# 다목적 공간으로서의 예배공간 활용에 관한 연구

A Study on Utilization for the Worship Space as a Multifunctional Space

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### Abstract

종교공간으로서 교회건축물은 각 지역 단체생활의 정신적, 물질적으로 다양한 활동을 공급하고 있는 장소이다. 그러나 오늘날 변화무쌍한 현대 사회의 도심 교회들은 그 참여 수가 점차 줄고있는 젊은 세대들에게 충분한 만족을 주고 있지 못한 실정이다. 대부분의 영국 도심 교회가 변화가 어려운 예배당 공간 하나로, 각기 다른 기능을 요구하는 이용자들에게 다기능 공간을 공급하고 있으며, 과거에 잠재적 기능을 고려하지 않고 디자인된 대부분의 한국 도심교회들도 비슷한 조건의 문제 발생으로, 현 이용자들에게 또 다른 요구 사항들과 불편함을 주고 있다. 이것은 이용자가 공간을 사용함으로 즐거움과 감흥을 얻기가 어렵게 구성되어 있음을 보여주고 있다. 오늘날, 젊은이들의 생활 패턴이 바뀌어 가고 있음으로 그 실태는 더욱 심각하게 나타나고 있다.

본 연구는 먼저 도심교회 공간의 전형적인 문제점과, 연령별 이용자 그룹의 우선권을 조사하고, 각기 다른 조건의 종교적 공간 사례 조사를 통해 이용자들 및 공간 디자인의 요구사항을 분석하고 있다. 이어서, 각 공간에 따른 문제 해결 방법을 성공적 공간디자인 사례자료를 토대로 정리한 후, 어떠한 종교적 공간에서도 적용 가능하도록 통합적으로 설정된 디자인목표를 바탕으로, 세 가지 다른 방법의 계획서들을 제시하고 있다. 마지막으로, 이용자들의 응답을 통해 계획서를 평가하여, 그것에 근거한 결론적인 종합적 디자인 계획서를 제안하고 있다. 본 연구는 교회가 필요로하는 기능에 따라 변화가 가능한 예배공간을 활용할 수 있는 디자인을 제시하는 데에 그 목적을 두고 있으며, 기존의 교회건물이 더욱 더 많이 사용자의 요구에 만족할 수 있도록 만들어질 수 있는가에 대한 방향이 제시되고 있다.

키워드: Worship space, Multifunctional space

## 1. Introduction

## 1.1. Purpose

The theme of this study, categorizing is concerned with multifunctional space in order to develop quality space within the existing church building. This document is based on a design strategy to utilize the worship space in a church. The most important aspect of the current project is to suggest potential functions. The aim of this study is to demonstrate flexible space within a church, which accommodates various activities, This document should be given to interior designers and architects as guidelines for developing space. It is also showed the progress of the design of the project.

This project intends to explore representative examples of the

provide multiple functions to satisfy the demands of a diverse way in which existing church buildings can be modified to church membership. When users design their own space using flexible systems, they feel a different image of space in the same place in a church but at a different time. The interior is not only transformed in terms of layout, but also in how to it can be used. It is this flexibility that can serve the various activities and thereby demonstrate how an existing church building can be made more accessible.

### 1.2. Background

As well as being a religious place, the church building is a venue for various church activities offering both a physical and psychological presence in the lives of the local community. However, in transient modern society, the urban church is perceived as offering less satisfaction to the young whose attendance is on the decline. This group is an influential audience

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both today and in the future. The structure of the present church is divided into several rooms, each one being assigned a different function, such as for example, a worship space, a meeting room, a kindergarten, a concert hall, and a conference room. In most urban church in England, this is the only worship space accessible to a wide range of activities. The church needs to encourage and attract people back.

## 1.3. Objectives and methods

In this report, the following structures are explored:

(1) Typical problems in churches

To define the supporting area through observing and analysing the characteristics, conditions and situations that need to be identified before designing.

(2) Considerable factors by user age groups

To address preference and worship style of each group, and identify what they are considered through reading case study and information from web site.

(3) Case study

To investigate the problems and propose solutions, this will be achieved through the analysis of three existing religious spaces which have different condition and statue, and visual research.

(4) Proposal

To be examined with the view to developing ideas with three design proposals through reading case study and analysing other successful spaces.

(5) An evaluation of the design proposals in terms of qualities and characteristics

To evaluate the above proposals, responses from the existing users, predicted users and an architect will be reported for progressing the final proposal. The final proposal will be shown through the result of evaluation.

## 2. Typical problems in churches

The problems in the project area will be defined through observation and analysis of it's characteristics with the view to implementing a new design.

## 2.1. Attendance in decline

The numbers of Christians attending church on a regular basis are not on the increase in 1980, 4,720,000 of the English were members of church, compared with 3,950,000 in 1995. This figure is predicted to decrease to 3,660,000 by the year 2000. Most main

stream denominations have suffered a decline, Roman Catholic and Anglican congregations have fallen equally, with a decline of 1.6 percent respectively over 15 years. "The substance of this shift has been brought about by social change, as much as by religious indifference." commented Dr Grace Davie.1)

## 2.2. Individualism and the Church as a meeting place

The conventional church plan has extremely huge nave space without individual space. In view of modern life style, it might be awkward for people who to meditate and / or pray at liberty.<sup>2)</sup> It means that people, who come to church individually, amy not feel comfortable in too huge nave and other user group. Therefore, the worship space needs to accommodate an individual space in order to protect communication within each group.

## 2.3. Different requirements

A Church building is divided into several rooms. Each one is assigned a different function for respective church activities, such as education, training, drama, festival, exhibition, and counseling.3) However, in most urban church in England today, only the worship space is available for these activities. So, when people use the worship space for purpose other than worship, the activity may be limited. They may feel awkward using this space because of the existing inflexible systems. If people are use a space with many purpose, then this space has to be flexible to accommodate different interior layouts and requirements of users in order to position the furniture for function.

## 3. Preferences of user age groups

People in different age groups demand different things from the church. Who are churchgoers and what are their preferences? These are the questions which we will address in this section.

#### 3.1. Preference of worship style

(1) The old generation

Classic(traditional) worship style

The 11am Classic worship features traditional reformed worship with the great hymns of the church accompanied by an

<sup>1)</sup> Church attendance in decline, claims report, The Church of England newspaper, November 14, 1997

<sup>2)</sup>Paul & Tessa Clowny, Exploring Churches, WM. B. Eerdmans Publishing Co. Michigan

<sup>3)</sup> Edward D. Miles, Flexible planning for the modern church, Manchester University

organ and the stirring anthems of the Chancel Choir. Nursery is provided for infants of years old and Sunday school for 4th grade through secondary school during worship. They like traditional formal worship style.

#### (2) The young generation

#### Contemporary worship style

The 9am service is held in the Sanctuary and features the worship team leading the service with worship music, new and old, in a contemporary style. If some people are looking for lively "interactive" worship service that appeals especially to young families and the young at heart.

#### LES(Late Evening Service)

Some churches services focus on the taste of the young generation. One example of this kind of church service is the 'Late Evening Service' which is one of the oldest established recognised alternative worship service in the country, having run for 6 years. The concept of offering this type of service in Lancaster was the reason for success of the 'Nine O'clock Service' in Sheffield. It came to fruition in 1991 after a great deal of initial planning by a youth pastor, prayer, seeking God's will and the backing of the clergy. They decorated the church with brightly coloured banners, manufactured a false ceiling and incorporated technology into the service by using audio/video equipment.<sup>4)</sup>

### (3) Children

Free worship style for small group

Children may experience good worship through small groups with activities, scripture sharing, song and praise, drama, and prayer time. Older children may be called upon to help in worship such as leading in prayer, taking up the offering or even providing special music. This is a mission's curriculum list of creative ideas for the children: Role-lay, panel discussions, field trips, videos/ slides/ filmstrips, missions songs, songs from different countries, posters, displays with maps, missionary pictures/ prayer cards.

#### 3.2. Considerable factors

The old generation	The young generation	Children
Comfortable Easy to use architectural system (including furniture) Considering of their physical problems Supporting sublime atmosphere	Induction of interests/ entertainment Dynamic and technologica environment Flexible architectural systems to accommodate various activities Support modern atmosphere	*Induction of interests/ entertainment *Require different furniture, ergonomically from adults *Consideration of vidual effects (including colours) *Familiar atmosphere

<sup>4)</sup>http://www.users.daelnet.co.uk

## 4. Case study

The objective of this section is to identify characteristics and requirements of three representative religious spaces in England, with different needs and status which have been chosen as a case study, through the site analysis. Following that, a proposal for each will be addressed in order to solve their problem and adapt to their requirements.

### 4.1. St. Pancras church (inner church in London)

Activities	Users	Rooms
-Sunday worship service (including children service) -Meeting after worship	-Most of them are old generation (average age is up to 60 years olds) -2-3 people come as a visitor every Sunday	-Worship space -Meeting room -Cloak room

#### **Problems**

- -Lack attraction of interior design for young people
- -Inflexible furniture and systems

#### Reason of their problems

- -Conservative to modify space, people have not considered the possibility that they need to change their space for solving the problems.
- -Limited way of using / modifying their space by governments conservative idea about historic building
- -Lack of fund.

## Requirements

- -Modify layout with architectural system for adapting all generation taste and efficient using, but also considered economic value.
- -Closed space by flexible systems which can make private space in worship space for private prayer.
- -Movable platform which can be made easily different stage for Christmas, Harvest and Easter festival and other service.
- -Need the service space for children.

#### Characteristic

- -Conserving historic building
- -With reference to the age range of the church attendees and their interests, most of the inner city churches have a falling attendance of the young while that of the elderly remains constant. This is because young people live transient lives and do not want to commit their time to church attendance on a regular basis, they think attending a church service is not 'the thing to do' and holds no interest for them. In addition, most inner city churches have not offered services of young

generation. Since only a small amount of young people visit inner city churches. The church may think that is not necessary to offer services for young people.

## 4.2. Manchester Church (suburb church In Manchester)

Activities and Users	Users	Rooms
Service-Worship (All generation)	-Worshippers	-Worship space
Education	-Family groups	-Hall
-Bible study for students (11-17years old)	- Marring	-Meeting room
-Sunday school (2-10years old)	couples	-Cloak room
-Alpha course for beginner (18years old)	-Children	-Study room
Meeting	-Musicians	-Children room
-Coffee bar (Sunday evening/ after bible study)	-Artists	-Kitchen
-20 plus/30 plus/ Anyone over 40/ Senior	-Lecturers	
Seminar/Lecture	-Visitors	
-Discussion with contemporary issue		
-Video shows		
Events		
-Concerts (choir card / organ / orchestra /		
chorus)		
-Jumble Sales(20-50years cld)		
-Celebration (primary/ secondary school) (11-18		
years old and their parents)		
-Marriages (18-40years old)		
-Funerals		
-Children art competition (4-10years old)		
Counselling		
-Discussion problems with individual/ group		
(8-30 years old)		

#### **Problems**

- -Not offer appropriate spaces for diverse users
- -Rooms layout are not assigned for these function

### Reason of their problems

- -Inflexible furniture and systems
- -Existing furniture is not designed specially for function and characteristics of each room

#### Requirements

- -This church as a multi-purpose building, needs functional rooms which can be appropriately accommodated diverse activities and assigned these characteristics of use
- -Need new design for layouts of each functional room and its furniture, which can assigned these functions and efficient use.
- -There is generally little social activities associated with worship on Sunday school, Bible classes, youth fellowships and so on outside the service hours. Throughout the week, organizations of all kinds will be using ancillary accommodation for great variety of purposes: education, training, drama, physical recreation(e. g. badminton), culture and religious study groups, meeting of the Kirk session, congregational board and committees, possibly toddlers play centres, parish meeting room or lounge. For some or all of these, canteen or tea facilities are desirable. It is also desirable that there should be a comparatively large hall or vestibule for fellowship between the worship room itself and the

door to the outside, where members of the congregation can meet after the service without having to go outside in bad weather.

## Characteristic

- -This church is used as a multi-purpose building
- -This church provides a variety of different services and is successful in maintaining the attendance of a young generation. This church holds services and group meetings according to age. Service time and activities are divided by age. This church believes that young people have many different ways of communicating ideas than those of the elder generation.

## 4.3. King's cross community hall (in central London)

Activities	Users	Rooms
-Lecture /Seminar -Concert /drama -Dance -Film shows -Education for mental patient -Feeding homeless -Meeting disables people-meeting after worship	-Mental patients -Homeless -The disables -Worshippers -Young people -Old people -Children	-Hall -Kitchen -Storage -Toilet

#### **Problems**

- -Not accessible for the disabled (it is located in basement without lift)
- -Not enough architectural system which can manage its functions
- -Not a conductive atmosphere for users
- -Existing furniture that we can buy any where; it is not designed for this hall, also not easily movable, not so flexible to transform to different layout
- -The furniture does not match the interior space and other furniture
- -This hall does not have enough support environmentally or emotionally the satisfy a diverse range of users, because they use the same space for their services without any special setting of space.
- -Gloomy atmosphere; inadequate lighting systems
- -Not pleasing aesthetically

## Reason of their problems

- -Inflexible furniture and systems
- -The space not designed for multi-functions
- -Each system includes furniture that was not designed for unifying with other design

## Requirements

-Need flexible furniture which can be transformed and mobile to

accommodate various layouts for multifunction

- -Also it has to be used accessible for all users
- -Consideration for disable users (easy enter for the disabled)
- -Furniture which is matched with interior design concept for looking unified

#### Characteristic

-The government shares half the responsibility of running this with the church

## 5. Proposal

## 5.1. Proposal for each space

(1) St. Pancras church (inner church in London)

Accommodate flexible furniture, which improves church activities, should be easy to manage for all users, also it can be adjusted for children. In addition, adds design to attract the young to church, however, it will be also considered in keeping historic value as a conservative building and be economic.

(2) Church (Suburb church in England)

Support appropriate divided interior space for various functional rooms as the multi purpose building. Each room will assign its function by layout and interior systems, which are put characteristics of the each room.

(3) Community hall

Support flexible architectural systems to make diverse layouts and different inspiration as a multifunctional space, and considered design for the disable people.

## 5.2. Objectives for the multifunctional worship space

For other religious place can be applied, project objectives will be integrated and arranged in this section. The following spaces identify the project objectives.

- -To create space in terms of satisfying users spiritual needs and amenity in terms of functional use.
- -To create space for users behaviour and comfort.
- -To create space described with local characteristic which is familiar.
- To help people get away from everyday life and feel emotionally satisfied.
- -To create space which is attractive to the target audience.
- -To create flexible space for environmental quality.

## 5.3. Principles of design of the project

An objective assessment of design and the process of

designing, relies on the three aspects previously mentioned. These are summarized as:

- 1. Function: satisfying requirements of user or purpose;
- -Can it accommodate each function appropriately?
- -Can it solve the problems of space?
- 2. Structure: the physical implementation of function by the best available material(s), construction, manufacture and skills as conditions permit;
- -Does each transformed space assign each characteristic of space?
- -Can it be used efficiently by users?
- 3. Appearance: obtaining satisfactory visual effects (sometimes referred to as aesthetic value);
- -Can it attracts the target audience and encourage them back? Does it belong to it's context (concept)?
- (Signifying it's separation to the secular–according to "the church")  $^{5)}$

## 5.4. Design proposal (Focused on St. Pancras Church)

One of the three congregation spaces is chosen for application of the design proposal, to show the example of developed existing space. Particularly, St. Pancras church is a good example for application, as it has most typical problems and requirements. However, it is also dealt with the assumed potential functional spaces, for accepting other requirements of other religious spaces.

(1) Design proposal 1

#### Design Approach

Creation of new space in the existing building

## Potential assumption

Several functions are required at the same time

#### **Functions**

On Sunday - Sunday service

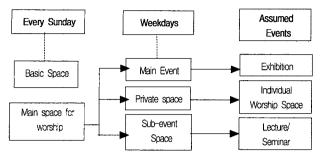
Week days - Exhibition + Lecture/Seminar + Private worship Users

Priest/ Worshippers/ Artists/ Visitors/ Audience/ Lecturers <u>Problems</u>

More than one functional space is required at the same time Design criteria

- 1. New suggestion for multipurpose building concept
- 2. Destroy everything in the existing worship space and create new environment in the space.

<sup>5)</sup>R. Fraser reekie, Design in the built environment, Edward Arnold Ltd, 1972, p.2



(2) Design proposal 2

#### Design Approach

The utility (different way of use) and arrange

#### Potential assumption

Main worship space accommodates another main activity with attractive design for more uses for the weekdays

#### **Functions**

On Sunday - Sunday service

Week days - Concert/ Exhibition

#### Users

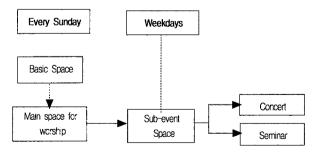
Priest/ Worshippers/ Artists/ Musicians/ Audience/ Lecturers

## **Problems**

Requires a different layout of space from a worship space in weekdav

## Design criteria

- 1. Not so creative way but occupied
- 2. Attractive design.
- 3. Conservation for the some part of the existing space of the building
- 4. New structure is installed (needs of structure mechanism)
- 5. Current design technology is required
- 6. It needs to be compromised concept of new structure and existing design



#### (3) Design proposal 3

## Design Approach

The improvements for the existing elements in the space

### Potential assumption

The main worship space can accommodate users' needs during worship, and different layout by worship style is possible

#### **Functions**

On Sunday - Sunday service

#### Users

Priest/ Worshippers

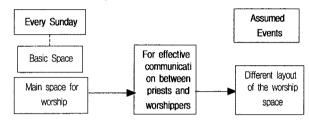
#### **Problems**

Existing inflexible interior systems do not help people communicate well during the worship

### Design criteria

- 1. Use of the existing layout but make elements(furniture/interior systems) flexibly to make different layouts of another worship style
- 2. Easy way of using for arrange

Consideration of ergonomic



## 6. An evaluation of the design proposals in terms of qualities and characteristics

The Three design proposals will be evaluated in this section. The objective is to define the design which solves problems in terms of use worship space, based on the responses of users and an architect. An architect(1person) has been chosen for the esthetic and design quality view, for the rational view, the priest(1person) and existing worshippers(2people) have chosen. In addition, the young believers(7people) in other churches have been chosen to predict the taste of general users for the future. In order to evaluate the three proposals, a questionnaire, and pictures of the space, have been used. Through the result of the evaluation, the proposal has been modified.

## 6.1. The responses to the evaluation questionnaire

(1) The most interesting suggested design •

	The Priest (1)	The existing worshippers (2)	The other church believers (7)	The young who are not believers (1)	The architect (1)	The point of the questionnai re and the result
Proposal1	•	•	• • •	•	•	Preference
Proposat2			• •			<b>*</b>
Proposal3		•	••			Proposal 1

## (2) Good suggestion for the future and the present •/ the present (immediate) o/ the further future ■/ unrealistic (impossible/ not so developed) □

	The Priest (1)	The existing worshippers (2)	The other church believers (7)	The young who are not believers(1)	The architec t (1)	The point of the questionnaire and the result
Proposal1	•	□ •	***	•	•	Possibility  For the future
Proposal2	0	0 1	• ¤ • 0 □ • 0	•	G	For the near future
Proposal3	ü	• 0	0 0 0 0	0	•	for the present (immediate)

## (3) Image words (chosen less than 5words)

1. Futuristic, 2. Realistic, 3. Rational, 4. Comfortable, 5. Systematic, 6.Easy to use (accessible), 7.Convenient, 8.Simple, 9.Rhythmic, 10.Flexible, 11.Attractive, 12.Aesthetic, 13.Focused, 14.Unified, 15.comprehensive, 16.Conservative, 17.Majestic (Spartan), 18.Dynamic, 19. Modern, 20. Unique, 21. Economical, 22. Difficult of using

		• '				
	The Priest (1)	The existing worshippers (2)	The other church believers (7)	The young who are not believers (1)	The architect (1)	The point of the questionnaire and the result
Proposal 1	• 18-8-12	• 1-10-11- 15-18 • 1-4-10-1 8-6	• 12-14-1 7-22-19 • 10-20-2 1-12-6 • 1-10-18 -15-5 • 1-21-10 -9-7 • 1-5-13- 19-20 • 1-3-4-9 -20 • 1-5-11- 18-20	• 19-18-10- 11-20	• 12-3-5	The concept and its' coherence  1. Futuristic 2. Flexible 3. Dynamic 4. Unique
Proposal 2		• 1-2-6-10 -19 • 1-22-20- 10-3	• 11-15-1 6-19-20 • 22-19-1 8-1-5 • 11-1-12 -20-13 • 6-4-5-1 2-10 • 2-8-14- 16-21 • 2-5-18- 21-19 • 9-10-19 -21-15	• 14-6-7-9 19	• 3–10–16	Modern     Systematic     Texible     Futuristic
Proposal 3		• 2-4-6-8- 12 • 2-21-19- 10-7	• 4-6-7-8 -21 • 6-2-8-1 0-14 • 23-16- 21-6 • 13-4-10 • 1-4-5-1 8-19 • 21-16-7 -6-15 • 2-3-7-8	• 21-3-16-2 -8	•2-22-17	Realistic     Simple     Simple     Conomical     Cornfortable     Conservative     Easy to use
The other words testers want designer to consider	Peaceful Dynamic Beautiful Harmoni ous				Spartan     Patriarch     Matriarch	Peaceful Dynamic Beautiful Harmonious Spartan Patriarch Matriarch

## (4) Other requirements

The Priest (1)	Make the focused flexible altar space, which is moved to other position to be closed between a priest and people     Recommend a rhombus for the best worship space     Platform's step should be just one and opened     Required small space but open for private worshippers (they prefer to open space)
The existing worshippers (2)	The pews-inflexible The balcony-cut off the rest of the church desk Consideration of existing concept of Greek style Installation of facility (example a kitchen and toilet)
The other church believers The young who are not believers (8)	Divided two spaces—the sanctified space and public space The weakness of acoustics Not unique (every church do not have their own characteristics) Worship space is only considered the priest not worshippers Required ergonomic chair (comfortable) and desk design Need of the longer distance between a chair and a chair Requirement of brighter atmosphere (people in the worship space feel more depressed or gloomy in the worship space by darkness)
The architect (1)	Consideration of position of organ

## 6.2. The result for evaluation of three proposals

	Strengths	Weakness
Proposal 1	The best proposition for solving problems completely Accommodate space for user's needs (more than one at the same time): Environmental quality The best proposition for new church building can be applied Modern image of worship space is going to be attractive to the young people for the future New image of created church space helps people naturally come and communicate (it is possible for people come to church and use more) For the priest, it opens opportunities It allows the first principles of liturgy and worship to be discussed	Too expensive (not so economical solution) It takes a long time to build new space Not so possible to be applied to St. Pancras church because of the historical building (everything in the existing space has to be destroyed)
Proposal 2	Many layouts of spaces which users want, are possible to be built, and users can feel different image on the basic existing space     Good suggestion not only for compromising with the historical value, but also for creating something new in the space (because it is not going to destroy everything of the existing space)     Economically possible to use at any church	Technicians (users) who is going to install structure need the way how to install it properly Not so easy to install it Big storage is required, when it has to be removed (another problems may be come out)
Proposal 3	The economical solution Realistic proposition to be applied to the existing church immediately Existing worshippers can accept the design readily The best way to keeping existing sacrament of the church The best suggestion for conserving the value of St. Pancras church by improving user's perception	Not so attractive to the young people Not a big development for the future (it may be changed some day again)

## 6.3. Final design proposal

As the result of the survey, proposall was the most preference space of users. Thereby, the final proposal is mainly based on proposall, but some part is also applied for proposal2 and3.

Title of the project

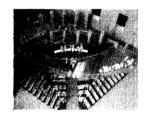
Space utilization

## Design Approach

- ■Remove everything in the existing space to create new environment (Proposition1)
- ■Support functional rooms which are composed by flexible elements (Proposition 2 and 3)

## Design Concept

This church is a stereo type of existing church building. It should be more aesthetic and comfortable where people feel pleasure. The main image of space has come from Greek style, to be matched with the exterior of the existing building (St. Pancras church), that also makes the existing users accept a new environment without denials. However, it is also combined with modern image to be attractive to the young and new visitors. The layout of the worship space is based on a rhombus that is to be achieved for efficient communication between priests and worshippers during the worship.

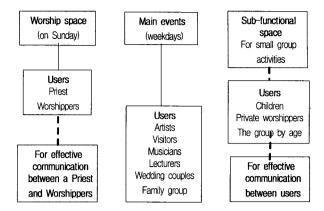


< Fig. 1> The Worship space which is based on a rhombus

As a multi-purpose building, any activities of church for community is possible here. Worship space can be used for the main hall for other events and sub opened space is also supported for small group, those give more opportunities of using church.

### Design Criteria

- 1. Application to the existing building
- 2. Flexible space for environmental quality
- 3. Flexible elements for communication
- 4. Easy way of arrange
- 5. Accommodate user's need
- 6. Conserving value of the existing building



## 6.4. Potential solution of the problems

#### Attendance in decline

- Provide various service styles so that attendees can worship according to their preference.
- Deal with contemporary issues People are curious and may be motivated to attend a service.
- Divide group activities according to age people communicate well with like minded others.

#### Individualism

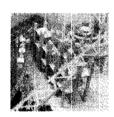
►Offer individual space by using flexible partition or screen individual worshippers can make their own spaces with comfortable mind.



<Fig. 2> Individual space by partition or screen

#### Different requirements from diverse users and activities

 Offer flexible architectural systems, which are transformable and mobile as the elements of making any spaces that accommodate each user's needs and their activities.





<Fig. 3> Flexible architectural systems

<Fig. 4> A movable stage

#### Young people who are on decline attendance

▶ Provide attractive dynamic modern image of the structure of

architectural systems, which they may like.

► Facilitate modern communication systems - audio and video- to promote their activities.



< Fig. 5> The worship space for dynamic modern image

#### Economy

Support multipurpose church building use to maximize the efficiency of land due high land cost and to be combined with commercial use (exhibitions, concerts...) for reason of economy.

## 7. Conclusion

As the result of this study, the proposals which were proposed for utilization of the congregation space in above sections, can be chosen by each status and condition of a church. Firstly, proposall is proper for applying to new church building, as it is the best way to solve any existing problems and potential problems completely. Secondly, proposal2 is suitable for the conserved building for keeping historical value, as new flexible structure is just installed on the basic existing space and many layouts of users want are possible. However, this space can bring about another requirements or problems from managing new structure. Proposal3 is the adequate proposition for the space which wants the economical solution and applying immediately. However, it is not so big development for the future, as some part of the existing systems is changed, thereby, someday it may be required to another change.

Creation for developing church space, it has to be considered with satisfaction of users desire and environmental quality. Modifying from the traditional denominational church to the space which is interesting and dynamic transformable place for its functions and users for solving the problems, is the main subject, and 'offering flexible environment for various different image of diverse users' is the theme for the direction of design it.

It will encourage all generation to benefit from their church experience. These adaptable church spaces for activities are a necessity in modern church procedure. Users are in need of a church in which flexibility is provided. The simplest way to enable such flexibility is by using modular movable partitions,

transformable floor, platform and portable chair.

From a final point of view, flexible architectural systems are a good investment for inner city church, because instead of extending the site for many functional spaces (an inner city site is much more expensive than a suburb site.), the church can offer one space to accommodate many activities by use of flexible systems.

In this paper, a comprehensive analysis of such a design relationship was examined, followed by the appropriate proposals for improving the present state.

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