

Designing One-flat church as small-scale community space in densely populated urban environment to perform both sacred and contemporary functions

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Abstract

This research is based on the scenario in the context of Hong Kong, in which church has been built in densely populated urban environment restricted in flat space. The research objectives were: 1) firstly to investigate the relationship between theology and spatial design in Hong Kong Protestant church; 2) secondly, to analyse the issue of the lack of design with respect to sacred identity in the church of Hong Kong that leads to an unappealing and non-sacred appearance of Protestant church; 3) and finally, to establish theoretical standpoints on designing sacred space with contemporary quality without surrendering of the *sacred identity*. The aims of the research were to understand the influence of secularisation to the rationale of church design and to generate an *appropriate identity* of church with a theoretical standpoint to serve the contemporary community effectively.

In order to meet these objectives, the study comprised of a qualitative site observations of 171 churches, which provided comparative figures for the study of churches incorporated with design elements or no design elements.

In Hong Kong approximately 775 one-flat churches, which are 66% of the total number of Protestant churches, are located in different layers of vertical space within this vertical city. When churches provide social services in the same limited space, the identity of church is surrendered to the need of the social community.

This study endeavours to facilitate church design with the focus on the immanence quality in order to encounter the different spatial limitations in church design.

Keywords: Church design, Community space, secularisation, sacred and profane, contemporary design

Historically, church architecture is a spiritual and sacred space people could experience the solemnity and serenity. Due to secularisation, in Hong Kong, the scenario of one-flat churches has been shifted to unappealing and non-sacred appearance. With approximately 803 one-flat churches, which are 62.4 % of the total number of Protestant churches, they are scattered among different buildings that function as small-scale community space.

The phenomenon has become worse when churches operating social services in the same venue; the domination of the social community towards the *sacred* community has

hidden the church identity. Churches simply surrender the *sacred* identity despite there is multi-functional scheme to transform the space from the profane to the sacred uses. In spite implementation of church design has been adopted progressively, the sacred identity is forfeited because of their focus on attracting newcomers with a contemporary looking church. These two approaches have overlooked the significance of church as the house representing God. The discussion of representing the transcendence and immanence of God was one of the vital concepts relevant to one-flat church design. When churches are small in space, the representation of the immanence of God is more appropriate. Torgerson (2007) commented that “the transcendence of God was on decline, and the immanence of God in people was highlighted” (p.12).

As a researcher with background in interior design and pastoral ministry, there is a desire to contribute the knowledge and experience to conduct a research which could generate a deeper reflection in church design related to urban context.

It was hypothesised that designing church as a small scale community space in densely populated urban environment requires to put a balance between community need and sacred identity with the application of contemporary design. The key research question is: How to design one-flat churches with physical constraints and multi-functional needs while preserving sacred and contemporary qualities simultaneously?

Literature Review

Secularisation and Church Design

It is vital that, in Western church history, church design was always associated with theology and aesthetic manifestation for the representation of the Deity. The scenario after secularisation with the merge of the separation of the sacred and the profane into a continuum which resulted in the loss of sacred identity. And churches rather put their focus on contemporary quality indeed. When churches were further challenged by secularisation to try new ways to express their faith, they surrendered the sacred identity in order to break the threshold fear.

We cannot change this reality, then it is a matter of how to embrace it. Bruce (2002) shared similar approach with Cox. He quoted from Fallding (1967) the saying that: “What modern man would need, if he chose to hold on to religion, is not to turn away from secularisation but to baptise its fruits, grafting each innovation back onto the tree of his life and consecrating them all to the service of the whole” (cited in Bruce, 2002, p.359). Theologian Tillich and Bonhoeffer also acknowledged this attitude and their writings contributed in-depth discussion on this theme.

Renowned theologians, such as Dietrich Bonhoeffer (1930/1963) and Paul Tillich (1987) expressed the need to find a contemporary approach to reach out to the world. As Bonhoeffer contested, churches were encouraged to develop a secular manner to deliver the message. Hence, a contextualised attitude was essential and Bonhoeffer stated that “we can now let go and immerse ourselves in the new world of the secular city” (as cited in Cox, 1966, p.18). In their modern context under all the challenges, their perspective was that secularisation did not necessarily pose a negative impact to Christianity. Under the conviction that church design must be contemporary and responsive to the need of the age, different scholars such as Hammond (1960); Bruggink & Droppers (1965); Smith (1964); and Kilde (2008) delivered insightful ideas about contemporary expression. When scholar

like Kilde (2008) wrote about this issue, he tactfully referred to renowned Catholic theologian Thomas Merton that “contemporary faith required a contemporary architecture” (p.162).

Definition of Sacred Quality in Design

One of the aims of this thesis is to incorporate both contemporary and sacred qualities into church design. Could contemporary quality co-exist with sacred quality? Apart from defining contemporary quality in the previous section, it is necessary to define sacred quality as well. It is essential to clarify that the discussion on sacred quality here is about design elements to achieve the sacred effect.

Pichard (1960) identified sacred quality as the expression of mystery, magnificence and splendor which are qualities associated with Medieval churches. Kilde (2008) pointed that, “the desire to project a single, unified image of Christianity in a context of increasing secularisation and denominational fragmentation” (p.165). The rationale of some church leaders was that sacred quality should be different from secular design and because contemporary design was associated with secular design, some church builders rejected contemporary quality and followed Medieval style to present the sacred quality. In Pichard’s opinion, he did not reject contemporary approach but his idea was that simplicity as associated with contemporary quality was opted to link with grandeur in order to achieve the transcendent effect. However, one flat churches in Hong Kong under site limitation are difficult to deliver the transcendence of God; discussion is needed to explore whether the search for sacredness should be targeting on the immanence side.

Hong Kong Church Design

Let us conduct a historical review of Hong Kong church design -- From Western to Hong Kong Church Design: Church growth in relationship with the Use of Space from Individual Building to the Unique Scenario of One-flat Church in Hong Kong.

From 1842 onwards, Protestant Church of different denominations and missionaries organisations started to establish churches, schools and hospitals in Hong Kong. In 1950’s, because of the influx of refugees from Mainland China, the number of churches began to grow steadily. (See Table 2) Due to church planting movement, Church growing rapidly from 1980’s to 2004 (From 1842 to 1979, 538 churches were established; up to 2004, there were 1181 churches — a multiple number of churches was planted within these 24 years). A total of 1,287 Chinese-speaking churches were surveyed in 2014, there were a total of around 305,097 church members in Hong Kong (Wu & Lau (Eds.), 2015, p. 17), and they distributed among more than 50 denominations together with more than 200 churches without any denominations. From table 2.6, 80% of churches in Hong Kong with congregation size was less than 200 people. Majority of one-flat churches was located in limited area with smaller size of congregation. Until 2014, there were 687 churches (53.4%) located in residential buildings, commercial buildings, 100 churches in social services centres and 303 churches in schools (Wu & Lau (Eds.), 2015, p.13). A total number of approximately 1126 churches was located in non-individual church buildings. The high proportion of churches without individual church buildings was a very typical and unique phenomenon in Hong Kong because of its scarcity of land which would make individual church buildings costly.

Churches were located in multiple layers of vertical space in a vertical city. Because sites such as ground floor shops in busy areas and multi-level shops with double height spaces are relatively expensive, churches generally occupied flat spaces upstairs in commercial blocks or residential buildings, especially in busy urban areas. (See figure 1) In one case, it consisted of seven churches located in a commercial building in Shatin.



Figure 1: One-flat churches in different layers of buildings

Social Need Influenced the Secularisation of Hong Kong Church as Small Scale Community Space in One-flat Church

The prominent role of the church was to serve the community, in addition to providing worship space to the public. According to Wu and Lau (Eds.) (2015), around 66% of churches provide social services; which was a significant increase as compared to the 1999 survey which was around 41.5%. There were around 849 churches providing social services (p98).

Participation in social services was a dominant strategy for churches. However, in terms of design, it is discovered that churches surrender the sacred identity to the identity of the social services. On the other hand, in order to reach public housing residents, church organisations applied for the establishment of the affiliated social services centres. During weekdays, the centres required to fulfil the requirement of the social services as granted by the government. The spaces were then converted into church spaces on the weekends. Apart from subvention, majority of churches ran their social services on self-financed bases; hence restrictions from government could be reduced; and flexibility in design approach and spatial arrangement could be enhanced.

Statistics of Hong Kong Churches Surveyed in 2004

The statistic is extracted from the book 2014 Hong Kong Church Survey – The collection of statistical Data edited by Wu, C.W. & Lau T.H.

A total of 1,287 Chinese-speaking churches in 2014.

- There was a weekly average of 305,097 Christians attending services.
- There were 560,547 registered members (both overseas and local); 327,112 members in Hong Kong.
- 62.4% of churches were located in flat spaces, such as residential buildings, commercial buildings and church operated social services centres.

Table 1: Distribution of Churches in Different Kinds of Worship Places:

Kinds of Worship Places	No. of Churches			
	1994	1999	2004	2014
Individual Church Building	163	147	161	161
Commercial Building	311	292	338	289
Residential Building	211	341	321	398
School	143	179	231	303
Social Services Centre	132	158	116	100
Industrial Building or Centre				16
Others	96	12	14	20
Total	1056	1129	1181	1287

There were 803 churches located in different levels of high rise building, such as commercial buildings, residential buildings and public housing complex. There was a rising number of churches situate in school due to the opportunity of evangelising in church operated school which could reduce cost in church planting as well. There was a drop in number for churches in social services centre but the number of churches provide social services is 849 which was 66 percent.

Table 2: Distribution of Churches with Different Sizes of Congregation:

Sizes of Congregation	No. of Churches	Percentage (%)
<i>Below 50</i>	167	13%
<i>51-100</i>	322	25%
<i>101-200</i>	408	31.7%
<i>201-500</i>	284	22.1%
<i>501-1000</i>	72	5.6%
<i>Above 1000</i>	34	2.6%
Total	1181	100%

From Table 2, it is found that there was 69.7% of churches with size of congregation below 200.

Research Methods

Qualitative method through field works are applied to understand the subjective meaning of behaviours and the phenomenon of the spatial settings. In applying qualitative research methods, the researcher has conducted site observation of 171 churches. The researcher has obtained better understanding of the scenario of one-flat churches in Hong Kong. Seven churches have been selected to conduct site observation with long term participation in order to identify with the needs of the spatial arrangement and the users. Under site observation of selected churches with long term participation, the researcher has also participated in different activities organised by the seven selected churches. Even though the researcher does not use participant observation, it is vital for the researcher to act as a worshipper to obtain first hand experience about worshipping in specific settings. Hence, valuable insights can be gained as an insider to evaluate the findings, which echoes with Corbetta annotation about ‘vision from within’ in particular.

Site Observation

From site observation of 171 churches out of 1287 churches in Hong Kong, these Hong Kong churches were classified into four categories under the division of sacred quality and contemporary quality, the relationship of theology and spatial design was then discovered explicitly. (*The term sacred quality refers to the presence of symbolic meanings; the term contemporary quality refers to the presence of contemporary interior features.*) Majority of churches which employed designers are creating a contemporary

quality without strong awareness of the sacred quality.

Table 4.1: Scenario of Church in Terms of the Representation of Sacred Quality and Contemporary Quality

Sacred quality	Contemporary quality	Scenario of Hong Kong Church
Strongly expressed	Weakly expressed	1. Churches adopting Western traditional church design methods, especially those with individual buildings. Theology and design were related but retained in a traditional manner. (see figure 2)



Figure 2: Church adopting Western traditional design

Weakly expressed	Weakly expressed	2. Most of the churches in Hong Kong lacked resources to incorporate design; together with a theological position that church was a community of believers, not a building, made design a minor issue and the concept of creating a sacred space minimal. Design was detached from theology. (see figure 3)
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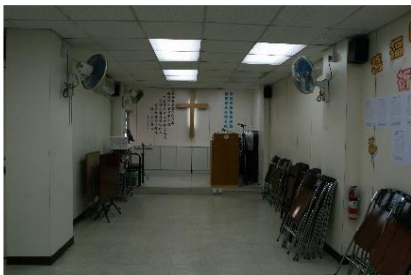


Figure 3 Church incorporated with no design

Weakly
expressed

Strongly
expressed

3. Most of the churches incorporated with design was within this category. Churches sensitive to newcomers delivered a space with contemporary touch and warmth. Those with social services also focused more on contemporary design. They were not aware of sacred representation in the churches even relative budget was spent on design. Theology was related to design in the sense of creating a contemporary design to attract newcomers. Theology and sacred representation was detached. (see figure 4)



Figure 4 Church incorporated with contemporary design

Strongly
expressed

Strongly
expressed

4. Rarely seen churches with this approach but this was the most significant direction from the literature review to revitalise the essential sacred quality with contemporary manner under substantial theological standpoints. (see figure 5)



Figure 5 Church with sacred and contemporary quality

Site observation of selected churches with long term participation also revealed that church design to reflect the sacred nature was not a main concern. Through the application of some sacred symbols such as the cross and the pulpit, which were often ineffective for the holistic sacred atmosphere. It was a challenge for church design to provide both sacred and contemporary qualities. For the seekers sensitive approach, the delivering of sacred nature was not in the design brief. The sacred quality usually relied on the altar design only. The spiritual path and the careful use of symbols have been lost from traditional essence in church design. From the observations, when churches need to be multi-functional and focused on the communal side, they would neglect the sacred nature.

Hong Kong churches with limited space. Let explore different practices through the understanding of the layout from layout plans analysis from site observation.

Plan in a square shape

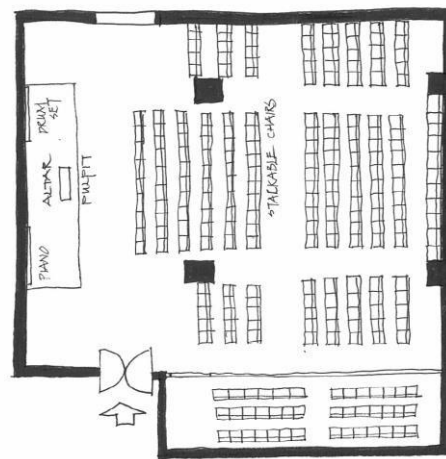


Figure 6 Shatin Alliance Church

This was a church with a square-shaped plan with columns in the middle of the sanctuary and entrance near altar. When location of entrance was limited by the building layout, a proper progression of space was surrendered. The biggest issue was the circulation because the entrance was near the altar, people walking passing after services started caused disturbance to worshippers.

Plan in a Rectangular Shape Longitudinal Layout

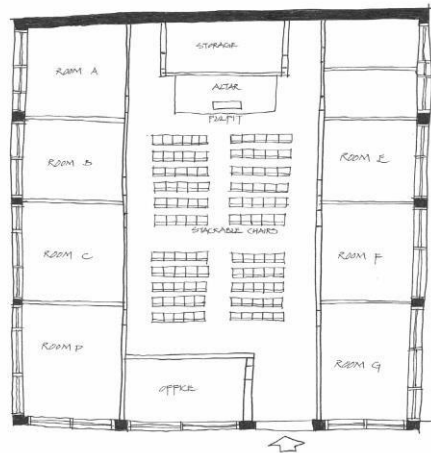


Figure 7 Grace Methodist Church

This church was located in a kindergarten with classrooms surrounding the assembly area which is converted into a worship space. Limitation is distraction from the colourful decoration along the classrooms. The only option to set up a proper altar was the far end of a longitudinal layout.

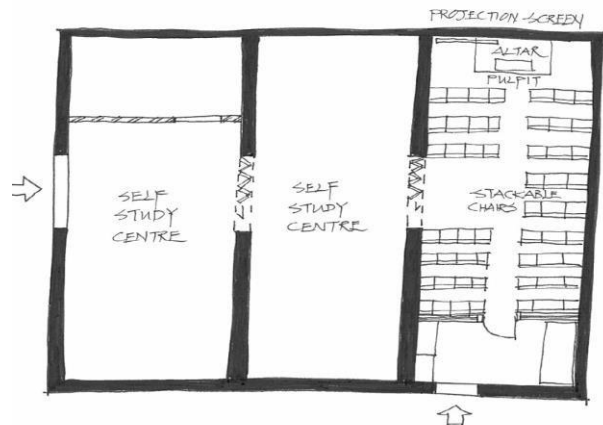


Figure 8 Shatin Free Methodist Church

This site was composed with three bays separated by structural walls. A longitudinal layout was created in each bay. However, the narrow width of the altar back wall was a big problem; such as when allocating the cross, projection screen, banners and pulpit, it was difficult to avoid these elements from blocking each others.

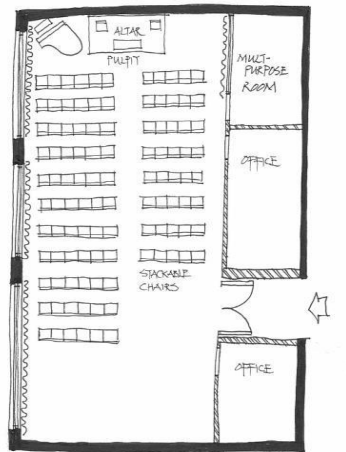


Figure 9 Sai Sha Road Baptist Church

Unlike the previous two churches, the floor plan of this church was possible to create an auditorium layout. This is one of the churches with a typical longitudinal layout with a central aisle and altar at the far end. It did not make use of natural lighting.

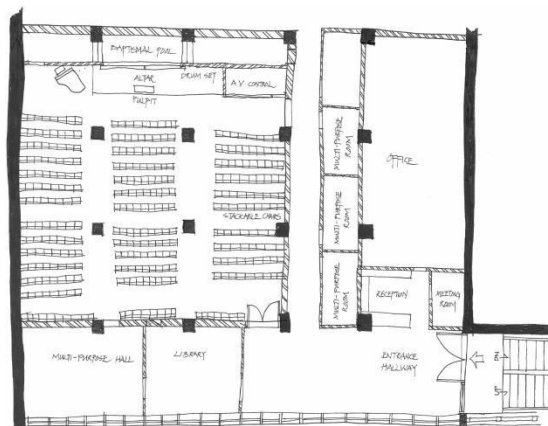


Figure 10 E.F.C.C, Waterloo Church

This church has created a spiritual path to prepare the worshippers' hearts and souls before worship. There was space for people to mingle before and after service. However, the spiritual path from main entrance to sanctuary entrance was also the mingling space which made it harder for worshippers to experience the spiritual path. In term of the sanctuary, the columns limited variations in layout, thus the longitudinal layout was selected. Baptismal pool was located at the back of the altar covered by an especially designed sliding door.

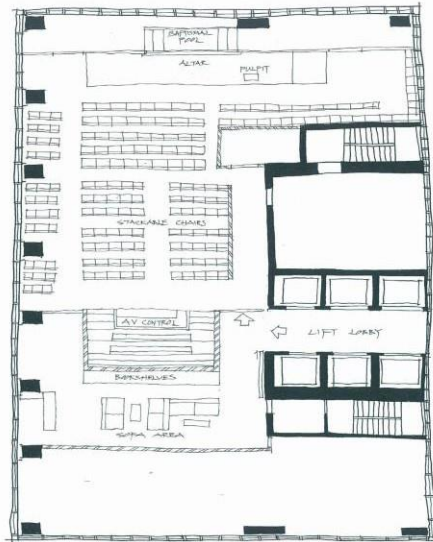


Figure 11 1/F, Island Evangelical Community Church

In this longer length longitudinal plan, projection screens were placed in the middle of the sanctuary to create a projected image of the altar for worshippers sitting at the back. Baptismal pool was located at the back of the altar covered by sliding door .

Auditorium and Communal Layout

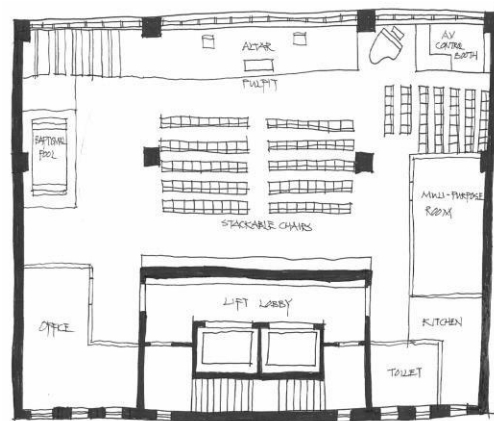


Figure 12 Sheung Wan Baptist Church

This church has occupied the whole floor of a commercial building and the creation of spiritual path started from the lift lobby. Altar was placed in the centre of the longer side of a rectangular plan to create an auditorium layout; with windows at the back of the altar, light was diffused into the sanctuary as a symbolic element.

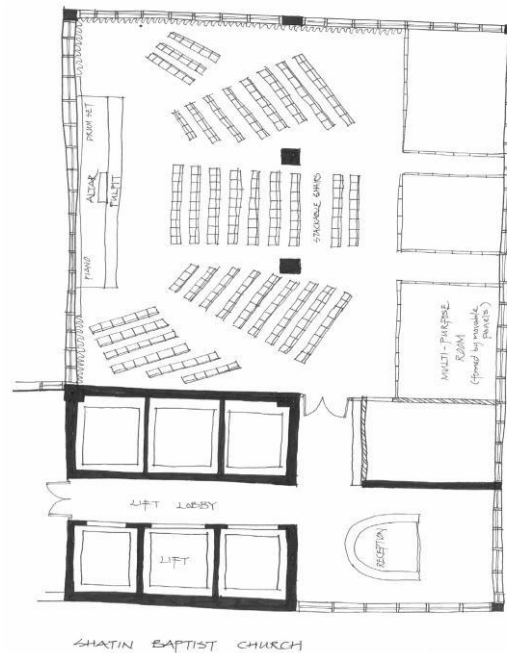


Figure 13 Shatin Baptist Church

This is a church with both a communal layout and an auditorium layout in the sanctuary. Although there were windows located at the back of the altar, they were covered. The space for mingling before and after service was relatively small because space for maximum capacity was one of the goals.

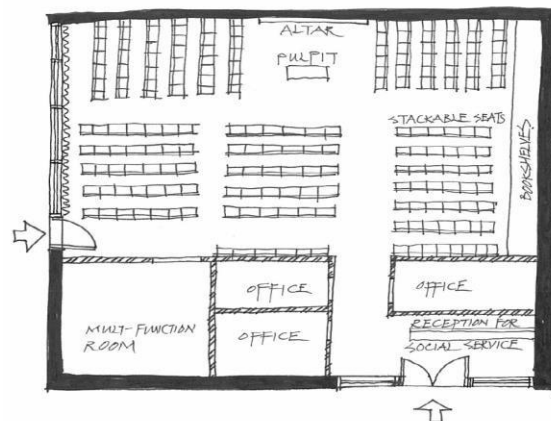


Figure 14 E.F.C.C. Kong Fok Church

This is one of the few churches which both a communal and an auditorium layout had been applied, with the pulpit located in the middle of the longer side of a rectangular layout. However, this was a church without professional design, the effect was very basic and functional.

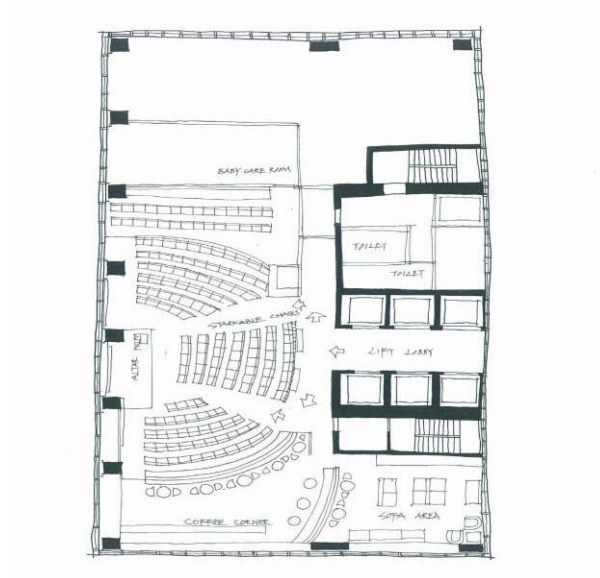


Figure 15 2/F, Island Evangelical Community Church

A communal layout was created through the semi-circular seating arrangement. Coffee corner and sofa area further delivered a relaxing mood within a worship space.

Summary of the Layout Concepts of Churches

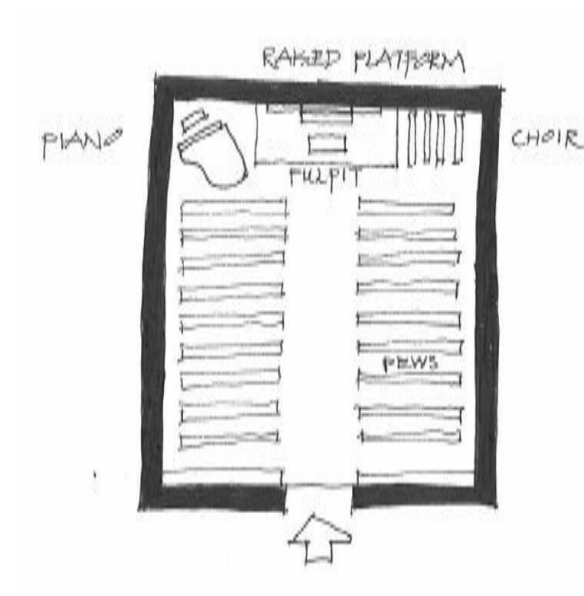


Figure16: Typical layout plan with a longitudinal layout

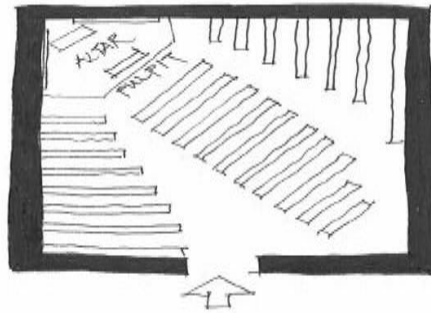


Figure 17: A variation with altar being placed at the corner to create a dynamic layout with a communal effect but the distance of the congregation with the preacher is not resolved.

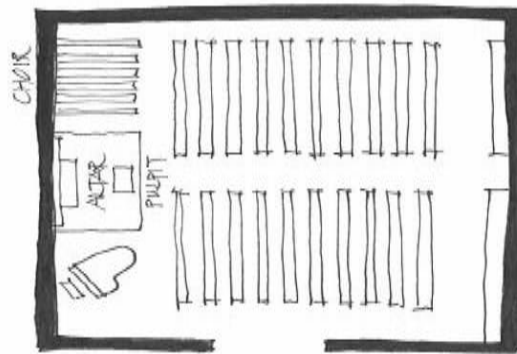


Figure18: Even though the entrance is located at the longer side of a rectangular layout, a longitudinal plan is still created.

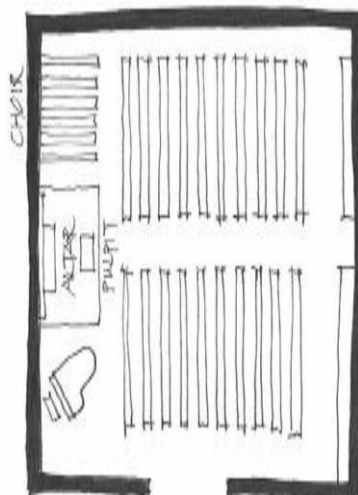


Figure19: Layout with altar being positioned in the longer side of a rectangular shape to reduce the distance between congregation and preacher

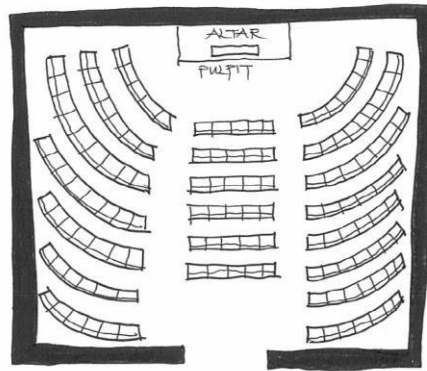


Figure 20: Communal Layout can reduce the distance of congregation and the preacher, it can also enable eye contact for reinforced the community spirit for the worshippers.

The common scenario of churches was to form a longitudinal layout with altar at the far end of the worship hall (see figure 16). If maximum capacity is a key, space for mingling will be reduced. Evangelical churches focus on preaching, a layout which can reduce the distance between congregation and preacher is preferable and hence the immanent quality can be better delivered. Apart from reducing the distance between congregation and preacher, layout which facilitates the communal spirit is also significant. Semicircular layout is one of the options. However, the capacity will be reduced.

Discussion

Secular social need and contemporary sacred quality of God

The key function of a church is to house worshippers to worship the deity (Victor Fiddes, 1961; Bie'ler, Andre', 1965; Debuyst, F., 1968; White, James 1988; D. Foy Christopherson, 2004, p.20). In modern church design, one could discover that a number of churches were designed to house as many people as possible. As described in the book, *Sacred power sacred space*, church looked like a theatre than a church; not approaching the liturgical or theological requirements (Kilde, 2008, p.155). The functional task was satisfied but the space lacked sacred quality. Actually, when churches became dual-purposes, the sacred identity faced great challenges. When more and more satellite towns or new communities were built, dual-purposes churches were the trend to solve the diversified needs in the community. 1950's and 1960's were the peak periods of the so-called "multi-purpose" space. In relation with massive urban development, named as "satellite towns", the Church decided to build buildings not solely dedicated for religious activities but for variable use (Schwebel, 1994). Under secularisation, religious activities were not the prime need and they were replaced by different individualistic and social concerns.

When Torgerson (2007) discussed about nourishing the sacred especially in the immanence side, he borrowed from different scholars about their supports toward multi-purpose church based on the theology of breaking the dichotomy of the sacred and the secular. In the sub-section 'The effort to relate faith to the secular world', Torgerson illustrated that Liberal theology intentionally or unintentionally influenced church design on the immanence of

God. Torgerson elaborated primarily on theologian Dietrich Bonheffer (1906-1945) who developed his theology from the person of Christ to searching for language relevant to secular humanity. Then, he introduced Bishop John A.T. Robinson (1919-1983) who believed that “the Christian faith had the potential to break down the artificial distinction between ‘sacred’ and ‘secular’” (Torgerson, 2007, p.17). Roberson was inspired by famous theologians, such as Dietrich Bonheffer, Paul Tillich (1886-1965) and Rudolf Bultmann (1884-1976). One of the approaches is the application of contemporary symbols. Seasoltz (2005) stated that “sacred building and sacred art are above all symbolic” (p.345). Loveland & Wheeler (2003) also described sacred church as “beautiful, symbol-filled, worship-orientated sanctuaries” (p.239). If contemporary representation wants to integrate with symbols, a transformation of new symbolic form is the key. This study opts to facilitate church design with the combination of contemporary quality and sacred identity. The term contemporary in church design indicates that there is the application of contemporary materials and technology in design such as the use of glass panel, metal, acrylic and pre-fabricated materials. An article called Contemporary Catholic architecture written by Rev. Edward J. Sutfin and Maurice Lavanoux, cited in Modern Church Architecture by Albert Christ-Janer and Mary Mix Foley (1962) mentioned that “The presentation of this heritage, however, is dated by the ‘new’ and the ‘now’ of the contemporary stage of development of the city of God” (p.1). When they described contemporary church design, they reinforced that design must be created and addressed for the people of our time. Hence, the use of current materials to fit the time and spirit of people we live in was vital (Pichard, 1960; Hammond, 1960; Bruggink & Droppers, 1965). In the article, Contemporary Protestant Architecture by Dr. Paul Tillich (1987), Professor in Harvard Divinity School, he stated the dilemma of applying tradition in practice: “The polarity of tradition and contemporaneity in all religions... Both Protestant liturgy and Protestant theology retain many elements of the common Christian tradition: Why not church architecture?”. To answer this question, he reminded people that symbols used traditionally but change in style continually. It means that contemporary vocabulary can be related to tradition with a transformation of traditional symbols, spiritual path and more elements to contemporary style. In the book, Sixty post-war churches (1956), an inspiring statement was written with similar answer: “The ‘Truths’ are not contemporary, but that only the means of expressing them are” (p.7).

Conclusion

Analytical Framework: Functions of Church in Relationship with the Three Attributes

When a church is established in terms of design, the practical function and the sacred function are the two categories under consideration. These issues are depended on the theology to influence the decision making. Hence, theology is the key (see table 3). These three concepts: theology, practical function and sacred function are related to the three attributes of church. When discussing theological definition of church, church is identified as the community of believers. When considering church as a place of worship, the primal concern is the practical function of a worship space, such as the capacity, the layout, and the sound effect. When one associates church as the house of God, the concept of symbolic function is brought forward. Community is the spiritual level which is the ultimate definition theologically. Undeniably, this is a worshipping community united together in a place dedicated for God, and which is named the church or the house of God.

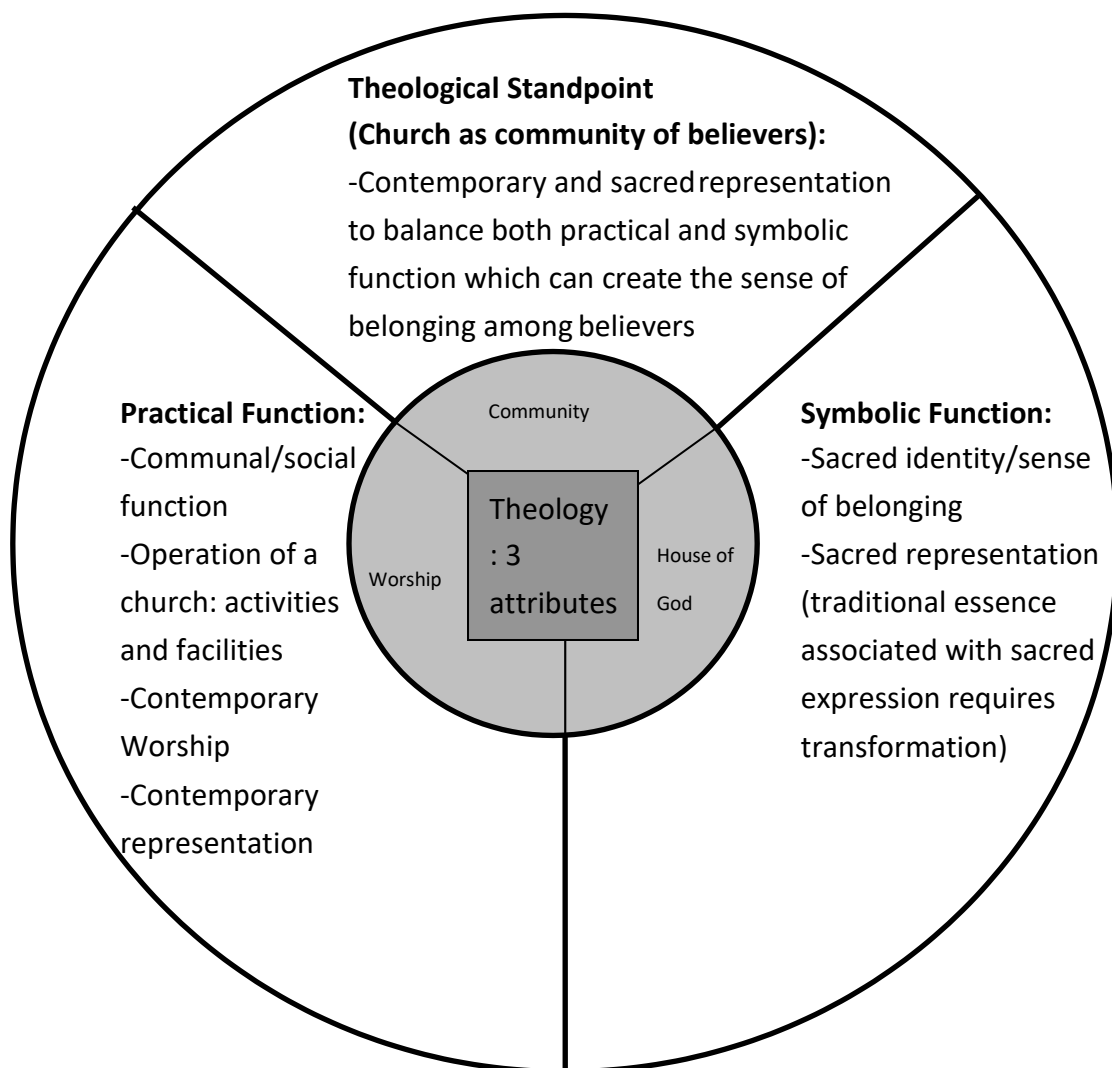
While this thesis explores the dilemma between contemporary expression and sacred expression, it is known that contemporary design focuses more on the practical function

and the performance as a worship space whereas the sacred design reinforces the symbolic function and the representation of the sacredness of church as the house of God. In order to link the central issue, a theological standpoint must be applied to represent the physical existence of a church community by balancing the contemporary and sacred representations.

The sacred expression is associated with symbolic function which is one of the traditional essences of church design.

When church associates with community services, it is revealed that the design is pinpointed on the functional need of the social services. For churches affiliated with social services, it was discovered that the designs were mainly contemporary and social services oriented. A balance must be achieved through a theological reflection so that community of believers can benefit from both functions. Simultaneously, the sense of belonging could be achieved.

Table 3 Functions of Church in Relationship with the Three Attributes



The wonder effect as mentioned by one professor is vital for church space. No matter what elements are applied to deliver the sacred, the magical experience through spatial design is

reinforced. It is undeniable that wonder effect in church space must be associated with sacred quality. In one-flat church, the representation of the immanent nature is more appropriate spatially.

Design Guidelines: Spiritual Path as one of the guidelines in Creating Sacred Space

The research findings indicated that design was a growing concern; however, church design was targeting on the contemporary issues such as the need of the social community and the application of contemporary aesthetic. It is concluded that this phenomenon was a serious issue in Hong Kong churches which needed to be amended. When it is revealed that this issue was quite complicated with the lack of existing practices to support the urge for both sacred and contemporary qualities, the researcher wished to generate design guidelines to contribute more reflections and practical suggestions for pastors and church administrators. One of the selected elements for church builders to think deeper is the creation of a spiritual path. Although churches under the constraint of limited space, spiritual path can have significant contribution in creating a sacred space. It works with creating an immanence space, without the necessity of high ceiling, through spiritual path to experience the sacredness. The traditional approach is the creation of a linear path (see figure 24). To modify from linear path, sometimes split path is created (see figure 25).

Below is a proposal of different spiritual paths which can be implemented in one flat churches. If there is a lift lobby, the spiritual path can start from it - from lift lobby to reception, leading to worship hall and then the location of altar. It then depends on the layout to decide whether the designer can create a U turn or L turn to extend the path (see figure 21-25).

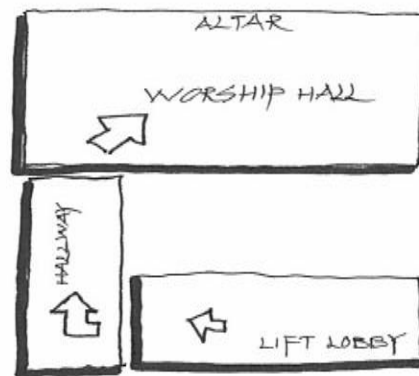


Figure 21: U Turn

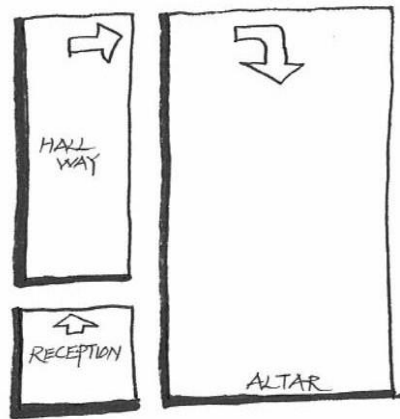
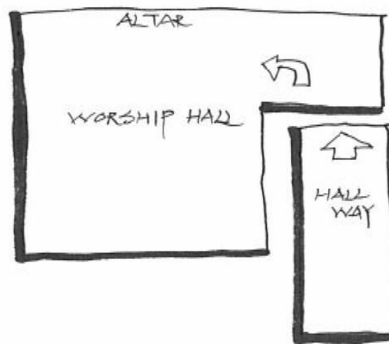
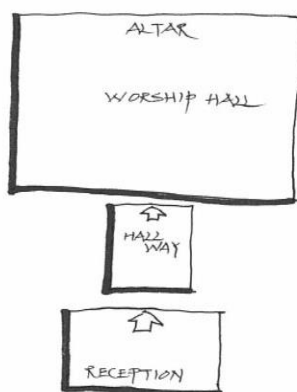


Figure22: U Turn



Figur23: L Turn



Figur24: Linear Path

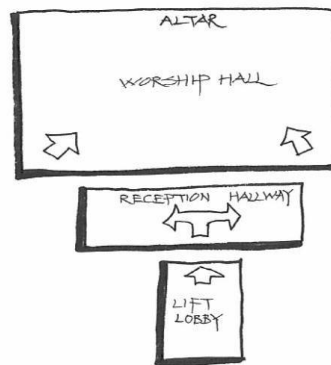


Figure 25: Spilt Path

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Dr Louis Poon is currently senior lecturer of Department of Design at Caritas Bianchi College of Careers. He has obtained his Bachelor of Arts in Design (Interior Design) from the School of Design, The Hong Kong Polytechnic University in 1989. After graduation, he worked as an interior designer with specialty in commercial projects. He was appointed as team leader in 1991 and was responsible for a number of international and renowned clients. From 1993 onwards, he shifted to study theology and he has obtained his Master of Divinity from China Graduate School of Theology, Hong Kong in 1996. He kept on his professional practice in interior design projects such as church, kindergarten and elderly centre. In 2003, he decided to integrate his extensive and diversified experiences in interior design and culture (especially church) into a PhD research project. He started his research as a full time PhD student in 2004 in the School of Design, The Hong Kong Polytechnic University. During his study, he was employed as Visiting Lecturer to teach subjects on design, culture and theory, design history, design research and design studio projects. His research expertises are sacred space design in urban environment, social design and community design.