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Theories, Histories and Philosophies in Conservation**

What can be learned about the educational and architectural attitudes of Martin and Chamberlain Architects, and the Birmingham School Board, from Floodgate Street School, Deritend?

Floodgate Street School was built in 1890, financed by the Birmingham School Board, and designed by Martin and Chamberlain Architects. It was opened the following year, situated in Birmingham's industrial heartland, on a tight urban site, surrounded by factories, and back-to-back housing. As a result of Joseph Chamberlain's drive, and economic expansion, this period saw the construction of many schools by the same architects. In this particular school, however, alterations to the building have not destroyed the original fabric, and the design of the Victorian school is still very apparent. The original plans, held by the City Archives, can no longer be opened and so I wish to demonstrate how the existing built form can inform the onlooker about the motivating forces in Birmingham of the 1890s, and the subsequent decades.

The first element to notice is the choice of site. The building is located in a highly built-up, and densely populated area, as the map of 1918 shows. It is located very close to the Mission Hall and the Sunday School, and along with the Institute, these four make up the largest public buildings in the area. The overwhelming domination of these buildings among the terraces and courts demonstrates the importance of religion and education to the Victorians, to support and improve society.

The tight site meant that the building had to rise several storeys high, to accommodate the number of rooms required. This practice was abandoned after 1914, as it was believed that it was unhealthy to teach children in this environment. The buildings became more suburban, sprawling and single storey, to allow greater light and cross-ventilation in the classrooms. The high numbers of children in the Deritend area, however, in the 1880s, created pressure on the Board to form this urban school. The location meant that the building had to deal with several specific issues. Firstly, the noise and dirt in the air from manufacturing nearby meant that the windows needed to remain closed, and the children attending the school had invariably come from cramped, damp and dark homes, in the surrounding courts.

The results of this can be seen in the facades of the school building. The design is Gothic, a 'style' that was synonymous with school architecture for many decades, due to its ecclesiastical links. The Victorians liked to be able to 'read' their surroundings by nominating a 'style' for each type of civic building. There are other features such as the rose window and internally, barrel-valued ceilings, which are evocative of the church. It was believed that schools were second only to churches "as a means of spreading religious views among the rapidly growing population".<sup>[1]</sup> Interestingly, the Gothic Revival in school architecture had been abandoned in London in the 1870s, in favour of the new Queen Anne style. This move was initiated by a surveyor for the London School Board called Robson, who believed that a school should look like a school and not try to mimic a cathedral or monastery. Robson called for civic pride to inspire the designers, not religion. Birmingham, however, was not to abandon its allegiance to the Gothic style until thirty years later, at Oldknow Road School, 1904, designed in the Byzantine style. The continuing use of the Gothic was for two reasons. Partly, it was because Chamberlain, the architect, had studied in Venice and had been a

great follower of Ruskin, who praised the Venetian Gothic, and believed that architects should not devise new 'styles', "the forms of architecture already known are good enough for us".<sup>[ii]</sup> Secondly, it was thought by the Board that Gothic architecture gave the children the best compensation for their drab homes, being much more decorative and detailed than the more subdued Queen Anne style. They thought the "school building should contribute to the aesthetic sensibility of the child by showing him standards beyond those of his own home".<sup>[iii]</sup> The design also clearly defined each element as being different from the others. The main hall, for example, had a different roof design and fenestration from its neighbouring rooms, and each classroom has its own gable. Architects saw the vast school building programme as "a noble opportunity for the exhibition of national architecture,"<sup>[iv]</sup> and so great care was taken to build the best. The buildings were designed to stand for all time. Birmingham was a great producer of terracotta, and no doubt saw the schools as an opportunity to show off local skills. Similarly, the architects have used an exposed iron structure in the roof, highly contemporary technology for the era. Internally, the plan tells us a vast amount about the way the children were taught. During the 1800s, the move was being made from teaching the children in large groups under the master, to teaching in smaller groups, in one room, under monitors (advanced pupils). The Privy Council on Education, established in 1833, advocated a mixed method, teaching in small groups ('mutual method') for the three 'Rs' and one large group ('simultaneous method') for more general instruction. As assistant teachers and pupil teachers (trainees) were increasingly used instead of monitors, the amount of supervision from the master could be reduced. This resulted in the move from hall designs to classroom designs. In 1873, under the influence of Robson, T. Roger Smith designed the first central hall school at Jonson Street, Stepney, in the Gothic style.

This layout allowed the master to teach in the hall, and keep an eye on the trainees teaching in the classrooms, through windows. The plan also facilitated the adoption of specialised rooms for certain subjects, and the movement of pupils between rooms, all under the eye of the Head Teacher. Robson also campaigned for separate entrances for boys and girls, preferably on different streets, and segregated playgrounds, and the introduction of well-lit drawing classrooms.

By the turn of the century, many schools were adopting the classroom system, but Martin and Chamberlain have designed Floodgate Street School on the central hall plan, almost identical to Jonson Street School. This is because the Birmingham Board did not believe that their pupil teachers were competent enough to teach without supervision, although they were keen to separate classes. The lower hall would have been used by the Infants (mixed) and the first floor hall by the Seniors (sex segregated). The separate classes tell us that the children here would have learned much more than the three 'Rs', probably with the introduction of games and music in the hall. The raked gallery in the hall, a common feature of simultaneous teaching, would normally have been situated to allow light from the left, and there is no evidence to suggest that there was one in this school. However, the Jonson Street School allows the light on the gallery from the right, and I could not gain access to this area to look for evidence of raking in Floodgate School. There is the remains of a curtain rail attached to the wall of the hall, which could have once divided the hall into different areas for the teaching of different subjects. There is also no evidence of the use of specialised rooms for science, cookery or art. All the classrooms have huge windows for light. It is thought that due to a lack of money, all the rooms were multi-functional. Interestingly, the

windows sills are all well over a metre off the floor level, presumably to allow the wall space below to be used to display lessons (at a child's eye level) and to prevent the children looking out of the windows, and being distracted.

The segregated entrances to the school are still obvious, although it is not known which side was used by girls and which by the boys. The divided wall between the two playgrounds originally joined the building at the southwest corner, and can be seen on the 1918 map. The map also indicates open covered areas so that the children could still go outside in wet weather.

The Victorian obsession with hygiene, particularly in schools is also still apparent. The toilet and wash blocks were originally outside, and can be seen on the early map. These no longer exist, and it seems that the existing garage is not the original wash block, but a later addition. The 1918 map shows the wash block further back, on the site now covered by the factory. WCs were added internally into one of the original office spaces, by the main entrances.

The schools inability to open the windows due to the pollution resulted in the use of a hot air ventilation system, sucking in air from a high-level 'Plenum' tower, heating it in the basement, and expelling it through vents in the window sills. This was a feature of many Martin and Chamberlain schools. The duct chimneys, tower, and coal chute are still clear.

The lack of corridor between the hall and classrooms was to encourage free airflow, as well as increase supervision. The windows throughout the school are large, to allow in maximum light.

The building suggests many of the Victorian thought processes in its detailing. The timber panelling around the walls to about one metre is surely to prevent damage to the walls, and ensure the building's long life, with no need for frequent repair. There is frosted glazing in the lower panels of the ground floor hall (most likely for the Infants) to stop distraction by passing vehicles.

The Birmingham Board obviously spent vast sums on their school buildings. The Pall Mall Gazette, in 1896, five years after Floodgate Street School was opened, wrote,

"In Birmingham you may generally recognise a Board school by it being the best building in the neighbourhood. With lofty towers which serve the utilitarian purpose of giving excellent ventilation, gabled windows, warm red bricks and stained glass, the best Birmingham Board schools have quite an artistic finish... In regard to light and air, the worst schools are equal to the best in London."<sup>[v]</sup>

Yet it seems that in the following years, there was no more money put into the school. The war, and the following 'Homes Fit for Heroes' scheme, ensured that public money was spent elsewhere. Floodgate Street School's building has remained an educational establishment throughout its life, although it has been used for all age groups. As the move to classroom teaching became complete, the hall space has been utilised as a sports hall, and assembly space as we can see from the markings on the floor of tennis / netball courts. This communal space has remained a key part of elementary education even today. The windows into the classrooms have been largely blocked off, to increase privacy. As the building has been used more recently for older students, with no need for sports facilities, partitions have been added to create a series of small rooms in the hall, with a corridor under the balcony. In general however, the multi-functional room design of 1890, has allowed the spaces enough flexibility to retain their relevance for a century, despite huge changes in teaching

methods.

The Infants hall has also been reduced in size, with classrooms built into it. There has also been a kitchen added into what was probably once a master's room, and the hall now functions as a dining room. This is an indication of the changing standards imposed on educational establishments in the last hundred years. Schools are now obliged to provide food, partly because the students are no longer necessarily local, and may travel a long way.

There is further evidence of the increased standards of comfort, imposed, or expected today. The gas lighting was changed to electricity in 1919, although the old gas fittings remain in some places. The hot air ventilation is also now disused, replaced by central heating. The ducts in all the windowsills are now blocked off.

The school's house, probably once the Head Teacher's residence, still appears to have a connection to the school, and is occupied by a caretaker. The changing social position of the Head Teacher now means that they no longer wish to live on site, and can afford their own, much more desirable residence away from the school.

The school building itself has changed very little during its lifetime, although the type of education it provides has. Floodgate School remained in occupation until 1939-40, when the premises were taken over by St. Michael's Roman Catholic School. Today, the Arts and Media Centre occupy it. Its changing usefulness from a school is largely due to the increasing industrialisation of Deritend. Factories now replace the houses, so that there are no local children. The lower birth rate, and preference for smaller schools in larger, suburban sites has also resulted in the redundancy of many inner city elementary schools.

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[i] Malcolm Seaborne, The English School Its Architecture and Organisation Vol. I. 1370-1870, London, Routledge & Kegan Paul, 1971, p.211

[ii] John Ruskin, Seven Lamps of Architecture, 1849

[iii] Malcolm Seaborne and Roy Lowe, The English School Its Architecture and Organisation Vol.II. 1870-1970, London, Routledge & Kegan Paul, 1977, p.4

[iv] Seaborne, The English School Vol. I. p.214

[v] Seaborne and Lowe, The English School Vol. II, p.10