Mary and David Medd's work: domesticity in postwar British school design (1949–72)

Montes, Paula Lacomba; Campos Uribe, A.

DOI
10.1080/03054985.2021.1924652

Publication date
2021

Document Version
Accepted author manuscript

Published in
Oxford Review of Education

Authors:
Paula Lacomba Montes (paulalacomba@gmail.com)
Alejandro Campos Uribe (a.camposuribe@tudelft.nl)

Mary and David Medd's work: domesticity in Postwar British school design (1949-72).

Introduction

From 1949 until 1972, the architects Mary Beaumont Crowley (1907-2005) and David Leslie Medd (1917-2009), within the Development Group of the Architects and Building Branch inside the Ministry of Education[i], were responsible for the design of numerous schools in Great Britain. The Development Group gave them, as acknowledged leaders [in primary school design within] of its Department of Architecture, the chance to develop and apply the design strategies they had developed throughout their lives, ever since their work in the county of Hertfordshire, regarding their understanding of a school in terms of space. Their particular way of envisaging educational spaces was built up over many years in numerous collaborative design processes, conditioned by their backgrounds and strengthened by deep educational and architectural research. Their job in the Ministry of Education was to focus on the design and construction of schools known as the Development Projects[ii], where the results of their approach is more visible.

The work of Mary and David Medd's has already been acknowledged and analysed through various approaches by the historians Catherine Burke (2013), Geraint Franklin (2012), Andrew Saint (1987) and Stuart Maclure (1984), among others. From all these and other sources, which have indeed helped to build a solid working framework,

the present research draws together the context and circumstances under which the Medds grew and worked. Although they have been extensively enriching, the existing sources focus on the relations between the teaching methodologies and the school types from a historical perspective, approaching the buildings as the final physical support of a particular use: learning. On the contrary, this article, a result of a thorough architectural and archival research, looks more closely into the Medds' *design process*, as a way to unravel some of the hidden and undiscovered aspects of their educational proposals.

The personal collection of Mary and David Medd, archived in the Institute of Education, UCL, the R.I.B.A, and within private collections, gathers an extensive number of documents which include notebooks, diaries, reports, Building Bulletins, letters, drawings, notes and drafts. By looking closely at these documents and the schools that were specifically developed by the Medds, one can detect that their designs are characterised by an avowed domestic *aura*, a homelike atmosphere. Our hypothesis is that such spatial feeling is substantially attained by architectural strategies traditionally linked to the design of domestic architecture.

A critical review of the original documents has allowed us to elucidate how the common school typologies, where the self-contained classroom (or classroom-unit) prevailed as the main feature of the school plan, were rejected in favour of a 'place/room'- based plan, which is a collateral effect of the unconscious pursue of the domestic topic hereof addressed. Even though both David and Mary Medd would say that the *homelike school* was just the outcome that best met *educational* needs, that the primary driver was education, its meaning and practice, the following lines argue that the architectural answer was ultimately the construction of a domestic environment, and that the architectural strategies used by the Medds resemble those used in domestic architecture. In order to clarify and prove this avowed domesticity, the paper sets out a

comparative analysis between the English house of the Arts and Crafts period and the Development Projects, as a method of casting light on the design strategy defined by Mary and David Medd in the late 1960s, commonly known as 'Built-in variety'. The research carried out so far has provided support and evidence enough to claim that domestic English architecture - as well as Scandinavian - had an important influence on the Medds' work, mainly due to conscious or unconscious memories related to their own groundings. This research underlines the Medds' architectural contribution through a rigorous study of their papers and documents, which implicitly confirm the suggested domestic inclinations.

Therefore, this essay constitutes one of the first architecturally focused analyses of the Medds' schools, an attempt to unpack their intentions and spatial strategies, as well as their relation to previous experiences that influenced their work—following Michael Baxandall's *inferential criticism* (Baxandall, 1985). The method proposes a close look into the design process as the object of study; in search for the principles (intentions) underlying it. Michael Baxandall, who gives a detailed account of his research method, first reminds us that our investigative perspective is peculiar and limited: it is impossible to discover the ultimate causes of the schools. Our intention is to analytically construct possible causes and ends, as we infer them from the relationship of the schools to their objective circumstances. It is impossible to think within the standards of the culture we study without destroying it by making it too explicit, without transforming its principles into rigid rules. But it is precisely this distance from the object of study that allows the explanations we give to be scrutinized and evaluated. The new findings are used to point differently to the works, so that their meaning is defined by the relationship between the schools and the schools that we perceive. This round-trip process brings us closer to a clearer perception of what we study, while we must avoid

all accessory discourse.

Domesticity

Mary and David Medd were very frugal when it came to describe the domesticity of their work, understood as an idea and as an experience, and when they did so, the most customary expression encountered in their writings was simply: ‘to achieve a homely environment’. Attending to contextual circumstances, the term domesticity was used to describe the environment of schools in its most literal sense. The Medds referred to domesticity in a specific context, in a shattered country with totally abandoned peripheral neighbourhoods, devoid of resources and under very poor health and hygiene conditions. Under these circumstances, the school had to recover that sense of ‘belonging’ that the Second World War had destroyed for many inhabitants. Nevertheless, looking closely at the original plans and photographs, letters and many other writings, it can be proved that the intensity of that domestic condition is more profound than they revealed in their formal written work.

> Should we continue to talk about the classrooms and the corridor? These words are part of a vocabulary that belong to an outworn image. Should not the primary school *be more like a home* with somewhere to wash, somewhere to cook, somewhere to rest, somewhere to read and write, and somewhere to make messes and experiment with materials and so on? If we think of life we may find a different and more stimulating *pattern* for our schools (Medd, 1963, p. 12).

It was precisely this statement by David Medd what drove us to the hypothesis that the so called *home-like* atmosphere could have been the main catalyst for the significant changes that the Medd’s proposed to traditional school types. Could the intended *domesticity* be responsible for the dismantlement of the ‘classroom’ (Lacomba & Campos, 2018, pp. 1-12) and its replacement by a school plan made up of varied

‘rooms’ for specific uses? If that is right, it could be anticipated that the acknowledgment of some features of the English house is a good means for coming to understand the Medds’ strategy and its domestic *aura*, for the schools’ spatial hierarchy that was put forward recalls the internal spatial structure of English houses of the nineteenth and twentieth centuries. It was David Medd himself who, during an interview in 1998, mentioned domestic buildings and well-known Arts and Crafts architects:

> The English tradition is essentially designing for human sensibilities, what makes people comfortable, the lighting and the textures, and the quality of materials, and the absence of harshness, and a degree of softness and, of course, of hardness, and the proportions which you can live with, you don’t tire of them instantly, it’s not a big splash that you see every day, every hour of the day, you can live with it. I think that’s the test, it is essentially an aspect of domestic building. And this is very much something which England was famous for at the beginning, up until the turn of the century. You can’t step into a Voysey house without feeling at ease. [...] There is a definite connection between the early architects - what Roger Fry and Ruskin stood for example- and people at that time. Philip Webb was the start of it - that was 1859. (Medd, 1998, p. 144).

Certainly, David Medd showed knowledge and admiration for the English domestic work. This, together with a note from 1965 where he stressed that the design of the Finmere School in particular was of interest due to the disappearance of the classroom which had been replaced by a pervasive domestic character of space (Medd, 1965), can lay the foundations for the following analysis. So far, it has been argued that the Medds allude to domesticity in atmospheric terms. Nevertheless, certain comparisons with the house arose when they described the functional requirements of schools: ‘as much care is needed in assessing the changing requirements of class spaces as in assessing the requirements of the dwelling rooms of a house’ (Building Bulletin 1, 1955, p. 23). These subtle remarks, though apparently insignificant, reveal that the

'house' was somehow unconsciously present in their ongoing personal processes. As the Spanish historian Gloria Franco Rubio points out, domesticity is a cultural construction—an abstract concept that refers to the way of conceiving the home and the space circumscribed to it—generating a determined lifestyle (Franco, 2012, p. 21). So, the English lifestyle would have been part of that construction of domesticity which the Medds had acquired during their childhood and youth. For instance, the Arts and Crafts architect Barry Parker designed a family house for the Crowleys—the last house at the end of Sollershot Road-overlooking a farmed landscape in the direction of Hitchin', where Mary Crowley (Medd) spent her youth (Burke, 2013). These kind of connections explain the many similarities that exist between the Medds' and the British domestic architects' ideas, such as their shared vision about the power of space to restore the imagination of the inhabitants—David mentioned Charles Voysey during a 1998 interview.

These links between the English houses of the Arts and Crafts period and the Medds' work give way to the following comparative analysis, through three suggested analogies that cast light on the main design strategy developed by Mary and David Medd, which indeed hides a domestic tendency, so far little recognised. The analysis proceeds by way of a description of some carefully selected Arts and Crafts houses along with a description of some school designs.

The English house and the Development Projects

A part-based architectural system: Variety as a sequence of differentiated 'rooms'

According to the architects Raymond Unwin and Barry Parker in *The Art of Building a Home*, 'the essence and life of design lies in finding that form for anything which will,

with the maximum of convenience and beauty, fit it for the particular functions it has to perform, and adapt it to the special circumstances in which it must be placed'(Parker & Unwin, 1901, p. III). Architects of the Arts and Crafts movement designed houses to carefully frame domestic everyday activities: places for sitting by the fire, eating, studying or writing letters, preparing food or reading the paper; 'this is space organised according not just to use but to a plethora of pleasurable homely experiences' (Unwin, 2016). In English houses of the period, 'rooms are fit to be homes in the fullest poetry of the name' (Parker & Unwin, 1901, p. VI), and the space is divided into different parts that are integrated as a series of closed and private units. For many scholars, such as the Spanish architectural historian Antón Capitel, the main feature of the English domestic plans was the clear differentiation of the interior rooms. This characteristic results from their internal structure, built from the addition of rooms with specific uses and names (Drawing room, Breakfast room, Billiard room, Dining room, Hall etc.), with their own nooks and crannies, that shape the home and form a closed unit, a sum of autonomous parts in a network of reciprocal relationships.

> Room names tell us about changing attitudes to behaviour in different places at different times – as, for instance, the terms drawing-room, parlour, sitting-room, lounge and living-room. Rooms can be more or less specialized, boundaries between activities established or blurred (Aynsley & Grant, 2015, p. 14).

The English houses designed by the architect Norman Shaw – among others – are real examples of how the rooms are centres endowed with individuality and singularity. In many cases, each of them can be clearly distinguished along the perimeter, as if the outside of the house was created simply from the design and placement of its rooms, from the inside out [Figure 1]. In Adcote or Alderbrook – both

Shaw's works – the same principle is clearly manifested. In the latter, the dimensions and positions of the drawing room, billiard room, morning room, and dining room,

Figure 1. Three Arts and Crafts houses. *Left*: Ground floor – Alderbrook, 1881, Norman Shaw. Source: Saint, *Richard Norman Shaw. Centre*: Ground floor – The Grange, Ramsgate, 1843–44, Augustus Pugin. Source: Brittain-Catlin, Timothy. The English Parsonage in the Early Nineteenth Century. *Right*: Ground floor – Adcote, 1876–81, Norman Shaw. Source: Saint, *Richard Norman Shaw.*

create an irregular perimeter, underlining the uniqueness of each space. The halls of Shaw's houses have seats embedded in the walls, corners by the chimneys and spaces to sit in, so that the plan seems to be designed around these (Benton & Millikin, 1982, p. 36), according to the views they offer and the comfort they build in the interior. A similar layout to Shaw's had previously been used by Augustus Welby Northmore Pugin on his own house – The Grange, Ramsgate, of 1843 – which Brittain-Catlin has described as a 'pinwheel plan' (Brittain-Catlin, 2008), where a number of rooms 'had its main axis at right angles to the adjacent one' (Brittain-Catlin, 2008, p. 148) around a squared staircase hallway. As Brittain-Catlin points out, 'the whole house could be said to be forming part of a spiral-shaped route, with, a circulation route like a tightly coiled

spring' (Brittain-Catlin, 2008). In all these cases, the layouts are the result of such pragmatic intentions, the direct translation of a set of inhabitant's activities.

Just as the English house was equipped with the necessities of a home, Mary and David Medd's schools were designed according to the same criterion of differentiation of spaces, but responding to the educational needs detailed by the future occupants. The spatial fragmentation in rooms, (also) with their own specific names, and the interior spatial succession characterized by the presence of a large room connected to more intimate ones, is equally typical of English houses and of the schools designs by the Development Group at the Ministry of Education.

> Designed with regard to the village background, a domestic atmosphere has been aimed at in each case. The two class spaces in each school are arranged so that there is a central area, as much like a living room as a classroom in the usual sense, with small bays and alcoves where various activities can be carried on by individuals or groups of children. For the more vigorous activities, or for school assembly, a third space is provided between the class spaces, and separated by folding doors. The domestic theme is underlined by the finishes and furniture and by the design of the external areas, such as playgrounds, paths and planting trees, shrubs and flowers[iii].

While the Medds attributed the domestic character of their designs mostly to the furniture and interior decoration, by looking into earlier English domestic designs—highly appreciated by Mary and David and part of their personal memories and experiences—it becomes evident that the shared spatial strategies played a significant role in the resulting atmospheres. This assumption, once more, is not meant to prove possible influences from one set of architects to others – though this could be possible – but to reinforce how certain ways of approaching design are common in different kinds of architectures. The Medds expressed the internal spatial structure of their schools in terms of variety, described as 'Built-in variety', a network of places associated with

different ways of arranging the actions of children's learning activities. 'Diversity' of plan form was promoted, with a set of different rooms as a starting point.

All of the Development Projects selected for this paper share this feature of 'variety' by the differentiation of its 'rooms'. Finmere and Eveline Lowe Primary Schools, among others, deserve special mention, in that their general *domestic* environment was achieved to a great extent by the suppression of serial classrooms. In Finmere, the plan for 50 pupils turns around a central space, a hall, which is connected to the infant and the junior set, each with its Home-base and corresponding Bays, Living room and Library. In Eveline Lowe, the design breaks the school into different volumes, corresponding to the different groups, and each of these offers a diversity that responds to the particular needs of each group through niches, staggered rooms, and spaces for quiet work. As Eric Pearson, a member of the Architects and Building Branch, wrote:

> Having seen in some schools how education seemed to have opened the classroom doors and penetrated into every part of the building, was it not possible for architects to make a larger contribution to the conception of the 'teaching area' as the whole of the school environment, rather than as a series of individual classrooms? […] (Pearson, 1966, p. 1).

If the selected English houses seemed to be designed as a direct provision of different rooms for homely activities, organized around a central space and resulting in irregular contours, the actual system used by the Medds to develop their school layouts, known as 'Planning Ingredients', similarly proceeds from the careful description of each of the spaces or ingredients and their arrangement, in many cases also around a hall or courtyards, so as to form a whole network of distinct rooms, not a limited set of repeated classrooms [Figure 2].

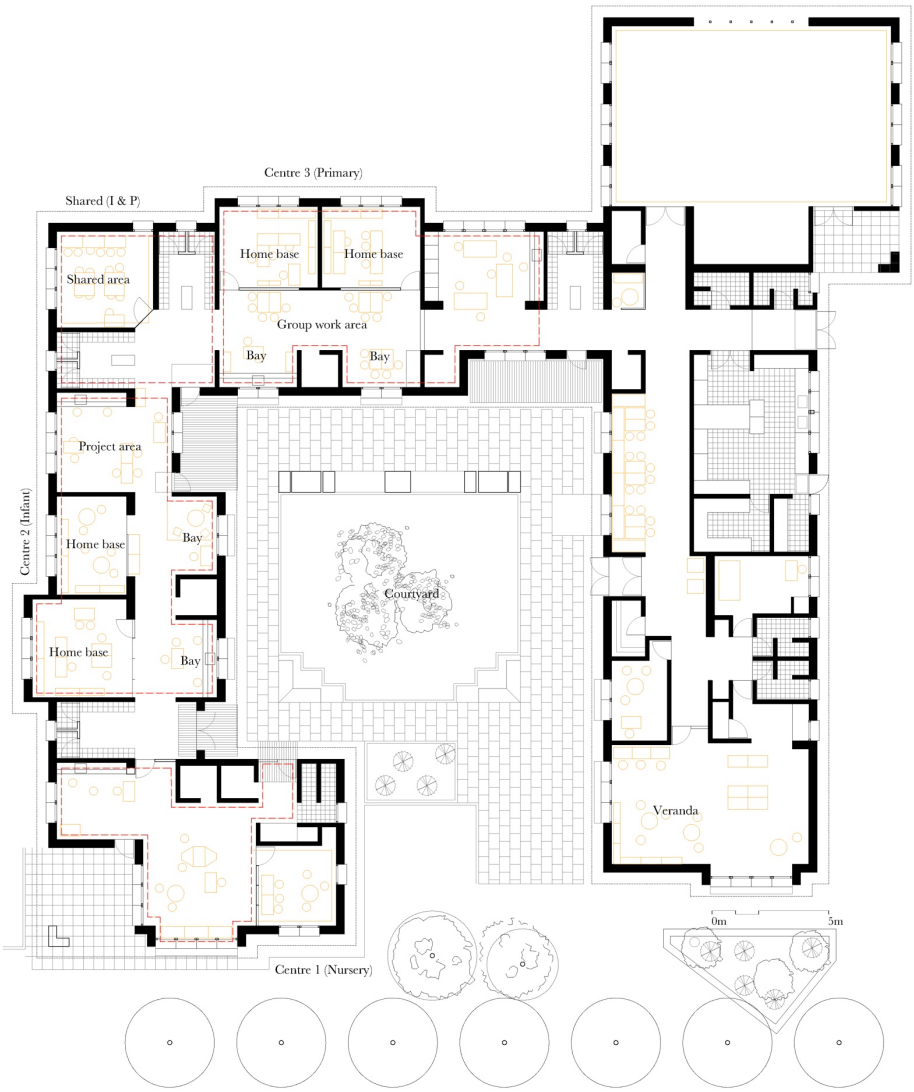


Figure 2. Ysgol y Dderi Area School, Llangybi, 1976. Author's drawing.

The hall and the openness of space: Finmere Primary School (1958-9) and the Baillie Scott's Red House (1892)

Even though Norman Shaw's houses were the result of putting together a set of clearly defined rooms, the main architectural problem of how to articulate them as part of the same unit still remained. In the Arts and Crafts' answer to that question —the hall— is to be found one of its main contributions to the Medds' work. The use of the hall is specially interesting in Baillie Scott's work, most evident in the spatial strategy followed in the Red House (1892-3) in the Isle of Man, which was Scott's own house,

but also in many others like the ‘White Nights’ (around 1900), where the living hall is the main volume and has the dining recess and the boudoir on its sides as two compressed, more intimate spaces. As the historian Geraint Franklin has pointed out (2012), this spatial relationship of a double height space, the hall, with other compressed ones on its sides—widely used by the Medds, is an architectural gesture very common of English domestic architecture. In Finmere Primary School (1958-9), for instance, the differentiation of rooms was achieved by means of a compact scheme where the hall dominated the whole as the main central piece. In the same way as Scott’s houses, the spatial sequence started in the Hall, went across a pair of smaller rooms (Home bases) and finished in some niches in the facade, labelled as Bays.

Before going further into the comparison between the school and the house, it may be helpful to comment on Baillie Scott’s intentions in terms of a domestic interior space. In his works, he redefined the hall’s character and the relation this space kept with the surrounding ones: ‘it was a general gathering-place with its large fireplace and ample floor space: no longer a passage...[but] a necessary focus to the plan of the house’ (Haigh, 1995, p. 39). He pursued the idea of redefining the hall as the core of the house, where meetings and other important events took place. His main contribution to the planning of houses was a spatial openness which began in the hall and swept into the adjoining spaces. This was due to his conviction that a series of compartments without unity or focus could never make a house (Baillie Scott, 1902, p. 89) [Figure 3].

> Instead of the usual humdrum box-like division of the rooms, he sometimes throws several rooms into one, making one large room within the framework of the small house; sometimes he makes one room do duty for two by means of a low, projecting bay; elsewhere he concentrates the life of the house into a large central hall, off which all the other rooms open, as the rooms in a Roman villa opened off the atrium (Muthesius, 1987, p. 47).

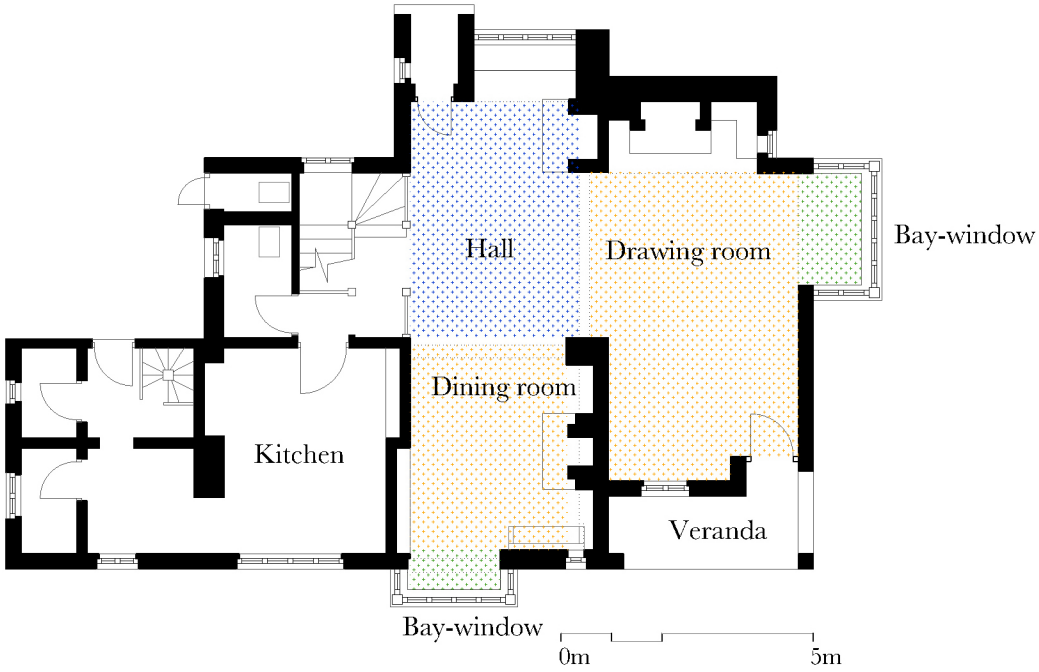


Figure 3. Red House by Baillie Scott (1892). Author's drawing.

Figure 4. Finmere Primary School (1958–9). Author's drawing.

Scott's proposals focused on gaining space for the house. Unlike the Victorian model, that was characterised by having a corridor and a series of contiguous spaces, the English architect achieved the unity of the whole through a group of rooms around a centre, the Hall, which had a powerful capacity to transform the space around it. This extraordinary transformation of space is appreciated, as stated previously, in his own home, The Red House[iv] (1892), where 'rooms are divided by panelled screens which are removable' (Baillie Scott, 1895, p. 127); but it is also recognised in the Medds' Finmere Primary School, where integrity is achieved due to the Hall. Both schemes have a powerful centre surrounded by other subaltern spaces that contribute to an expansion of space. This sequence and relations between spaces occurs equally in Finmere School [Figure 4] and other unexecuted designs such as St Bartholomew's in Eynsham, Oxfordshire; and Grove School in Berkshire.

In Finmere, the Hall appears as a void in the centre of the school, where access is provided to the two main learning rooms. The unfixed limits of the central space encourage the user, as an active participant, to decide how space should be arranged. The wooden folding doors that separate the two spaces from the hall can be closed and the rooms made completely independent. When folded, the continuity is absolute, so that children can freely travel through the entire space and learning is not only happening in the 'classroom' but in the whole school, as much as inhabitants do so in a house. Even though the use of these large dividing doors could be considered of continental origin—e.g. the Schroeder house (1924)— it is clearly a mechanism already present in many Arts and Crafts' designs. Scott envisioned the use of large removable doors between contiguous spaces as a way of avoiding the permanent compartmentalisation of spaces, in order to build the possibility of generating a large continuous space [Figures 5 and 6].

Figures 5 and 6. *Left:* Hall in Finmere Primary School - Source: Archives Institute of Education, UCL. *Right:* Red House - Source: Haigh, Diane. *Baillie Scott. The Artistic House (Note in book: Screens removed to create a continuum of ground-floor rooms; from Dekorative Kunst, vol.5, 1900).*

It is obvious, looking at Finmere's hall and moving walls, that the Medds knew Baillie Scott's designs. The Hall at Finmere is conceived as a thoroughfare room, the space that children must travel to reach their respective rooms. The floor extends throughout its surface and enters the adjoining spaces, thus building a fluid and continuous space. In Scott's Red House, the lobby leads the inhabitant to the two most public rooms or to the staircase towards the first floor, '...and so the hall resolves itself into the focus of the plan and the family life, from which one catches a glimpse of rooms beyond – the parlour adjoining, and in a more remote privacy – the study' (Baillie Scott, 1902, p. 89). Upon entering the Medds' school Hall, if the folding doors are fully retracted, there is a cross-view diagonally to the two Home bases, exactly what happens when entering the Red House: the user perceives both the drawing room and the dining room simultaneously.

> The hall constitutes an expansion of the route plan of the house, where one may observe, as it were, the full current of the household life (Baillie Scott, 1906, p.19).

Ultimately, the hall, as a room and a meeting place, is the space that organizes the users' pathways towards tje rest of the rooms, welcoming visitors that can obtain a

complete vision of the spaces that surround it. The hall in Scott's houses and Mary and David Medd's schools is the device that gathers the different parts of the design, making them work together while keeping their formal and functional autonomy, creating a homely atmosphere. This is how the unity of the schools is achieved.

Recesses and bay windows — Shaw, Scott and Webb

> Now many people have a feeling that there is a certain cosiness in a small room entirely unattainable in a large one; this is a mistake altogether; quite the reverse has been my experience, which is that such a sense of cosiness as can be got in the recesses of a large room, can never be attained in a small one, be it no larger than a sentry box. But if your big room is to be comfortable it must have recesses. There is a great charm in a room broken up in plan, where that slight feeling of mystery is given to it which arises when you cannot see the whole room from any one point in which you are likely to sit; when there is always something round the corner (Parker & Unwin, 1901, p. 4).

Probably, the most well-known devices in the English house are the so-called 'inglenook fireplaces'. Besides these, among the places that enrich the interiors of the apartments are also the so-called recesses, small areas which are subordinated to the main spaces, with controlled dimensions to fit a table, some armchairs or any fixed or mobile piece which gives scale to the event. The best known were the dining recesses, which sometimes could be hidden away through the use of curtains. These small spaces resemble the alcoves, typically for rest and sleep, but acquire new daytime uses: there, one can now work, pray, have dinner, read or receive visitors. This variety of use reflects the fact that these were the house's most truly comfortable spaces. Baillie Scott used the watercolour technique to represent these scenarios.

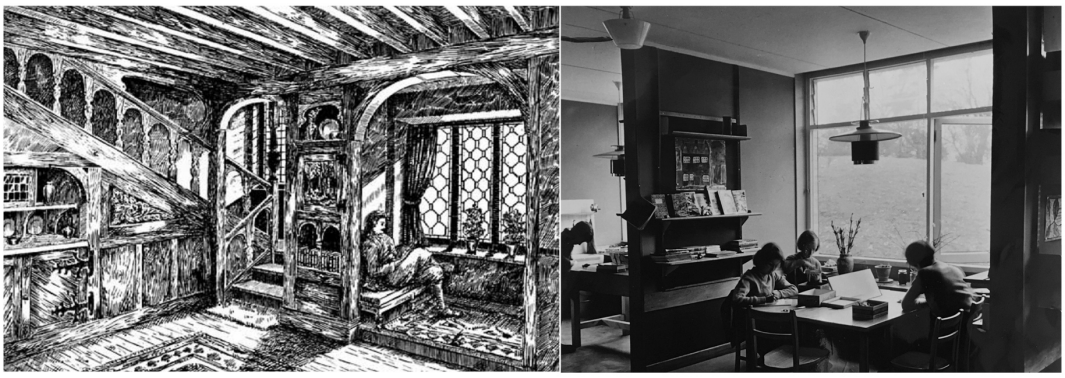
From a spatial design perspective, these recesses are conceived as places with their own rules, but are closely connected to the larger spaces to which they belong. This operation, albeit on a different scale, can be seen in David and Mary Medd's

schools, within the small places—more open than the examples of the houses—subordinated to the Halls and the Home bases. In Eveline Lowe, for instance, the shaping of the Home-base is attained through a mechanism similar to that used by Baillie Scott: the raising of the space a few steps interrupting the floor and the placing of a fixed piece of furniture that breaks the continuity between the recess and the adjoining spaces [Figures 7 and 8].

Figures 7 and 8. *Top:* Music room - Watercolour by Baillie Scott. Source: *House and Gardens, 1906. Bottom: Eveline Lowe Primary School, 1966. Source: Archives IoE, UCL*

There is also a particular architectural device, a type of recess, widely known as a characteristic of British domestic architecture since the Victorian period: the bay window. The bay windows were *the* places that opened up to the outside world from a

safe and protected interior. It turns out that these devices, understood as niches or inhabited windows, are also constantly used by the Medds in their designs, as learning spaces or around the courtyards as dining areas. The use of a predominantly domestic element in educational architecture gives an idea of the wide range of strategies the Medds needed to use in order to attain their desired homely environment. Of course, Baillie Scott, Norman Shaw and Philip Webb, architects of the Arts and Crafts movement, profusely used bay windows in their designs. The drawings in *The Art of Building a Home* accurately convey the character of these places [Figures 9 and 10].



Figures 9 and 10. Bay windows - *Left*: Barry Parker and Raymond Unwin in The Art of Building a Home. *Right*: Finmere Primary School, 1958–9. Archives IoE, UCL

This architectural mechanism is used throughout the Medds' work, in Finmere Primary School, Eveline Lowe, Ysgol Y Dderi, Delf Hill and Woodside, for example, though with obvious constructive nuances. The Medds' bay widows are not singular volumes that project towards the outside, but are instead contained within the built volume—they themselves called them 'Bays'. The Bays are equipped with the required facilities to accommodate certain activities. In most cases these areas could house a worktable for four or five students, and sometimes included basins on the side wall or proper working benches, for carrying out craft activities. In Eveline Lowe or Delf Hill schools, the dining rooms disappeared as regular and uniform spaces, replaced by a sequence of small bays around the courtyards. This strategy undoubtedly links the

school to the domestic environment, with the wide and homogenous places turning into cosy, small alcoves, as if they were for small families.

These places, the nooks and crannies, the alcoves, the bay windows, are all mechanisms that many English architects have used, working to increase intimacy without dividing the space, but rather providing small niches from which one can control the entire area.

When Beatriz Colomina describes the inside of the Müller and Moller House by Adolf Loos (Colomina, 1992, pp. 314-320) —also highly influenced by British domestic architecture, she argues that comfort is paradoxically produced by two seemingly opposing conditions, intimacy and control. The appearance of these areas (the enclosed rooms, the bays, the homes bases) in the school, conveys an extraordinary spatial quality, breaking the homogeneity of the floorplan and incorporating intimate places that exclusively belong to the inhabitant and provide more intimacy together with that idea of 'belongingness' that the Medds stressed in their writings. The recesses, inglenooks and bay windows bestow quality to space, increase its variety, and promote a closer relationship between the architectural elements and the inhabitants in relation to the body and its scale.

The homely atmosphere. A customised interior

> The Medds' interiors often have a domestic, informal, welcoming character, defined by an intricate combination of intimate scale, enclosure and lighting, overlain with much woodwork, carefully chosen colours and the visual and tactile pleasure of hand-crafted details: a woven light fitting here, a rug there (Franklin, 2012, p. 359).

The previous comparisons have addressed space as shaped by a building and its layout, a 'dimensional' point of view. However, there is another layer related to what Franklin

underlines, that is, the detailed care taken by the Medds in the selection and definition of furniture, textiles, colours, flowers and objects. A closer look reveals the Medds' preference for traditional methods of making, which brings them again closer to the Arts and Crafts philosophy concerning the 'craftsmanship' in the design working processes. Their intense concern for these particular elements added greatly to the domestic aspect in the definition of the schools' interiors.

Figure 11. Bunks, trolleys and rocking chairs. Finmere Primary School. Archives Institute of Education.

Furniture was indeed a major concern in the design of the schools and, in fact, David Medd was himselft a cabinet-maker and did much of the design work [Figure 11]. Much research was conducted by David Medd and other members of the Development Group in order to meet the requirements regarding the data collected from anthropometric studies, recorded in Building Bulletin 1, as well as the use of colour. Just as the Arts and Crafts architects, the Medds defended that furniture and accessories had to be part of the architect's job: 'furniture can only become an integrated part of the whole if its selection is the responsibility of the architect who builds the school' (Building Bulletin 1, 1955, p. 28). Together with manufacturers, basic pieces were

designed (such as tables, chairs, stools or desks, work benches, cabinets, etc. all of them adapted to the children's scale) as well as more sophisticated ones like the bunks in the Kiva in Eveline Lowe School, for example, or a rocking chair.

Rugs were also frequently seen in the schools' interiors, which together with the beds, tables and mirrors, created a perfect domestic scenery. Other textiles, such as curtains, had a significant role in the definition of the space. Obviously, English architects like Voysey—red curtains in the dining room at The Orchards—or Baillie Scott, profusely used textiles to contribute to the privacy of the spaces, as the Medds did in Finmere, Ysgol y Dderi, or Woodside. Lastly, the original photographs of the schools reveal the presence of vases and flowers on window sills or dining tables.

> Besides spreading a white cloth over their tables, however the English decorate them daily with flowers. It is taken for granted that the dining-table must have flowers (Muthesius, 1987, p. 206).

Mary and David Medd's interest in all these small elements, contrary to the prevailing attitude towards prefabrication and standardisation of the time due to the pressing needs of the post-war period, prove that domesticity, as a response to educational requirements ('education first'), was the main force of their oeuvre. This comparative analysis shows that, in many ways, that quest was constantly informed by English domestic architecture and particularly the Arts and Crafts movement.

The spatial strategy developed by the Medds.

Having dug deeper into the Medds' work through a comparative analysis with the English house, we can now proceed to outline their distinct design strategy, which was very much related to the variety, the subtle openness of spaces and the nooks and crannies present in the Arts and Crafts homes. The primary school design ideas of Mary

and David Medd developed throughout the long course of their professional careers within the Development Group in the Ministry of Education. The school plan proposed was transgressive in that it distanced itself from the previous understanding of such institutions, based on an authoritarian model equipped with individual desks facing a single direction towards a fixed blackboard. Their architectural approach considered both the demands of the educational committees and the overall conditions of context, to arrive at a strategy known as 'Built-in variety', a term that could be defined as the art that traces the connections between the programme needs, the site conditions and the teamwork's design principles. This strategy incorporates 'variety' as the intrinsic condition, and main *characteristic*, that has its roots in educational methodologies and ways of teaching and learning at that time. To define the proposal based on this *strategy* known as 'Built-in variety', the British architects designed a *system* that was named 'Planning Ingredients'.

Variety

During the 1960s, the Dutch architect Aldo van Eyck, who was sceptical of dogmatic functionalist theories, introduced the term 'False Neutrality' to define his understanding of the term flexibility, more clearly stated in his well known proclamation: 'we must beware of the glove that fits all hands, and therefore becomes no hand' (Van Eyck, 2008, p. 341). Van Eyck, a close friend of Jaap Bakema, who knew the Medds, considered that interior structures and space organisations should have enough space to house diverse meanings without the need to be continuously altered. Herman Hertzberger, an architect much involved in school design issues (Hertzberger, 2007), referred to the argument in similar terms, stating that flexibility implied the denial of a starting point, and he advocated instead for different permanent forms that were 'multipurpose'; shapes which, unaltered, could be used for several purposes.

The Medds understood the term ‘flexibility’ in a similar way. According to David Medd, ‘flexibility’ went against ‘variety’: ‘The kind of flexibility primary schools demand is something much more subtle. Variety of character that stems from a variety of activity’ (Medd, 1966).

In other words, the Medds attended to the school’s plurality of activities through a scenario that offered a spatial variety which ought to be sensitive to the interpretation of the user. Perhaps the terminology, in relation to the use of the word ‘flexibility’, differs in some nuances between the Dutch and British architects, but it is evident that in both cases there is a clear rejection of an architecture that favoured a serial repetition of homogenous or equal spaces (the ‘box-classroom school’ and the ‘big-box school’). On the contrary, they addressed proposals where a sequence of different and varied places, belonging to a unique group, prevailed. David Medd explains that their approach only refers to flexibility as a characteristic offered by the furniture they designed to equip the primary schools (Medd, 1972).

Thus, as stated by the Medds, the term ‘variety’ is the main property of their design strategy, regarded as a sum of places spatially different but still forming the same unit. The Medds agreed that the most traditional types of schools, following a classroom-type scheme of repetitive units, did not respond adequately to educational environments that demanded variety and complexity. The question was, according to David Medd, to ‘get the mix right, especially when space was limited’, and added that ‘the skill in achieving built-in variety lay at the heart of planning’ (Medd, 2009, p. 43). The proposed spatial order was a response to the educational demands, backed up by the diversity of activities developed by groups of different number and age, and also to their belief that ‘human relations at a personal level were more possible in small groups that in larger ones’. They argued that ‘the natural and original group for the development of

close personal relationships was the family' and good schools sought to offer children conditions as intimate as those they know at home' (Medd & Gibbon, 1963, p. 3).

The Medds presented an heterogenous part-based system – shaped into specific spaces designed for distinct activities – with different physical and operational characteristics, that were tied together with the inhabitant's movement and the disposition of the architectural elements. Of course, this spatial strategy (a part-based school) strongly resembles the internal order of the analysed English domestic buildings. The space-user interaction transformed the network of distinct parts into a single place, just like the home. Ultimately, the Medds wanted to 'abandon an abstract concept of flexibility for a real concept of variety' (Medd, 1972, p. 5), expressed in terms of polarities: 'small/large, seclusion, withdrawal, isolation/gregariousness, clean and quiet/messy and noisy, inside/outside'.

Built-in-Variety

This concept of variety, introduced as the main condition of the design strategy, was translated into the idea of 'Built-in variety', meaning a variety *integrated* into the architecture itself. In other words, it was not that the school absorbed the variety of activities, but that the physical environment itself brought about this variety, because as the term implies, it was *built-in*. 'Built-in variety' stood for a design that was composed by a sequence of related and distinctive didactic spaces that allowed a certain degree of isolation. The *Centres*, which constituted the different parts that hosted the activities, originated from the need to assume the plurality of uses in a school, as well as the will to share and improvise. There was no established routine, nor a repetitive order of actions; the spaces were designed to be able to deal with the assorted needs of children and teachers (Medd, 1980, p. 21)[v]. The 'classroom' condition was to gradually disappear in favour of more *Centres*. The relationship between these and the spatial

sequences would determine the architectural order of the whole. In the light of this 'Built-in variety' spatial strategy, the connections to domestic architecture becomes obvious, specially to those of the English 19th Century tradition.

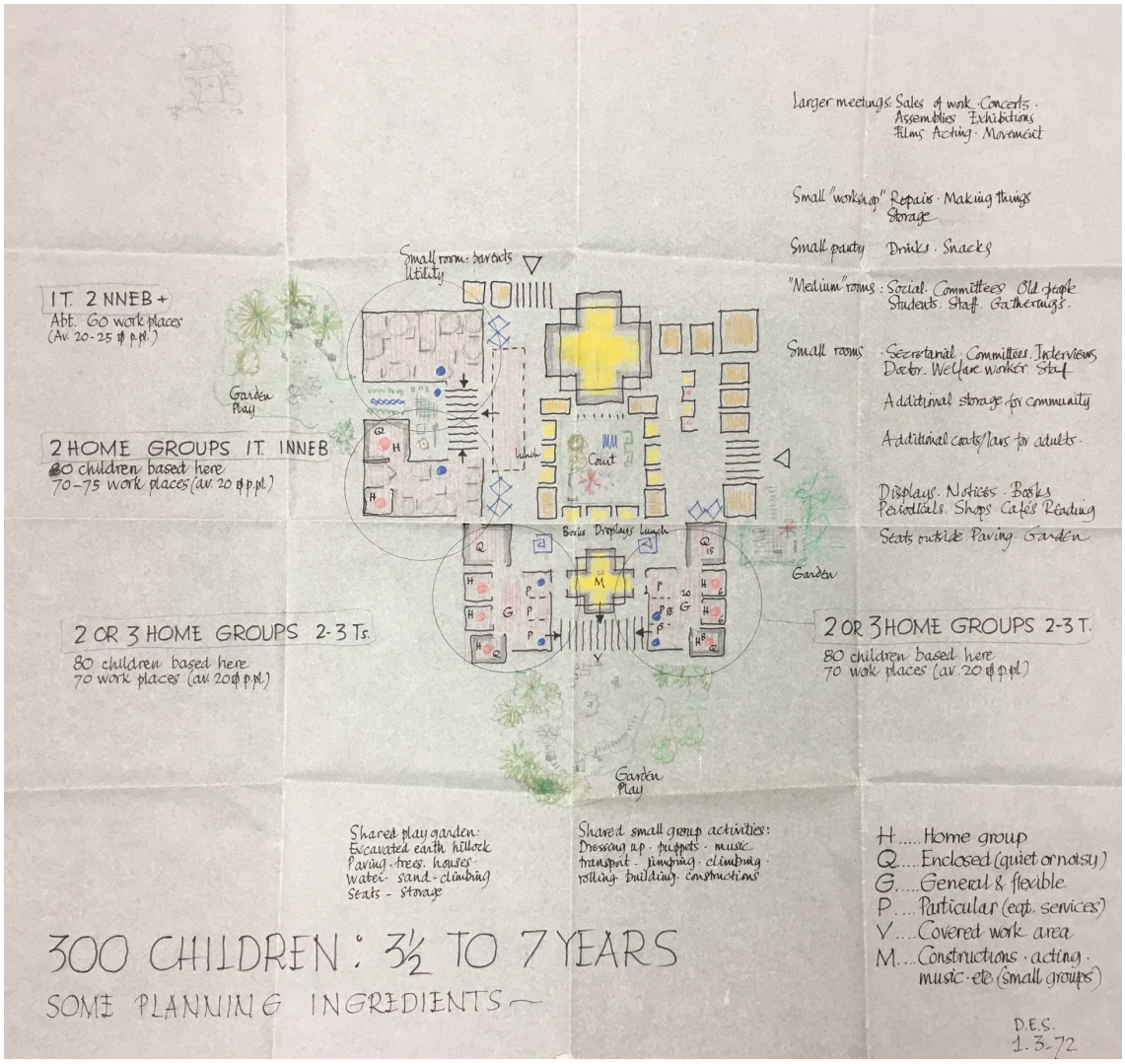


Figure 12. Mary Medd's drawing. Archives IoE, ME/E/18/5, UCL

'Planning Ingredients'

To tackle this *strategy* known as 'Built-in variety', the architects introduced a *system* known as 'Planning Ingredients', which in fact wasn't mentioned as such by the Medds until late in their careers—Geraint Franklin points out they were 'reluctant to promote a general architectural solution' (Franklin, 2012, p. 347). According to the historian, 'the ingredients could be freely mixed in different proportions conforming to local

educational circumstances: the number and age range of the children, the methods, preferences and aptitudes of the teachers and the space and resources available to the school (Franklin, 2012, p. 348). This system identified and labelled a series of places, like the English houses previously analysed, which were to be the basis shaping the proposals. The 'Planning Ingredients' were to promote an internal organisation without corridors, as the few circulation areas merged with the adjacent spaces to become learning spaces.

The *system*, which resulted in a build-up of distinct places labelled with specific names, gave the proposal a clear degree of domesticity, since it was based not in an indefinite space but in definite rooms planned for the activity and the users. The interior order was to be determined by the Hall, the Home bases, the Bay windows, the Quiet areas or the Enclosed rooms, Kiva, Verandahs, Library, Sitting area, Dining room, Music room, all of them terms associated with the home (Cieraad, 1999, p. x)[vi]. The architects David and Mary Medd wanted to offer an environment—which somehow already introduces certain associations with the house—that fostered a plural, specific and diverse use of space [Figure 12].

> The class space is becoming an enlarged 'family room', colourful, homelike and informal. There may perhaps be forty children, with forty different approaches to many interests, and space must be thought of in terms of these small, simultaneous activities, with a wide range of easily accessible materials and tools. It may be that a simple rectangular plan shape is not the most suitable for infants, and within the recommended areas the possibilities of an alcove, recess, or a small area which can be curtained off to form a space for a 'house' or a 'shop' might be investigated (Building Bulletin 1, 1955, p. 25).

Mary Medd's drawings are the most valuable graphic evidence for this design strategy, in which she identified the main *Centres*, common areas and niches of the schools (Medd, 2009, p. 149)[vii]. These drawings are today the main source (including

texts, notes, or sketches) for uncovering the essence of their strategy since they reveal, with great lucidity, the idea of variety as addressed in the present paper.

Conclusion. In search of a 'homely environment'

These three main concepts, from Variety to the 'Planning Ingredients', synthesise the main architectural qualities of Mary and David Medd's work which arise from a holistic attempt to create a homely environment. They offer essentially similar results and thus are closely related to the strategies used by the British Arts and Crafts architects when designing domestic architecture. The three structured sections in this paper have been deliberately organised in a sequence that appeals to the reader's imagination. By placing the comparative analysis in the centre of the discourse, it has been possible to suggest a series of feasible links between English houses and the Development Projects. After breaking down the main features of their design process, it appears that there is indeed an undeniable shared common ground in which diversity and heterogeneity become the principal 'ingredient'. Both in the houses and the schools, this feature adds a kind of 'flexibility' to each individual design process, adapting and responding to the particular needs of the commission. The design, based on a series of customary 'areas', will differ from one proposal to another, of course, responding to the inhabitant's needs. This spatial change was supported by a deep understanding of the educational activities which were to take place in the schools, and involved a different perspective towards educational architecture, closer to a home than to an institution.

---

[i] Department of Education and Science in 1964.

[ii] The text will refer to the following schools: Woodside Junior School, Amersham 1957; Finmere Primary School, Oxfordshire 1958-59; Eveline Lowe Nursery and Primary

School, Southwark 1966; Delf Hill Middle School, Low Moor, Bradford 1969; Ysgol Y Dderi Area School, Llangybi 1976.

[iii] Registry seems to confirm that this belongs to David Medd, but the document has no signature. Ministry of Education «New look for village schools remodeling programme going ahead». 19 de abril de 1960.

[iv] This name is in honour of the Red House of William Morris, by Philip Webb.

[v] 'There are subtle, but significant variations to be made in the accommodation and design of these 'units' or 'Centres', which range from the relatively self-contained spaces for the youngest children, through shared areas for certain aspects of the work for the middle groups, to the introduction of more specifically subject-based accommodation for the older groups'.

[vi] 'The home is a key site in the social organization of space. It is where space becomes place, and where family relations and gendered and class identities are negotiated, contested, and transformed'.

[vii] 'Mary is well known for her desire to understand what people want to do and to talk to them and understand their position, and interpret their needs into buildings, plans especially, in a way that they couldn't have imagined […]'.

References

Aynsley, J., & Grant, C. (2015). *Imagined interiors*. Victoria and Albert Museum.

Baillie Scott, M.H. (1895). An Ideal Suburban House. *The Studio. An Illustrated Magazine of Fine & Applied Art.*

Baillie Scott, M.H. (1902). A Country Cottage. *The Studio. An Illustrated Magazine of Fine & Applied Art*, 25 (108).

Baillie Scott, M.H. (1906). *Houses and Gardens*.

Baxandall, M. (1985). *Patterns of Intention: On the Historical Explanation of Pictures.* Yale University Press.

Benton, T., & Millikin, S. (1982). *El Movimiento Arts and Crafts*. Adir.

Burke, C. (2013). *A life in architecture and education: Mary Beaumont Medd*. Ashgate Publishing.

Brittain-Catlin, T. (2008). *The English Parsonage in the Early Nineteenth Century*. Spire Books Ltd.

Colomina, B. (1992). *Sexuality & Space*. Princeton Architectural Press.

Franco, G. (2012). El nacimiento de la domesticidad burguesa en el antiguo régimen.

Notas para su estudio, *Revista de Historia Moderna* 30, ISSN 1989-9823.

Franklin, G. "Built-in variety": David and Mary Medd and the Child-Centred Primary School, 1944–80. *Architectural History* 55, 321-367.

Haigh, D., (1995). *The Artistic House*. Academy Editions.

Hertzberger, H. (2007*). Space and learning*. 010 Publishers.

Lacomba, P., & Campos, A. (2018). The dissolution of the classroom: Finmere Primary School (1958-59) by Mary and David Medd, an integrative, specific and active learning, *Revista 180*, n.o 14.

Louise Brodie: David Medd (personal communication, October 21, 1998). Institute of Education ME/B/1.

Medd, D. (1963). Development- an attitude to architecture through school building. (A.A. Department of Tropical Studies). Institute of Education ME/M/4/1.

Medd, D. (1965). Woodside Junior School and Finmere Primary School. [Unpublished manuscript]. Collection at the Institute of Education, UCL ME/E/4/10.

Medd, D., & Gibbon, L. (1963). Designing for Education (Ministry of Education). Institute of Education ME/M/4/1.

Medd, D. (1966). Report of the Department of Education and Science, 4th August. Institute of Education, ME/M/4/1.

Medd, D. (1972). Primary Child School Design. [Unpublished manuscript]. Institute of Education ME/M/5/6.

Medd, D. (2009). *A personal account. School design 1920's-1970's*. [Unpublished].

Medd, D. (1980). An approach to design. Draft Advisory Bulletin. Institute of Education ME/G/27/9.

Ministry of Education. (1955). Building Bulletin 1: New Primary School, 2.a ed.London.

Muthesius, H. (1987). *The English House*. Butler & Tanner.

Parker, B., & Unwin, R. (1901). *The Art of Building a Home*. A Collection of lectures and illustrations. Mayfield Press.

Unwin, S. (2016). *The ten most influential buildings in history. Architecture's Archetypes*. Routledge.

Pearson, E. (1966). Primary School Building Developments since the War. Central Advisory Council for Education (England) Building Group, Paper N0.6. Source: National Archives, London (ED 146/79).

Van Eyck, A. (2008). *Collected Articles and Other Writings 1947-1998*, ed. Vincent Ligtelijn y Francis Strauven. SUN.

Figure 1. Three Arts and Crafts houses. *Left*: Ground floor - Alderbrook, 1881, Norman Shaw. Source: Saint, *Richard Norman Shaw*. *Centre*: Ground floor - The Grange, Ramsgate, 1843-44, Augustus Pugin. Source: Brittain-Catlin, Timothy. The English Parsonage in the Early Nineteenth Century. *Right*: Ground floor - Adcote, 1876-81, Norman Shaw. Source: Saint, *Richard Norman Shaw*.

Figure 2: Ysgol y Dderi Area School, Llangybi, 1976. Author's drawing.

Figure 3: The Red House by Baillie Scott (1892). Author's drawing.

Figure 4: Finmere Primary School (1958-9). Author's drawing.

Figures 5 and 6: *Left*: Hall in Finmere Primary School - Source: Archives Institute of Education, UCL. *Right*: Red House - Source: Haigh, Diane. *Baillie Scott. The Artistic House*.

Figures 7 and 8: Recesses - *Top*: Music room - Watercolour by Baillie Scott. *Bottom*: Eveline Lowe Primary School, 1966. Source: Archives IoE, UCL.

Figures 9 and 10: Bay windows. *Left*: Barry Parker and Raymond Unwin in The Art of Building a Home. *Right*: Finmere Primary School, 1958-9. Archives IoE, UCL.

Figure 11: Bunks, trolleys and rocking chairs. Finmere Primary School. Archives Institute of Education.

Figure 12: Mary Medd's drawing. Archives IoE, ME/E/18/5, UCL.