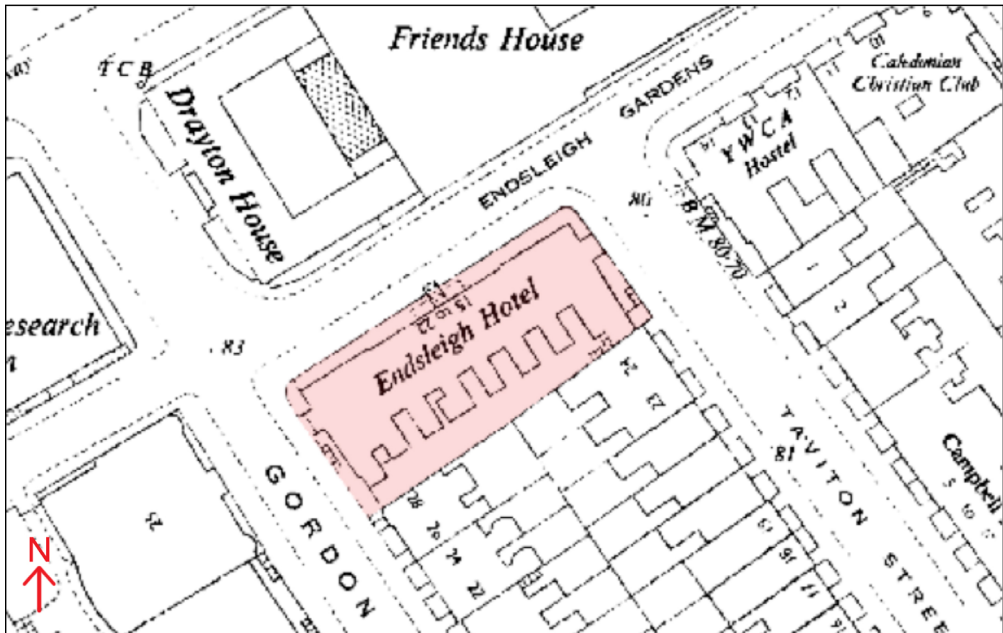


Figure 2: 1961 Map of Endsleigh Hotel, showing the site for Wates House. © Crown Copyright and Landmark Information Group Limited (2013). All rights reserved (1961).

in the Wilkins quadrangle on Gower Street, whilst the Planning department was located in Flaxman Terrace.

1969 — 1991: Bartlett School of Environmental Studies

Architects' Co-Partnership Incorporated (ACP) designed the new Faculty building. During the 1960s they had designed buildings for educational institutions and by the 1970s had gained a range of awards from the Royal Institute of British Architects, the Civic Trust, the Ministry of Housing and local government (Williams & Partners 1978: 74). Their profile, therefore, suggested their suitability for the job of designing a Faculty for UCL.

The client was UCL, not the Bartlett Faculty itself. Because UCL is an institution comprising a vast range of departments, and is located in the centre of London with many listed buildings in its surrounding area, this meant that it was, and remains, a difficult task for it to expand and construct new spaces. Therefore, when the opportunity arose for UCL to buy a plot of land in Bloomsbury, formerly the

site of the Endsleigh Hotel, the agenda was not entirely focused on fulfilling the specific needs for the Bartlett Faculty alone, but on creating a new stock of spaces for the university generally. What secured the site for the Bartlett was the financial support Llewelyn Davies procured from a friend, Neil Wates, from the Wates Foundation, which provided £450,000 towards the project (assuming an average inflation of 6.2% a year this amount would be equivalent to £5,386,500 in 2012 terms) (Bank of England [Online] 2013). The donation was earmarked for housing the School of Environmental Studies, hence the Wates name was given to the new building. A condition of this donation was that the building was to be completed within three years of the architects' receipt of the brief.

Limitations in time and budget were not the only concerns affecting the design of the Bartlett Faculty. The site (**Figure 2**) was restricted, due to the narrowness of Endsleigh Gardens and the requirement for surrounding buildings to access daylight, which limited the height of the new building. The site,

therefore, predetermined a rectangular block to occupy the space, and it was likely for this reason that ACP never explored any alternative form. Furthermore, the economic climate in Britain, along with attitudes towards architecture during the 1970s, did not favour extravagance in construction. These factors were to have an overbearing effect on the aura of the building.

An extended Wates House Committee (WHC) was set up, combining professors, junior staff, and students from the Bartlett to outline the user requirements and specifications. The new building was to include workshops; demonstration rooms; laboratories for lighting, acoustics, and thermal studies; a wind tunnel; a photographic room; a library for 20,000 volumes and 60 readers; seminar rooms; a college flat; and work space for some 180 undergraduates, 200 postgraduates, and between 80 and 90 full-time academic, technical, and administrative staff (Duffy 1975: 764). We can see from the list of laboratories and workshops how Wates House was to facilitate Llewelyn Davies's vision for a scientific and practical pedagogic approach to architectural education and research. This marked the biggest difference in architectural education that the Bartlett had yet to experience – the drawing board was not going to be the only source for production. Although there had been attempts to create a practical curriculum for Bartlett students, such as the Carpenters' Company classes at the beginning of the twentieth century, as well as holding classes with Engineers and life drawing with the Slade School, Wates House was to provide a bespoke space for environmental studies. Research laboratories and outdoor workspace was to facilitate a specialised 1: 1 scale testing ground, where light and shadow, for example, could be tested in a controlled manner. The building was promoting a new working method, one that was reacting against the previous zeitgeist of regurgitating historical ideas.

However, it is important to note that, at the same time, an alternative means for pushing architectural innovation started

emerging elsewhere. The avant-garde architectural group Archigram, whose conceptual drawings and montages demonstrated ideas for breaking boundaries of what people thought architecture and technology was capable of achieving for society. Their work was circulated amongst architectural students through their magazine *Zoom*, receiving a cult following. But, according to Simon Sadler:

Some students, for example those at London University's Bartlett School swayed by lecturer John Christopher Jones's 'Design Methods,' disregarded zoom [sic] as lacking substance. Jones's lofty, professional approach could hardly be more different from zoom [sic]: Design Methods 'teaches design as a series of logical decisions and not "inspired flashes"', wrote Jones in a 1969 comparison of his own Bartlett School with the AA and Regent Street Polytechnic nearby (Sadler 2005: 158).

Thus, during Llewelyn Davies's time, the Bartlett headed towards greater practicality, as opposed to encouraging philosophical and utopian ideas through illustrations. However, this is not to say that the Bartlett was not concerned with design. In fact, the report by Abercrombie and Hunt showed that, in 1960, structures dominated the student's workload, but was later reduced with design taking a stronger lead. Murray Fraser, Professor of Architecture at the Bartlett and a former student from 1976, remarks that the Bartlett 'didn't have a design ethos at all' and he controversially states 'Llewelyn Davies sucked the design heart out of the school' (Melia 2013: 85). According to Fraser, AA students at this time believed that Bartlett students were taught to 'plan everything, design nothing' (Melia 2013: 85). These views seem understandable when we consider how strongly Llewelyn Davies wanted the curriculum to be grounded in a scientific environment as well as be amalgamated in the same building with the School of Planning. Where exactly in

the new building was Llewelyn Davies hoping that architecture students might discover their new aesthetics and style? Ironically, Sir Peter Cook, the co-founder of Archigram (an architectural group), was to become Chair of the Bartlett in 1991.

Llewelyn Davies's intentions, as recalled by Michael Edwards, teacher of planning at the Bartlett since 1969, were that Wates House should not fossilise a moment in time nor embed a particular method of education in the structure. Instead, he believed that it would be better to have a building that was not precious, that could be reconfigured, in which walls could be knocked down and 'no one would have to worry about protecting marble floors' (Edwards 2013). However, he was old fashioned in some respects as he envisioned the top floor of the new building to be dedicated to Masters' suites, offices, reception rooms, and kitchens with views across London. This idea was actually incorporated into the first design, which included luxurious 'internal courtyard spaces on the roof' (Edwards 2013) while the library was spread through the ground floor and basement. This caused uproar amongst the WHC who felt the rooftop level should be dedicated to communal use. After many meetings, the WHC managed to re-brief the architects, which led to the library being located on the top floor.

Although Wates House was intended by Llewelyn Davies to be flexible and free of boundaries, there were other ideas about pedagogy, which influenced the philosophy of the school building and its spatial configuration. Jane Abercrombie's theories on pedagogy, as shown through her study on medical students at UCL as well as from what I have been told in interviews with Adrian Forty, Professor of the History of Architecture, and Edwards, inform us that she was an advocate for small group learning as the most productive means for individual development (Abercrombie 1971). As part of the Architectural Research Unit during the 1960s, she was also teaching Human Behaviour classes at UCL. It is very likely that

she influenced the choice of the cellular structure design deployed at Wates House (Forty 2013). This would help explain why there was no provision in the brief for creating a building with large, expansive, open studios, as the former Bartlett Building had, and which was the defining feature of most architectural schools. There was also specification for large gathering spaces.

According to a report from 1974 in *Building Design*, a college spokesman stated that Wates House was to be a 'sort of warehouse', which would 'churn staff and students together' (Building Design 1974: 1). It is unsurprising that the Bartlett should want all of its students and staff, working in the field of the built environment, to work side by side, as the aim was to break the boundary between disciplines and create a cohesive intellectual hub. As Abercrombie and Hunt noted, the new faculty 'differed from others in University College in that it represented a School without departmental boundaries. It also included members drawn from ten other departments in University College' (Abercrombie & Hunt 1977: 4/4).

The Bartlett was not the first School of Architecture designed to 'churn' different disciplines and members of its department together in order to encourage a level of intellectual exchange and social interaction. Paul Rudolf's design for the Yale School of Art and Architecture, built in 1963, was designed specifically to bring architects, planners, painters, sculptors, and graphic artists under one roof. 'Each discipline has its own precise area, but when possible they are brought together (i.e. jury space, student lounge)' (Rudolph 2008: 100). Furthermore:

[Rudolf] believed that students from all years would benefit from working together in the same environment and could learn from listening to the live criticism examinations of others students' work. It was for these educational reasons that he conceived the central teaching spaces for both the architects and designers in this

form. In the event, these areas were infrequently used; they were too public, too noisy, not well lit and not the venues for the theatrical activities the design had anticipated (Monk 1999: 42).

The main difference between Wates House and Yale was that the latter had a very large site for the architect to incorporate expansive open spaces without impinging on workspace. The site for Wates House, however, did not permit an equivalent grandiose space. In fact, the criticism Tony Monk makes is similar to what I have heard most staff and students vocalising during a crit (public tutorial) held within Wates House. In contrast to Yale, Wates House users have no other choice but to use the designated crit spaces. Along with a philosophy to encourage small-group teaching, Wates House was prevented from ever becoming a real warehouse.

Flexibility was a practical architectural concept to incorporate into Wates House, particularly as its site restricted its size. In addition, flexibility was a concept being employed by the avant-garde architects of the 1960s and 1970s in Europe as it 'was a period in which architecture was expected to be seen as *the social art*' (Landau 2003: 9, italics in original). Examples include Cedric Price's *Fun Palace* (1961, un-built) and Archigram's conceptual and fantastical designs of a *Plug-in City* and *Walking City* (1964), which broke the boundaries of the previously rigid, fixed, deterministic architecture that they perceived to be imposed on us by historical architectural epochs. As well as Richard Rogers and Renzo Piano's *Pompidou Centre* in Paris (1971–77), as Forty mentions:

...after about 1950, flexibility offered hope of redeeming functionalism from determinist excess by introducing time, and the unknown ... a recognition that not all uses could be foreseen at the moment of design made

'flexibility' a desirable architectural property (Forty 2000: 142).

This was the point of view expressed by Llewelyn Davies's most admired architect, Walter Gropius:

...the architect should conceive buildings not as monuments but as receptacles for the flow of life which they have to serve and ... his [sic] conception should be flexible enough to create a background fit to absorb the dynamic features of our modern life (Gropius 1954: 177–180).

Within the architectural sphere at this time, flexibility was at the forefront of architectural theory. Therefore, ACP had a series of precedent studies to inspire their design for Wates House. So how was ACP going to incorporate ideas of flexibility and paradoxically achieve deterministic social qualities for encouraging intellectual exchange between disciplines, as well as create specific facilities bespoke for practical architectural research? ACP also had to bear in mind that UCL wanted a general building to add to their stock of spaces. This was a difficult task to accomplish within the time frame, budget and site.

There could not have been a more dramatic shift in the interior configuration of the teaching environment between Wates House and the former Bartlett Building: large open plan studios gave way to small cellular rooms. There was a theoretical ambition for Wates House to become, on the one hand, a multidisciplinary hub that would produce intellectual exchange, and on the other hand an environment for small group teaching. The latter ambition was to be an overriding influence on the design compared to the former.

There are two published designs for Wates House by ACP (**Figures 3, 4 and 5**). According to Edwards, the first proposal was heavily influenced by Llewelyn Davies, which was then rejected by the client board (Edwards 2013). However, it is interesting to

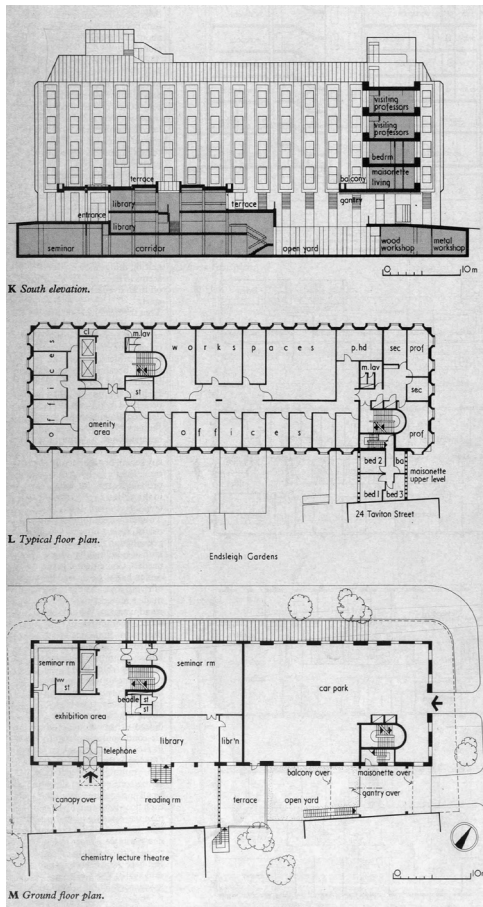


Figure 3: First design proposal of Wates House (rejected), 1971–75. Extracted from *Architects' Journal*, 161 (15), 1975 Apr. 9, pp. 763–775. Permission granted Feb 2014.

compare ACP's first proposal with the final design as the former reflected the architect's initial reaction to the brief, whereas, the final design was a product of negotiation between the WHC, the client (UCL), and the architects. The final design (**Figures 4 & 5**) does retain some ideas from the architect's initial proposal, such as the location of the workshop facilities in the basement with an open yard for outdoor practical work, as well as the idea that the ground floor entrance should be used as an exhibition atrium space.

In the revised design, the stairwells were symmetrically placed along a central line

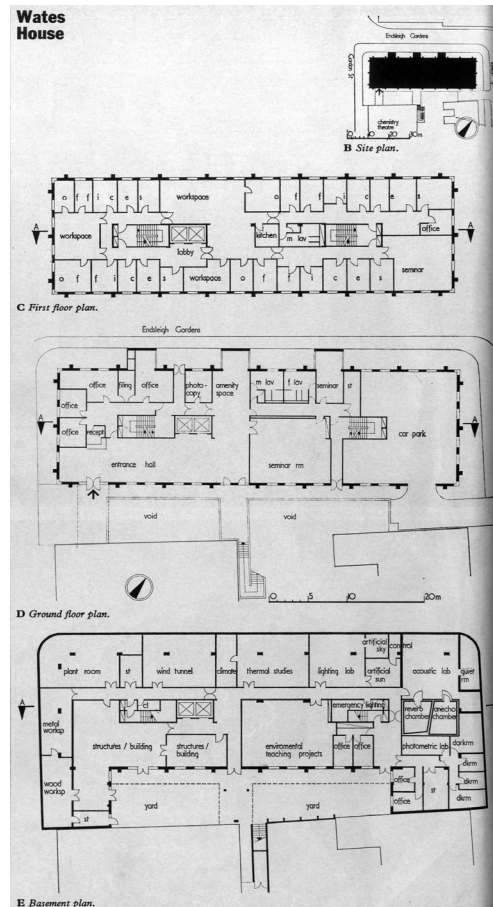


Figure 4: Final drawings of Wates House, 1971–75. Extracted from *Architects' Journal*, 161 (15), 1975 Apr. 9, pp. 763–775. Permission granted Feb 2014.

in the floor plate, supporting the floors between the central lift shaft and the edges of the building. Ed Reynolds, an architect from ACP who worked on the project, stated that the decision to move the stairwells was to maximise natural sunlight for all the offices and studios (Reynolds 2013). Although this seems reasonable, the final design takes away an easy circulation route from the original design and replaces it with an incomprehensible one. The lifts open directly onto the exhibition space and the stairwells are hidden. The location of the stairs is not even suggested from the atrium: they are a

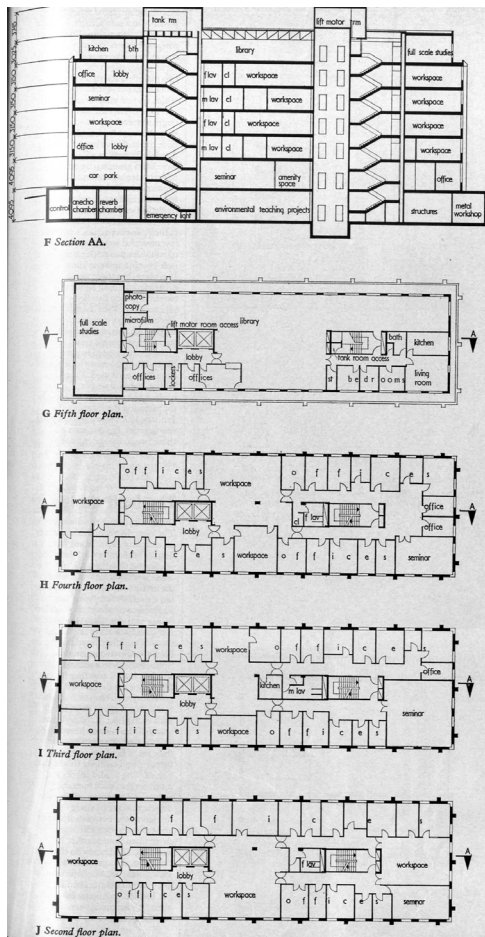


Figure 5: Final drawings of Wates House, 1971–75 Extracted from *Architects' Journal*, 161 (15), 1975 Apr. 9, pp. 763–775. Permission granted Feb 2014.

surprise to be stumbled across by the visitor. The placement of the stairwells and lift shaft also put an absolute limit on the degree of open space to be created within the building.

In addition, as the room configuration became a cellular structure of individual private offices with small to medium sized studios, the floor plan of Wates House had to be largely given over to accommodating corridors (**Figures 6, 7 & 8**). If the scheme had been more open-plan, then more floor space would have been given to workspace. Moreover, there was, and still is, an interesting social distribution in offices: as professors

occupy corner offices the hierarchy of seniority descends as one moves towards the centre of the building. The corner office has the luxurious benefit of two walls bringing light through its windows.

The car park, a requirement of Camden Council at the time, which prescribed a number of square units of car-parking space per square unit of building (Edward 2013), was initially proposed to take up 50% of the ground floor plan, but the final design shows a reduced percentage. Around 1995, the car park was transformed into the Garage Theatre for the benefit of all UCL students (Abdolwahabi 2013). Unfortunately, a fire during a Bartlett Summer Show opening night, where Wates House as well as the interior of the car park was used as the exhibition space, revealed a dangerously long evacuation time. This meant the Bartlett Summer Show ceased to be hosted in Wates House, and has instead been moved to the Slade School of Fine Art, UCL (Abdolwahabi 2013).

ACP's concept for creating flexibility within Wates House was far less radical compared



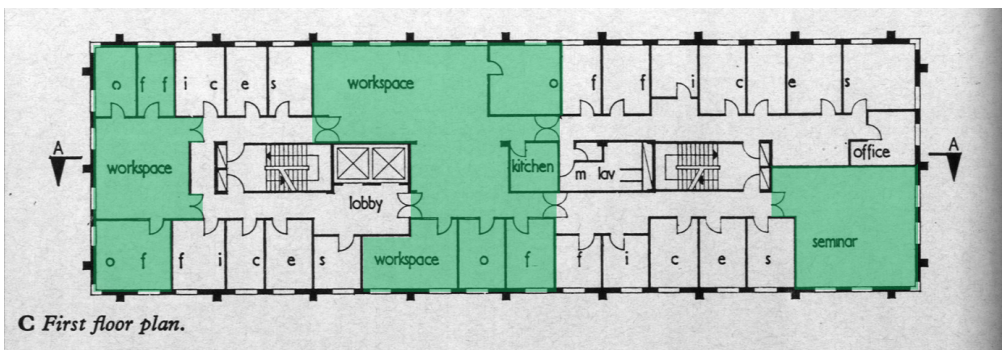
Figure 6: Fourth floor corridor for planning staff offices, photograph by author, 2013.



Figure 7: First floor corridor for architectural staff offices, photograph by author, 2013.



Figure 8: Third floor corridor for architecture student studios, photograph by author, 2013.



C First floor plan.

Figure 9: First Floor Plan. Green areas indicate teaching space, 1975. Extracted from *Architects' Journal*, 161 (15), 1975 Apr. 9, pp. 763–775. Permission granted Feb 2014.

to the examples previously discussed. Their strategy was to make all internal walls non-structural, thereby allowing wall partitions to be dismantled and re-assembled over time. However, since these walls were installed in a fixed position when the building opened, it is reasonable to assume that the building was not so flexible as to allow the removal of a wall on a day-to-day basis. By bringing together the memories of people who worked at the Bartlett from the outset,

Edwards and Forty, with the photographs of Wates House, it is possible to outline how the building was used after it was opened.

Despite the hope that disciplines would engage with one another, each discipline was in fact put on its own floor. The green highlighting in **Figure 9** indicates where the minimum teaching and studio areas were on the first floor, (which were similar to the 2nd, 3rd, and 4th floors). Students were taught in year groups when Wates House opened and

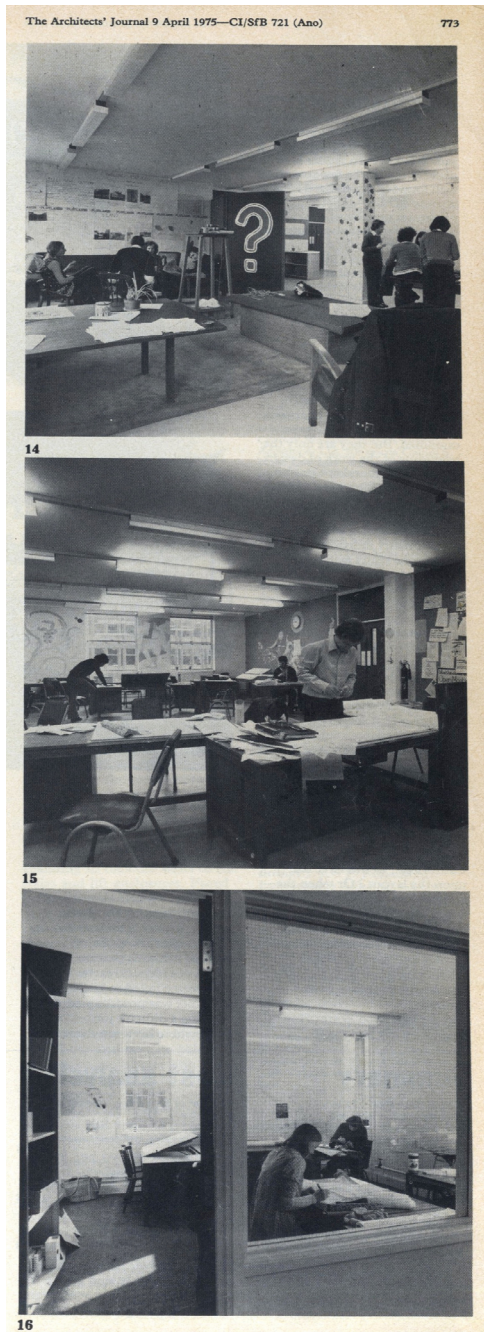


Figure 10: Interior photographs of studio space 1975. (Top) Bigger studio space; (bottom) smaller studio off bigger studio space creating a social territory. Extracted from *Architects' Journal*, 161 (15), 1975 Apr. 9, pp. 763–775. Permission granted Feb 2014.

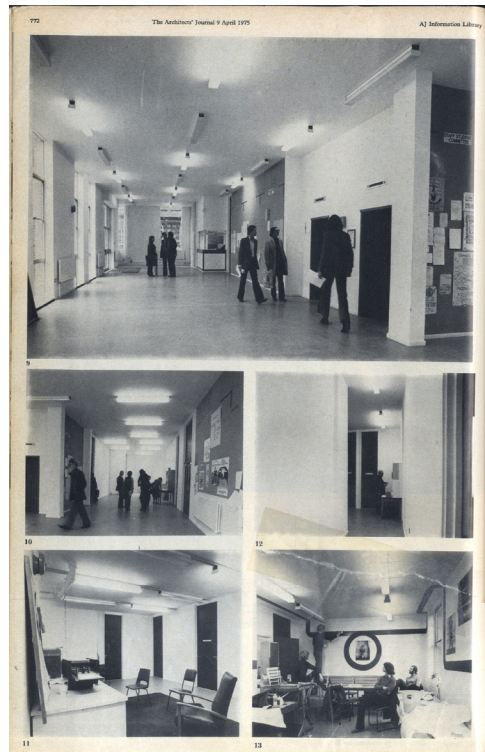


Figure 11: Interior photographs (Clockwise) exhibition atrium; awkward corridor passage; bigger studio/social space; smaller central space on typical floor, 1975. Extracted from *Architects' Journal*, 161 (15), 1975 Apr. 9, pp. 763–775. Permission granted Feb 2014.

student numbers were much fewer than they are now (Edwards 2013). This allowed for a whole year group to be taught in the same area and occupy many rooms of the building as a communal territory, making the workspace a socially cohesive space. As can be seen from the plans, there was a combination of large and small studios next to one another, providing the student with the option to work in a confined space or in a more open space (**Figure 10**). This also created a subtle divide between students within a year group through wall partitions. The rooms coming off the 'workspace' areas were smaller studios with transparent walls (**Figure 10**). According to Forty, the 'workspace' areas would be used for tutorials as well as studio work—this is



Figure 12: Photograph of small social space on fourth floor, no natural sunlight, photograph by author, 2013.



Figure 13: Photograph of central space now used as computer cluster room, photograph by author, 2013.

where intellectual exchange and transparency in the general progression of students' work could occur, as a tutorial would be open for observation by the rest of the year group (Forty 2013). The transparency in the wall partitions also allowed for light to travel through the building, creating a lighter environment to how Wates House now appears. Yet the photograph illustrating a typical communal space in 1975 (**Figure 11**) looks very similar to what exists now (**Figure 12**).

Each floor was designed to have a central workspace, which Edwards remembers as having kitchenettes, shared both by staff and students allowing for social interaction and 'time-out' from work (Edwards 2013). However, as the number of students increased over the years and facilities such as computers infiltrated into the architectural practice, the demand for working space overrode the need for communal social space (**Figure 13**). Today the 2nd and 4th floor central spaces are computer cluster rooms, and the few remaining kitchenettes have been renamed 'Staff Only' creating a socially hierarchical boundary between staff and students (as well as having the practical effect of cutting students off from kitchen facilities). This particular change reflects the attitudes of the current users more than the spatial design of the building.

Today, the 3rd floor central space is most similar to the original intention as

established at the beginning of Wates House. The 'workspace' still exists and is a common ground for the surrounding studios. It is still used by the first year teaching group to host tutorials, studio work, and social interaction. The fact that this feature has only remained constant to the first year teaching group can be explained by the pivotal change in architectural pedagogy from 1991 when Sir Peter Cook took up the Chair of Architecture at the Bartlett, as well as the fact that student numbers and the demand for computer facilities has grown.

As mentioned earlier, since the 1960s, Sir Peter Cook had established himself as an avant-garde designer and creative thinker, so when he was appointed to the Chair of Architecture in 1991, the Bartlett's focus on design was to develop further than it had ever done before. His pedagogic system subdivided design-teaching groups vertically through the years, rather than what can previously be described as horizontal design-teaching groups. His approach was called 'the unit system'. This vertical streaming enabled the ever-growing student intake to form much smaller teaching groups. The unit system is still in practice today whereby a unit is comprised out of 2 different years per unit (Years 2 and 3 merge together and Years 4 and 5 merge together). The consequence of this pedagogic shift created a dramatic change in the use of the studio in

Cam). Had Wates House never been commissioned to incorporate such practical laboratories in the first place, the Bartlett may not have so easily updated itself with the latest technology in recent years. This shows how the spatial structure has some influence but cannot be the sole determining factor for how architectural education is practised.

Conclusion

Wates House was not created with a particular design ethos. Rather, the building was strategically planned to work within a complex and, at times, contradictory set of parameters with an unfortunately small budget; it was a product of schematic planning rather than of architectural design. The idea that Wates House could represent an aesthetic for the school was inconsequential, yet Wates House does inadvertently reveal an aesthetic indicative of its original brief and philosophy. The building is so non-descript that it invites the opportunity for one to project onto it whatever one wants, catering for the original idea that the building should not fossilise pedagogy. However, one cannot get away from its classic 1970s office block physicality, built with cheap materials and fittings that are more indicative of the British economic climate of the time than of the architects' taste. The fact that the basement has continually managed to be updated, and that the social structure of the 1990s Unit System has harmonised with the cellular structure of the building, proves that some of the ideas that were implemented in the design of Wates House have had a legacy within the school. The hesitancy for the architecture to be bold was, however, contradictory to Llewelyn Davies's conviction and eloquence in theorising how he would change the school for the future, but it does show the true nature of architectural pedagogy during the period in which it was commissioned – unresolved but distinctly rejecting the past.

Today the building does need to be improved for the simple reason that services

need updating and new design strategies need to be considered for how space and light can be utilised on the site. Getting the balance between providing spatial parameters to foster pedagogic systems as well as provide flexibility for ever-changing practices and physical equipment is extremely hard to achieve, especially on a small footprint in central London. This study has been undertaken at a unique moment when Llewelyn Davies's original Wates House will soon be lost. What takes its place will be subject to much scrutiny as the new building, designed by Hawkins Brown, has the potential to mould the future of architectural pedagogy in London.

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
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