Gothic revival and neoclassicism architecture in churches

Gothic Revival and Neoclassicism were strong architectural movements which occurred during the mid 18th to the end of the 19th century. In Wellington, these two architectural movements can be seen through the churches of Old Saint Paul's (OSP) which is a Gothic Revival church and Metropolitan Cathedral of the Sacred Heart (MCSH) which is a neoclassical building.

Reverend Frederick Thatcher (1814 – 1890) designed Old Saint Paul's church in 1866. He was born in Hastings, England and came to New Zealand in 1843. His influences for designing the church were by the ecclesiastical movement and he strongly supported their theories of letting every material used being real and that Gothic architecture is the only true architecture (Alington, 26)

Francis (Frank) William Petre (1847-1918) designed Metropolitan Cathedral of the Sacred Heart. Petre was born in Lower Hutt in the North Island. He had strong family connections to the Saint Mary's Cathedral (Gothic Revival Church) which had been burnt down in a fire in 1898. This made Petre to design a new Cathedral in MCSH to mark the site of the burnt down church. Although, MCSH is a neoclassical church and construction started in 1899 and was completed in 1901. Petre was influenced by Pugin as gothic was his first love but later moved into classical basilica design because it was a lower cost and for structural sustainability.

Approaching OSP externally, I felt that the church seemed to be slightly hidden behind the large trees which obstructed parts of the church at eye level. I could have walked past the building without noticing that it was a

church as it was so homely. Mulgrave Street is the road running in front of the church and it is placed on ground level with no major slopes or elevation. (See Figure 1 for exterior illustration) The original clients of the church were British Anglican worshippers and Ecclesiology in church architecture was important during this period in time and the worshippers would have responded to the building with pride as it symbolised British dominance. Today's users are majorly still Anglican worshippers and the growing number of worshippers mean that the church would be used more than at the time that it was initially built.

On the other hand, approaching MCSH was a contrast to approaching OSP. A dominant grand building standing tall on a raised platform rose as I walked towards it. The six exterior ionic pillars with immense pedestals which are larger than an average human really made me feel discrete and powerless. This adds an authoritive label to the church. (See Figure 2 for exterior illustration) Catholic worshippers were the original clients and the same remains today.

The two distinctly different churches were designed by their architects deliberately to show the different faiths being practised at each church and how specific elements reveal this. This paper addresses how the ordering principles of the columns in both Metropolitan Cathedral and Old St Paul's reveal that the architects planned the structural element not just for functional demands, but to compliment aesthetic values as well.

Columns are essential building elements which are used both in OSP and MCSH. In OSP the basic function of the square base column is to support the

ribs of the vaults. In MCSH the internal ionic columns are placed to support the altar canopy in the sanctuary area. The columns in each church add to the overall experience with ones individual personal relationship with god.

Approaching through the sideway entry at OSP creates an extra anxious wait for seeing the internal of the church at a full scale. There is a true definite emotional aspect walking through the entrance as it somehow silently makes one go on a journey, a journey to God. The columns are noticeable because they are placed near the seating area by the nave so therefore when sitting down looking towards the chancel, the view is filled with the columns alongside the nave with the presence of artificial light inside the church. Although, with purely natural light coming into the church the columns are certainly no distraction when looking at the chancel area because of the dimness created by the stained glass windows. To an extent hides the tall columns and the focus of the eye is upon the chancel due to the maximum natural light in the church being maintained in this area. Margaret Alington reinforces:

…quality of light within the building is dim, however, as a Neo- Gothicists believed that this was suitable for their style of architecture…Natural light leaves Old St Paul’s feeling gloomy… additional lighting is directed throughout the nave and chancel areas (47).

Today, approaching into MCSH is similar to the entering into OSP because the new entrance is perpendicular to the sanctuary area and the internal columns appear when looking towards the chancel. Two main ionic columns which support the altar canopy but there are other decorative purpose ionic

columns like structures attached to the arched walls. This can be misleading because they are not classified as architectural columns because they do not support anything. The white columns in the altar from far have a very powerful and elegant look because it holds the canopy in which a painting of Jesus placed underneath. From a closer view, the size of the columns really did place my perspective in scale and the details of the Ionic order appeared more clearly.

Historian Margaret Alington explains that " one of the most striking features of the Gothic style is the relationship between structure and appearance. They are as one" (32). This is portrayed through the columns in OSP. Alington also states that:

…it is from these columns that the ribs appear to grow. At their beginning, the ribs encase the columns, and at a greater height do they become elements on their own right (38).

Thatcher designed the column set up this way to follow the Gothic tradition of emphasising height. Alington further mentions that the " continuation of the columns, the ribs add to the organic feeling of the vertical growth which the building possess (38). The Christian soul experiences uplift as the height of the building is symbolic during worship (38). This is an example of the column contributing to the building in physical terms as well as showing historical ideas that they can be seen as being representative of. (See figure 3 for ribs growing from column).

Internally, the Ionic order columns are employed by Petre in MCSH to support up the altar canopy. The Ionic column is historically defined by Italian

architects, as one of three orders built by the Greeks. Many structures are seen portraying Ionic columns, and examples are seen throughout the world. The Coliseum in Rome, Italy shows a simple Ionic column that has lasted since the original construction in 1st Century AD. The Erechtheion in Athens, Greece is also exhibiting the Ionic column. Dating back to the building of these structures, the Ionic column was an obvious favourite, when trying to communicate strength and dignity. Dr Fil Hearn describes the ionic capital as being " faintly evocative of feminine curls but abstractly decorative all the same" (110). This explains that Petre wanted to exhibit strength and dignity to the church but at the same time have a decorative quality to it. This relates to a respectful relationship with God where as in OSP it is a more personal one. (See figure 4 columns supporting altar canopy).

Gothic architecture is unique in its use of materials. Alington mentions that:

...In medieval Europe, the building material was stone- usually limestone, frequently sandstone and occasionally granite. This heavy material was made to soar to great heights and to feel light in gothic spires (66).

Although, stone is rare in New Zealand but timber is an available resource and the " gothic style of England was adapted into this material" (66). Thatcher cleverly manipulated the new wooden elements used inside the church as a substitute to stone. New Zealand rimu timber is used for the square base columns inside OSP which lead into the ribbed vaults which are also made from rimu. Rimu can be used in interior situations for a variety of elements, without the need for treatment from decay. Alington writes " the English settlers bought with them the style and technologies of their mother

country” (66). The natural browns of rimu are present in the columns. This also gives a homely effect which ultimately plays with ones senses and leads to a worship of personal qualities. (See figure 5 for colour palette). As an effect of running my hands down a column, the smooth texture of wood is an indication that it has been varnished and handled very carefully.

On the other hand MCSH has been made out a much harder structural material. It has a red brick and masonry exterior and white Oamaru stone in the interior, also plastered pilasters and concrete was used for greater strength and is weather resistant. My conclusions of why stone is used for the ionic columns in MCSH and in neoclassical buildings are because of the solidity of the stone. It adds to the overall effect of the building of representing strength and dignity as this was a key prospect in classical architecture. Also, the painting of Jesus under the altar canopy needs to have a strong support by the columns. This is symbolic in a way because the ionic columns act as the strength of the church as this may be the importance for the shelter of Jesus Christ.

The architects of both churches purposely used ordering principles to position the columns to create, axis, symmetry, hierarchy, rhythm and repetition. Both churches include ordering principles which overall create an emotional experience on the worshipper of each respective church. Some aesthetic values are also created in this process.

“ Geometry formed the basis of gothic art” (Alington, 54). Thatcher designed OSP with series of squares. Also the repetition of equilateral triangles were employed by Thatcher to “ symbolise the Trinity, and the quatrefoil being

symbolic of Matthew, Mark, Luke and John, the four evangelists” (Alington, 60). (See figure 6 for plan)

The forms and spaces of any building should acknowledge the hierarchy inherent in the functions they accommodate, the users they serve, the purpose or meaning they convey, and the scope or context they address (Ching, 320).

Ching is addressing to the fact that forms and spaces should have a purpose in a building and they must portray a meaning and this is what is done in OSP by Thatcher. The placement of the columns creates an axis running through the centre of the nave and this also establishes a symmetrical arrangement of the columns and space. Ching states that “ a symmetrical condition cannot exist without implying the existence of an axis”... (330). A hierarchy of the chancel area is also formed by the columns creating a visual direction to look towards when sitting down. This hierarchy is formed by size and placement. “...dominate an architectural composition by being significantly different in size... (339), “...the focus of a centralised or radial organisation” (339). “ Rhythm refers to any movement characterised by a patterned recurrence of elements at regular intervals” (356). This is true because of the pattern made by the columns in OSP as they are placed at regular intervals on either side of the nave. This creates a sense of order and is pleasing to the eye as one walks into the church. (See figure 7 for plan).

The Classical language of architecture adheres to notions of natural order and beauty through harmony and discipline and Petre addresses this in MCSH. Symmetry and harmony is achieved by using balanced axis through

the building. Everything is perfectly balanced (or was until the restoration and additions in the 1980s). Each part of the building stands a mirror image of the other part – from macro to the micro. This creates symmetry which is very aesthetically pleasing. Ching mentions that " radiating elements such as the composition can be divided into similar halves along a central axis" (330). The windows also match up to their opposites. Entrances into the building stand opposite the entrance to the sanctuary. Nothing is random or asymmetrical. The two columns supporting the altar canopy creates the hierarchy point because the main painting of Jesus is placed underneath the altar. Also because there are only two proper columns inside MCSH, the rest which are decorative illusions are placed against the arched walls. (See figure 8 for plan)

In comparison, OSP and MCSH have numerous ordering principles although, MCSH has a very controlled and dignified march to the focus of the Sanctuary which is first manipulated by the narrow columnisation at the exterior portico, with a pace that makes you hurry. MCSH holds a more disciplined order through the arrangement of elements than OSP.

For aesthetic considerations Petre used the golden section in MCSH.

The Greeks recognised the dominating role the Golden sections and the proportions of the human body…they utilised this proportions in their temple structures (Ching, 286)

The golden section/ratio is also used in the ionic column. The base end of the ionic column is 0. 618 time larger than the top end. This creates a perfect balance for the element which creates visually pleasing qualities and

supposedly to be the perfect building ratio. The golden section is not only present in the columns but also in the whole church itself. The external face of MCSH is all presented through this ratio and also the floor and ceiling all use this rule. This symbolises authority through perfection and order and impacts worship activities in many ways. The sense of perfection and order in MCSH discards any sense of private discovery of god because everything has been discovered through the perfection of the building.

Similarly, the original floor plan of OSP is based on this golden section. Although that is the only aspect of the golden section used in this church and aesthetic values thrive through the arrangement of elements as discussed before. Thatcher and Petre planned the columns to fit ordering principles which suited functional demands and complimented aesthetic values too.

Overall, OSP demonstrates the Neo-Gothic style, following the ecclesiological society and MCSH demonstrates the Neo classical style following the Ionic order effectively. The functional demand of the columns in MCSH is to support the altar canopy of which the main painting of Jesus is placed under and therefore serves an important role in the church. Meanwhile is OSP the columns are present to support the rubbed vaults which ultimately holds the church up. Thatcher and Petre use ordering principles such as axis, symmetry, hierarchy, rhythm and repetition to show reason for each respectable church and to create aesthetic properties as well. Aesthetics values were also evident through the use of the golden mean and this was employed in both churches. The columns presented in both churches contribute to each of the buildings in physical terms as well as the historical ideas that they can be seen as being representative of. The two architectural

movements (Gothic revival and Neo-classical) in the 18th and 19th century were evident in both churches and Thatcher and Petre can be proud with their creation of both churches as it is a place for many worshippers today.