

Theory, Meaning & Experience In Church Architecture

*An Investigation into the Influences of Buildings
Upon Worship & Spirituality, & their Implications
For the Design & Ordering of Churches*

John Alfred Thomas

Thesis Submitted to the School of
Architectural Studies (University of Sheffield)
for the Degree of Doctor of Philosophy

Submitted May 1994

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SUMMARY

This work attempts to study the relationship between buildings - principally churches - and religion, "religion" meaning worship and spirituality. It aims to study church architecture from a variety of different angles or viewpoints, contrasting with many previous studies, which tend to employ only one approach. Three basic concepts are defined - Theory, Meaning, and Experience - which, while interrelated in practice, are ultimately separate things.

Section 1 is a condensed account of three basic religious architectural theories, or ways in which architecture and places are understood in specifically religious/theological terms.

Section 2 applies the study of architectural meaning to churches, proceeding from a chronological resume of church architectural meaning in history. It applies the concepts of semiology or semiotics to church architectural meaning, and distinguishes between specific systems of architectural meaning, and loose connotation and association.

Section 3 outlines various ways in which religion and spirituality may be affected by buildings, including the effects of aesthetic factors such as design rules, proportion, light and darkness, etc., and examines reported instances of religious/spiritual experience from the point of view of place(s) and aesthetics. By way of these studies, it is suggested that experience of space and spiritual experience may be intimately linked, but that experience(s) of, and in, buildings can in no way necessarily be determined, anticipated, or found to be constant.

Section 4 argues that church buildings have to be made, and regarded, as places that are by nature special and of special significance, and suggests that architects, in creating new churches (or re-ordering existing buildings) take account of the factors discussed in sections 2 and 3, in an attempt, wherever possible, to enrich the experience of worship and spirituality by means of making places which provide more than the essential requirements of liturgy.

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ACKNOWLEDGEMENTS

Very many people have helped with this work, not only latterly, in the production of the thesis, but with so much that went towards its eventual making; inevitably, only a proportion of them can be named.

Let me firstly mention members of the various organisations with which I have been involved, as their help, and contribution to all that I have done, has been great: my supervisor at Sheffield, Prof. Kenneth Murta; Nigel Melhuish, the editor of CHURCH BUILDING, and many others who are part of the CB team (so much that I have had the opportunity to do came from Nigel and CB); members of the Church & Community Trust (Mary Kirk, David Kitton, Jane Kennedy and Adrian Mann), and the organisation's founder, Gordon Cook, who first asked me to join CCDC, as it then was, and who also helped in practical ways, when it was needed; members of the Alister Hardy Research Centre (the Rev. Dr. Gordon Wakefield, Dr. David Hay, Oliver Knowles, and John Franklin). I must acknowledge the support of Library & Learning Resources (South Bank University), and thank my friends and colleagues at South Bank, and also members of various organisations for which I gave talks and led groups, etc., thus giving me the opportunity to learn people's experience directly, and to have my own thinking questioned and enriched.

Among the many who have contributed ideas, support, and help, I must mention Adrian Yardley, Menna Saunders, Prof. Geoffrey Broadbent, Katharine Thrower, the Rev. John Byrom, Canon D. T. W. Price, the Ven. Hywel Jones, Canon David Durston, and the Rev. Philip Thrower (not least of Philip's contributions was that of giving me the opportunity to acquire first-hand experience of the conducting of worship); my wife Elaine has rendered invaluable assistance by spending considerable time reading drafts. Finally, if there is one person who has consistently contributed ideas, wisdom, experience, and thought to this project, since it began, and helped me in many other ways, it is the Rev. John Hawkins. If a thesis can be dedicated to anyone, this is dedicated to John.

AUTOBIOGRAPHICAL FOREWORD

I make no secret of the fact, nor apology for it, that this work draws upon most of the many studies, researches, and writings that I have made in the years since I first entered higher education, the decade before the decade before last. As I explain in the Introduction, my first training was in theology, which I studied in a small Welsh town, beginning in the last three months of the 1960s. From the University of Wales I was fortunate in being able to go to the Institute for the Study of Worship & Religious Architecture (University of Birmingham). I studied with its lecturers, the late Gilbert Cope and the late J. G. Davies, and was the only student in the Institute that year (1972/73). The Diploma in Liturgy & Architecture involved many approaches to the study of churches - historically, artistically, theologically, and sociologically - but the especial insight into the subject that Gordon Davies and Gilbert Cope made their own was the very practical consideration that church architecture was inseparable from liturgy, both in the way we look at its past, and plan for its future. In addition, Gordon's most important work (in my opinion), The secular use of church buildings (1968) concerned theological or religious ideas about churches ("Attitudes and Buildings", he entitled a part of the book specifically concerned with this), and this it was that led me into theoretical theological thinking about churches, buildings, and places. My Birmingham MA (1979) was an attempt to study Nonconformist and "Free Church" architecture from the approach of theory and theological ideas, based largely on various documents that I had begun gathering in 1973.

My gradual conviction that such an approach was by itself inadequate as a means of understanding the relationship of

church architecture and religion, eventually led me - as also suggested in the Introduction - to concerns with religious architectural meaning, and studies of religious experience. The second of these drew me to the work done by what is now called the Alister Hardy Research Centre into Religious & Spiritual Experience, Oxford. Meanwhile, however, I had studied the history of art and architecture, in the University of London, shortly after which (1984) I began my association with CHURCH BUILDING Magazine - my work for which enabled me to study and write about a very wide variety of aspects of church architecture and art - and also with the Churches Community Development Consultancy, which later became the Church & Community Trust. While the first of these involved me in researching, evaluating, and writing about many new and re-ordered churches, the second enabled me to visit clergy and churches, to work with congregations and church councils, in an attempt, by advising and counselling, to aid them in their search for the best way in which to use their buildings/ resources for worship.

While much of this work had been going on, however, I had been earning my living in the field of information work/ librarianship related to architecture and construction, first in the Redditch (new town) Development Corporation's Department of Architecture & Planning (1975-77), and then in the South Bank Polytechnic (now University) Faculty of the Built Environment, where I have for some years been Faculty Librarian: Architecture, and latterly of Civil Engineering, also. Because of this work and its context, architecture, planning, design and construction, are my constant preoccupations, and this thesis, unlike my MA and certain other articles and papers that I have written about churches, is fundamentally concerned with architecture; while it has been researched and written in absentia from Sheffield and its

school of architecture, I have in a sense always been at least on the fringes of that of South Bank.

As suggested above, it seems right to me that doctoral research should, in part, be a product and summation of all that the candidate has done before it. In addition to the writings and studies - carried out at different times, and in different circumstances - that I have drawn upon, there were also talks given to various groups (Southwark Ordination Course, 1986; Christian Resources Exhibition, 1989; Church of England Diocesan Advisory Committee Conference, 1990; Alister Hardy Research Centre, 1991) - mostly concerned with church architecture and religious/spiritual experience. And I am conscious that the work itself refers to very many areas of ideas, beliefs, and experience, presenting some very disparate material to the reader. But I have come to the conclusion that only by doing it this way - by probing the many dimensions that church architecture may ultimately exist in - can we begin to gain a measure of insight into the subtle complexities of the part played by buildings and places in religion and spirituality, and the religious perception of physical reality.

Because this present work draws on work that I have done in the past, certain parts of it develop writings which were published at some time previously:

(section/subsection(s), Appendices):	(document):
1	<Thomas, 1986/RATC>
3/3/2	<Thomas, AIVM>
Appendix T	<Thomas, LM>
Appendix W	<Thomas, 1978/ARE>

THEORY, MEANING, AND EXPERIENCE IN CHURCH ARCHITECTURE

An Investigation into the Influences of Buildings Upon
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INTRODUCTION

This work is an attempt - as the subtitle suggests - to examine the relationships between religion and architecture. As my concern is with churches, "religion" is confined to Christianity, but within that, many areas of worship - formal liturgy and informal worship, personal religion and spirituality - are all part of my concern and investigation (questions regarding the most appropriate siting of people, furniture, and events in a liturgical environment, however, are beyond the scope of any specific enquiry, by me, since such questions have received very considerable attention, in theory and practice, in the last thirty years). While "architecture" and "buildings" refer essentially to churches, non-religious buildings, and other places and spaces - made by humans, or even natural - are all involved in any consideration of the complex subject of faith and its environment.

The notion that buildings, places, spaces, and objects, play some part in spirituality and/or religious experience, or perception of the infinite, or consciousness of the divine -

however we may put it - is one that is increasingly expressed; and yet such ideas generally remain vague notions, never formally studied, structured, nor set within any ordered system of religious ideas. These may, in part, be theological concerns (despite the fact that theology generally gives little heed to them), but no-one concerned with religious architecture can afford to ignore questions concerning the effect that the form and nature of church buildings, objects in churches, qualities of light and shade, separation of spaces, symbolism, beliefs and ideas - and a host of other matters, large and small - have on people's worship and spiritual experience.

The actual title of this study - theory, meaning, and experience - gives some hint, perhaps, of the way in which the enquiry is to proceed, or rather, the concepts by which church architecture is examined, and understood, in the following pages.

To explain these central concepts, and their bearing on the matter in hand, it is necessary to look at the circumstances that gave rise to this work, as explained in the Foreword. Coming to the study of church architecture from theology, my initial concern was with the application of religious ideas to the whole field of church architecture - historical, liturgical, and practical - which had long fascinated me. Many of my first studies and writings, related to churches, concerned what I came to call "religious architectural theory" - the specifically religious or theological understanding, not

just of buildings, but of three-dimensional reality - the world, nature, in effect - and this involved ideas which were derived from religious dogmas and beliefs, ideas held a priori, ways in which the world and its places might or should be understood, as a result of thinking about god; this is a realm of prescription, and requirement.

As my work proceeded, however, I became convinced that theory did not always accord with actual convictions and experiences of religious people, that theory did not always coincide with experience, and that we must not only study systems of belief, and all that flows from them, but also the way in which, in everyday experience, people feel and think about buildings, places and spirituality. Thus it was that I began studying churches by way of accounts of spiritual and religious experience, an approach which concerned itself with peoples' feelings, experiences, reactions, etc., a method very different from that of theology, and systems of ideas. In many earlier attempts to plan this present work, I considered that this study, unlike its predecessors, would leave religious architectural theory behind, and concern itself almost entirely with experience - with research into the actual beliefs, experiences, attitudes, and feelings of people who used church buildings, or reported significant experience related to other buildings and places.

Certainly, what had always seemed to me to be a large, neglected area, is the way in which church buildings in some

way or other convey ideas, or bear meaning - architecture operating in some way as language - and this I considered to play an important part in the link between religion and buildings. Many writers refer to the importance, in church architecture and art, of systems of symbolism - ideas conveyed through architectural forms - and yet rarely do such people delve deeply into these matters. Architecture and meaning - architecture as language - is largely a theoretical matter, it is concerned with structured systems of conveying ideas; but here again, meanings which people receive from a building do not always coincide, I discovered, with theoretical ideas about how such meaning operates. However, this is architectural theory, not religious or theological, and has been an important area of concern to architectural theorists in recent times - and yet it would be foolish to suggest that such thinking leaves religious ideas behind.

Despite my intentions, study of the religious experience of architecture quickly showed that in concerning ourselves with the empirical - with the way in which people experience - it is not possible entirely to leave the theoretical behind, and this means religious architectural theory, as well as systems of meaning and symbolism. Divisions, in actuality, do not work, and watertight separation of things that can be intellectually separated become useless when we look at things as they really are. For this reason, I have begun with a brief account of the principal branches of religious architectural thinking - the sacralist, the secularist, and the cosmological (section 1);

such theory is ultimately linked with experience, as we shall see.

Meaning, however, - architectural meaning as it concerns church architecture - requires much more detailed investigation, particularly its historical development, and the way in which modern-day architectural theorists have looked at architecture and language. What I refer to as the "cosmological" strand of religious architectural theory is equally a system of meaning, and it receives its fullest treatment in the "meaning" section of this work, section 2.

The study of religious/spiritual experience, section 3, proceeds by way of what others have called a "phenomenological" approach; while there are Appendices (U and V) which refer to the basic procedures - and criticism - of such studies, I have essentially reported information voluntarily recorded, and attempted to use it, without giving any thought to the truth or falsehood, reality or illusion, of such experience(s).

Section 4 is an attempt to draw some conclusions from the previous studies, and make recommendations as to how the church architecture of the future might more fruitfully aid the processes of worship and spirituality, and proclaim the presence of the Christian Church in the world.

As suggested in the Foreword, this work attempts to study church architecture from many different angles, referring to a wealth of ideas, principles, values and concerns. It is noticeable that when we come across a book on church architecture that is new to us, it requires more than scanning

the title page to ascertain exactly what kind of thing it is actually concerned with. Thus, in parts of the work, I perhaps present a small amount of information and ideas on a lot of topics, as opposed to a lot of information on a few topics; and a broad, overall view of such a subject as mine - the myriad approaches, values, principles and beliefs - surely exposes the simplistic nature of any attempt to devote a detailed study, such as mine, to the task of establishing the correctness of one particular (inevitably partial) viewpoint. Of course I have regard for the merits of certain means, and ends, but time and again, the work simply lists series of - often conflicting - ways of regarding, and relating, matters of worship, spirituality, architecture and buildings.

Throughout the work, I have been concerned to produce a text which can be understood by anyone interested in religious architecture, but who has no technical knowledge of architectural theory or theology. Occasional technical terms, when defined, do not in themselves produce that which I have most tried to avoid: the dense, impenetrable jargon-ridden verbiage that plagues so much architectural writing, and seems to one possessing the slightest trace of cynicism, to be merely an attempt to prove erudition by a complexity of confusion.

It has also been my intention that the individual parts of this work can be read in isolation, without producing total confusion on the part of the reader: hence the seemingly-endless cross-references and occasional ^erepetition.

1 Religious Architectural Theory

1/1 DEFINITION, NATURE, SOURCE, AND VALIDITY

Few theologians, as suggested in the Introduction, have given much regard to the physical world, to three-dimensional reality, or to the fact of space, and human location within it. The reason is perhaps the ingrained bias in Christian thinking against the physical and the sensual; this is a mistake, since the mode of human being is so firmly fixed in this reality, and no other. Space and place should be a foremost religious concern.

Religious architectural theory, I have defined as structured theological thinking about three-dimensional reality; its product is religious architectural theories, specific ideas or systems of ideas which understand space and place in a particular way; the three basic theories, or bodies of theories, are the Sacralist (the idea of religious buildings and places as holy places), the Secularist (thinking which sees all places as equal, undistinguished realms), and the Cosmological (in which a building, or significant place, is seen as symbolic or representative of the created order, in whole or in part). These three groupings may not account for other theories, which may be held by traditions outside Christianity and western religion. While such theory must be

created as a conscious act, by a rational process, it is very often assimilated unconsciously by religious believers, who generally hold a religious architectural theory whether they know of it or not, hence, no doubt, the pervasive influence of theory on individuals' feeling and ideas.

These theories, and any others, have their origin in theology in the literal sense of the word - in the concept of the nature and being of god that a particular religion holds, and dogmas concerning god(s)'s relationship and interaction with people. The being of god, god's actions in creating the world, creating the race of humans, and perhaps intervening in history and society, of necessity affect the way religious people think about the world and places in the world.

Theological ideas, however, are not only the foundation of religious architectural theory, but of necessity the validation, or invalidation, of a particular theory or understanding. It is not logically possible for a group of religious believers to hold a set of ideas about buildings which are simply not consistent with their faith and its essential ideas. The Buddhist stupa is thought of as marking the centre or navel of the earth, its central point (a column-like structure, or its representative), the axis of the world. It would be clearly invalid for a Christian church to have such a symbolic column within it, since Christian thinking does not include the idea of any axial points on the earth's surface having religious significance. Religious believers cannot with validity simply choose to believe anything they like,

concerning religious architectural theory, any more than they can, in any other area of belief, simply import ideas at will, without establishing their validity within the framework of their overall theology. Invalid religious architectural theory is not confined to major misappropriations, but mostly concerns vague notions based on whimsy, sentiment, or what might be called "folk religion". The question of the way in which religious architectural theory may be present in, or bound up with, a building - consciously, intentionally embodied in it, perhaps, as part of a design process - is a larger question of validity and invalidity; it is often an issue almost indistinguishable from questions of the meaning and experience of church architecture: thus, such matters are treated, much later, in subsection 3/5.

1/2 RELIGIOUS ARCHITECTURAL THEORY AND THE NATURE OF GOD

What is the nature of God as understood in the Christian faith? [I have generally used "God", capital "G", specifically for the deity as understood in Judeo-Christian tradition; in all other circumstances (eg. deity of no specific tradition), I have used "god", "god(s)", or "gods".] Once we accept that Christianity is a historical religion - one originating (from Judaic roots) in a known time in real history - we can see that the Christian concept of god is one that has evolved as part of a long human

quest to comprehend the divine. From the religion of Israel (itself a long process of evolving ideas) we have the concept of a divine creator who is at once remote and cosmic (transcendent) and also capable of direct action in the world (immanent), and very much concerned with the doings of humans. The god of the Pentateuch manifests himself in definite places, which naturally acquire, as a result, special significance.

Perhaps the most important of such theophanies, in religious architectural theory, is Jacob's vision at Bethel (Genesis Ch. 28, vv. 10-19). His response to that experience was to consider the place where he had had it to be holy, to endow it with objective or actual holiness, or to understand it in terms of being a place possessed of such holiness (in fact, Jacob's experience of god was in a dream, and dreams are perforce spatially dislocating; perhaps this is why it is referred to as the gate of heaven). This concept of holiness may be called theophanic sacrality; (it can be observed not only in ancient history, but also in modern times, since the same effect has occurred with the locations of appearances of the Virgin Mary, ie. in Lourdes, etc.). Moses's encounter at the top of Mt. Sinai (Exodus Chs. 19-31, etc.) is with a sky-god, and the fiery cloudy pillar, of the wandering in the wilderness, implies a nebulous divinity, who, though inconstantly, is still capable of location in the world.

Jacob's experience at Bethel, and a host of other theophanies and visions, point out an important fact: that religious ideas of place, or concerning places, have often had

their origins in events. Theory may have its source in experience, rather than theoretical ideas being simply created de novo by rational process; and this is a significant qualification of our attempt to mark a separation - referred to in the Introduction - between theory and experience. It may even be that a religious architectural theory or understanding has been bound up with a significant experience, in this case, theophanies.

The Tabernacle (Exodus Chs. 25-29, etc.) takes the "mobile divinity" concept further, in that it was a relocatable structure - yet very carefully determined, structured, and designed to suit its very special ends - but one that denoted, indeed created, God's place in the world. With the first Jerusalem temple, God's location became thought of as fixed and constant; and while the fortunes of the various Jerusalem temples ebbed and flowed, those buildings (or the idea of the Temple) had an influence on Christianity that was very profound, pervasive, and long-lasting. In essence, the Judaic cosmic creator-god remained both ever present and wholly-other, located in an empty room, yet bound up with the processes of history, and the triumphs, disasters, and Messianic hopes of his people.

In Christianity, the conclusion of long Christological controversies produced a concept of a divine-human Messiah, Son of the Creator, present in the world in a historical sense in his earthly life, then present, in a non-literal or mystical

sense among believers. The implications of Jesus's life and teachings are many and disparate; as with so many questions, it is possible to argue for a variety of understandings of space and place on the basis of his recorded words and actions. It is significant, however, that Jesus's life and works took place in known places at a known time. Locations and situations are very much bound up with the gospel narratives. The scriptures of other religions simply record teachings, ideas, and exhortations, but in the New Testament, such material is presented in real settings where place is important. The so-called Sermon on the Mount is an example of this, and there are many others. This fact could be seen as the gospel writers' desire to create a semblance of real event from verbal teaching traditions, or, as a sign of the writers' concern to identify the divine presence with the real world, and places in it. This raises questions as to believers' regard for actual places where he was present, both locations known and not known.

Jesus's attitude to places of worship, on the evidence of the New Testament, is complex and ambiguous. He does not seem to have objected to the synagogue, where he on occasion taught - despite his obvious objection to some of its other incumbents, the Pharisees. His attitude to the Jerusalem Temple is often seen as crucial, and yet it is hard to be sure of a definitive interpretation of what it may have been. In his youth, we read of him using it, in effect, as a place for theological discussion. The central incident, known as the "cleansing of the temple", or expulsion of the traders (St.

Matthew, Ch. 21, vv. 12, 13), might simply imply a disapproval of commercial mis-use (and perhaps, therefore, respect for sanctity), or it could be taken to show a totally negative attitude to a place of sacrifices and cults, with a "house of prayer" being his preferred substitute. The other important temple reference is to the splitting of the temple veil, upon Jesus's death (St. Luke, Ch. 23, v. 45). This is often interpreted as symbolically suggesting the end of the old order, and the termination of the temple cult in particular. It could be taken as a sign to Christians that they are required to reject belief in places that house God's presence, sanctified places, holy buildings, etc. The history of the relationship of Christian buildings to the Jerusalem Temple - one of both adoption and rejection - displays the differing approaches that have been taken to these complex questions.

Certainly Jesus in his reported words makes it clear that God could be worshipped (and hence "found") in more than one place, indeed in all places, and that he was himself specifically present among any group of believers (St. Matthew, Ch. 18, v. 20). The fact of his omnipresence does not preclude specific centres of worship, of course, but makes it open to question whether any specific place may be considered to contain his presence.

1/3 SACRALISM - CHURCH BUILDINGS AS HOLY PLACES

The source of sacralist theory in Christianity is the Jerusalem Temple, which involved a hierarchy of spaces which were thought of as possessing ascending degrees of holiness. The final space - the Holy of Holies - was thought of as the earthly location of Yahweh. At times in Judaic history this room seems to have contained the Ark of the Covenant, and at others, to be entirely empty. Such thinking, however, never precluded God's presence elsewhere. This model of a religious building, and this theory of the nature of God's residence and relationship with the physical world, seems to have been adopted by Christianity around the 4th century, as a result of various factors involved with the church's elevation of political status in the Roman Empire. Certainly, the Church quickly found itself possessed of large numbers of converts, where before there had been a small intimate group of people, whose presence was at best discreet, within society. It has been suggested that order was only kept, amongst such a large throng, by introducing the idea of awe and mystery <Davies, 1971/2/INL>.

Prior to this, small, simple buildings had been erected, or houses used and/or converted, circumstances which provided little reason for the idea of any powerful holy presence. This development has been seen as a falling away from truth into compromise and error; but could equally be seen as the process of coming to a right understanding of the reality and nature of

religious spaces, in much the same way that the nature of Christ had only been determined after long centuries of heterogenous theological interpretations, and much bitter dispute.

The Medieval church was dominated by sacralist thinking, and by this time we see the developed concept of "two worlds", the sacred and the profane, and the ultimate division of all places and spaces, objects, and even people, into these two, realms thought of as totally separate and antithetical <Davies, 1968/SUCB, pp. 214-5>. In the great Medieval church, the three-fold division of spaces, with their ascending holiness, was introduced directly from the temple model; Durandus, the 13th century bishop of Mende (whose ideas are analysed in detail in subsection 2/5) openly states that "From both of these, namely the Tabernacle and the Temple, doth our material church take its form" (Rationale divinatorum officiorum, I, 5), and he refers to the Holy Place, Holy of Holies, etc.

This sacralism was above all ritual sacralism; objectively holy places and spaces were created, and protected from the incursion of the profane, by means of ritual, namely, consecration, the making of places/things holy, and the ritual ablution, cleansing, and exorcism of profanity, impurity, and evil. Holiness was thus a real, but also a constant, thing. It existed permanently and unconditionally; it did not depend on the perpetual presence of people, things, events or contingencies. This ritual sacralism (together with the theophanic sacralism, referred to above) I refer to as

"classic" sacralism, and we later find it in the post-Tridentine Catholicism of the Counter Reformation, and in the Catholic revival and Gothic Revival in 19th century Anglicanism (and other Christian denominations). In Cardinal Bellarmine's Disputations (published between 1586 and 1593) we read: "in the likeness of Solomon's Temple, in which there were atrium, holy place and holy of holies, almost all churches have three parts" <Davies, 1968/SUCB, pp. 96-7>, and in The church edifice and its appointments, published by Catholic authorities in San Francisco, California, in 1946, we find pages of instructions concerning the consecration of buildings, altars, relics, bells etc., and the exact causes of deseccration: criminal homicide, shedding of blood, burial of an infidel in the church - etc., etc., all based, of course, on the appropriate Papal document <Collins, H. E., 1946/CEA>; a British equivalent is J. C. O'Connell's Church building and furnishing The Church's way <O'Connell, 1955/CBF>.

A remnant of classic sacralism, within the realm of "folk religion", is perhaps seen in the tendency of people - often village communities - to value their historic church, and even consider it sacred, while having no desire (or even feeling unworthy) to worship in it <Reed, 1978/DR, Ch. 5>. It is interesting to note that such attitudes have been frowned on by "secularist" writers <Reed, 1978/DR, p. 102>, while "conservativ~~is~~onist" thought of the 1970s (subsection 9) delighted in the universal value often put upon a "common heritage".

But in addition to classic sacralism, holiness may be understood in other ways. Belief in holy places need not include a specifically dualist world view, or involve struggling cosmic forces. In what might be called "associational sacralism", places can be seen as being holy by way of worship, ritual, and the (temporary) presence of the sacraments within them (Harold Turner calls this "representative holiness by sacramental function" <Turner, 1979/FTHM, p. 328>). The presence of the sacraments is perhaps a source of sacralism which classic sacralism, in its concern with Judaic sources, gave little emphasis to (Turner, however, argues that any kind of associational sacralism is solely dependent on the presence of the worshipping community <Turner, 1979/FTMH, pp. 329-332>). Places, and even people, can be thought of in terms of "temporary" holiness, an idea that might be seen as following naturally from the principle of Christ's (sanctifying) presence amongst a group of believers; the believers gathered in his name are nonetheless located in a particular place. Recurring acts of worship can be seen as sanctifying to their environment. Also, places such as specifically-religious buildings have been seen, themselves, in sacramental terms (see subsection 2/10/7, etc.), and there are many ways in which churches may be thought of as "special" places, places "set aside for God" <Dees, 1986/PSAG>, or where God's "name" is specifically present <Cook, 1986/MNSBT>.

Another approach is one based on the "Sabbatarian" principle of all being "special" by way of one being held in special

regard: just as the special-regard of the Sabbath day in effect makes all days holy, the keeping of "special" places dedicated only to religious worship may cause us to realise that all places are worthy of high regard <Turner, 1979/FTMH, pp. 329-330>. Tim Gorringer has suggested that while it is (in his view) right to hold certain places special, and mark that difference, and their purpose(s) with appropriate symbols, etc., there is no way in which such treatment "guarantees that any particular place must be sacred" <Gorringer, 1992/SS, p. 4>; this is thoroughly non-classic sacralism, and, when translated into the realm of religious/spiritual experience, this inability to ensure a quality/effect is seen in what I have called "non-repeatability" (see subsection 3/4/3, etc.).

These non-classic sacralist approaches are very prevalent today, in many areas of Christian thinking and experience. Certainly there are non-sacramental Christians who, while rejecting classic sacralism, are reluctant to accept a totally secularist understanding - the approach that we must examine shortly - of churches (and Turner reports this as being present even in a modern Quaker context <Turner, 1979/FTMH, p. 327>). One final observation concerning the idea of a Christian building as a holy place, is the advantage that it may give of identity, purpose, and location in society, psychological advantages which may exist whatever the validity or invalidity of such a theory, or the theological foundation for it; an event illustrating this was the case of an Anglican church in

north London which, a few years ago, was specifically reconsecrated after deseccration by supposed satanists.

1/4 SECULARISM - THEORIES OF A UNIFIED REALM

The word "secularism" is of course a modern one, and it is as a modern (1960s-) concept that we are mainly concerned with it in this study; but its pre-history is very important, for, as suggested above, it has been considered to be the original, true, and only supportable way of considering places, buildings and objects in Christianity. The early Christians did not have special buildings with sanctuaries and cults ("We have no temples, no altars", proclaimed the Christian Apologist Minucius Felix, around 200 AD <Davies, 1968/SUCB, p. 1>), and Christian worship in the form of the central act of the breaking of bread, must be traced back to the upper room, not to any religious building or place, as such. The adoption of sacralism, and the Jerusalem temple model, has thus been seen as a corruption, a falling away from truth, a compromise along with others that the "officialising" of the Church produced. In the primitive church, the building used - whether a believer's house, a converted house or tenement, or a catacomb - was merely a meeting place, and those in later times, who have advocated a return to this primitive simplicity, have denigrated the "temple" tradition in favour of the "meeting

house". An important example of this is Harold W. Turner's exhaustive study (of 1979), which, coming from a broadly Reformed tradition it seems, makes a sustained attack on any form of sacralism: "the temptations of the temple tradition", as he puts it, are always present as a hazard to a truly Christian understanding of places <Turner, 1979/FTMH, p. 329>.

With the coming of the Reformation, particularly in its later phase - Calvinist or Reformed - the meeting house was chosen as the one appropriate form of Christian building. In its form, construction and furnishing, the meeting house proclaimed the belief in a building which was in no way different from any other building, the place of worship being the same, in religious or theological terms, as any other place. The rejection of the sacred/profane dualism (physical and spatial) was quite explicit. As the 1644 (Puritan) Directory for public worship put it

"As no place is capable of any holiness under pretence of whatsoever Dedication or Consecration, so neither is it subject to such pollution by any superstition formerly used and now laid aside, as may render it unlawful or inconvenient for Christians to meet together therein for the publique worship of God". (quoted by J. G. Davies <Davies, 1968/SUCB, p. 116>).

And George Fox (1624-91), leader of the Quakers, wrote:

"... the Lord showed me clearly, that he did not dwell in these temples ... but in peoples' hearts ...". [And he considered that he had been sent to preach to people

that] " ... they might know their bodies to become the temples of God and Christ ..." (both quoted by J. G. Davies <Davies, 1968/SUCB, p. 118>).

The quotations from Fox involve an idea that is very much a part of modern non-sacralism, and will be expressed by many Christians today: that the dwelling place of God has been changed from a physical location into a human condition, and this is rooted in the teachings of St. Paul, etc. One other important aspect of early Dissenting and Nonconformist use of buildings, is the fact that these Christians (mainly Methodists, in the later-18th century) developed the practice of creating a multiplicity of spaces, within their meeting house, to accommodate a variety of activities, not all of which consisted of formal worship. The term "meeting house" is very appropriate for these buildings, of course, and it is always remembered that with the emergence of the first Methodist buildings (although Methodism retraced many of the first Christian stages from conversion to new-build), John Wesley chose the word "chapel" because it avoided the implication of Dissent <Perkins, 1952/MPHL, p.13>, and had (High Church) Anglican overtones.

The modern secularist approach arose partly in conjunction with the Liturgical Movement, which had developed on the Continent, but was also a product of the radical theological climate of the post-war decades. J. G. Davies's important book The secular use of church buildings (1968) <Davies, 1968/SUCB>

examined the long history of non-liturgical and non-sacral activities that had gone on in church buildings - albeit frowned on by the ecclesiastical authorities - in the ancient, Medieval, and post-Reformation Churches, such as eating, sleeping, elections, legal proceedings, transactions, etc. From these, he argued for the legitimacy of churches as buildings, or complexes of buildings, that could house a variety of uses. But further, the book disputed the theology of sacralism and ritual holiness: the dualism of "two worlds", and the idea of the holy as the "numinous", or "wholly other" (the thinking of Rudolf Otto in his book Das Heilige (1917; published in English as The idea of the holy (1926) <Otto, 1926/IH>). The holy, he claimed (ideas developed in Every day God (1973) <Davies, 1973/EDG>) was to be encountered in daily life and acts of worship and service, not in religious experiences, and the sacred as traditionally conceived (see also subsection 3/3/4).

The sacred/profane dualism is, in this thinking, replaced by one world, an undivided, undistinguished realm, common to all, and everywhere to be found, a world neither blessed by divinity, nor fallen, evil: it is a single realm known as the secular. As we saw in the Reformed thinking of the 1644 Directory, for secularists, buildings and places cannot become holy, but neither can they become profane or polluted. In this approach, the erroneous effects of Medieval ideas (and much in the Renaissance and Counter-Reformation) have long lain heavy upon the Church.

Along with this rejection of holy places and sanctuaries,

secularist thought objects to Christian buildings that are costly to build and maintain, or large and imposing, seeing these as negative symbols of Christian triumphalism, and immoral wastefulness in a world of need and suffering. Much of the theology of these decades looked to the concept of the Church as servant, rather than master. Thus, church buildings which were used in many different ways, for the whole week and not just Sundays, were a justified expense, particularly if such buildings could be made to serve, not only the liturgy, but also the material needs of men and women, who lived in the "secular city" (see also Appendix T).

Side by side with these ideas - which are perhaps summarised somewhat simply - went the desire to reject the traditional church architectures of the past, with their elaborate styles and aestheticism, which had in almost all other areas been long rejected, thus creating an architecture of backwardlookingness. The secularist movement was thus concerned to marry the new conception of a church with the Modern Movement in architecture, which laid emphasis on the theory of Functionalism. Although churches in modern architectural form, and planned for modern conceptions of worship, had been built (mostly on the Continent) in the 1920s and 1930s, it was largely in the 1960s that secularism, and modern liturgical planning and building, came together (see also subsection 2/9). The ultimate product of these ideas, currents, and developments, was the non-sacralist, multi-purpose, church-centre.

As we get further and further from the period of, say, 1958-75, secularism, in church architectural thought and practice, appears more clearly as a product - particularly in Britain - of the post-war climate in which the dusty, musty ways of the past - in religion and church-building - were sloughed off, largely by people who had grown up in the last gasp of the Gothic Revival and the tired world of Anglican matins-and-evensong, unintelligible Latin Catholicism, or dull hymn-sandwich Nonconformity. Secularism, and the radical approach to the way we consider churches, had a very strong appeal for many, yet also produced (after the mid-1970s) a pronounced reaction. When I interviewed J. G. Davies, for CHURCH BUILDING Magazine, near the end of his career, he suggested to me that his ideas - on secularism - had been disregarded <Thomas, 1986/CJGD>. In part they had, and yet the Christian longing to recapture a simple innocence (in these matters), and the rejection of insupportable, irrelevant grandeur (in buildings) has sunk very deep into the contemporary Christian mind.

Another example of the secularist approach - this time, from an architect - is found in Peter F. Smith's Third millenium churches (1972) <Smith, 1972/TMC> and his article "Peter Smith on post religious churches" (1974) <Smith, 1974/PSPRC>. Smith follows the principles and ideas of Dietrich Bonhoeffer - popularly associated with "religionless Christianity" - and the "demythologising" theology (originally applied to the New Testament texts) of the post-war decades. Bonhoeffer's Christianity "come of age" involved a "worldliness" in which

sacralism, and much else besides, needs to be "stripped away" <Smith, 1972/TMC, p. 25>. For Smith, the eucharist has "tended to assume some symbolic overtones of pagan sacrificial symbolism. Even the toned-down liturgy of the Protestant Communion has not escaped" <Smith, 1972/TMC, p. 26>. Church buildings are the one thing that has not been demythologised, Smith writes <Smith, 1974/PSPRC, p. 12>; and his desire to do this involves opposition to the idea of buildings possessing symbolism and specific meaning: "... the feedback from a church in London ... indicates that a building which is not image-impregnated has much wider acceptance within the community" <Smith, 1972/TMC, p. 74>. His rejection of special buildings for Christianity is seen where he refers to churches which "fail" and are deemed redundant: "... this demythologised attitude to the design problem has commercial advantages. ... There are many instances of new churches on housing estates failing to survive for a variety of reasons. If the building complex is devoid of religious imagery it is quite easily translatable to other use, such as pre-school centre, library, medical centre, youth and community centre, etc." <Smith, 1972/TMC, p. 75>.

When considering Christianity's two principle^{al} theoretical approaches to space and buildings, the sacralist and the secularist, it is vital to realise that varying - indeed, conflicting - attitudes to these questions were present, not only in Christian history, but in the long centuries of Hebrew/

Judaic religion, before the birth of Jesus. In a recent article <Gorringer, 1992/SS>, Tim Gorringer outlines "four broad strands" in "what we mean by the word "holy"", and the presence of these in the Old Testament, amongst the conflicts of prophets, priests and kings, and the rise and fall of Israel's dynasties and political fortunes <Gorringer, 1992/SS, p. 3>. Firstly Gorringer sees holiness as mana, something superior and threatening (he sees this as comparable with the understanding of Rudolf Otto); secondly, holy means "set apart", a defined, marked-out area; thirdly, he sees holiness as being related to wholeness, integrity, and perfection; and fourthly, holiness is absolute, pure love, such as the love of God, beyond and above what humans experience.

Set against the kings and priests - who were influenced by ideas of physical holiness and temple cult originally taken from the Canaanites and others - were various prophets, and the writers of Deuteronomy, who saw the holy as being present in the people, not in cultus; and Jesus was thus drawing on the theological tradition of Deuteronomy in his apparent denunciation of the Temple cult <Gorringer, 1992/SS, p. 4>, and the later Christian sacralists (who looked to the Temple) were drawing on the other, opposing, ancient traditions.

A large proportion of the world's religious architecture is understood in terms of a kind of thinking about god and the world that is of very great antiquity, and while not a fundamental part of Christianity, cannot be discounted in any discussion of its religious architectural theory. This approach is one in which religious buildings and structures are specifically constructed as intended models, representations, or symbols of the structure of the cosmos or created order. Such an idea goes back to the very first human buildings, and efforts to understand the nature of the cosmos, its coming into being, and the human place within that created order, and human destiny.

The ideas that emerged from these efforts we would understand as the early myths or religious beliefs of nascent human civilisation. The first "religious" act was surely the marking of places on the earth's surface, and these often denoted experiences of the divine. "Communication" between gods and people became an essential part of such places, and the buildings which succeeded them, and formalised understandings of the worlds of men and gods. The understanding of the heavens as a great bowl was bound up with the development of the dome - or, the emergence of the ability to build domes - and the square plan marked, by one means or another, the four cardinal directions, which were so crucial to understanding place and human location. Orientation, which has persisted very long in many Christian traditions, has its origins in the concern with directions, and the "death" and "rebirth" of the sun. The cubic

domical building is only one of the approaches to representing the cosmos and the world of gods and humans. The Hindu temple owes its origins to the idea of the mountain of god, temples first being cut within mountains, but then constructed as built representations of mountains. The Buddhist stupa, as a structure representing the earth's navel, we have already met.

As suggested above, the cosmological building was created for didactic, illustrative, purposes; but more than that, the physical "correctness" of the symbol is ultimately a source of the validity of the structure for serving the religious purpose to which it is put. Religious buildings of this kind do not depend on the idea of being situated in a ritually-separate realm, but rather, are made valid by the mathematical (and numerological) devices by which the "correct" location is found, or the proportions by which the different parts of the building represent the respective part of the world, the underworld, or the human realm. Such traditions - being concerned with the heavens - generally give much attention to astrological requirements, and "sacred geometry", or geomancy [discussed in depth in Appendix Y].

This approach is one of theory in that it involves a body of ideas as to what such a building must be, what it must be constructed like, how it must be understood, and how it may, with validity, serve its purpose. These ideas result from religious concepts and understandings, and exist prior to the act of building or sheltering. In addition, such architecture is very much concerned with meaning, and the communication of

ideas; for this reason, "buildings like the world" will be examined in much greater detail in section 2 of this work, architectural meaning perhaps having its (historical) origins in these ancient symbolic structures.

Cosmological theories of religious architecture are important in any consideration of church architecture, today, principally because of the presence of various cosmological relics within Western Christianity, such as the orientation of buildings, noted above, and the strong concern in many ages to create a "roof" of one kind or another over the altar/sacraments: ciboria, baldacchini, and more temporary veils and covers, or the simple raising of a dome over the sanctuary itself. In Byzantine church architecture, and hence, perhaps, in the traditions of Eastern Orthodoxy, we find the largest remnant of domical symbolism. Christianity's roots were in another cosmologically-minded religious tradition, Judaism, and Islam, a younger faith, has preserved a cosmological theory of religious building. A further reason for giving attention to this theory is the rediscovery, in the late-19th century, of architectural symbolic imagery of a cosmological nature, which, through the influence of the Arts & Crafts movement and the later-Gothic Revival, had considerable influence on Christianity, in the 20th century, in the English-speaking world. A further aspect of the contemporary situation is the strong interest, in certain quarters, in esoteric and even occultist, ideas about certain forms of traditional architecture - particularly Gothic. Such thinking understands

Medieval buildings as being the products, and repositories, of arcane lore, their nature and form being correctly understood in terms of geomancy, numerology, and cosmological reference. Not only Medieval buildings are cited by devotees of this approach, but also modern ones; the plan and dimensions of Guildford Cathedral (mid-1930s) is claimed by Nigel Pennick to display some of the canonic proportions and numerological formulae that are likewise thought to be found at Chartres, Westminster Abbey, and a host of other ancient buildings <Pennick, 1980/SG, pp. 135-6> (see Appendix Y). Many people, inside or outside conventional religious faith, express a need for the recovery of special places where materialist and utilitarian values can, for once, be absent; and the intense interest in such a place as Chartres - central to the "sacred geometry" persuasion - is often a feature of "Alternative" or "New Age" religion.

Implicit in the previous paragraph is an aspect of cosmological theory not as yet stated: that though such ideas are logically distinct from sacralism, in practice, religious architecture understood in any kind of cosmological way is almost always, in some sense or other, regarded sacrally, thought to be special, set apart, and possessed of non-material qualities and effects; all of which must be examined, in detail, later in this work.

2 Church Architecture and Meaning

2/1 ARCHITECTURAL MEANING

Architecture and meaning - "architecture as language" - buildings, places and environments that can be said to convey ideas, embody beliefs and ideologies, inspire feelings, or in some way "speak to" those who experience them: this is a vast subject, and a pervasive matter of concern for architectural theorists, and others, over many centuries. These concerns take many forms; and yet they seem to be linked by the notion that mute matter might not be simply silent, but can be invested, almost like language itself, with the power to communicate; indeed, it may not be anticipating our discussion in an inappropriate way to suggest that some writers have spoken, not of the power of buildings to carry meaning, or their facility to be made so to do, but of the inability of architecture not to bear meaning. As suggested in the Introduction, if we are to understand the way in which church architecture is bound up with the experience of worshippers and others, we have to attempt to understand the ways in which buildings might, as a result of a programme or some other intention, or by some less premeditated means, convey ideas and feelings to people.

In the subsections that follow, we shall be examining this thinking, the diverse approaches to it, and its different areas

of concern. The ideas of many theorists, and schools of theorists, will be outlined, ideas that are ancient, and also very modern. Naturally, modern thinkers, in addition to formulating new concepts, also address themselves to older ideas.

2/2 THE STUDY OF ARCHITECTURAL MEANING

How might architectural meaning be studied? One way is to try to analyse and classify the different theories of meaning, or ideas of architecture-as-language, looking at examples from many times and places in architectural history, distinguishing between them, and classifying them according to their underlying principles. One problem with this may be that, in many instances, concepts of architectural meaning may not be mutually exclusive; their central principles might merge into one another, and clear definition become impossible. Or, the ideas held in different ages might be so unlike one another that they will seem to require quite different evaluation.

Another method is the purely chronological approach, the study of meaning in architectural history; but beyond such an exercise, it is still necessary to compare, classify, and analyse. Such analysis and classification is surely impossible, however, without a knowledge of historical context, and so the method adopted below has been to proceed in a roughly

chronological way - examining, principally, those ideas and examples concerned with Christian church architecture, but also outlining ideas from outside a Christian context which are relevant to it; this survey is used to gather instances and examples of idea and theory, that can then be studied outside their specific chronological and cultural settings. It does not attempt, of course, to be an account of all architectural meaning, in all architectures, of all ages.

2/3 "BUILDINGS LIKE THE WORLD"; ANCIENT SYMBOLISM AND MEANING

As we have noted in the above study of cosmological religious architectural theory (subsection 1/5), much of the architecture of ancient times was conceived of as being an embodiment, or physical realisation, of the way in which people thought of the nature of the world: the earth, the heavens, that which was under the earth, and the place of humans within it. This, at least, is an interpretation of early buildings and structures that has been stressed, on several occasions in recent times, with the central argument that in early history, and pre-history, the buildings that were of any size or importance, were understood not simply as utilitarian, nor as products of any concern with what we might call aesthetics, style, or taste, but as physical symbols, structures that were a material recreation of an idea, the manufactured bearers of meaning.

An important book, which is centrally concerned with this thesis, is W. R. Lethaby's Architecture mysticism and myth (1891, 1892, 1974 <Lethaby, 1891/AMM>). Of course, this book has to be seen as a product of a particular late-19th century climate of thought and taste, and equally, the book itself did very much to produce the architectural ideas and buildings (of the Arts & Crafts movement and the mature Byzantine Revival) that followed it (see also subsection 2/8); but the author clearly considered that the cosmological symbolic nature of early buildings transcended the concerns of the 1890s, since he returned to the subject in 1928, publishing various articles on aspects of it (later published as Architecture nature and magic, 1956).

In both books, he looked at the ways in which ancient peoples - both in the great civilisations of Egypt, Babylon, Persia, and Greece, etc., and among Nordic peoples, Polynesians, and other "primitives" - had viewed the cosmos, by what images or myths they had explained the sun and stars, and the earth set in its surroundings of sea and sky.

In most cases, the cosmos had been understood as a vast but essentially simple structure, and one which was easily and naturally understood in terms of an archetypal building - a microcosmos - and in the successive chapters of his (earlier) book, Lethaby looks at different features of early buildings and cosmology, in which the latter was symbolised or represented in the former: "Pavements Like the Sea" (IX), "Ceilings Like the Sky" (X), "The Planetary Spheres" (VI),

"Four Square" (III), etc.

It is surely unwise to generalise about the understandings of cosmology that were in the minds of early peoples; however, it is readily apparent that within certain variations, a similarity of ideas - or even leitmotifs - appear time and again. Most conspicuously, the earth on which we live was seen as a central zone, sandwiched between a lower realm (or realms) and upper realms, or heavens. Of early South American ideas, Lethaby writes: "We live, as it were, upon the ground-floor of a great house, with upper storeys rising one over another above us, and cellars down below" <Lethaby, 1891/AMM, p. 12>. The region of the heavens is all-apparent above, and the underworld was perhaps a memory of great caves or dark swamp-like regions below the normal place of living.

Always, however, the earth and the sky are connected, the two (and the underworld also) being almost staked together, or fixed in place by some vast central structure. This not only held the realms together - yet separate - but might also form the axis on which the worlds spun around. This axis might be a world-mountain, as it is in much mythology, but an equally strong myth - particularly in northern Europe - is the world tree (normally seen to be an ash tree), which, situated in the centre of the earth, reaches up to the heavens, its branches spreading over the whole world, its roots descending to the underworld <Lethaby, 1891/AMM, pp. 10-14>.

The world tree or mountain introduces the concept of the mythical central place on the earth's surface, and Lethaby

later devotes a whole chapter to this idea. Two spatial concepts of the cosmos are found in this ancient thought, one of a globe-like structure, the other square, and box-like, and Lethaby supposes the second of these to be the more primitive and ancient <Lethaby, 1891/AMM, pp. 12-13>. Certainly much mythical cosmology involves squares. The world as an enormous box has the sky as a lid, and in addition to a central support, many myths exist of four creatures (dwarfs, beasts, or monsters) that support the corners; sets of four creatures have a persistence in mythology and religion beyond that of overtly cosmological entities. The spherical conception (and some ideas involve hemisphere with cube or semi-cube) sees the sky in its more familiar form of dome, rather than flat ceiling; Lethaby remarks that when primitive people combined a domical heaven with a cubic earth, they seemed to disregard the "architectural" problem of linking the two, as with pendentives <Lethaby, 1891/AMM, p. 14>. Lethaby's sources suggested that the Chaldean cosmology involved a hemispherical heaven, and that it was in that region that builders first created domes (see below). A world conceived circularly may be involved in the origins of circular temples, such as the Temple of Vesta and the Pantheon.

Always there was the linking of the earth, the world of the living, with the world of the dead below, and Egyptian ideas suggest the earth was walled-around with a gateway giving access to the dark regions beyond, or a river of death, or waters surrounding the earth, across which the dead were

ferried. The realms of the heavens, like the underworld, might also be seen as vast structures, the sky being thought of as a heavenly palace, in Hindu myth. The understanding of the heavens seems always to have been complex, with not just one sphere sufficing, but, in different systems, seven, or even twelve. In this thinking, the stars, and the different planets, revolved around the sky, each as part of a vast transparent sphere, and these ideas are products of attempts to understand the movements of those stars and planets which revolve independently of one another. The scheme of Pythagoras is perhaps that which persisted longest in our thinking <Lethaby, 1891/AMM, pp. 20-21>. Many remnants of early cosmology are found in the Bible, including Job's image of the sky as a beaten-out sheet of glass-like metal, and the cosmological symbolism involved in the Jerusalem Temple. Lethaby describes the ideas of the Early Christian writer Cosmas of Alexandria, who insisted that Christians see the universe as like a long box or coffer with rounded lid, in which all the earth, the heavens, and stars were set, the tabernacle of Moses being an embodiment of the same image <Lethaby, 1891/AMM, pp. 29-30>.

Having considered thinking about the world, Lethaby then goes on to examine the different microcosmic images, or structures that embodied the various ideas; "When the world was a tree, every tree was in some sort its representation; when a tent or a building, every tent or building ..." <Lethaby, 1891/AMM, p. 35>. But the most complete cosmological images are those found in (or created by) temples.

Examined in detail, it can perhaps be suggested that the concept of "centre" is the most archetypal and essential of these cosmic/architectural ideas, since it underlies that understanding of "place" which is at the heart of the human relation to the physical world, and one which architects down the centuries have grappled with: the idea of "place making", creating - or marking - some point in the world of especial significance. Lethaby's chapter on the subject is number IV, "At the centre of the earth", and C. B. Wilson, of Edinburgh University's school of architecture - following such authorities as anthropologist Mircea Eliade - sees the idea of Centre as connecting with that of Origin <Wilson, C. B., 1984/CW>. The place understood as the centre of the world, by "traditional" peoples, was at once a locus and an image, and one involving the ideas of source, roots, primordial purity, and a universal norm; it was a place of order, of unity <Wilson, C. B., 1984/CW, particularly pp. 51-2, 57>. (In a more recent article, Wilson has connected centre with dwelling, as in a traditional Chinese house <Lyle, 1992/SA, pp. 111-132>.)

At this centre, earth, heaven (and hell) are connected, and open to one another; heaven is found here, although raised high upon a sacred mountain, tree, building, or altar, and this place (even though not literally) is the axis mundi. "The world" means the ordered environment of a common people. Eliade saw the construction of traditional/primitive houses as the making, at the centre, of an imago mundi, a new creation in the likeness of the old original creation of the universe <Wilson,

C. B., 1984/CW, loc cit>. Lethaby says that in their myths, many ancient peoples see their land or empire as being the centre of the earth, and consider their largest mountain - Olympus, Meru, Fuji - as the mountain at the centre of the world, or pillar of heaven, its summit being in heaven <Lethaby, 1891/AMM, pp. 72-5>. Puay-Peng Ho shows how a central pillar (axis mundi) is also present in Buddhist cave temples (ie. within the mountain) <Lyle, 1992/SA, pp. 59-70>.

Heaven has been seen as the ultimate purpose and objective of early religious architecture, the temple, stupa or whatever being an image of the heavens, in order to be an image of heaven itself. John M. Lundquist writes: "...there exists in the sky a perfect place, the "city" of the gods. The goal of human life is to establish contact with this place ... The earthly temple is an exact replica of a heavenly temple" <Lundquist, 1993/T, p. 11>.

The "centre" has often been described as the omphalos, or world's navel, and Lethaby relates a myth in which two eagles were sent out to find the centre of the world, and were later found perching either side of a vast egg, a symbol of creation <Lethaby, 1891/AMM, pp. 79-80>. He connects the word "hearth" with "erde", earth, seeing the hearth as the centre of the house <Lethaby, 1891/AMM, pp. 82-3>.

Both St. Peter's, Rome, and Hagia Sophia, Constantinople, he says, were understood to be, or to possess, omphaloi, and great pillars set up in Delphi and other places, were representations of the earth's axis. Several religions have the idea of a city

(Mecca, Jerusalem) as the centre of the earth, and even specific central places in those cities (the Ka'aba, the Dome of the Rock), and these have been places to which worshippers have faced in prayer, and towards which buildings have been oriented. Various eastern traditions have built temples to create the idea of a holy mountain (eg. in Cambodia), or as representations of axis-mountain-centre. The Buddhist stupa is an example of the latter. In essence it is a pole, marking axis and omphalos; built up around it there is a large solid dome-like mound, or symbolic mountain. It is crowned with a short axis-pole, upon which are set small "umbrellas", or diminishing dish-like structures; these (and the pagoda is a descendant of the same physical symbol) represent the spheres or realms of the heavens above the earth <Snodgrass, 1992/SS, pp. 21-3; 189-220; 226-232>. A stupa is not a building one can enter, or do anything in or with (though worshippers make journeys around the stupa, or circumambulations, anointing it); it is principally a cosmic symbol, and "place" of worship in its fullest sense. Lundquist refers to this practice of circumambulation, when writing about Egyptian temples: it "is a ritual act that commemorates the journey of the sun god through the heavens, and thus further cosmicizes the building" <Lundquist, 1993/T, p. 14>.

From the "centre" depart the many points of the compass, or directions, particularly the four cardinal points, which mark out the idea of a square space, or building, or city. Lethaby points to the fact that many temples and cities were built, or

conceived of, as "four square", and this is true of the heavenly city in the book of Revelation, and the Roman camps or towns, which were laid out on a square, or perhaps rectangle, upon a cross-axis, meeting at a central point (eg. Chichester) <Lethaby, 1891/AMM, pp. 62-5>. Some civilisations thought of their country as one in which four rivers descended from the central sacred mountain, and likewise many ancient tombs (eg. the Egyptian pyramids) are set out on a precise square, and systems of proportion often relate elevations to plan, etc. The perfect "four square" form is the cube, and there is the double-cube, the form which Vitruvius recommends for temples, the length being twice the height and width. Based on etymology again, Lethaby's sources connected "garth" - the ground within a quadrangle - and "yard", with Scandinavian words for "world" <Lethaby, 1891/AMM, p. 62>. The "four square" city connects with the idea of the flat, square earth, that was seen as supported at its corners, and Lethaby sees the figures of the four evangelists, which are set in the pendentives of Byzantine domical churches, as being connected with the four supporting creatures of myth <Lethaby, 1891/AMM, p. 61>.

The idea of cities and buildings designed square upon the four cardinal directions, is, we have seen, bound up with the idea of the orientation of religious buildings. This is a complex subject, concerning which there is, perhaps, an absence of thorough studies; however, it is clear that many early temples had their principal door on the eastward side, and the shrine or focus at the west, so that the rising sun should

enter the building and strike the shrine, and illuminate it. This was true of the Jerusalem temple, and many ancient precedents. These were "occidented" buildings. The Christian churches of the Emperor Constantine followed this scheme (the Holy Sepulchre, Jerusalem, St. Peter's, Rome). The churches of Justinian, however, have their altar-end towards the east, and with Hagia Sophia this is known to have been conceived of as having the place in which the sacraments were consecrated set towards the rising sun. The idea that churches (ie. their sanctuaries) face Jerusalem may have been another intention. (A completely different approach to orientation, the Chinese system of feng shui is outlined in Appendix X.)

A way in which the underworld may be present in buildings representing the cosmos, is by the symbolic suggestion of the labyrinth, or maze <Lethaby, 1891/AMM, Ch. VII> <Matthews, W. H., 1922/ML>. Maze and labyrinth patterns are found in many buildings, either as small diagrams scratched in stone (eg. the door-jamb at Lucca) or elaborate pavement-patterns in Gothic cathedrals (eg. Chartres; see subsection 2/5). The mythology of the labyrinth seems to go back to one which was constructed - perhaps in reality - by Daedalus in Crete, a dark underground catacomb in which the Minator lurked. The maze, in Christian thinking, might symbolise the struggles of the Christian life against sin and the Devil, or the journey of faith. In many ancient versions the labyrinth seems to be connected with the myth of the stolen maiden, the creature of brightness, who is lost underground. These are likely to be mythical ideas about

the nightly loss of the sun - its death and descent into the many-zoned land of darkness - and its eventual escape back into the world, at the next dawn. Some maze-patterns are rings of several zones, suggesting the geography of the underworld, as it was understood in some cultures, and such ideas survived into the schemes of Dante, with his many regions of paradise and hell. The pavement maze at S. Maria di Trastevere, Rome (c. 1190) has concentric rings enclosing nine regions, which have been compared to the degrees of beatitude, by which the soul approaches heaven, as in Dante <Matthews, W. H., 1922/ML, p. 58>. Some Egyptian tombs, it is suggested, were designed maze-like, as symbols of the world of the dead. Lethaby even connects the idea of the underground passage of the sun with the evergreen myth of tunnels which are often said to connect an English church with the nearby castle, or some other ancient building or site <Lethaby, 1891/AMM, pp. 172-3>.

If we ascend from the underworld, we reach, in the cosmological building, the floor or pavement, the location of the earth. In Lethaby's account, however (Ch. IX), floors are seen to have very often been symbolic of the sea, or water, which he found to have been depicted in the decoration of many early pavements, in ancient, Classical, and Early Christian times, examples from the last group including pavements in Hagia Sophia, Constantinople, and St. Mark's, Venice. The idea of a shining sea-like floor is present in Biblical cosmic visions (eg. those of Ezekiel, and in the Revelation of St. John). Solomon's throne, in the Koran, seems to stand on water,

as was imagined of God's throne, and these ideas - much older than the Koran - are those of the creator-god as one who subdues the chaos of the oceans. Some eastern temples, such as that at Amritsar, were actually surrounded by water, symbolic of the sea, with the god and his throne set in the middle of it. Also, many ancient floors involved, in their decoration, the symbolism of the waters of life, and some had four "rivers" set in them, recalling the four cardinal directions. Greek and Roman floors often had mosaics depicting sea gods and sea creatures, and the most appropriate Christian symbolism of this variety is that found in early baptisteries, where marble inlays suggested water and rivers; even modern baptisteries have been decorated with forms and symbols recalling water.

Perhaps the most pervasive architectural/cosmological image is found above the pavement, namely the "Ceilings like the sky", as Lethaby's chapter X puts it: ceilings - particularly domes - representing sky/heavens/paradise. "It may be said that at great periods of architecture ceilings were always skies", says Lethaby <Lethaby, 1891/AMM, p. 222>.

Domes and their meaning have been the subject of several detailed studies in recent decades. One fact that clearly emerges is that representations of the heavens upon domes or cupolas were preceded by depictions upon flat ceilings (eg. that of the rock-hewn Tomb of the Monkey at Chiusi, an Etruscan work of the 5th century BC). The first domes were most likely created out of bent wooden frames covered with skins; stone in no way gives itself to this kind of construction, nor suggests

such forms. Sky-like ceilings/domes would have a blue ground, with stars, perhaps of gold, set in it; paint, or mosaic, might be the medium. Karl Lehmann, in his 1945 study, describes the development of these "heavenly" domes and flat ceilings, from the earliest examples, through Classical buildings, to the Christian era, particularly Byzantium <Lehmann, 1945/DH>. E. Baldwin Smith however, in a major study first published in 1950 <Baldwin Smith, 1950/D>, laid emphasis on the funerary and martyrial connotations of domes. In the 5th century AD, churches were built in the form of cubes surmounted by domes, but such churches, he suggests, were generally connected with martyrs and their remains, and these associations - like the association of domes with the heavens and the cosmos - could be traced back to ancient times.

But the major theme in Baldwin Smith's interpretation of domes was seeing them as canopies for a king/emperor <Baldwin Smith, 1950/D, pp. 3-9>. Royal palaces, in ancient and Classical civilisations, often had, as their most central and important space, a domed chamber or throne-room (see also subsection 2/4). The heavenly dome then served as a canopy for the king, but linked him, by association, with the gods, the rulers of the heavens. In the Byzantine version, the Christ Pantokrator was the equivalent of the deity. An imperial church like Hagia Sophia was also a setting for the emperor's throne, beneath the heavenly dome in which the Saviour of the world was depicted.

Oleg Grabar, developing Baldwin Smith's work, shows how the

heavenly throne-room, from the late-Classical world through to Medieval Islamic civilisation, became, in effect, a place of pleasure, with Nero's Golden House being important in that development (not that the domed hall of the Golden House lost its cosmological connotations; Suetonius describes how the dome actually turned around, showing the progress of the stars and planets) <Grabar, 1990/DHPD>. Through the Alhambra and Isfahan palace complex, and many others, the "stately pleasure dome" evolved, which, through modern Orientalism, emerged into Coleridge's Romantic dreaming.

Stately pleasure domes are not our concern; but linked to heavenly domes is a feature that has persisted within Christian architecture, in various versions, to our own day: the altar/sacramental canopy or covering, which takes the form of the ciborium or baldachino. Again, this has pre-Christian origins, as suggested above. In Hellenistic and Roman times temporary ceremonial structures were erected as tents or awnings for kings; they were decorated with heavenly symbols and imagery, and as such were a token of the (semi-divine or divine) emperor's universal or cosmic dominion. Lethaby says that of the Persian dome, surrounding the emperor's throne, the crown (too big to be worn) was hung from the dome, above the throne <Lethaby, 1891/AMM, p. 226>. But more importantly, temples (eg. in Greece, and that at Jerusalem) had a veil, cloth, or peplos, which hung vertically, covering the shrine or holy place, and this, also, was embroidered with

representations of the stars. The free-standing structural version, correctly called ciborium in Christian usage, fully reproduces, in itself, the cosmological symbolism of domed buildings, with four columns supporting the cover (itself, perhaps, domical) in the manner of pillars supporting the world, etc. The hanging version, baldachino (or baldachin, baldaquin, baldachinum), comes from an Italian word for "Baghdad", where a cloth of metal and silk was woven. Examples were first made from this fabric in the Renaissance period.

Bernini's great structure in St. Peter's, Rome, is generally called the "Baldacchino", though it is in fact a ciborium; it is a successor to that in the (Constantinian) St. Peter's, and reflects the tendency of the first Christian emperor to re-use items of Roman imperial symbolic architecture in the newly-officialised Roman Christian religion. A ciborium was used to canopy the Byzantine emperor in his imperial church in Constantinople; but at St. Peter's, Rome, and beneath most Christian ciboria/baldachini, it is the altar and sacrament that is canopied. The desire to cover the sacrament itself, also gives rise to the use, in some Continental countries, of an umbrella-like object, the umbrellino, which is held over the sacramental elements when carried in procession; this practice almost gives the impression that the desire is to shelter the elements, rather than to raise some kind of canopy of honour over them. In the Western Church, in various forms, the marking, covering or "canopying" of the altar or sanctuary has persisted in almost all periods, though often this has only

involved the special decoration (painting, carving, etc.) of the roof or vault in that part of the building - a practice that recalls the (sky) blue painting of coffers in early Greek ceilings, a practice which Lethaby sees as the ancient Greek equivalent (they did not use domes) of "ceilings like the sky" <Lethaby, 1891/AMM, p. 229>.

Additional cosmic symbols which Lethaby describes include the egg, a symbol of creation. Eggs, he relates, were hung in many churches, both Byzantine and Coptic, and also Northern European (eg. Durham); mosques also had such eggs - real or porcelain imitation - hung within them; yet Lethaby claims that the symbolism is as old as ancient Egypt, and has its roots in myths of creation where the primordial egg broke and separated into earth and heaven <Lethaby, 1891/AMM, Ch. XII>. A symbol connected with the world tree (and, ultimately, the dome) is the legendary "jewel-bearing tree", which is said to have stood, as a real tree-like structure, in various ancient Eastern palaces. It is the origin of the seven-branched candlestick (best known in its Jewish form), which Lethaby connects with the seven planets, and the jewels that were hung on the "tree" (representing fruit) may also be understood as representing heavenly bodies, like the stars painted on domes (and, presumably, the seven regions of the heavens are to be associated with this numerology, also) <Lethaby, 1891/AMM, Ch. V>.

Buildings which embodied cosmological symbolism clearly formed an important part of many ancient traditions of architecture, and much of this architecture must be considered religious. Buildings as cosmological symbols are buildings invested with meaning in a very fundamental way, one in which - in most cases - the physical form, or structure, is intentionally arranged and ordered to create a specific reference, or convey and embody specific ideas.

The question that we must consider, however, is to what extent Christian buildings have been thought of in cosmological terms, or if churches were thought of as in some sense referring to models of the world. Certainly Medieval architects, artists, and philosophers (in Western Christendom) were concerned with heavenly bodies, the nature of the world, the signs of the zodiac, and many other interconnected things. But to what extent were the various portions of the Medieval great church thought of as representing the world and the heavenly realm? When discussing the Gothic period, and the symbolism of Durandus and others (subsection 2/5) this will be examined in greater detail. However, the three-fold division of the great church certainly was understood in terms of realms of ascending degrees of holiness, or progressive sacrality, following the model of the Jerusalem Temple, and the Temple was understood in cosmological, as well as sacral, terms, as evidenced (Lethaby says) by the accounts of Josephus and Philo <Lethaby, 1891/AMM, p. 28>; and Lethaby suggests that this was a tradition inherited by the Early Church (and Islam) <Lethaby,

1891/AMM, pp. 28, 41>. Certainly it is generally the case that these two kinds of understanding were, in practice, linked together: wherever we find a cosmological understanding, sacralism tends to be present also. Perhaps, in the imagination, these two are inseparable.

2/4 ORDERS, COLUMNS, GATEWAYS AND TOWERS: MEANING IN
CLASSICAL, EARLY CHRISTIAN, AND EARLY MEDIEVAL
ARCHITECTURE

In The lost meaning of classical architecture (1988) <Hersey, G., 1988/LMCA>, George Hersey sets out a complex theory of the original meaning of ornament, and the orders, (in Greek architecture, primarily) based on the details of pagan religion - the instruments, procedures, and products of sacrifice. He works principally from the words by which we know Classical architecture - names that are used for different elements and styles, the varieties of decoration and their evolution - proceeding by comparative etymology, such that many different associations are called in to add to the connotations that a feature, and its significance, may have had. Like many people studying ancient Classicism in modern times, he proceeds from Vitruvius, but makes his readers very aware of the essential Hellenism of that first-century Roman, and his dependence on many (now lost) Greek source-books. Vitruvius, unlike modern Classicists, was "steeped in an architectural sensibility that has since vanished" <Hersey, G., 1988/LMCA, p. 3>; for him, not only did "Doric", "echinus" etc. carry associations now lost, but the meaning of these words suggested other words, and other meanings. Hersey's analysis depends much on the ancient Greek tendency to play word games, a verbal play known as "troping", and the use of ornament, he considers, was a series of tropes

upon tropes <Hersey, G., 1988/LMCA, p. 4>.

Analysis of historic architecture from the point of view of architectural words is a very valuable method of procedure, particularly when looking at the nature of architectural style - what it "means", and has meant - from the point of view of the meaning of style-words (eg. the fascinating history of "Gothic" and "Baroque"). In this book, Hersey digs deep down into the ultimate information that words give to the architectural historian, but in doing so he seems to go even further than he himself is aware, into the confused matter of the meaning of architectural meaning. The Doric order is associated, in its founding, with Dorus, son of Helen and Phthia, and "Dorus" and "Dorian" are plays on words connected with violence: flayed skin, fighting with spears, a spear (doru) or sceptre, etc. (Dorus was a conqueror who invaded various regions and killed the resident populations). But further, homonyms of doru suggest the female genitals. At the same time, however, the Doric column was thought of as an image of the male body (naked) <Hersey, G., 1988/LMCA, p. 53>, and entasis (the column's slight outward curvature) means tension, straining, and exertion of the human body. The word tympanum (the central panel of the pediment, the triangular gable-end of a temple-roof) means a drum made of bones and animal-skin, used in Bacchic rituals <Hersey; G., 1988/LMCA, p. 38>. When discussing the famous caryatid columns (best known from the Erechtheum temple, Athens), Hersey recalls Vitruvius's story of the women of treacherous Caryae, being punished by their

captors, but also points out that a homonym of Caryae means hill, mound, blood clot, or altar - thus caryatid contains suggestions of the places where blood sacrifices are performed. Also, ker (inhabitant of Caria) meant slave, but Ker was also the goddess of death, and ker could mean the heart, especially of a sacrificial animal, perhaps displayed upon an obelisk or altar. Another variant of the word meant evil, or taboo; and then there is the story of the young Carya, daughter of King Dion, who refused the amorous advances of Dionysus, who turned her into a walnut tree - a sacred bush - and whose chastity caused the Caryans to worship Artemis, whose favourite virtue was chastity <Hersey, G., 1988/LMCA, pp. 71-3>.

I hope I have given sufficient examples of Hersey's analysis of Classical meaning to reveal a curious fact - that any feature or element, by way of its name, can mean an almost endless number of things, or have connotations that are very diverse and disparate. The piling of meaning upon meaning upon (seemingly unrelated) further meaning has a quality of reductio ad absurdum, whereby meaning can seem to dissolve under its own weight. A thing can mean almost anything, and thence, perhaps, nothing at all. This is perhaps going too far, and may be unfair to a brilliant and refreshing analysis of Classicism (why, Hersey asks in his first sentence, have people gone on using Classical orders and decorative elements, for centuries and centuries, even in our own day, when the whole meaning of the style is related to blood sacrifice, etc.? <Hersey, G., 1988/LMCA, p. 1>). But the presence of bewildering showers of

multiple meaning is something that we will experience again, when specifically Christian church architecture is the subject under discussion.

The attention given to sacrifice, sacred prostitution, war, death, despoiling and taboo - in Hersey's analysis - spells out the essentially religious and cultic nature of Greek architecture, and the origins of its many elements. Dentils, flutes, echini, and scotia (a concave moulding at the base of a column, but meaning shadow, darkness, the goddess of the underworld, the world of the dead, a place filled with the souls of the perished <Hersey, G., 1988/LMCA, pp. 21, 23>) cease to be simply trimmings added to essential structural members, or the pretty garlanding produced by a race dedicated to beauty. Trophies, in particular - and very many features of architecture he originates in the concern for appropriate trophies - he clearly reveals to be the remnants of defeated enemies (mannequins made from their armour, but also their arms, their dismembered bodies) <Hersey, G., 1988/LMCA, pp. 20-1, 23>. This frank indulgence in the trappings of sacrifice and pagan religion, as the source and nature of Classicism, brings Hersey to quote A. W. N. Pugin: "Do we worship the blood of bulls and goats?" (True principles <Pugin, 1841/TP, p. 54>) <Hersey, G., 1988/LMCA, p. 2>; presumably the defender of "Christian architecture" was aware, if others were not, of the truths spelt out by Hersey.

In another exhaustive study of Classical architectural meaning (Bearers of meaning, 1988) <Onians, 1988/BM>, John Onians demonstrates the way in which rulers used the orders (columns and orders are his principal concern) to make "political" gestures. The Greek orders were used in earlier times to express the individuality, or identity, of races (although the Dorians might use Ionic and the Athenians Doric, against our expectations); and later, they were to be displayed together in order to express a desire to unite the Greek peoples (or display Panhellenic power) <Onians, 1988/BM, p. 16>. Rows of columns (as on a temple peristyle) might resemble a phalanx of soldiers, or an army <Onians, 1988/BM, p. 8>: Onians suggests that in the time of Euripides (early 4th century BC), not only were columns thought of as like a person, but men as "like columns". Also, Onians reveals the (developing) association of the plainer Doric with manly, martial, outdoor activities, and the more decorative Ionic with indoor, feminine and cultured pursuits, with the result that Doric was eventually used for exteriors where Ionic was used for interiors, with the choice of order increasingly marking a passage from the exterior to the interior <Onians, 1988/BM, p. 16>. The use of orders to mark differences (of activity, status of building users, status and role of the building in relation to others, etc.) became very sophisticated in the later (Hellenistic) period, with the addition of Corinthian (which Onians sees as having etymological associations of healing, life, and also death <Onians, 1988/BM, p. 19>). And this

tendency developed much further in republican Rome, and later imperial Rome, with the addition of square piers, arches, and other orders (now known as Composite and Tuscan), to say nothing of the introduction of whole scales of material quality, from crude brick to precious marbles, etc. <Onians, 1988/BM, pp. 25, 26>.

With the increasing power of the Roman Empire and the personal cult of the emperor, architecture grew in importance, indeed, became "almost as important an art for a politician to exploit as rhetoric" <Onians, 1988/BM, p. 33> in the age of Vitruvius (1st century BC). Part of the motive behind Vitruvius's famous treatise was the need to establish architecture on the kind of serious scholarly basis that rhetoric had long enjoyed, and the different orders (now put together in one book, as alternatives) now take on something of the flavour of different appropriate "languages", similar to the different styles of oratory, used for different occasions, described by Cicero and Quintillian <Onians, 1988/BM, pp. 36-8>. Vitruvius's legitimising of architecture and the orders is partly achieved by the mathematical or proportional structure he gives them, and his understanding of columns, etc., in terms of human proportions. The notion of buildings, or parts of buildings, taking their form and nature from human bodies - in one way or another - was to be very pervasive in architectural history, as we shall see. In some cases, it is worth noting, Vitruvius describes forms of orders and buildings that are known not to have been those actually erected in his time;

often, in many ways, he has a prescriptive tone, rather than describing actual practice <Onians, 1988/BM, pp. 39-41>.

The developing imperial cult led to the introduction, as suggested above, of various structures and forms that came from the Hellenistic east, from Egypt, and ultimately from Asia, where ancient religions had long celebrated the presence of their gods, or their emperor, or god/king, with elaborate ceremonies and festivals. An essential part of these were the enthroning of the king or emperor (who might be taking the place of the divinity, rather than having such status himself), beneath a large canopy, or, the entrance of the god/king into the imperial city or palace, by way of a great gateway. This is drastically to simplify a complicated history of many centuries of kings, gods, empires, cults, and ceremonial structures, and to summarise the exhaustive study of E. Baldwin Smith (Architectural symbolism of Imperial Rome and the Middle Ages, 1956) <Baldwin Smith, 1956/AS>. The city gate, the entrance to the imperial realm (called Porta Triumphalis, or Portus Divorum), was the scene, in Rome, of ceremonies marking the coming of the semi-divine ruler into his home (the Adventus Augusti), amongst his people. The ceremonies over, he would enter the imperial palace, or palatium, a building increasingly endowed with the status of divine residence. He might be returning from some military triumph, bearing the spoils of war, and there be presented to the people <Baldwin Smith, 1956/AS, Ch. I, particularly pp. 10-13; 19-35, etc.>.

The gate itself we know very well from the triumphal Roman arches, found in Rome itself, but also many other places in the empire. Baldwin Smith shows how the triumphal arch - still politically and ceremonially useful long after the fall of Rome - was taken on into the Western empire in the early Christian centuries, and beyond, into the Holy Roman Empire, and the era of Romanesque architecture, as we term it (a style which, along with Pre-Romanesque or Carolingian, lasted from about the 8th century AD to the development of Gothic in the early/mid 12th century). The origins of this arch or gate are clearly seen to lie in the very ancient world of cultic cosmological symbols, surveyed in subsection 2/3, for the arch represents the bow of the heavens, that rises over the divine ruler, who is lord of all creation.

Later Roman arches and city gateways often had loggias or arched galleries over the principal arch, which were the setting for imperial appearances at the climax of ceremonies, not unlike today's appearances of the Pope in Vatican square, or the balcony appearances at Buckingham Palace. Baldwin Smith shows how these architectural structures and their meaning became absorbed into early Christian usage. The west front or westwerk of many greater Romanesque churches are in effect the translation of a formalised, and perhaps over-sized, triumphal arch onto the termination of a nave volume (and also provided accommodation, etc., for the emperor, when in residence), and the many galleries and arcades on some early Medieval churches (at the west) are a development of this importation (eg. the

cathedral at Pisa). The origin of such loggias is proved, Baldwin Smith claims, by the fact that in the Gothic era, the thinking was formalised by the actual placing of kings in these canopied spaces, in the form of statuary in niches <Baldwin Smith, 1956/AS, pp. 34-7>.

This is not just borrowed decoration and aesthetic use of earlier forms, since in their early Medieval Christian use, they reflect the struggle for supreme power between the civil imperial authorities and the Church; by such use, the Church assumed and displayed its succession from the empire of the past, to Christ's empire, ruled by the Church, or, an imperial church and its formal symbolism may have served to claim the authority of the emperor over the papacy. The use of grand western doorways (royal portals, etc.) descended from this Roman tradition, but for the Medieval church, the divine ruler who entered was Christ, and it is probable that the identification of Christ with this door or gateway lies in the Early Christian period, (for Jesus had said "I am the door" (St. John, Ch. 10, v. 9)), and that traditions of Roman architectural symbolism play a part in this development.

The Byzantine emperor himself, Baldwin Smith suggests, might have been received "like Christ himself" at the entrance to a monastic church <Baldwin Smith, 1956/AS, p. 29>, and received beneath a ciborium, perhaps a portable canopy, which reflects traditions descending from Roman - and much earlier - use of ciboria, baldachinni, and the domical vestibules that were sometimes set out before an imperial gateway <Baldwin Smith,

1956/AS, pp. 34-5; 190-8>. In Christian use, some of the meanings behind Roman arches and gateways may have survived in the great abbey gateways. That at Lorsch, Germany (c. 790) reflected the Roman arch structure. Christ Church abbey, Canterbury (now the cathedral) had a room, above its "Court Gate House", whose name was the "Paradise Chamber" or "Heaven Chamber"; in front of this was a royal arcade <Baldwin Smith, 1956/AS, p. 35>. Great imperial/royal monasteries, such as these two, were the residences of secular rulers, as much as communities of members of religious orders, as we think of monasteries today.

An important ingredient in these developments was the imperial palace, or sacrum palatium - referred to above - which, as home of a semi-divine ruler, became in itself a symbol of divine presence; Diocletian (Roman emperor 284-305 AD) developed the use of this architectural symbolism, and created an imperial palace style related to the Roman castrum, or fort. In the early Medieval period, large towers and fortificational devices were developed at the west (and later, at other parts) of great churches, which borrow the imagery of the palatium. This was done as part of the same power-struggle, to assume the divinity of the old pagan empire to the Church; and the imperial authorities probably used similar imagery in contemporary palaces. The use of towers and steeples thus has its origin and raison d'etre, at least partly, in the use of architectural forms which could display a message, or argue for

an ideological position <Baldwin Smith 1956/AS, pp. 74-9; 186-7>. Unfortunately, little is known of Roman palaces, or even Byzantine examples, but evidence exists in depictions upon coins, which emperors, Romans and many others, used as propaganda devices or means of establishing their cult "image". One form, which had particular significance in the fourth century, is the almost-square palace with four corner towers (and perhaps central dome or tower), and the amassing of towers in groups around square or rectangle became a feature in greater Romanesque churches. Baldwin Smith suggests that the failure to complete certain Norman/Romanesque towers (in southern France and Sicily) may owe more to the politics of Church/Empire struggle, than changes of aesthetic taste <Baldwin Smith, 1956/AS, p. 188>.

Also present was the use of cupolas, small domes, or baldachinni, as part of the design of gateways. This ancient device, whose origins were outlined in subsection 2/3, were borrowed, like much else, from older Eastern civilisation, by Roman emperors anxious to assert their heavenly, universal, or cosmic authority. Globes, or global finials, were added to the cosmological imagery, and a castrum or palatium portal, decked out with these forms, showed Diocletian, etc., to be the pater urbis et orbis. Domes seem to have developed from a ceiling/roof structure (whose sky-like interior was its principal feature) to external domes, which might be bulbous or ribbed. These symbols of cosmic divinity passed into Christianity mainly in eastern or Byzantine use, or at least in that

tradition (eg. Russian churches), we are now most familiar with them - the memorable forms surmounting St. Basil's, Moscow; the use of an apsidal semi-dome, both an external and internal feature in many cases, perhaps survived much longer, in the west <Lehmann, 1945/DH, passim.>. A corner-towered, central-domed church, as a symbol of the cosmic house and dwelling-place, takes its ultimate form in the great Imperial Byzantine churches of Constantinople <Baldwin Smith, 1956/AS, Ch. IV, V; pp. 197-8>.

The developing architecture of the Roman empire, as suggested above, involved an increasing use of piers, arches, domes, and massive walls - rather than columns - the structural use of concrete being the wonder of Roman building. But with the Christianisation of the empire, after 312 AD, the newly-officialised faith needed large congregational spaces, and the resulting building-programme produced a return to the use of structural columns. John Onians considers that a major reason for the importance given to columns is the column-imagery found in the New Testament, eg. James, Cephas (Peter) and John being called "columns" by St. Paul, in Galatians Ch. 2, v. 9, and the frequent references to the apostles as "foundations" of the Church <Onians, 1988/BM, p. 70>. Constantine, the first Christian emperor (312-337) himself inaugurated many building programmes (following the Council of Nicaea (325)), in which groups of twelve columns upheld or surrounded churches, and Eusebius, in his history of the Church (completed 323) says

that the circular building erected over Christ's tomb had twelve columns to represent the apostles. And while columns could represent the Church's founders and leaders, they were safely devoid of direct depiction, preventing any connotation of idols or cult images (which had been the focus of pagan temples).

As with the Roman, Hellenistic, and Greek use of columns, in earlier centuries, the first Christian builders used different orders to contain meaning, though the new meanings and motives were necessarily different from those of the past. Firstly, the re-use of columns from significant pagan sites bore a conscious message of triumphalism; and then, the different orders began to be used in significant sequences, marking the ascending importance of spaces from atrium to altar, a progress which was mirrored by the stages in the liturgy, and from the street outside, to the sanctuary. Ionic, the most basic order, was used in the atrium, where worshippers would take water from the fountain (suggesting their original baptism). Corinthian would be used in the nave, and Composite around the altar. Composite had traditional associations of triumph, and at the "climax" of the church, Christ himself was triumphant. Slightly varying capitals within each space/order add subtlety, in some early basilicas, to the process of transformation <Onians, 1988/BM, pp. 62-9>. In S. Agnese fuori le mura, Rome (625-638), the use of "inferior" orders, or successions of orders, in the gallery, is due to the fact that it was the matronuem, the area occupied by women, who were considered inferior <Onians, 1988/BM, p.

67>. The use of purely Ionic at S. Maria Maggiore, Rome (c. 432-440), Onians sees as a gesture of discretion on the part of the patron (Pope Sixtus III), namely, the use of an "inferior" and hence "low profile" order for a building dedicated to a theological idea (Mary as the Mother of God) that was still contentious <Onians, 1988/BM, p. 68>.

In the early Medieval period, this Early Christian use of columns and capitals, to define and distinguish different spaces in the building, changed somewhat. By the 11th century, tensions between secular and religious authorities contributed to the Church's increasing emphasis on distinction between clergy and laity. Around 1060, Humbert, a Burgundian cardinal in Rome, was arguing that the distinction between these two was to be expressed inside the church building, and outside it also <Onians, 1988/BM, p. 97>. Again, Ionic was used to denote the most inferior areas, Composite was now the symbol of the less-inferior, while Corinthian denoted the most important part of the church. This is seen in the use of these orders of capital in the Aracoeli church, c. 1220.

Progression in significance and importance from nave (the most public/lay space), to sanctuary (the most holy/clerical space) was not the only spatial "process". The left- and right-hand sides, or arcades, of a church could signify such a process. The left was considered inferior, or, as involving a more "incomplete" spiritual state in the worshipper. Earlier stages of the liturgy might take place on the left-hand side, later parts on the other side. The 12th century west door of

Pisa Cathedral is supported by two different orders of column, Composite (inferior) on the left, Corinthian (superior) on the right <Onians, 1988/BM, pp. 98-9>. S. Maria Fortisoportam, Lucca, has a colonnade of mainly Composite columns on the left, and wholly Corinthian on the right. One suggestion is that the left represents the laity, the right the clergy, and also, the left represents the Jews, the right the Gentiles. This conflation of ideas is the thinking of Hugh of St. Victor (who died around 1141).

The two different columns at Pisa could also represent the two (endlessly-reinterpreted) columns found in the Jerusalem Temple, Jachin and Boaz (1 Kings, Ch. 7, v. 21), standing, here, for the Jews and the Gentiles, or the Old Covenant and the New. But no group of worshippers could have sat or stood on just one side of a nave, suggesting that these ideas were as much cerebral as borne out in reality. In some churches, transverse arches linked the two arcades, and St. Hugh saw these as Christ joining the two communities of Jews and Gentiles - presumably Christian Jews and Gentiles. In some cases, different capitals are found, not in a line, but diagonally opposite one another. This might reflect cross-shapes drawn on the pavement in consecration ceremonies, and Honorius of Autun, a scholastic philosopher of the early 12th century, explains this in terms of crosses which represent the Jews and Gentiles being brought together and saved by Christ <Onians, 1988/BM, pp. 98-103>.

One very pervasive piece of Christian architectural symbolism, that had its origin in the Early Christian period, is the numerological relation of eight and baptism: the building of baptisteries and/or fonts, with eight sides, or eight columns, suggesting the eighth day on which Christ rose from the dead, the symbolic death and rebirth in the faith of Christ, being the meaning of the baptismal rite <Davies, 1962/ASB, pp. 16-7>. In some cases, the building might be six-sided, referring, perhaps, to the day of Christ's death; in some cases, a structure might involve both hexagon and octagon. Proof that the form/number/meaning are not later speculation comes from such sources as a late-fourth century inscription written by St. Ambrose, specifically relating a particular baptistery to Christ's resurrection, and the eighth day of the new Creation <Onians, 1988/BM, p. 69>. (Another variety of baptismal symbolism concerns the siting of a font near a church door - baptism as the rite of entry to the Church - which is at least as old as the Gothic period <Davies, 1962/ASB, p. 61>).

In the early centuries of the so-called Middle Ages, while there was a return to the building of heavy structures (employing wide piers and vast solid walls), round columns were still used, being a development from Early Christian building, and the anthropomorphic understanding or symbolism, of columns, became more specific. Scholars began to describe the exact ways in which they served as both structural members, and representations of Christian ideas. This approach came to its

fullest development (as we shall see in subsection 2/5) in the Gothic world, but embarked upon a significant phase in its development in the early ninth century, when the emperor Charlemagne refounded the western Roman empire. At that time, Hrabanus Maurus wrote De Universo, and this work is in part based on the Etymologies of Isidore of Seville, written some centuries before, around 623. Isidore said that columns represented apostles and holy preachers, and their bases were the scriptures on which all doctrine rested. Isidore specifically called a church's door "the Lord", because no one comes to God except through him (St. John Ch. 14, v. 6). Hrabanus connects St. Paul's idea, seen above, of apostles as columns with Jachin and Boaz <Onians, 1988/BM, pp. 74-6>. These columns are linked with representations of the Church's mission to both Jews and Gentiles, an identification anticipated by Bede; and two free-standing Jachin-and-Boaz-like columns were found in Charlemagne's palatine chapel at Aachen (792). In many Romanesque buildings, as in earlier examples, sets of twelve columns seem to have been specifically intended to represent the apostles, but a curious German variant is the use of a single specially-designed column (to represent Christ), or, one differently-designed column added to a set of twelve (Christ with his apostles). John Onians connects this with a specific religious/political act, the attempt, on the part of Charlemagne, to replace the pagan shrine at Irminsul, Eresburg (a large tree-trunk - surely a world-tree, a cosmological totem - which the emperor destroyed in 772), with a "Christ column"

(Christussaule); and distinctive columns, set among other rows of columns, were being built as late as the 11th century <Onians, 1988/BM, pp. 81-5>.

The fortunes of round columns and square piers ebbed and flowed. Hrabanus's emphasis on the symbolism of "strength" (the apostles, and their teaching) led to the use of solid structures which allowed the development (or re-introduction) of masonry vaults; but as textual scholarship became more sophisticated in the 12th century, it became clear that St. Paul's "column" could not refer to square piers <Onians, 1988/BM, pp. 86, 90>. At about this time, the Gothic style began to develop (seen particularly in the eastern portion of St. Denis abbey church, 1140), and this employed round columns, and/or clusters of round columns.

Accounts of the history of architecture without exception refer to the era of Gothic architecture as a great age of faith and creativity, when many great churches were fashioned that stood testament to Christian belief. These buildings are often seen as structures whose totality, in a single, unified work of many art-forms, told a story, or series of stories, by means of carving and statuary, stained glass and fresco, mosaic and textiles. These conveyed the message of the faith, the stories of the Bible, the lives and doings of the saints, the Christian life on earth, and that to come. This was a very explicit and obvious conveying of meaning (for if they were paupers' Bibles, no room for subtlety would there have been). But taken to its logical conclusion, this universal story-telling must almost have negated the effect of the building; (who, on leaving Padua's Arena Chapel, remembers the form of the building, the materials and structural members, the spaces? No, the wallpapering of Giotto's powerful frescoes (completed 1306 or 1309) demands all one's attention). Or rather, an excess of images points to the fact that architectural meaning - the building as a means to convey information, ideas and emotions - can be ultimately separable from the rather different kind of artistic "language" that it may be host to.

But what of the building, and its meaning? Christopher Wilson asserts:

"Every Medieval church was an evocation of the heavenly Jerusalem, the abode of the saved to be established after the Last Judgement (Revelation 21, 23). That this was the primary meaning of church buildings is clear from the service for their consecration ... There were of course other meanings ... and the fact that these overlapped or even appeared incompatible with the primary meaning was a merit rather than otherwise, for no one symbol could yield more than a partial and imperfect glimpse of that ultimate, transcendental reality which mankind sees only as if distorted in a mirror (1 Corinthians Ch. 13, v. 12)."
<Wilson, C., 1990/GC, p. 8>

According to Otto von Simpson's account, the foundations of Christian Medieval architecture and art theory go back to St. Augustine (354-430), whose Platonic ideas were inherited by schools of Platonists (or, perhaps, Neo-platonists), such as the School of Chartres (second quarter of the 12th century) <von Simpson, 1956/GC, pp. 27, 37>. Augustine's thought, on music and architecture, was dominated by a Pythagorean concern with number, geometry, proportion, and harmony, and modern interpreters of the great churches of the High Gothic period, following the treatises of Medieval scholars which form part of this tradition, see the buildings as images of the eternal order of creation - cosmic images, or models - as well as the images of the New Jerusalem, the Celestial City, that Wilson considers to be their primary meaning <Wilson, C., 1990/GC, p.

8>. But also, such buildings, it is alleged, must be seen as images of Christ. When referring to these suggested cosmological meanings and interpretations, it must be seen that such cosmology is not overtly present in the forms of the buildings: Gothic churches were not created primarily as built models, whose shape explicitly displayed the nature of the world, as with the cosmological architecture examined above (subsection 2/3). Of course, it has to be remembered that these interpretations and meanings (though they may be contemporary in origin) may have in part been attached to structures by scholars and ecclesiastics, rather than those who designed and built them.

One feature of the Gothic period, and the couple of centuries that preceded it (as seen in subsection 2/4), is that in these times, writings of scholars and ecclesiastics concern themselves directly with symbolism and religious architectural meaning (and this is particularly the case when we consider the work of Durandus); here, architectural meaning is explicitly addressed, and so an account of such writings provides an opportunity to proceed from trying to discover ideas about architectural meaning, to examining theory of religious architectural meaning itself.

Guglielmus Durandus (1230-1296) was a contemporary of Dante, and a legal official of the Roman Curia. In the service of Pope Gregory X, he attended the Second Council of Lyons (1274),

where he drafted the Council's decrees. From 1285 he was bishop of Mende, in southern France, though he did not visit his diocese (where his nephew, of the same name, administered the diocese, and finally succeeded him as bishop) until 1291. He produced various writings, many concerned with canon law (eg. his Speculum judiciale), and an influential pontifical (a book containing the prayers and ceremonials of bishops). His best-known work, however, is the Rationale divinorum officiorum, or "rationale of ecclesiastical offices", written between 1286 and 1295.

Various early-Medieval writers preceded Durandus, and produced works like his, including Alcuin (c. 735-804), Agobard (c. 779-840), and Amalarius of Metz (c. 780-850/1); Hugh of St. Victor (c. 1140-1200), we encountered in subsection 2/4. None of these writers are so well-known, in modern times, as Durandus, and one reason for this is that in the 19th century, the first book of Durandus's work was translated, edited, and published, and its ideas were actively promulgated. This was done by John Mason Neale and Benjamin Webb, who were leaders of the Cambridge Camden Society, or Ecclesiological Society, a movement dedicated to the revival, in their own day, not only of Medieval church architecture, but also Medieval church furnishings, liturgy, worship, and spirituality. The Ecclesiologists' edition of Durandus (entitled The symbolism of churches and church ornaments, published in 1843, repr. 1906 <Durandus; Neale and Webb, 1843/SCC0>) contains, in addition to the translated text, a very large essay by the editors.

Durandus begins his book with a preface, the Proeme, and in it, argues for the importance of symbolism, and refers to truth as those things which are hidden, half-hidden, or clear for all to see. Developing this, he says that scripture itself may be interpreted in four different ways, or perhaps we should say, at four levels. These four ways are the Historical (things as signified by the meanings of words, or literal); the Allegorical (where one thing is said, but another meant); the Tropological (a moral exhortation, either literal or symbolic); and the Anagogic, where meaning proceeds from the visible and literal, to the unseen; where present things suggest those of future life (ie. eschatological reference). He then tells us that Jerusalem can be understood in these four ways, (Proeme, Section 12), and the choice of "Jerusalem" shows that Durandus means that the things referred to in scripture are what is to be understood in these different ways. (This multi-layered interpretation of scripture, and the categories of "anagogic" and "historical", are, of course, a normal part of the scholastic method of the age, and Durandus was here part of a tradition that goes back to St. Augustine.) In a difficult passage near the end of the Proeme (Sec. 18) he suggests that the things of "ecclesiastical offices" can be understood in terms of these four categories.

We might now expect Durandus to develop his four categories of symbolic meaning, and to discuss a number of "ecclesiastical offices" such as church buildings, furnishings, vestments, and liturgies, etc., in these terms; but he does not exactly do

this. While he does produce chapters on items (I, the church building; II, the altar; III, pictures and images; VI, the dedication of a church, etc.), he does not actually distinguish between the different orders of meaning, or separate categories by which an object is to be understood - in parallel with others - at a specific "level". As a Medieval scholar, we should expect him to have an intensely analytical approach, constantly creating concepts, categories, classifications, and abstruse terminology; and clearly his writing is in this vein - yet when Durandus discusses things, and their meaning, he makes no attempt to separate out the different orders of meaning, by which an object is meaningful, neither does he refer, again, to the categories of meaning that he has described, nor to any others. In a word, once the writer gets into the objects of his discussion, the intellectual framework, or rational inquiry into the nature of meaning, collapses. And yet his work still has, as a central concern, the nature of religious architecture as that which bears meaning, and meaning he finds in abundance, with some objects possessing several meanings, and others, many.

Typical of the multiplicity of meaning and significance is Durandus's treatment of the cloister (I, 42, 43); in fact, he seems to have the usual quadrangle, and also claustral buildings as a whole, in mind. Firstly, he reports a suggestion that the cloister derives from the watchings of the Levites around the Tabernacle. Then he refers to the common life of the priests in the cloister, and explains that the cloister

signifies Paradise, "where there will be one and the same heart fulfilling the commandments of God and loving Him". Then Durandus talks of various "offices" in the cloister, which signify the different Mansions in the Father's house (St. John Ch. 15, v. 2). Next, the cloister's four sides are said to represent: contempt of self, contempt of the world, love of God, and love of neighbour. Each side is supported by columns, and the virtues have "columns" too: contempt of self has humiliation of the soul, mortification of the flesh, and humility of speech; and the base of all the columns is patience. Durandus's application of meanings to columns places him in a very long line of anthropomorphic interpretations of columns and piers, which (as we saw throughout subsection 2/4) reaches back to the ancient Greeks. Not surprisingly, "The piers of the church are Bishops and Doctors: who specially sustain the Church by their doctrine" (I, 27). John Onians sees the placing of statues of apostles/saints half-way up column shafts (in French High Gothic churches), as deriving from this pervasive idea of the columns/piers of a church representing the apostles/saints who uphold the Church <Onians, 1988/BM, p. 70-2; 90>.

Perhaps the most complete example of meanings piled upon meanings, is that thing with which the writer begins, the church. Firstly, Durandus states his fundamental and very significant belief that "church" has two meanings; there are two things denoted by "church", but the two are mystically joined to one another. There is the spiritual church, and the

material church. The former is the body of believers, the second a material building [in this section and in others, I have generally used "Church" to mean the human organisation (Durandus's "spiritual" church) and "church" to mean a church building]. Immediately, he identifies the two, through his imagery: the human Church is a "spiritual fabric", and the material church is made by the joining of stones, just as the spiritual Church is made by the joining of men. So for Durandus there is no way in which the church building can be said not to be the reality of the Church, and as with all his ideas, this is couched in a complexity of scriptural quotations and references. This understanding of "church" and "Church" was not new, or unique to Durandus. These ideas have precedence in the works of Hugh of St. Victor, for example, who wrote (The mystical mirror of the church, Ch. 1) "The material church in which people cometh together to praise God, signifieth the Holy Catholic Church, which is builded in the heavens of living stones" <Durandus; Neale and Webb, 1843/SCCO, p. 198>.

Next Durandus explains the meaning of "church" words. The Greek ecclesia means the same as the Latin convocatio, for the Church calls men to itself. He also admits of the use of synagoga or congregatio, where people come together. But then actual names and terms are supplanted by metaphorical devices, and here, Durandus consistently describes meanings of "church" which refer to the physical and the material. The spiritual Church, he says, can be called "Sion", because Sion means "expectation", and the church is a band of wanderers filled

with expectation and hope. It is also "Jerusalem", because that means peace, which is, he implies, a characteristic of the Church. He accepts the terms temple, oratory, and martyrrium, and calls a church a "basilica" in the sense that this term was used for earthly kings' palaces, and a church is a home of the King of Kings (the basilican origin of the church building is not suggested; for Durandus, the material church takes its form from the Tabernacle or Temple (I, 5)). Interpretations of the ways in which the material church may be known, and understood, include much human imagery, some of it of a nature quite fantastic; obviously, the chief symbolic image of the form of the building concerns the human body.

St. Paul, in his epistles, made extensive use of the imagery or analogy of the human body. Not only do Christian believers constitute Christ's body on earth (1 Corinthians Ch. 12, v. 27) - the body of the Church, Christians as Christ's earthly body - but different members of each Christian community, having different roles and tasks and possessing different abilities and gifts, constitute the separate limbs or organs of Christ's body (Romans, Ch. 12, v. 5; 1 Cor. Ch. 12, vv. 12-31; Eph. Ch. 4, vv. 4-13). Also, a believer's body is Christ's residence (1 Cor. Ch. 6, v. 19; 2 Cor. Ch. 6, v. 16).

Clearly these concepts were in Durandus's mind, and formative of his architectural symbolic ideas. The arrangement of a church building (the "material church") "resembles" that of a human body (ie. "historical", or literal meaning; I, 14),

and the building "represents" human virtues (I, 15); "the faithful are the stones in the structure of this wall" (I, 9; a reference, surely, to the Church as "Living stones" (1 Peter, Ch. 2, v. 4; the "living stones" are to be built into a "spiritual house")). In a somewhat Pauline reference to parts of the human body, Durandus sees the chancel as resembling the head, the transepts the hand and arms, and "the remainder - towards the west - the rest of the body" (I, 14). St. Hugh of Lincoln (writing around 1225) described the parts of a church building in terms of different parts of a person: the foundation is the human body, the wall is the man, the roof the spirit; the body belongs to the earth, men to the clouds, and the spirit to the stars (the last part of which neatly links human body symbolism with cosmological symbolism).

But while Durandus connects the human body of a believer with the church building, the parts of the believer's body with the parts of a church building, and the body of Christ with the Church ("spiritual"), he does not actually connect parts of Christ's body specifically with parts of the church building, though he does write "some churches are built in the shape of a cross, to signify that we are crucified in the world, and should tread in the steps of the Crucified ..." (I, 17).

Durandus may not really have supposed that the cruciform plan of the greater Gothic church owed its origin to any symbolic consideration, but certainly Medieval speculations about the church as an image of Christ involved the cross-shaped building (Christopher Wilson states that this plan was "the most

important of ... symbolic features" <Wilson, C., 1990/GC, p. 8>); and in the 15th century, Francesco di Giorgio inscribed an image of a man upon such a plan <Wittkower, 1962/AP, Pl. 1a>. However, some symbolic ideas - probably modern ones - took this too far, for there is the reported suggestion that churches whose basic volumes were not set in alignment (eg. Lichfield Cathedral) were said to have the symbolism of "weeping chancels", or as resembling the head of Christ on the cross, hanging in death (in fact, foundation problems at Lichfield required such alignment) <Clifton-Taylor, 1967/CE, pp. 190-1>. Clearly in the Medieval imagination - as Durandus's complex speculations and whimsies show - all these ideas conflated into one, and no distinction can be made between body (of Christ, of the Church, of individual believers) and the "material church" as an image of the body, etc.

Durandus's architectural anthropomorphism, however, should not be confused with that of Vitruvius (von Simpson sees Vitruvius as the basis of Gothic anthropomorphic ideas <von Simpson, 1956/GC, p. 36>), for while the parts of the cruciform church might be ordered in a way equivalent to parts of the human body (in Durandus's thinking, I, 14), it is hardly in terms of Vitruvius's idea of an outstretched man (which he saw as the measure by which temples should be designed). Vitruvius also related human proportions to the proportions of the column, but Durandus's anthropomorphic symbolism of piers (I, 27) does not relate (even notionally) to their proportions, size, or scale, but only function.

The examples of Durandus's thinking, given above, must surely convey some impression of the way he uses symbolism and signification. While analysis and discussion of architectural meaning is concentrated in the final parts of this section, some attempt can be made to try to distinguish between the various kinds of architectural language and meaning in Durandus's work. This will be a difficult task; meaning, for this writer, is found everywhere and in everything, and any scheme of classification, or categories of meaning, quickly breaks down, since his ways of conveying ideas mix and mingle.

Most of his meanings are by way of metaphor, or perhaps, in his terms, this would be the "anagogic" mode. These include: Metaphorical interpretation of Form/Physical shape. An example of this is his interpretation of exedrae, or parts of the church that project out of the main building. These he connects with the laity, who, in Medieval terms, are seen as partially outside the Church proper (I, 19); in this section, he is elaborating upon the understanding of the church building in terms of the human body. Of course, words concerned with place and physical location or process, are central to the way in which spiritual reality is expressed and understood - metaphorically - in human terms (eg. the mystic's "journey within", etc. (see subsections 2/10/5, 3/3/2)). Secondly, Act, Action and Ritual are interpreted metaphorically. As so often, Durandus produces one of his very curious images by way of this kind of thinking. The vestry/sacristy he understands as the womb of the Virgin Mary, since in the vestry the priest puts on

his garments of office (in which he represents, symbolically becomes, Christ), before coming out into the church; and in the womb of Mary, Christ put on himself the nature of a man, before coming out into the world. An image concerned with the metaphorical interpretation of act and process is Durandus's interpretation of the spiral staircase. Such things are often "hidden", or set deep in the fabric of wall or tower, and by them one ascends to the heights; and to Durandus, they signify the secret knowledge of the enlightened, who "ascend" to celestial things.

A third form of meaning by metaphorical association is that related to a thing's Function, Nature, or Property. This thinking was involved in the "hiddenness" of the staircase, seen in the previous example (few of Durandus's examples of symbolism stand singly, and simply, alone, possessed of one variety of thought and signification). Examples of Function/metaphor are the piers which uphold the church representing the bishops and doctors, which "sustain the Church of God by their doctrine" (I, 27), and the beams, "which join together the church, are the princes of this world, or the preachers who defend the unity of the Church, the one by deed, the other by argument" (I, 29). Likewise the "open court" (atrium?) signifies Christ, by whom "an entrance is administered into the heavenly Jerusalem" (I, 20). Examples of this kind of image could be given in great number.

Less often, in Durandus's work, do we find examples of a particular kind of symbolic reference, namely, elementary

number symbolism of the kind which derives numerological meaning from physical forms or features - three of something "means" the Trinity, etc.; such things were, however, obviously present in his thinking, and lie beneath much in the Rationale. Where we do find them, the simple connection of numbers and things is developed by the introduction of moral qualities. In I, 15, we read that the church is built of four walls (derived, surely, from Revelation's idea of the city built "foursquare", rather than any real church plans), and that these are "built on the doctrine of the four evangelists". But the four walls' three dimensions are then seen to represent virtues: height equals courage, breadth equals charity, and length fortitude. Elementary number symbolism, moreover, is something that (according to Christopher Wilson), "medieval clergy would have taken for granted" <Wilson, C., 1990/GC, p. 65>, and he quotes the early-12th century writer Rupert of Deutz, who explicitly describes a three-storied Gothic elevation as a Trinitarian symbol, and Suger's description of the tripartite facade of St. Denis in similar terms; and in subsection 2/4, we saw the foundations of this thinking.

However, the more simplistic and literal concepts of architectural meaning are not absent in Durandus, for we learn in I, 32, that the choir's seats "admonish us that the body must sometimes be refreshed", ie. seats mean rest. That Durandus should turn from the most cryptic and specious ideas of architectural meaning to the most basic ("it means what it is actually for") should not surprise us, for, as we shall

discover, certain modern writers have done much the same. While Durandus has some very fanciful ideas, we must not assume that he understood all his connections literally, and did not see the (physical) reality because of seeing too much signification. As suggested above, he knew that churches were not square buildings, and when he calls the pillars or columns "seven" (I, 27), because Wisdom's house had seven pillars (Proverbs, Ch. 8, v. 1), he acknowledges that in reality a church's "piers are more in number than seven"; sets of twelve columns (=the Apostles; subsection 2/4) now seem to be redundant.

Various criticisms have been ranged against Durandus, and other similar writers of his age. Firstly, there is the objection of Paul Frankl, that Durandus made no attempt to interpret Gothic as a style, or to see it in architectural terms <Frankl, 1960/G, p. 215>. We could take this further and suggest that he is not concerned with churches in aesthetic or formal terms (except in their basic physical components), indeed, he seems barely conscious of any real kind, or example, of church building at all. Durandus's meanings go beyond style or even cultural context, groping for a timeless norm, beyond physical reality. Even "function" - liturgy, worship, and the myriad Medieval religious practices - do not seem to impinge on Durandus's mind (a consideration that throws into relief discussions of the relationship between liturgical practices (ie. new ones) and changes in Medieval building form/style,

etc.; see, for example, Peter Draper's account of the building of Lady Chapels <Ferne and Crossley, 1990/MA, pp. 137-42>).

It has been suggested that far from being theoretical and systematic, Durandus, in his ideas about meaning, is arbitrary and even chaotic; thus Gilbert Cope wrote that for Durandus and the other Medieval symbolists, "Christendom becomes Wonderland and they its White Queens" (to whom everything meant what she said it meant, a witty play on theory of meaning, by which a thing can mean something and not mean it at the same time, thus breaking one of philosophy's so-called "Laws of Thought"), a suggestion with which Cope surely hit the mark <Cope, 1964/CVA, p. 80>. Further, there are the occasions when Durandus uses absolutely ludicrous ideas, for example the notion - surely scandalous in his own time - that the material church may be considered "an harlot" (I, 4), "because she closeth not Her bosom against any that return to Her".

It is very noticeable, however, when considering the esoteric theories of Gothic, outlined in Appendix Y, that Durandus gives no hint of any arcane lore, or of ideas/meanings that might lie unsuspected in the "hidden" geometrical structure of church buildings, or secrets to be revealed to some initiated cabal. When he writes of "hidden truths" (as symbolised by the spiral staircase set in the depths of stone walls, invisible to outsiders, mentioned above), he is referring, rather, to a process of spiritual enlightenment, such as the "mystic way" of perceiving/knowing truth; there is no hint, here, of anything dark and mysterious, and the same is

true of his Allegorical or Anagogic ideas of the meanings of scripture. He is complemented, in his concerns, by those other Medieval writers whose preoccupation is the endless beautifying of the places of repose of holy martyrs (eg. Abbot Suger writing on the church of St. Denis; first part of the 12th century <Panofsky, 1948/AS>), or the practical means of setting out the complex construction of elaborate Gothic structures (Mathes Roriczer <Shelby, 1977/GDT>). Frankl's suggestion that Durandus ignored Gothic architecture, or ignored it aesthetically, as a style, probably reveals a certain distance between the ecclesiastics and scholars on the one side, and the master masons who actually designed the great buildings on the other, the latter of whom must surely have had some conception of the meaning or significance of their works in purely architectural terms, though recalling the ideas of these builders has always been a nigh-impossible task.

Today's "esoterists" (the concern of Appendix Y) can surely claim with justification that Medieval churches are indeed filled with a large number of curious items whose meaning, symbolism, or iconography, is very obscure, thus giving support to ideas of arcane meanings. A good example of this is the maze or labyrinth patterns inlaid into the floor in various French cathedrals, notably that at Chartres <Critchlow, etc., 1973/CM>. A word or two on such things as these, by Durandus and his ilk, would have been more interesting than a whole chapter connecting holy virtues with weathercocks, steeples and

floors. Modern writers who have been fascinated with the Chartres labyrinth have claimed that it is a symbolic diagram of the universe, a kind of map of reality, thus finding another example of cosmological symbolism in Medieval church building (see also subsection 2/3). As a symbol of a long, tortuous journey (it has no dead-ends like a proper maze, but many twists and turns) it may be an image of the Christian journey of life; indeed, pilgrims frustrated by war and famine may have made a "progress" along the path (on their knees?) <Lethaby, 1891/AMM, p. 150>. But did the Medieval conception of the Christian life see it as a "spiritual journey" - many people's lives did not last long enough for such a process, and salvation may have been thought of in far more black-and-white terms.

Accounts of Gothic art and architecture often stress the change from the religious and mystical origins of the style, to the worldly, secular and political concerns that overtook it in its later phases, and the emphasis on the aesthetic at the expense of piety (in George Henderson's words, "O Lord I have loved the beauty of thy house" became abbreviated to "I have loved beauty" <Henderson, 1967/G, p. 82>). Thus - whatever the religious and mystical iconographies and meanings that may lie within it - there is a great change from a building such as Chartres to one such as the chapel of King's College, Cambridge (1446-1515) where the iconography is neither subtle (to contemporaries) nor other-worldly, but whose message concerns

(human) kingship. Walter C. Leedy has seen such meanings in that most amazing creation of English Late Gothic, the fan vault, particularly in Henry VII's Chapel, Westminster Abbey (1503-09). While the chapel is a burial-place for kings, it is also a celestial palace (lined with statues of apostles, saints and prophets); however, heraldic devices (symbols of important people) are as much in evidence as images of holiness. The ceiling-feature of the fans (here, many are wholly circular, their ribs radiating) Leedy connects with heavenly bodies (ceilings like the sky, again), and, by way of a royal pageant, "The Sphere of the Sun" (given for the reception of Catherine of Aragon in 1501) suggests the sun-ship of kings (contemporary ideas connected kingship with the sun, etc.); the whole work, therefore, might be seen as a means of linking the Tudor dynasty with Christ, and thus lending it divine authority <Leedy, 1980/FV, pp. 31-4>.

Another example of physical symbolism in English Late Gothic (again, rather worldly), is Wilson's example of the number of piers (26) designed (in the original scheme) for St. George's Chapel, Windsor (1475-1511). The building was to be the chapel of the Garter Knights, and 26 (two teams of 13) was the normal number of knights for a tournament; however, 13 was also the number of Christ and the apostles, the latter of whom were the pillars of the Church <Wilson, C., 1990/GC, 219-220>.

2/6 CLASSICAL ARCHITECTURE RETURNED: RENAISSANCE, BAROQUE, AND NEOCLASSICISM

Despite the efforts of many scholars, the Renaissance is still, perhaps, shrouded in myths. One is the almost subliminal conflation, buried in many minds, of Renaissance Humanism with the non-theistical man-centred philosophies of recent times, which has the lingering effect that Renaissance culture is viewed as somehow non-Christian. Peter Murray points out that Humanism, in the 15th century, "meant one thing and one thing only: the study of Greek and Latin literature, both as language and as literature. It never implied any theological position ..." <Murray, 1969/AIR, pp. 8, 9> - yet even here is the seed of misunderstanding, namely, the idea that 15th century philosophy, with its predominance of Neoplatonism (contrasting with the Aristotelianism of the Middle Ages) is some kind of return to paganism such as the "Apostate" Roman emperor Julian might have considered a personal vindication and triumph. Humanism, and the Neoplatonism of the Florentine Academy (founded 1455) were for a long time the concerns of only a very small group of people, not (unlike Christianity) the common culture of all of society. The principal 15th century theorists of church architecture do not help with their constant use of the words "temple" and "gods". This over-enthusiastic Classicising should not confuse us; the Renaissance was an age of Christian culture, or rather, Classical culture re-

interpreted in Christian terms, "Antiquity ennobled by the Christian faith" (Emile Male) <Murray, 1969/AIR, p. 13>. However, the later-15th century in Italy, and the 16th century in northern Europe, were perhaps not periods of intensive church building, as compared with earlier times. This is one reason why, unlike in the Medieval period, the meaning and significance of architecture becomes a subject equally concerned - as we are not - with palaces, villas, fortifications, and grand civic developments.

Another Renaissance myth, receiving gradual dismantling, is the simplistic notion that in early-15th century Italy, an architect called Filippo Brunelleschi somewhat summarily decided to re-create the glories of Classical architecture. (In architecture, unlike in literature and philosophy, "Classical" here means that of the Roman Empire, since nothing was directly known about that of Greece.) In a somewhat iconoclastic-sounding article of 1982, John Onians attacked the conventional idea (a notion created by the High Renaissance itself, and repeated, largely uncritically, ever since) that Brunelleschi had any real knowledge of, or interest in, Classical Roman architecture <Onians, 1982/BHN>. In fact, Brunelleschi (1377-1446) was an important member of a small group of Florentine intellectuals and artists whose motive was patriotic and nationalistic, their concern being to promote authentically Tuscan culture, the architect's work being a use and re-use of local Tuscan forms and decorative motifs, which were current in the later Middle Ages. Brunelleschi's sources were entirely

local Romanesque, not Imperial Roman, and his buildings bore the message that - at a time of national crisis, when Tuscany was under attack from the forces of Milan, loyal to the German Emperor - Tuscany possessed a culture and civilisation that was distinctive and worthy of defence. Brunelleschi's sources came from such buildings as the church of San Miniato al Monte, Florence (facade, c. 1090), Pisa Cathedral (1063-92), and the Florence baptistery. The last of these, Onians argues, Brunelleschi and others knew very well not to be a former Roman temple (as Humanists tried to suggest, and as modern scholars have considered that he and everyone else in 15th century Florence believed). The baptistery, also, was a Medieval work in the Tuscan Romanesque style.

Brunelleschi was reacting against Gothic (which clearly carried, for him, connotations of the Empire; the Imperialist Visconti rulers of Milan had built Italy's most completely northern-Gothic building in their city's cathedral (c. 1385-1485)); however, Brunelleschi's own greatest work - the dome of Florence cathedral (1420-1436) - owed much of its structural system to Gothic, and nothing whatever to Roman dome-building (ie. concrete) technology. Several of Brunelleschi's churches (S. Lorenzo, 1419-; Santo Spirito, c. 1434-) are basilican, and cruciform (Latin cross) in plan, and owe much more to the form of Early Christian basilical churches than temples, or any pagan architecture (they are arcuated, rather than trabeated, yet the same was true of some early basilicas, eg. Sta. Sabina, Rome, and Sta. Maria Cosmedin, Rome, both of the 5th century).

The early Renaissance was thus in some measure a "revival" of Christian Roman architecture, rather than that of the early years of the Roman Empire; hence - it is suggested - the incredulity with which early Renaissance architects would have viewed the 19th century notion that Classicism was inevitably the architecture of paganism. Later, however, the question of church buildings bearing pagan connotations was to be a matter of concern.

The word "revival" has been used. The conscious re-use of a particular style or variety of architecture from the past, which was not otherwise current, is a factor which, from the time of the Italian Renaissance of the 15th century, is with us to stay; yet in subsection 2/4 we saw that early Medieval builders consciously re-used building forms from the past - if not their actual styles - and in the Roman world too; and this borrowing was done in order to acquire associations and proclaim ideas by means of them. In the Renaissance, as it developed, a whole civilisation was evoked; and yet there was little attempt to use Roman architecture to convey ideas belonging to the Roman period; and when building-types were re-used, they were much re-fashioned.

As the 15th century wore on, however, architects began to be filled with a more developed interest in the Roman past. The Visconti/Imperial threat to Florence disappeared, and with it the nationalistic architecture, described above. Church builders increasingly turned from the basilical, Early Christian model, to a concern with new forms, namely,

centrally-planned buildings, either circular, or forms derived from the circle. These were "new", of course, only in terms of 15th century church building.

The major theorist, and architect, of the latter half of the century was Leon Battista Alberti (1404-72) whose Decem libri de re aedificatoria (largely written 1442-52, but revised until his death) argued for centrally-planned churches; perhaps the major architectural writing since Vitruvius, it is far more than a work based on the precedent of the ancient treatise. Alberti's approach to the connection of recommended ecclesiastical forms with Roman buildings is complex. Rudolf Wittkower argues that he saw his ideas as related to the Constantinian churches (Constantine built many circular Christian buildings), but also as a continuation of early (pagan) religious architecture <Wittkower, 1962/AP, p. 5>; but the notion of circular churches as some kind of man-centred, non-Christian preoccupation, in Renaissance thought, Wittkower rejects <Wittkower, 1962/AP, pp. 1-3>.

Much in Alberti's theory is based on belief in the virtue of harmonic proportions (his 9th book is largely concerned with this complex subject), and it is clear that his preference for the circle (and squares, polygons and other forms that can be derived from the circle) is related to ideas of this kind (the liturgical unsuitability of centrally-planned forms is a matter that many contemporaries were aware of). Alberti's philosophical (indeed, theological) emphasis on harmonic proportion places him in a line of Christian thinkers that goes

back to Augustine, and before that, of course, lies Plato. The square/circular form, based on the proportions of the human body, are, of course, exactly the kind of thing Vitruvius was advocating, as the basis for temple design (not that Vitruvius makes much reference to ancient circular temples). John Onians shows that much in Alberti's thought depends, in fact, on Medieval anthropomorphic ideas (eg. those of Isidore of Seville and Hrabanus Maurus) <Onians, 1988/BM, p. 148>, referred to in subsection 2/4.

The circle Alberti sees as the form preferred by Nature (ie. Divine Nature) for all her creations <Wittkower, 1962/AP, p. 3-5>, and the source of such forms is to be found in the order behind the cosmos that mathematics reveals. The forms and proportions of geometry, and the harmonies of music, are interdependent, as suggested in Pythagorean ideas. Wittkower also makes clear <Wittkower, 1962/AP, p. 9, 23, 28, etc.> that the latent cosmological concerns, found in Alberti's theory of church architecture, extend to the dome, with its connotations of the heavens, and domes (Alberti's Book VII) can be painted to look like the sky - clearly, the very ancient ideas of religious architectural meaning, discussed in subsection 2/3, etc., were current in Renaissance thought.

Alberti says that the ideal church needs to be the noblest building in the city, set apart from all others so that it can be seen in the round, and raised above ground-level, by some substructure or other. It must, therefore, be possessed of dignity and gravity, and it must be very beautiful and plain.

Austerity is a means by which it can have a purifying affect, instilling a state of innocence. Indeed, in a passage which has much resonance for later thinking (which must be examined in detail below) Alberti, as Wittkower reports, says that by its beauty and purity, a church can, and should, instil sublime sensations, and arouse piety. And further, in a passage that agrees closely with those who argue for the necessity of "sacred geometry" in church design (see Appendix Y), Alberti suggests that "Without that organic geometrical equilibrium where all the parts are harmonically related like the members of a body, divinity cannot reveal itself" (Wittkower; my emphases <Wittkower, 1962/AP, p. 7>); religious efficacy depends on building proportions. In another highly-significant passage, Wittkower suggests that Alberti considered that though proportion, geometry, and number could be rationally understood and explained (and used in the design process, no doubt), the worshipper in such churches reacts instinctively, "an inner sense tells us, even without rational analysis, when the building we are in partakes of the vital force which lies behind all matter and binds the universe together" (my underlining <Wittkower, 1962/AP, p. 27>) (concerning architectural proportion, see also subsection 3/2/2, below).

Not surprisingly, Alberti says little about the use of laterally-planned basilical churches; but he does see their validity, based on the fact that basilicas had their origin in institutions of (Roman) justice, and this is a reflection of divine justice and order. Filarete (his treatise being written

c. 1457-64) adds to the aesthetic ideas, found in Alberti, concerning the validity of circular churches: circles are soothing and suggestive (with their rising dome) of the soul rising in divine contemplation <Wittkower, 1962/AP, p. 10>.

In addition to the kind of philosophical connotations that the circle has, in Alberti's thought, Wolfgang Lotz, explaining a phenomenon mentioned by Wittkower, enters an associational connection: most of the Renaissance centrally-planned churches were dedicated to the Virgin Mary, and this is part of a (much older) tradition which descends from the fact that the ultimate circular, domed building (the Pantheon) had been made into a church, dedicated to St. Mary and all saints, in 608 <Lotz, 1977/SIRA, pp. 67-9>. Churches of this kind are also suggestive, by their form, of the martyria and certain mausolea (eg. of Theodoric, Ravenna, c. 520) that were built early in the history of Christian architecture: Donato Bramante's Tempietto, at S. Pietro in Montorio, Rome (after 1502) marks the traditional spot of St. Peter's martyrdom <Lotz, 1977/SIRA, p. 70>; it is a perfect example of the circular, domed, free-standing church (with peristyle) that Alberti advocated.

The centrally-planned church, a circle or square developed with polygonal exedrae and crowned with a dome, filled the imaginations and treatises of later Renaissance architectural thinkers, and actual examples were built, in small numbers, such as S. Maria della Consolazione, Todi (1504); Leonardo da Vinci, in particular, drew many variations of this kind of building. Another kind of centralised plan, the Greek cross,

was also used, and Wittkower suggests that Bramante and earlier architects chose this (amongst other reasons) for its cross-crucifixion-Christ symbolism <Wittkower, 1962/AP, pp. 25, 30>. Greek-cross forms, and circles/polygons, began to be made more liturgically practical by the elongation of one side (in effect, the adding of a nave), without this seeming to damage the meaning of the polygonal form; indeed, the drawings of Francesco di Giorgio which have human bodies superimposed over church plans, show how an almost-cruciform building could be understood in terms of Vitruvius's ideal of human proportions as the basis of "temple" buildings <Wittkower, 1962/AP, pl. 1a>. As late as 1560 (when Andrea Palladio's treatise was published), we find Alberti-like arguments for the (mathematical) beauty, purity, and distinctiveness of churches, to be still current, and Palladio seems to develop even further the cosmological connotations of religious buildings, which should now hold good for churches as once it did with (pagan) temples. This Renaissance cosmological thinking ultimately derives from the cosmology of Plato's Timaeus, which Palladio may have used directly <Wittkower, 1962/AP, pp. 22-3>.

John Onians clearly shows how in the later-15th century, the ever-more sophisticated classicising of Italian Renaissance architecture produced an embarrassment by way of its pagan origins, and also because of the vainglorious aggrandisement by which men of the merchant classes built large palazzi (he refers often to the morally dubious nature of the style) <Onians, 1988/BM, pp. 126-8, 194-5, 201-2>. The use of pagan

temple-fronts and Roman arches, added to the facades of churches, probably contributed to this associational ambiguity. Use of Gothic however - pointed, traceried windows set in otherwise Classical churches - seems to have gone some way to deflecting criticism, in some instances. In the "new town" of Pienza that Bernardo Rossellini built for Pope Pius II, the church (1460-62) has Gothic tracery in its windows, but the other civic buildings are firmly Classical <Onians, 1988/BM, pp. 193-5>. Alberti's S. Francesco, Rimini, otherwise known as the Tempio Malatestiano (after 1450) uses Gothic tracery, as does part of the Ospedale di Santo Spirito, Rome (1474-82) <Onians, 1988/BM, p. 197>. The Ospedale di Santo Spirito was built for Francesco della Rovere, Pope Sixtus IV (1471-84). He had been a reformist head of the Franciscan order; his works (including the renowned Sistine Chapel) have a quality of modesty and austerity. Sixtus seems to have thought of his great chapel (as an inscription suggests) as a work inferior to Solomon's Temple in grandeur, but superior in terms of religion (ie. less worldly). It has been shown that the Sistine Chapel's proportions are exactly those of the Temple <Onians, 1988/BM, pp. 199-200>.

Various palazzi built around the year 1500 bore either a Christian symbol (eg. IHS, at the palazzo Malipiero, at S. Maria Formosa) or a suitable inscription (from Psalm 115, at the palazzo Vendramin-Calergi, Venice, stressing that to God (not man) was due the honour and glory <Onians, 1988/BM, p. 128>).

And so we discover that the idea of architectural styles having specific meanings (ie. Gothic as "Christian architecture"), is seen not to be a phenomenon of the 19th century, but of about 350 years earlier. And, thus, "style language" at last enters our study; in reality, of course, it has been observed from earliest times (subsection 2/4) that different Classical capitals and orders (in effect, different Classical styles) bore various meanings, throughout their history, meanings which constantly changed, and the orders, as we shall see, continued to bear particular connotations. While S. Francesco, Rimini, uses Gothic, Alberti (or his executant architect) there used a different device to ensure the religious suitability of the building: he inserted cherubs' heads between the volutes of the Composite capitals, and in the entablature above. Cherubs (not used in Antiquity) had been the only "living" form allowed in Solomon's Temple, and so were a "safe" form of decoration, being divinely sanctioned (Onians, 1988/BM, p. 127). Another approach to the problem of creating a Classical architecture suitable for churches and specifically Christian buildings, but suitably "moral" and modest, was the development of the use, for these purposes, of the Doric order, which was considered chaste and sparse if, initially, in the late 15th/early 16th centuries, lacking a little in dignity. Doric was thus used at the Ospedale di Santo Spirito, referred to above, and in the courtyard of the Palazzo della Cancelleria, Rome (after 1486) (Onians, 1988/BM, pp. 202-3); this palazzo was the residence of a cardinal who was a nephew

of Pope Sixtus. The Doric order was then used in the church of S. Lorenzo in Damaso, Rome (after 1486), and on the facade of the duomo of Turin (1490s).

Sixtus IV had halted work on the new St. Peter's; but Julius II (pope, 1503-13) displayed rather different values and concerns, and set out to rival Solomon, in his work on Christendom's greatest church - as it was to be - producing a work worthy of the New Testament faith, as successor to the old church. This new and considerably grander approach to the appropriate nature of Christian architecture - a fitting successor to Solomon, and Imperial Rome, its form using the forms of Roman Imperial architecture - allowed for the "re-introduction" of the Corinthian order, and all others used in ancient Rome, into the official mainstream of Christian church building (Onians, 1988/BM, pp. 241-2). After this era - the early part of the 16th century - the orders are used in a way that appears stripped of the kinds of meanings and implications that, by way of John Onians's detailed work, we have been able to trace through many ages; but while, in the following centuries, their meaning depends more clearly on the association which architects wished to evoke with particular historic eras, certain associations lingered, or were discovered anew.

An exceptional Renaissance building, is the church-monastery-palace of the Escorial, near Madrid, Spain. Built between 1559 and 1584, largely by Juan de Herrera (for Philip II), it comprises various ranges of buildings. They are set in

a grid which may have been intended to represent the grid-iron symbol of St. Lawrence (he was martyred on a metal grid); but also, it seems to have been inspired by contemporary ideas about the nature of the Jerusalem Temple, which were then a source of much interest and speculation.

By way of the curious and exaggerated Classical forms of Mannerism (eg. the architecture of Michelangelo, as in the New Sacristy and Laurentian Library of S. Lorenzo, Florence (1521-34)), the architecture of the Renaissance was transformed into that known as Baroque. Baroque originated in the city of Rome, and it has long been thought of as the product and essence of Counter-Reformation Roman Catholicism. Modern accounts have pointed out, however, that the Counter Reformation (and particularly the edicts of the Council of Trent (1545-63)) in no way originated the kind of church architecture which later became so bound up with it <Bourke, 1958/BCCE, pp. 32, 45>; and it has been suggested that no one style of architecture could represent the many aspects of the Counter Reformation: in parts of Germany and the Low Countries, Gothic was used in 17th-century Counter-Reforming campaigns, by the Jesuit Etienne Martellange, to counter Lutheran attacks on "Romanist taste" <Meek, 1988/GG, p. 56>. Also, there was certainly Baroque, of a different kind, in Protestant countries. For the most part, however, the post-Tridentine theology and liturgy, and Baroque architecture, are closely interrelated.

With the advent of Baroque, which spilled out from Rome to

almost the entire Catholic world (particularly, perhaps, the Americas), we pass from kinds of church architecture which in some way or other, at some level or other, conveyed meanings and ideas, to an architecture which was essentially concerned with communicating feelings and religious emotions. Baroque did this in a number of ways, both subtle and less so, but always very effectively. Thus we pass almost beyond consideration of meaning, to that of the psychological power of buildings, and - a subject hinted at in our consideration of the ideas of Alberti - the direct spiritual efficacy or effect of church architecture and art. As suggested, this is a subject that must be investigated below; but it may be useful to make some reference to this aspect of Baroque, in its chronological context, before passing on to the way in which meaning and symbol were also a part of this phase of religious architectural history; and it can also be seen that in some instances there can only be a very fine distinction made between buildings that produce psychological effects, and those which communicate ideas.

Baroque was the architecture of theatre, using the drama of the liturgy, and all the arts of painting, sculpture, architecture, etc., to present an experience to the worshipper; indeed, Gianlorenzo Bernini (1598-1680), one of the first great Baroque architects and sculptors, referred to the "theatrum sacrum" that his churches created. The use of many different arts in one setting (often known as the gesamtkunstwerk, a term

reflecting the important German scholarship in this area), has been seen as one of the central elements that are present in many (but not all) works of authentic Baroque (this is a phase of architectural history which has seen many problems of definition and description). Anthony Blunt adds (in his list of the main features of High Baroque): the use of large scale, irregular and complex forms, and movement in line, mass, and space <Blunt, 1973/UMBR, pp. 8-9>. Such buildings, writes Edward Norman:

"were a plastic and sculptural representation of the great Christian truth that the world of the senses is itself illusory if it is taken by humanity to exhaust reality. The finite understanding of men can conceive the splendours of eternity only through Revelation, and the experience of applied Revelation ... requires to be set in the context of a higher plane if it is to elicit the awe and religious ecstasy appropriate to the mystery of ultimate truth." And: "Buildings came then to be regarded as ways of breaking through the regularity of ordinary human affairs, and of the immediately observable world of the senses. They became, instead, anticipations of eternity, their sculptural forms ... straining to pierce the existing realities and to allow the seen and the unseen worlds to intermingle." <Norman, 1990/HG, p. 211>.

And similarly, John Bourke writes:

"we realise that [in Baroque churches] is intended a great representation of the union of the visible and the invisible worlds in which earth and heaven are brought together in a rich pageantry of colour and symbol, of worship and communion." <Bourke, 1958/BCCE, pp. 46-7>.

Among the ways in which this mingling of the earthly and the spiritual/heavenly realms were created was the use, in certain German/Austrian Baroque churches, of ceilings painted to look like (not symbolically represent) heaven, or heavenly skies; this was a presentation of the idea of beatific experience, not the conveying of ideas about the cosmos, as with the earlier ceilings-like-the-sky, that were described in subsection 2/1, etc. Also in Central European Baroque churches (unlike those in Rome) the outside of the building might be very plain and white, even austere, compared with the interior richness. This is said to be symbolic of the duality of the inner life and the outer life, the material and spiritual, the body and the soul <Bourke, 1958/BCCE, p. 65>. Many of the German/Austrian Baroque churches were the focus of pilgrimages, their iconography relating to the cult of a local saint. Another example of Baroque religious architectural symbolism involves a somewhat different idea of spiritual ascent: this is the building, early in the 18th century, of flights of stairs that ascend to a church's door, or "sacred staircases". The best known are the "Spanish steps", in Rome (1723-6). At Bom Jesus, near Braga, Portugal, there is a via crucis (1720s) where the steps are lined with small chapels, containing tableaux of the Stations of the Cross; the landings have allegorical fountains representing the five senses <Norman, 1990/HG, p. 220>.

The actual forms of churches, both in the initial Roman Baroque, and in later developments in Germany, France, and

Spain, etc., are not dissimilar from those in the Renaissance. Centralised spaces are again used, and also various forms of axially-planned building, ie. lateral, or longitudinal, as it is often called; but the idea that these forms bear meaning, in the way they did in the Renaissance or Medieval periods is essentially absent. Perhaps the most important centralised form is the ellipse. This, whether used laterally, or, as occasionally, axially (eg. Bernini's S. Andrea al Quirinale, Rome; 1658-) combined "both the "embracing" effect of the circle and the "thrust" of an axis directed upon the altar. It both binds and points." <Bourke, 1958/BCCE, p. 54> - but there is no suggestion that it contains within it ideas about the cosmos, mankind, God, etc. The longitudinal churches were often produced by adding secondary centralised spaces to the principal volume (which then formed the sanctuary); occasionally these produced a vaguely cruciform effect: but we do not read that association with Christ's cross was particularly involved in this. Perhaps the overall aesthetic/psychological/spiritual effect took architects beyond the concern with such matters: but certainly Baroque churches were filled with symbolic forms and programmes, set within their total environment - perhaps this over-used word really is the only appropriate term for Baroque churches <Bourke, 1958/BCCE, pp. 58, 67>. In this context, of Baroque architecture, these symbols are referred to as "emblems", and some, eg. the pelican, the lily (of the Virgin), etc., are not very different from those of earlier ages.

It is often considered that with the work of Francesco Borromini (1599-1667), Roman Baroque architecture broke (as it did not with the - contemporary - work of Bernini) from the Classical regularity, symmetry, and harmony of form, of the Renaissance. But Borromini has been misunderstood and misrepresented, and Anthony Blunt has pointed out the very careful geometrical basis of his designs (and earlier we saw how geometry was understood to be a cosmological and mystical foundation for architecture) <Blunt, 1979/B, pp. 50-1>, and also that his work was consciously derived from Classical precedent - albeit, the florid Late Classical buildings of Baalbek, Petra and other places, that are now often called "Antique Baroque". Also, Blunt detects instances of cosmological interest in Borromini (domed ceilings, reflecting the Golden House of Nero (see subsection 2/3) <Blunt, 1979/B, p. 50> in a scheme for a villa), and anthropological concerns (the human body as the basis for architectural design). Though now probably much more monochromic than they once were, Borromini's churches employed very plain architecture; his work did not involve the many kinds of arts and art-works, referred to above.

Firstly, Borromini, like most architects of his age, and those preceding it, used heraldic symbols, items taken from the coat of arms of the patron. In the 15th century, Medici buildings had often borne a cartouche (eg. at the corners of palazzi) which had a group of stone spheres, the ball-like symbols of the Medici dynasty. By the 17th century, these

devices had ceased to be discreetly added to buildings, but were set within and without them, in all kinds of places, and thus Borromini liberally uses bees (the symbol of the papal Barberini family) as decoration, doves (the Pamphili family), and the odd formalised hillocks (montini) of the Chigi, etc. <Blunt, 1979/B, pp. 120-1, 126>. These occasionally form a major part of a composition, or determine a church's plan: the six-pointed star, out of which the plan of S. Ivo della Sapienza (1643-67) is created has been seen as a formalised bee's body, as well as a star of David, symbol of wisdom <Blunt, 1979/B, p. 116>. Borromini's work for religious orders also involved adding the symbols of that order, or of its founder; thus, the Oratory of S. Filippo Neri (1637-49) used flaming hearts, lilies, fleurs-de-lys, as well as the eight-pointed star (representing the Fathers of the Church), all of which were symbols closely associated with Filippo Neri and the Oratorians <Blunt, 1979/B, p. 98>. This work also involves an anthropomorphic element: its curving facade Borromini describes as being like a man stretching out his arms in welcome. The Filomarino altar (SS. Apostoli, Naples, from c. 1635) has, among its elements, two curious twenty-sided forms, or icosahedra, which are one of the solids from which the universe is constructed, in that perennially-influential cosmological work we have met before, Plato's Timaeus.

In S. Carlo alle Quattro Fontane, Rome (1637-1660s), as in other works, Borromini used palm trees and - perhaps his most ubiquitous form - cherubs; Bernini also made much use of

cherubs, as did many other Baroque artists, and they are often placed in circumstances where they represent contact with the heavenly realm, heavenly messengers or spirits, or the spiritual thoughts (or souls) of saints, etc., and, as we have seen, they make reference to Solomon's Temple. One drawing for S. Carlo (which has various Solomonic elements) shows that Borromini, like so many others, was influenced by ideas about the Jerusalem Temple; in 1594 and 1604, Girolamo (otherwise Hieronymo) Prado and Giovanni (or Juan Bautista) Villalpando had published a commentary on Ezekiel which had set out exhaustively to describe and illustrate Solomon's Temple, and this work was to have very far-reaching influence. S. Carlo also has crowns and palms, which are symbols of eternal life (and elsewhere, he uses the ancient symbol of the martyr's palm). Cruciform coffering, in S. Carlo's elaborate vault, has precedent in the vault (in mosaic, in this case) in the Early Christian church of S. Constanza.

S. Ivo della Sapienza, referred to above, was the church of one of Rome's universities; Sapienza means wisdom, and symbolism of wisdom is found throughout the work (or rather, the whole church is intended to convey the idea of wisdom). By extension, wisdom refers to the Wisdom of Solomon, and so there is considerable use of the six-pointed star of David, mentioned above. The dome has been seen as tent-like, a reflection of the tent-like cloth veil that is often used to cover the tabernacle, where the sacrament is reserved: the reforms of worship and liturgical practice, emanating from the Council of

Trent, required a tabernacle to be set on altars, for this purpose <Blunt, 1979/B, p. 114>. The curious spiral-tower that surmounts the (equally-curious) dome has been seen as a conscious borrowing of a Mesopotamian ziggurat (via contemporary engravings), but equally applies to a tower of wisdom, which has, at the summit, flames. In fact, it is a formalised symbolic Tower of Babel, which, by way of the experience of Pentecost (in which the Apostles spoke in many languages) has become a symbol not of folly, but wisdom; the flames are the tongues of fire that alighted on the Apostles' heads, at Pentecost <Blunt, 1979/b, p. 126->. The tower's flaming torches (of knowledge), etc., owe much to Cesare Ripa's book of symbols, Iconologia (1593, 1603, etc.). Books of symbols, or emblem books as they are properly called, were very common in the 17th century (others are Pierio Valeriano's Hieroglyphica (1556) and Junius Hadrianus's Emblemata (1585)), and many architects and artists used them, as much in Northern Europe as Italy; many of their symbols and symbolic personages represent secular virtues, and they are strongly mythological and Classicising <Blunt, 1979/B, pp. 126, 172> <Hall, 1974/DSSA, pp. 336-7>.

Borromini's training included the Gothic tradition of Milan, and Gothic clearly influenced his work; the same is true of another great Italian Baroque architect, Guarino Guarini (1624-83). A priest of the Theatine order, he designed various churches, including several in Turin, then the capital city of Piedmont-Savoy. The latter include S. Lorenzo (1666-) and the

church that houses the Turin Shroud, Santissima Sindone (1668-), and both have spectacular domes that rise over the central volume. S. Lorenzo's is created out of eight parabolic arches that rise across segments of the void, and that at Santissima Sindone consists of an amazing agglomeration of pierced pediment-like features, which diminish as they rise to the crowning cupola. The S. Lorenzo dome clearly owes much to Spanish Islamic precedent <Meek, 1988/GG, p. 52>; that at Santissima Sindone is simply without precedent. There have been many attempts to link these domes with symbolic programmes, or even esoteric ideas and cryptograms (eg. astrological connections with St. Lawrence's day); but at least one recent Guarini scholar, H. A. Meek, dismisses any such ideas, claiming that Guarini, a prolific writer, would certainly have alluded to such meanings in his theoretical writings, and that his intentions were purely theoretical. It may be, however, that these domes simply attempt to suggest the infinite <Meek, 1988/GG, p. 50>. Guarini did have a concern, however, like so many church architects in the 17th and 18th centuries, with ideas about the Jerusalem Temple, and went as far as developing an entire Order out of Solomonic (spiral-shaped) Corinthian columns, his "undulating Order" <Meek, 1988/GG, pp. 14-17>, which produced a faintly inebriated look in his posthumous S. Maria della Divina Provvidenza, Lisbon (1698-).

Guarini's work had much influence in the Catholic parts of northern Europe. A major church-builder in eastern-central Europe, however, J. B. Fischer von Erlach (1656-1723), studied

architecture in Rome, in the time of Bernini's last years, and soon after Borromini's major churches were built. Fischer's work was a product of the emergence of the Austrian Empire, out of the old Holy Roman Empire, following the final defeat of the Turks (1699) and the thwarting of Louis XIV's expansionist ambitions. His work thus contains much imperial symbolism, in addition to religious iconographic programmes, of the kind discussed above (ceilings painted with scenes of theophanies, etc.). Hans Aurenhammer <Aurenhammer, 1973/FvE> writes that symbolic meaning was inherent in "almost all of the forms he used". The Karlskirche, Vienna (1716-1738) involves a blend of religious symbolism and imperial ideology. A votive church, dedicated to St. Charles Borromeo (1538-84; a leader of the Counter Reformation) for his aid in delivering Vienna from a plague in 1713, its ceiling shows the saint rising to heaven. Outside the building, however, rise two vast columns, either side of the principal portico. They are closely based on the column of the Roman emperor Trajan, and as such point to the imperial status of the Hapsburg dynasty (they are decorated, however, with scenes from the life of St. Charles Borromeo).

Two columns (as built at Fischer's Imperial Library, Vienna) also suggest the ancient "Pillars of Hercules", the gateway to the Mediterranean, one of which the Austrian emperor had acquired, in name at least (Gibraltar; 1704) <Prak, 1968/LA, p. 128>, through his alliance with Britain in the War of Spanish Succession. But these two sets of columns also reflect those two ubiquitous ancient columns, Jachin and Boaz,

set before Solomon's temple; thus the Austrian emperor is both the second Augustus, bringing forth a new era of peace, and a second Solomon. Fischer's interest in the Temple is shown in his depiction of that building in his large illustrated history of architecture, Entwurff einer historischen architectur (1712). His "vision" of the Temple was based on the very influential "reconstruction" of Ezekiel's vision, produced by Girolamo Prado and Giovanni Villalpando, referred to above; Prado and Villalpando were Spanish Jesuits, and were in turn influenced by Herrera's work at the Escorial. Fischer and many others of his age (eg John Wood the Elder) clearly considered that Classical architecture had its origins in ancient Jewish buildings, and Solomonic concerns, of various kinds, constantly recur in 18th century architecture, though they do not often explicitly emerge in church buildings.

But for those areas of Germany, Spain, Portugal, and the South American colonies, where the use of Baroque continued for a very long time, Classical architecture transformed itself into more chaste and "purer" forms, which became known as Neoclassicism, though this umbrella-term covers many styles. English Palladianism, Roman, and Greek tastes, in the later part of the 18th century, are just some emanations of this spirit. France was much influenced by a group of architects who studied, in the later-17th century, in Rome; but even in that country, the move towards simpler forms continued unabated. Along with this, religious architectural symbolism and forms of

meaning gradually evaporated. Churches were still built, and more in number than in the previous century or so; but architectural forms began to be more a question of taste than symbolism or assemblages of iconography. Classical architecture itself became a thing of aesthetics and vague historical association, rather than a "bearer of meaning". Though the Protestant countries could build large, and even ornate churches, considerations of the practical requirements of Protestant worship (as in Christopher Wren's famous statement on the needs of the "auditory" church <Addleshaw and Etchells, 1958/ASAW, Appendix II>) outweighed other requirements. The idea of Classicism as being non-Christian now troubled no one; yet in a sense paganism, or at least philosophical atheism, was in the ascendance. France, which had persecuted people for not conforming to the Catholic faith in the 17th century, was, by the later-18th century, drifting into religious apathy, then outright atheism, and then the pseudo-religion of Reason. Where churches were adorned with sculpture, figures from Classical mythology might be set side-by-side with Christian saints, etc., as on Wren's St. Magnus the Martyr, London (1671-6; 1705) <Norman, 1990/HG, p. 240>. It is wrong, it has been suggested, to claim that Neoclassic architecture is simply a "natural expression" of the religion of the Enlightenment, the "Age of Reason", because so many different forms of architecture, religion, and society were involved, and the same trend - where churches become less overtly Christian - is found in all of them <Norman, 1990/HG, p. 239>.

In later-17th century France - it has been noted - Gothic forms were used, at least partially, with a symbolic intention. In 1706, the Abbe Cordemoy suggested a very simple form of church, supported by columns; and in 1743, Pere Laugier's Essai sur architecture produced a programme for a columnar church, based on the idea of a primitive wooden hut, made of posts and staves, which he supposed to be the ancestor of all architecture <Braham, 1980/AFE, p. 49>. This appeal to the primitive was in part an attempt to disassociate churches from the lavishness of Baroque, but positive attitudes to Gothic seem not far behind. Soon after the mid-century, however, a stage further was reached, in the taste for churches inspired by the Early Christian basilica, as seen in the paintings of Roman churches by Panini <Braham, 1980/AFE, pp. 123-8>. Basilican churches built with free-standing columns, which supported entablatures or arches/vaults, were very different from the churches of the Baroque, and they bore associations of the primitive Church: "the Christian religion as the creation of God then enjoyed its perfection" (Antoine Desgodetz <Braham, 1980/AFE, p. 124>). A somewhat less lavish and grandiose building seemed more appropriate, or more discreet, at a time when religious observance was declining, and the Church and the faith were moving towards official censure <Braham, 1980/AFE, p. 123>.

In England, Nicholas Hawksmoor's inspiration from the "Basilica after the primitive Christians" (as he entitled a curious basilican graphic scheme of 1711 <Downes, 1969/H, pp.

100-101, 106-8>) shows a similar interest to that in later-18th century France, but while his churches (second decade of the 18th century, mostly) drew on basilican forms, their "message" was one of grandeur ("solemn and awful", Vanbrugh had suggested), and they were intended to stand out as advertisements for the Established religion of Church and State in "benighted" areas of east London, where the only religion, if there was religion, was that of Dissent <Downes, 1969/H, pp. 103-5>. Like Alberti's ideal church, part of their effect was to be created by being free-standing, and raised on a high plinth. A steeple could now be derived from the tomb of Mausolus at Halicarnassus (St. George, Bloomsbury (1720s)), and Roman altars could form part of the balustrade separating St. Alfege, Greenwich (1712-4) from the road.

One religious architectural form, of great antiquity, that passed from the 17th century to the later-18th century, was the dome. At first, the inspiration was the dome of St. Peter's, Rome (1585-90; Giacomo della Porta and Domenico Fontana), which produced such works as the dome of St. Paul's Cathedral, London (cathedral: 1675-1710) and St. Genevieve, Paris (Jacques-Germain Soufflot, 1755-64). Later, architects were inspired by the "original" of all such domes, that of the Roman Pantheon. Berlin (St. Hedwig's Cathedral, Goerg von Knobelsdorff, mostly built in the 1770s), Baltimore, Ohio (Roman Catholic Cathedral, Benjamin Latrobe, 1818), and Possagno, Italy (G. A. Selva with Antonio Canova, 1819-33) all had one; Dublin's St. Mary's pro-cathedral (John Sweetman, 1815-) owed its portico to the

Pantheon, and also had a central dome. But did these hemispherical roofs, like their ancient predecessors, possess symbolism, ie. did they mean the heavens, the sky? St. Paul's was painted (1720s) with scenes of the life of St. Paul, and Baltimore Cathedral had a coffered ceiling. Ironically, it was perhaps only Etienne-Louis Boullée's megalomaniac project for a cenotaph for Isaac Newton (1784) that re-created the ancient symbolism: this spherical space was to have served as a kind of planetarium, with the heavenly bodies projected on its inner surface; and the Newton Cenotaph was a monument to the new French religion of Reason. This cult turned St. Genevieve into the secularised French Pantheon, or national shrine <Braham, 1980/AFE, p. 77-82>, and the ultimate pantheon, the largest ever dome, would surely have been Berlin's Volkhalle (Albert Speer's scheme of 1937-), effectively a monument to just one man, Adolf Hitler.

There seems to have been little of the otherwise-ubiquitous religious architectural symbolism of anthropomorphism in the age of Neoclassicism; however, at just this time various French architectural writers, and English leaders of taste, began, in their treatises, to describe architecture in terms of creaturely associations, or as a "communications appliance", things conveying ideas and emotions; at this time, also, architecture began to be described as being like language. Charles Batteaux's The fine arts reduced to a single principle (1747) saw architecture as unlike most of the arts, but

comparable to eloquence, something that had to be useful, as well as giving pleasure <Collins, 1965/CIMA, p. 174>. In his Livre d'architecture (1745), Germain Boffrand created a theory of architecture based on the Ars poetica of the Roman writer Horace <Collins, 1965/CIMA, p. 174>; he saw buildings as being like Classical drama, separating into the pastoral, tragic, comic, etc., each visually announcing their purpose and expressing emotions such as love, hate, and terror <Hersey, G. L., 1972/HVG, pp. 2-3>; the emotions were to be appropriate to the functional expression, and such considerations take precedent^{ce} over traditional aesthetic rules such as symmetry. Boffrand may have been the first to see different elements of architecture (profiles of mouldings, etc.) as being comparable to the words that constitute speech.

Jacques-Francois Blondel (Cours d'architecture, 1771-3) used the word "character" to describe the emotional charge implicit in Boffrand's theory, but Blondel adds the concept of convenance, which is applicable to a building when the composition and decoration is totally bound up with the building's function <Hersey, G. L., 1972/HVG, pp. 3-4>. For Blondel, different types of buildings require different emotional qualities, which must be expressed by the buildings themselves, churches instilling decorum, palaces magnificence, fortifications solidity, etc. Different styles of building are compared to different styles of eloquence, linking the idea of styles with languages, or modes of expression. Architecture, says Blondel, is comprised of rules, reason, and taste. Several

theorists of this period considered that buildings could be understood as having a gender. Blondel not only saw Doric as suggesting maleness - a very ancient idea, as we have seen - but in his thinking, sexuality permeated many aspects of a building. Those composed of "rectilinear masses" he saw as male; "sinuous parts" are the characteristic of female buildings. Palaces are often male, fountains and baths often female <Hersey, G. L., 1972/HVG, pp. 4-5>. In an essay of 1785, Quatremere de Quincy saw architecture as being a product, not of individuals, but of all mankind, like language.

Ledoux, whose work has been referred to above, was a pupil of Blondel, and he seems to have inherited many of his teacher's ideas <Hersey, G. L., 1972/HVG, pp. 5-7>. Ledoux considered that a building had an actual physiognomy, and with that it can be passionate, grave, sad or seductive. For him, buildings' expression goes far beyond the meanings of different building types that we saw in Blondel's ideas. First, buildings give knowledge, then bring forth the emotions required for action based on that knowledge. A number of his graphic projects go some way to explain what Ledoux had in mind. His house for the directors of the Loue irrigation system is a vast pipe out of which a stream of water is directed <Braham, 1980/AFE, p. 206>. His curious Oikema, or temple of erotic love, resembles, on plan, male sexual organs <Braham, 1980/AFE, p. 207>. However, Ledoux clearly considered that written poetic descriptions of such buildings were necessary in order for the viewer fully to understand their meanings and associations (and

thus, perhaps, George L. Hersey refers to Ledoux's "proto-associationism" <Hersey, G. L., 1972/HVG, p. 7>); and Boullée also considered that buildings should be like poems, and he provided poetic descriptions for his architectural schemes, in his treatise.

Various late-18th and early-19th century English writers on landscape gardens, taste, and aesthetic theory, consciously or otherwise, took up the French theories. Thomas Whately (Observations on modern gardening, 1777) considered that garden buildings should convey ideas, but that their message should be more direct than relying on textual explanation or discussion <Hersey, G. L., 1972/HVG, p. 9>. But an exact explanation of how this might be came only with the ideas of the Scottish "Common Sense" school of philosophers, particularly Archibald Alison. His Essay on the nature and principles of taste (1790) put forward a theory of beauty being in the eyes of the beholder, arriving there by way of various mental associations. An object which elicits no associations is not seen as beautiful. An object may possess the power of "expression", and "imagination" allows a mind to call forth associations. A place may be beautiful because of the historic or artistic associations which its history provides. Education - knowledge of such associations - and sight of such places, produces appropriate effects without explanatory texts <Hersey, G. L., 1972/HVG, pp. 10-11>. In addition, Alison believed in intrinsic formal beauty, whereby - a la Boffrand and Blondel - buildings are designed to produce different emotions, and these are in

truth ultimately based on fitness for purpose. As Hersey says, "The ability of the spaces [of building interiors] to project the emotions is judged as machines are judged" <Hersey, G. L., 1972/HVG, p. 12>.

"Fitness for the end in view" was taken up by John Claudius Loudon, in the 1830s, as the principal law of architecture, with the various elements of buildings (chimneys, doors, windows, etc.) as "signifiers" - a word that plays an important role in modern analyses (subsection 2/10) - which revealed their interiors, and hence spoke of the inhabitants, and their place in life, etc. Such exterior details, of course, were capable of lying, but this would forfeit the beauty of truth. Associational expression was seen by Loudon as a moral duty, but particularly with buildings which have a moral role, such as schools. Another aspect of Loudon's thinking is that of styles as languages, or rather, different styles as ways of presenting ("dressing up") an otherwise-similar building (Loudon gave the example of a small house "dressed up" in Gothic, Tudor, castellated and Chinese, etc., forms) <Hersey, G. L., 1972/HVG, pp. 14-19>. These ideas may seem very remote from the meaning of religious architecture; yet late-18th/early-19th century associationism, or proto-associationism, was to play a vital part in the religious architectural ideas of the age of the Gothic Revival.

2/7 THE GOTHIC REVIVAL IN THE NINETEENTH CENTURY

By the dawning of the 19th century, the matter of style had become a central, unavoidable preoccupation of architects and architectural writers. The concept of architectural style was in a sense of recent origin, but arguably had its roots in antiquity. Were not the different columns - Orders, as we know them - of the ancient Greeks, and Vitruvius, different styles with (as we have seen) their separate identities, applications, and meanings? Medieval building, both the round-arched and pointed forms, had evolved its various phases and individual characteristics. The Renaissance - whether by intention or not - introduced, at least as it appears with hindsight, the re-creation, the revival, of an architecture of the past, and thus brought into sharp relief the difference between two basic kinds of architecture, two stylistic families, Gothic and Classic, as they were to be called, within which various different Gothic and Classical styles can be described. The origin of the conscious idea of style is a complex one, and it seems to have its source - appropriately to our concerns - in the idea of architecture as being analogous with language, namely, in comparisons of kinds of architecture (at first, the Classical orders), with styles of rhetoric. In the Classical world, as we have seen, separate styles of oratory were identified, described, and prescribed for particular uses and situations. The different "rhetorical styles" of architecture

became the different maniera and stile that were identified in the period of "mannerisms" in Italian architecture, the early 16th century <Germann, 1972/GR, pp. 11-27, etc.>. With the evolution of words meaning "style", came the words denoting or identifying different styles, and it is surely no accident that style words or labels invariably had their origin in derogation: Mannerism, Baroque, and Gothic all had derogatory connotations and origins. The transformation of these terms into neutral identification-labels (very delayed, in the case of "Baroque" <Blunt, 1973/UMBR>), paralleled the acceptance of the idea that there were separate styles, and moreover that such things were in some sense equivalents, matters of choice - and such it came to be, in many situations, in the later-18th century.

The 19th-century "dilemma of styles" was the product of this idea, that here were a collection of alternative modes, from which an architect might select at will; and very early in modern times - certainly from the 1840s - there was the idea that the previous catalogue of styles would not always be the totality of the choices, that a new style would arise. The desire for a "new style" moved the hearts of many architects, and by the turn of the 20th century reached a crescendo <Thomas, 1975/SG>; (but the hoped-for style did not come in the form of the Modern Movement, since the desired style was always thought of as some kind of product of, or evolution from, the past; and the Modern Movement rejected the notion of style or styles of any kind, and of influence from the past).

From the very beginning of "styles", then, it was usual to see them in some sense as being an equivalent of language, and thus as containing or bearing meaning (indeed, J. M. Crook writes: "The traditional defence of revivalism is based on the linguistic analogy: architectural forms between the sixteenth and nineteenth centuries constituted an inherited architectural language through which the architect operated ..." <Crook, 1972/GR, p. 140>). The idea that a particular style might "mean" Christianity, or be visually associated with it, was, we have seen, present in 16th-century Italy, where its links with the faith were precisely those of past association - the past, however, including the very recent past. Any detailed examination of the meaning of features of Classical architecture - such as that presented earlier (subsection 2/4 <Hersey, G., 1988/LMCA>) - made denial of its pagan links impossible, as seems to have been understood in 16th-century Italy, despite the idea that an authentic Christian architecture could truly be that of the age of Constantine, who created Christian basilicas and martyria. The 18th-century idea of Classicism as a product of divine instructions, known most fully in the building of the Jerusalem Temple, does not seem to have been disconcerted by the pagan associations of the style, pagan religion that would have offended the Old Testament prophets as much as the early Christians.

The pagan nature of Classical architecture does seem to have been apparent to the Gothic Revivalists - A. W. N. Pugin, at least - and Pugin (1812-1852) was well aware that Christianity

was some centuries old before pointed architecture emerged. However, the truth - which Pugin might not thank us for suggesting - was probably that the enduring identification of Christianity with Gothic owed much to the 18th century, to the associations of monks and ruins that many Picturesque garden theorists cultivated, and which had its origin in a century of antiquarian interest in England's ruined abbeys and monuments. It is thought that Gothic was identified as the specifically Christian style as early as 1815 (by Mary Anne Schimmelpennick <Hersey, G. L., 1972/HVG, p. 13>), which shows the extent to which, for Pugin and the Ecclesiological Society, writing around 25 years later, the idea was not new. Certainly, Pugin produces no "proofs", nor fanfares, for the notion, just simply refers, in Contrasts (1836, 1841) to "Pointed or Christian architecture". While the pointed arch may have been "of great antiquity", for Pugin, Christianity's identification with Gothic was that, in Gothic, we find "the faith of Christianity embodied and its practices illustrated"; the basis for the identification is thus one related to architectural meaning <Pugin, 1841/C, pp. 2-3>.

However, an idea most prevalent in the developed Gothic Revival, of the 1840s and later, was: that every religion and civilisation produces its own architecture, and Christianity's is Gothic (all the other styles had had their actual origin in some other religion/civilisation). This, of course, had nationalistic and cultural overtones, namely, the idea that Gothic was not only the Christian architecture but "the

national style", and this was argued in several countries (the completion (1824-80) of Cologne's Gothic cathedral (13th-14th centuries) became, in effect, a cultural crusade, contemporary with the rise and fulfillment of German nationalism <Germann, 1972/GR, pp. 151-165>). However, so strongly had Classicism affected the countries of northern Europe, in the 17th and 18th centuries, that it would have been hard, even in the 1840s, to defend the exclusivity of Gothic as the true style, product, and symbol of any nation; in Germany, for example, Gothic had strong rivals (particularly Rundbogenstil), and the German Gothic Revival was in a large measure the product of political and religious struggles.

The cultural origins of pointed architecture were from the first considered to be uncertain and obscure. The old Renaissance propaganda of the destructive activities of "the Goths" was replaced (not that it ever actually died out, until recent times) by speculation about Saxons, Druids, and all sorts of peoples. Significantly, Wren considered it "Saracenic", and when Sir Gilbert Scott (1811-78) gave his lectures at the Royal Academy (1860s? Published 1879) he revealed that there had for long been very widely diverging bodies of opinion as to the origin and nature of Gothic, some seeing it as the product of various religions (including "Mahometan" and "Saracenic"), and others holding it to be the invention of various national and political cultures <Scott, G. G., 1879/LMA, Vol. 1, pp. 216-8 [lecture VI]> - and Scott here makes no reference to the many theories of Gothic as a

formalisation of nature, the architecture of petrified trees and forests, notions which had much influence on the late-18th-century mind.

Once the essential aim of the Gothic Revivalists had been achieved however (in Britain, that is, where, by the end of the century, and for long after, by far the greatest proportion of Christian buildings, ancient or modern, were Gothic), Gothic moved from being the style in which certain people thought all churches had to be built, to being a visual indication, or sign, of the Christian nature of a building, to the person who saw it; and thus it largely remains, in this country, to this day. The (19th-century) understanding of Gothic as a sign or indicator of religious identity is seen in criticism of its use. The waspish (if now quaint-sounding) tract by J. A. Tabor (A Nonconformist protest against the Popery of modern Dissent as displayed in architectural imitations of Roman Catholic churches, 1863 <Tabor, 1863/NP>) meant just what its title said, that even Nonconformists were using this form of building; and the fact that the author identifies Gothic principally with Roman Catholicism probably shows the particular effects of Pugin's polemics, as well as an ignorance of the deeply-rooted Baroque tradition of post-Reformation Catholic architecture, which was eventually to triumph even in Britain (the Brompton Oratory, London (1880-84), etc.), despite several later generations of Pugins who continued to build Catholic churches in Gothic.

With the powerful pro-Gothic polemics of John Ruskin (1819-

1900), the style gained full acceptance amongst Protestants: Ruskin was strongly opposed to the "heathenism" of "Popery", which he saw as being clearly expressed in the nature of Renaissance and Baroque Classicism. The identification of Gothic with Christian has to be considered in the light of the fact that one of the foremost Gothicists, the Frenchman Eugene Viollet le Duc (1814-1879) was a professed atheist, and for him, the nature of Gothic was related to principles of structure, materials and mechanics, and "based absolutely on reason and science" (Paul Gout), rather than religion, romanticism and sentiment <Pevsner, 1969/RV, pp. 16, 26, 33-5>. To return to Catholicism, Roman Catholic church-builders of the late-18th century had in fact played the architectural-language game very successfully, by occasionally designing churches to look almost exactly like contemporary Methodist chapels (eg. that at Newport, Isle of Wight, 1792), a form of architectural discretion that was necessary before Catholic Emancipation <Little, 1966/CC, pp. 29-31, pl. 6 (a),(b),(c)>.

The use of Gothic in Methodism was advocated by F. J. Jobson, whose argument (in Chapel and school architecture, 1850 <Jobson, 1850/CSA>) was of the authentic-style-of-our-Christian-civilisation variety. Within Gothic, however, Jobson showed - in a positively Loudon-like way - that it was quite permissible, and very easy to arrange, that any of the different Gothic styles or phases might be used. Jobson was well within the Picturesque tradition in which style was, in Nikolaus Pevsner's graphic phrase, merely "a cloak thrown over

a building" <Pevsner, 1951/CC, p.4>. The Ecclesiologists' insistence that "Middle Pointed", or Decorated, was the only acceptable phase of the only permissible style (the "Biological" analogy of youth, flowering and maturity, decline and death) was essentially an aesthetic idea, being only loosely and unconvincingly linked to ideas about the states of health of the Medieval (English) Church; and even in Ecclesiological architectural circles, eclectic assimilation of foreign Gothic styles - all decidedly non-Decorated - became acceptable very early on (from the later-1850s).

Beyond the idea of architectural style as a bearer, in itself, of meaning and identification, the Gothic Revival was - as suggested above - much more deeply concerned with religious architectural symbolism. Pugin considered that in such ancient structures as the "Druidical remains of Stonehenge and Avebury" and in "all these works of Pagan antiquity" the "plan and decoration of the building is mystical and emblematic", and in Christianity, the "faith embodied" and "practices illustrated", referred to above, include the doctrines of redemption (the cross, cruciform buildings), the trinity ("the triangular form and arrangement of arches, tracery, and even subdivisions of the buildings themselves") and the resurrection of the dead - which Pugin saw as "exemplified by great height and vertical lines, which have been considered by the Christians, from the earliest period, as the emblem of the resurrection" <Pugin, 1841/C, pp. 2-3>.

It is noticeable that the "three central doctrines", as

referred to by Pugin, are "embodied", "illustrated" or "exemplified" in substantially different ways, by means of different species of architectural meaning. The first involves the literal physical symbolism of cross-shaped buildings; the second, simple shape-number symbolism; the third, a more tenuous, even specious, connection between an aspect of physical form - verticality - and the "ascent" connotations of resurrection.

John Mason Neale and Benjamin Webb - leaders of the Ecclesiological Society - went further than Pugin, however, in claiming the centrality of the theory of Gothic architecture as symbolism and embodiment of the faith, and took all consideration of Gothic far beyond matters of style, in their insistence that Gothic had been, and must be, "sacramental". This concern led them to translate, edit, and introduce the first book of Durandus's Rationale divinorum officiorum (discussed in detail in subsection 2/5) as The symbolism of churches and church ornaments ... (1843) <Durandus; Neale and Webb, 1843/SCCO>. The 118-page "Introductory Essay" ("Sacramentality: a principle of ecclesiastical design"), by Neale and Webb, presented a series of "Arguments for symbolism" which defended the thesis that Gothic churches had always been not just a locus of Christian worship and life, but also a creation and presentation, in stone, of the faith itself. Thus, Gothic was not just an architectural style, or the appropriate style, but bore a specific relationship to the beliefs of the Christian faith, to which no other kind of architecture could

aspire.

The Ecclesiologists' Durandus, and the argument for the necessity of symbolism, has been said to have had a "tremendous" effect (James F. White <White, 1962/CM, p. 69>) on subsequent (Gothic) church-building and restoration; yet in truth, its product is probably more accurately identified with this elevation of Gothic above the mere question of style, than the propagation of symbolism among church designers; other than the use of three-fold forms (and the revival of ancient, authentic, octagonal forms for fonts/baptisteries), it is difficult to find many of the Durandus-like ideas influencing Victorian church builders. One reason for this may be the strong criticism of such approaches to symbolism, that followed the publication. The Ecclesiologist itself reported the view of the Society's Vice-President, J. J. Smith (it was "a system which opens to the imagination a wild range, and familiarizes the thoughts with violations of truth ...") <White, 1962/CM, p. 77>. Professor Samuel Lee wrote that it was "scarcely possible to conceive of a production so puerile in its conceptions" as the book of Durandus; he also saw it as "Popish" <White, 1962/CM, p. 77>. E. A. Freeman, of Oxford, expressing views somewhat similar to those (1964) of Gilbert Cope, considered Durandus's "system" of symbolism to be one of "merely arbitrary association" <White, 1962/CM, p. 78>. (Gothic theory in Oxford - eg. that of the Oxford Architecture and Historical Society - emphasised the idea of Gothic as the reflection of nature, nature revealing God, ideas associated with Ruskin; this

contrasted with the symbolism/sacramentalism of the Cambridge Gothicists.)

The five arguments for symbolism <Durandus; Neale and Webb, 1843/SCCO, p. xxxv-lxxviii, Chs. II-VI> must be seen as in a vague sense recalling such classical theological statements as the "proofs", or arguments, for the existence of God, or Durandus's own four ways, or levels, of understanding the meaning of scripture (the "arguments for symbolism", however, are not five species of architectural symbolism). Like the "proofs" for the existence of God, they are arguments which may masquerade as proofs.

The first is the "Argument a priori", which seems to be an argument from precedent, from the "fact" that architectural symbolism was very ancient, and thus of the essence of Christianity. The "Argument from analogy" claimed that as in other aspects of the faith there were symbols or "types" (prophets etc., used by God to prefigure the Messiah), and as the Fathers of the Church themselves understood the scriptures symbolically, it was right that they should understand Christian architecture in a similar way. The third argument, or "Philosophical reasons for believing in symbolism", evokes an almost Platonic idea of physical forms (of church buildings) as a reflection for the "subjective and unseen", with "material" things being developments of mental processes. The "Analytical argument" is fascinating because it suggests that Gothic buildings would, of themselves, without any explanation, inform a person (who had no knowledge of Christianity) about their own

symbolic nature. Such a person, visiting a "Catholick" country, would notice the "inconvenience" of the form of the many large, cruciform churches, and discern, in the "peculiarities" of such architecture, a concern to embody certain ideas. The "Inductive argument" suggests that the "selection and universal observation of particular forms and ornament, and peculiar roles of distribution" of Gothic churches, suggest a common source or authority, now lost, some Church Canon, that Durandus and the other Medieval writers of similar works, drew upon <White, 1962/CM, 73-5>. But as White suggests, this model or pattern might as easily have had its origin in functional (liturgical) requirements, rather than symbolic concerns <White, 1962/CM, p. 75>.

Insistence on the nature and necessity of Christian architectural symbolism fluctuated, in Ecclesiological circles. In the Durandus, it was claimed that church architecture was "part of the Ritual system" of the "Catholick" faith, and thus as expressive of ideas as much as any other part of the liturgy. Ritual requirements, they claimed, had produced certain physical forms, which then came to symbolise the requirements themselves, which seems to be saying, says White, that "a bed symbolises sleeping" - which is a version of the very minimal meaning-system which we have met before, and will meet again. The somewhat-blind belief that details of Medieval churches contained meanings led mid-Victorian ecclesiologists - many were amateur diletanti - down some very dubious paths: "lynchnoscopes" (unexplained unglazed holes in the walls of

Medieval parish churches) were now understood to be symbols of the wounds in Christ's side <White, 1962/CM, pp. 63-4>.

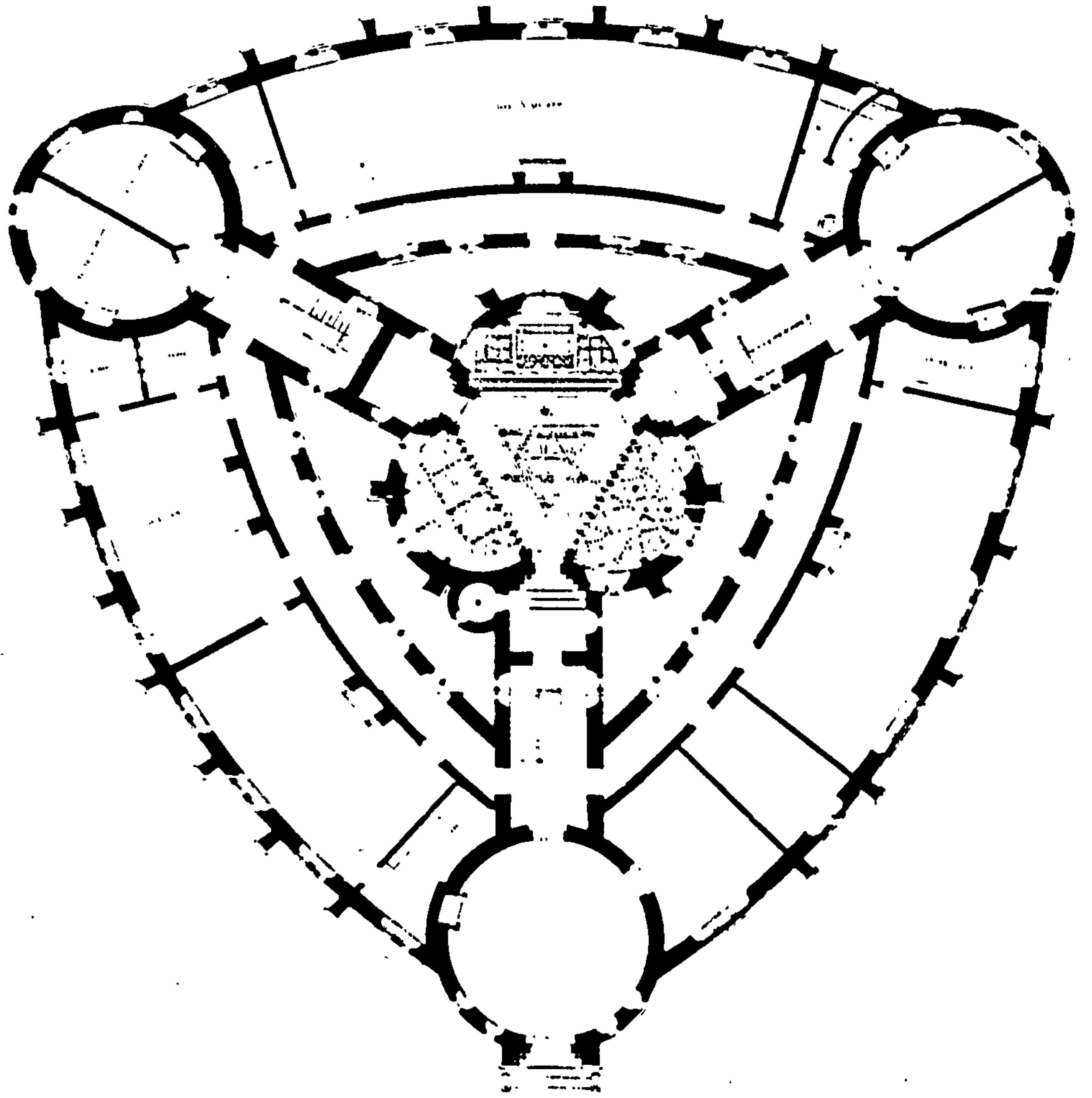
It is fascinating to note that in the "Introductory essay" to the Ecclesiologists' Durandus - as seen above - we have church buildings being described as possessing "Sacramentality" (meaning "esoterick signification") <Durandus; Neale and Webb, 1843/SCCO, p. xxv>, and this must surely be linked with Durandus's idea of the "material church" (the church building) which "typifieth the spiritual Church" (the community of the faithful) (Durandus I, 1, 2). But even here (as with modern ideas of religious architectural "sacramentality"; discussed below, subsections 2/10/7 and 4/1), the word is used loosely; there must always be inverted-commas, for no-one is seriously suggesting that church buildings are another Christian sacrament left out of the Medieval theologians' formulations.

One fascinating scheme - and such it was to remain - perhaps takes Gothic Revival notions of buildings symbolising ideas to their logical conclusion. A well-known Medieval diagram attempted to explain the doctrine of the Trinity by setting out three circles such that they described a triangle, linking them with lines, then placing a fourth circle in the middle, this being linked to the outer circles. "God" was inscribed in the centre, "Father", "Son" and "Holy Spirit" in the outer circles; the outer lines bore the words "Is Not", and the inner lines "Is", such that the three persons were not to be identified with one another, but all constituted God. In 1864, Charles Buckeridge produced a plan for Holy Trinity Convent, Oxford,

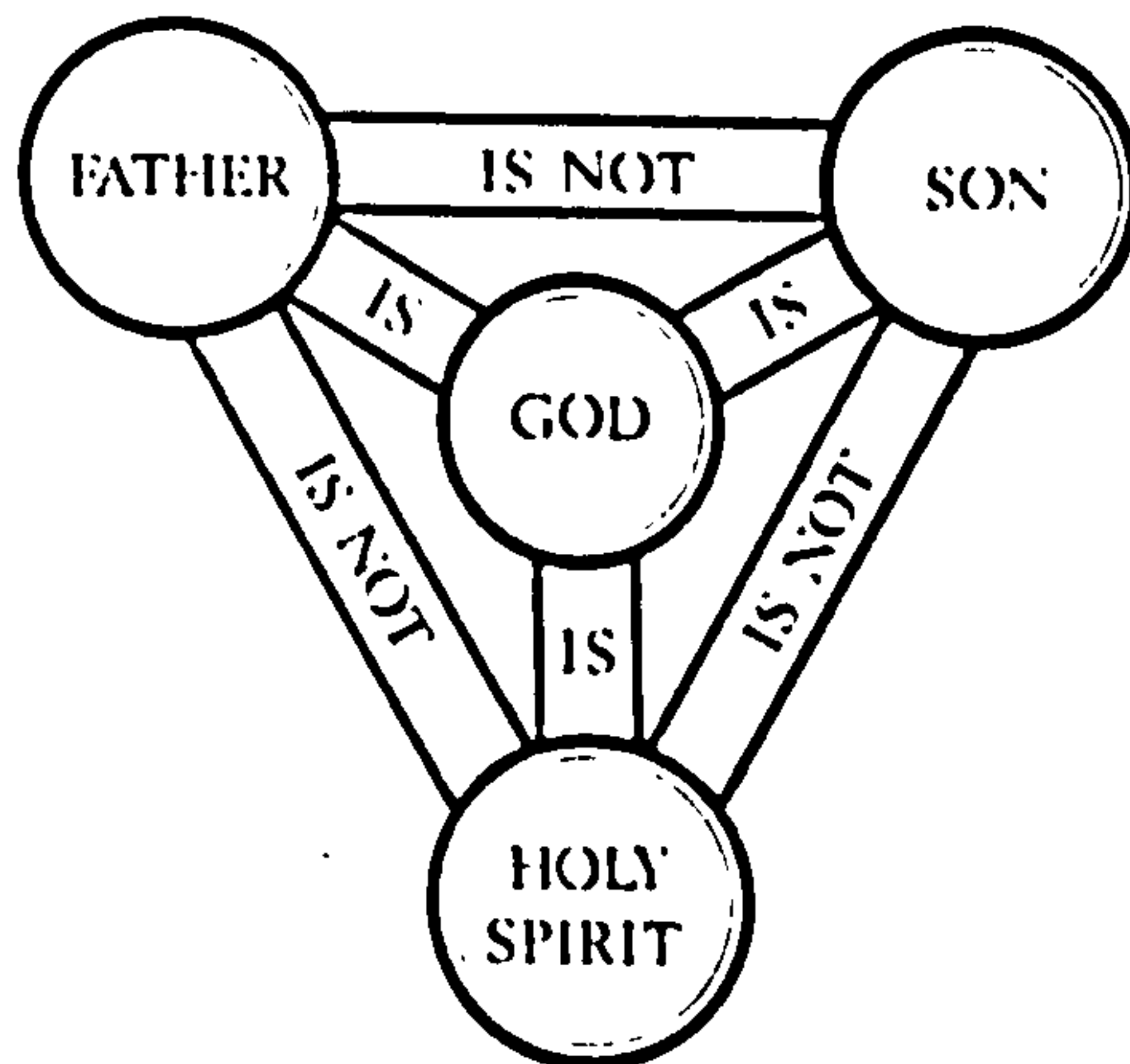
whose volumes exactly reproduced this diagram, in plan. The volume inside the ranges (trefoiled, in this case) was to have been the chapel <Colvin, 1983/UO, pp. 113-6>. Symbolically-planned buildings of this variety were not peculiar to the Gothic Revival: an even more discreet example of early Roman Catholic architectural statement, than the "Methodist" churches mentioned above, is found in the curious triangular lodge that Sir Thomas Tresham (a Recusant nobleman) built at Rushton, Northamptonshire, in 1595. The building incorporates many symbols of Catholicism (other than the Trinitarian reference of the plan), particularly, of the Latin mass <Clifton-Taylor, etc., 1975/SA, pp. 66-7>.

Beyond the confines of church building and the more specific concerns of the Gothic Revival, there was still considerable preoccupation, in the 19th century, with the idea of architecture as language, and as a bearer of meanings.

In the 18th century we saw how certain French theorists, and then English landscape theorists, saw architecture in one way or another as analogous to language. The "linguistic analogy" <Collins, 1965/CIMA, pp. 173-182> if anything became more significant in the 19th century, and one reason is that it became linked to the concern with which this section began, that of style(s). James Elmes's Lectures in architecture (1821) saw different races and cultures as having their own architecture, it being like the alphabet, shape, system, and rules of taste, of their language and literature. William



Edward Buckeridge's design for Holy Trinity Convent, Oxford (1864)



Medieval diagram representing the Trinity

Burges, in a talk given to the Architectural Association in 1867, referred to the quest for a new style, which, he considered, was like hoping for the emergence of a new language, and such things arose out of some "parent stock" - and similar ideas had been reported in the first issue of The Builder (1843). A perceptive writer in The Architectural Record (1894) saw architecture as being like the literature of nations (which was "an image of the mind and spirit of the nation"), yet the nations' architectures were increasingly losing their distinctiveness, and becoming more like fashions <Collins, 1965/CIMA, pp. 175-6> - a distinction between authentic style, and fashion, that anticipates Pevsner's thinking, of 1951, reported above <Pevsner, 1951/CC, p. 4>. Professor Donaldson's lecture of 1842 suggested that different styles of architecture were like different languages, each possessed of their own kinds of beauty and appropriateness <Collins, 1965/CIMA, p. 177> - an idea that found echo in a published letter (1950) of Giles Scott <Pevsner, 1951/CC, p. 4>. Another way in which architecture was seen as language, in the 19th century, is the analogous way in which it comes to be called "poetry" as opposed to the "prose" of simple building and engineering structures <Collins, 1965/CIMA, p. 180>.

A few writers went somewhat further in pursuing the implications of what it meant to suggest that architecture might be like language, namely, looking in detail at how architecture could be broken down into components like those of language, and in the previous section, we saw an 18th century

French precedent for such concerns (Germain Boffrand, 1745). In 1802, J. N. L. Durand suggested that: "the elements [of building, etc.] are to architecture what words are to speech, what notes are to music, and without a perfect knowledge of which it is impossible to proceed further" <Collins, 1965/CIMA, p. 179>, and Owen Jones and Charles Blanc used the word "grammar" when referring to their understandings of ornament and design <Collins, 1965/CIMA, p. 179>.

From the later-1850s to the 1870s, new forms of Gothic architecture came to dominate church building in Britain and much of the English-speaking world. Today, this is known as the "High Victorian" phase, and the architecture in question as "High Victorian Gothic". The foundations of this style include various features noted above, particularly, the interest in, and use of, such exotica as French, Italian, and Spanish Gothic; but the most formative influence behind the many developments was an acceptance of ideas of associationism. This, we have noted (subsection 2/6), goes back to 18th-century architectural theory, and its roots have little to do with church building. It is notable that Pugin, and the earliest ideas of the Ecclesiologists, were more concerned with style (ie. the significance and meaning of Medieval pointed architecture), than association, which may be defined as the understanding of kinds of architecture, based on ideas and meanings that lie behind it, or connections between things and ideas that it (mentally) sets up.

Various architectural theorists had developed the idea of the forms of a building displaying not only the activities that went on within, but also the character of the occupants. Ruskin, who followed Loudon (and, thus, Blondel) suggested that even the state of rot, ruin, and disfigurement that cottages may be in, had a certain beauty that spoke of the moral qualities of their inhabitants, as also did a builder's choice of materials <Hersey, G. L., 1972/HVG, p. 24>. In an early work, The poetry of architecture (1837) - the title of which displays an interest in the literary analogy - Ruskin related eighteen varieties of chimney to the character of their inhabitants, and illustrated window-surrounds fit for men of feeling, of imagination, and of intellect. This idea is known as "architecture parlante", and was developed by such architect-theorists as E. B. Lamb and William White, who emphasised the meaningful significance of roof structures and planes, the topology, or (external) forms, planes, and volumes, of a building. As late as 1881, the High Victorian Gothic church architect G. E. Street (1824-81) was expressing such ideas in his Royal Academy lectures <Hersey, G. L., 1972/HVG, pp. 23-42>.

In his later works, Ruskin developed architecture parlante (The stones of Venice, I, 1851, II and III, 1853), referring to the idea of reading a building, just as one would read Milton or Dante. Architecture was now seen as expressive of feelings, moral experience, and sentiment. Now, unlike with the 18th-century theorists, expression does not derive from beauty,

indeed, the finest Gothic, for Ruskin, might be characterised by "savageness, changefulness, naturalism, grotesqueness, rigidity, redundance" <Hersey, G. L., 1972/HVG, p. 31> (The stones of Venice, Vol. II, VI, 6-78). William White took the ability of buildings to affect emotion into the realm of architectural psychology, with his theory (1861) of colours psychologically manipulating human feeling in predictable ways: red excites the nerves, he considered, while white is essentially depressive, and so is bad for hospitals and prisons <Hersey, G. L., 1972/HVG, p. 40> <White, W., 1861/PP, 51>. (See also subsections 3/2/1 and 3/3/4).

An essential feature of associationist ideas is that of architecture as a repository for the experience of the past, or of a people's origins. This - seen in some of the theory of the 18th century - could be said to be present, no doubt in a modified form, in aspects of Postmodernism (subsections 2/9, 2/10). Such ideas are put very forcefully in the "Lamp of Memory", one of the Seven lamps of architecture (1849) of Ruskin's title; in this, some buildings are said to possess "the golden stain of time" <Hersey, G. L., 1972/HVG, p. 29>. Architecture as a repository for the past is perhaps seen at its most fantastic in the museum gateway illustrated in George Wightwick's Palace of architecture (1840) - a structure which employs many different styles from all ages and regions of architecture's history. The building is itself an architectural encyclopaedia, and the various parts discourse, not just with the viewer, but with one another <Hersey, G. L., 1972/HVG, pp.

Buildings were able to be engaged in "discourse" because of one vital ingredient in their nature (as it was seen, in this thinking): the creaturely, animal or human-like nature that buildings possessed. We have seen that 18th-century theorists saw buildings as having gender - thinking that echoes ancient ideas of the nature of the orders. In the 19th century, this was taken to the point that buildings were seen as not just evoking feelings, but almost, in their creatureliness, possessing them; references to "manly" buildings, or those with "feminine grace" continued, and overtly sexual metaphors were employed in (accounts of) the nature of buildings' discourse with one another. Even the idea of a possible new style of architecture might be put in these terms, with talk of existing forms "breeding" a new style.

Linked to architectural "creatureliness" are "organic" or "biological" associations of building forms. A product of such thinking which we have already met is the idea of styles emerging, growing to maturity, then ending in senility and death, like plants. At times, Ruskin's description of Gothic seems completely informed by his concern with biology and natural sciences (in this, he was echoing the fascination that the early-Victorian period had with these new disciplines, which were to have a great effect, of course, on religious belief and ideas). Ruskin had a great interest in geological forms and mineralogy, and recommended the imitation, in building, of the strata of rocks, as a means to make buildings

more organic. Whether or not the building preceded Ruskin's writings (as has been argued), the most important High Victorian church, Butterfield's All Saints, Margaret Street, London (designed 1849, consecrated 1859) makes much use of polychromatic stratification (as does his chapel, etc., for Keble College, Oxford (1867-83)), and All Saints' pulpit seems to present a museum-like exhibition of exotic stones. It is notable that, for Ruskin, architectural verticality expressed, not heavenly aspiration (as for Pugin), but "animal life" (the horizontality of southern Gothic he saw as displaying feelings of langour and ease).

Perhaps the ultimate product of High Victorian associationist "creatureliness" and "sexuality" is the - much debated - idea that the High Victorian Gothic style made conscious, or semi-conscious, use of aggressive, brutal forms that bore the undertones of sadomasochism and cruelty, the "beauty of ugliness". There is no need, here, to rehearse the arguments concerning the intentional ugliness, detected by John Summerson (in an essay published in 1945 and 1949 <Summerson, 1949/HM, pp. 159-176>) and later writers, in All Saints, Margaret Street, and other churches; but it is clear that certain Victorian architectural writers stressed architectural associations of pain and suffering. In the later, 1849, edition of her book, Mary Anne Schimmelpennick produced a "classification of deformities", seeing items of Gothic decoration as links with cruelty of one kind or another: rope mouldings as the means of martyrs' bondage, saw-tooth mouldings

as relics of devices by which victims were dismembered, beak heads and bird-sculptures as creatures which devoured the dead, and the many Gothic spikes as remnants of torture-instruments, etc. <Hersey, G. L., 1972/HVG, p. 54>.

Ruskin is said to have detected beauty in ugliness, since ugliness expressed the idea of redemption through suffering and purgation. Likewise - at a more practical level - Butterfield and others worried about designing pews that were too comfortable, suffering being necessary, even sacrifice (Ruskin's "Lamp of Sacrifice" stressed the need for nothing to be achievable with ease or comfort). The early portrayals of parts of All Saints (engravings published in The Builder) seem to stress the harshness and dismal atmosphere of the building. Hersey considers that the engraving of the baptistery, with its large font-cover about to descend on anyone unfortunate enough to be beneath, really does suggest "a chamber for bizarre tortures - the sanctum of some ecclesiastical pervert" <Hersey, G. L., 1972/HVG, p. 117>.

Unlike other forms of architectural meaning that we have examined, associationism, architecture parlante, and various 19th-century ideas of architectural nature and significance, operate in a way that is often subtle, and beneath the surface; indeed, with some of the ideas of architectural ugliness and sadomasochism, it is subliminal, almost, totally recovered for us only by later-20th-century critics (though, no doubt, some would say invented by these writers). Again, architectural meaning is seen to verge on the psychological effect of

buildings. In practical terms, the more extreme products of High Victorian Gothic church-building were few in number, the majority, or "mainstream", leading, via eclecticism, and the abandoning of stylistic prescriptionism - and the return to English Medieval precedent, in church building taste -to the evolving, developing, Gothic of the very late-19th-century/20th century period. Such Gothic, however, slowly became divested of specific concerns with meaning (continuing, of course, a residue of Gothic Revival ideas); and this process was concurrent with the rediscovery of ancient ideas of architectural symbolism, significance, and meaning, in the Byzantine Revival-Arts & Crafts-Art Nouveau church building movements.

In the later decades of the 19th century, church building developed a number of different Gothic styles, with increasing use being made of exotic influences and eclecticism. In England, this situation produced a reaction, a return to the Gothic of the English Middle Ages, which paved the way for the modern Gothic of the 20th century, which was a development of Late Gothic traditions. But in addition to this, the climate of the acceptability of eclecticism made possible the development of a revival of Byzantine architecture, which must be seen as related to the early-19th century interest in Early Christian, Romanesque, and even Moorish architectural forms. Seen as a whole, this "Rundbogenstil" (round-arched style, or rather styles) continued to have an influence, in certain areas of church building, right into the middle-decades of the 20th century.

The fin de siecle Byzantine movement, however, was bound up with ideas of architecture's symbolic nature, with design involving much more than style or visual association, namely a concern to express essential truths, through a building's basic forms and nature. The major source of such influence, which we have met already, was W. R. Lethaby (1857-1931), and his book Architecture mysticism and myth (1891, 1892, 1974 <Lethaby, 1891/AMM>). This, as described in detail in subsection 2/3, saw the origin of all building forms and features in the

reproduction or presentation, in physical construction, of ideas about the nature of the cosmos and external reality <Rubens, 1986/WRL, pp. 80-3>. Architecture mysticism and myth, and The church of Sancta Sophia Constantinople A study in Byzantine building (an account of the great archetype of Byzantine architecture, which Lethaby published with Harold Swainson in 1894 <Thomas, 1982/TGJ>) produced, unwittingly, sufficient interest in the ancient architecture of the Eastern Church to inspire many buildings and projects. Often, these buildings simply drew on a variety, or aspect, of Byzantine architecture (eg. J. F. Bentley's Westminster Cathedral, London, 1895-1903).

Ceilings and domes representing the sky, floors representing the sea - and a host of other symbolic pure forms - can be found in churches and many other types of building in the years c. 1890-1910. The covering of the altar with ciboria/baldachini - often with a sky-blue interior or soffit - became, once again, a common feature in many churches. At first, such canopies were mainly an aspect of Rundbogenstil or Byzantinising design (eg. at Holy Redeemer, Clerkenwell, London; J. D. Sedding and Henry Wilson, 1887-), but they then found their way into the modern Gothic tradition, such that Ninian Comper's "unity by inclusion" stylistic eclecticism made covering of the altar essential (a late example being that at St. Philip, Cosham, Portsmouth, 1937), and, in the mid-20th century, such features found a natural place in the architectural requirements of the Liturgical Movement. As

suggested, Lethaby's variety of symbolism was equally at home in other kinds of buildings, eg. country houses or offices, where squares (=cubes) and circles (=spheres) are often set side by side, and symbolic gateways may be surmounted by pairs of symbolic birds <Rubens, 1986/WRL, pp. 141-4>.

The Byzantine revival can in no way be separated from the Arts & Crafts movement; indeed, but for its earlier Rundbogenstil ancestry, fin de siecle Byzantine would be seen as merely one aspect of Arts & Crafts architecture and decoration. Lethaby's symbolism pervaded the work of the whole Arts & Crafts movement, hence its presence in much Arts & Crafts church building, most of which was ultimately Gothic in nature. St. Andrew, Roker, Sunderland (E. S. Prior, 1904-7), which has been called the "cathedral of the Arts & Crafts Movement" <Hawkes, 1985/SAR, p. 38> provides an example of how simply painting/decorating the ceiling above the sanctuary/altar - to resemble the sky/the heavens/creation - married the cosmological symbolism with a Gothic-derived building (ie. one without dome or ciborium); St. Andrews' ceiling painting (by MacDonald Gill) was not produced until 1927.

Lethaby's own church of All Saint's, Brockhampton, Herefordshire (1901-2) looks at first sight like a cosy country church, with its thatch and mouldering timber and stone - yet it is carefully contrived of symbolic forms - cube, pyramid, etc. - and everywhere there are features of primitive architecture (crude "arches" of two raking stones set together), which suggest the primeval origins of human building

<Blundell Jones, 1990/ASB>. Alastair Service considers that the Brockhampton church has "an extraordinary atmosphere of almost primeval sacredness about it, more reminiscent of Glastonbury or Avebury's prehistoric earthworks than of a purely Christian place of worship" <Service, 1977/EA, p. 118>; and this reaction is perhaps suggestive of the important fact that Lethaby's symbolism, and interest in esoteric lore, has to be seen as part of the much wider movement of symbolist/esoterist, and even occultist, concerns, which were sweeping through European architecture, art, literature and music, at this time. The paintings of Gustave Moreau, Odilon Redon, Gustav Klimt and Jan Toorop; the writings of the Symbolist poets and such novelists as J. K. Huysmans; and the graphic designs of Aubrey Beardsley, William Horton and others - all these artists, of the movements of Art Nouveau, Jugendstil, and the Secession - display a fascination with morbidity, monstrous distortion, sickness, and decadence; such qualities surely parallel the concerns for ugliness and cruelty detected (subsection 2/7) in areas of High Gothic architecture. Many of the themes found in the work of Beardsley, and the Glasgow School, descend from such Romantic poets as Keats, and Medievalism, Orientalism, Nordic and Celtic myth, are also frequently present. These movements owe much to the music-dramas of Richard Wagner, and ultimately, perhaps, to the writings of the Marquis de Sade. Fin de siecle occultism involved spiritualism, and the doctrines of theosophy (which, perhaps ironically, was later to produce the powerful Expressionist architecture of Rudolf Steiner).

While such ideas and artistic movements had little effect upon the mainstream of church-building in any country, such influence was far from non-existent. Otto Wagner's St. Leopold Am Steinhof, near Vienna (1905-7; decorations by 1913) is a Catholic church that is part of a sanatorium; and yet the sculptures, stained-glass and reliefs - mainly involving angels - are strongly reminiscent of the mystical fantasies of the Symbolists, and those seen in Decadent painting <Geretsegger and Peintner, 1979/OW, pp. 206-7, 212-32>. This is even more the case with Mary Watts' decorative work - mainly reliefs - at the Watts Memorial Chapel, Compton, Surrey (from 1896) <Beazley, 1976/WC>.

The work of Henry Wilson (1864-1934) involved powerful Byzantinism (eg. at St. Bartholomew, Brighton (1897-1908), which created, in physical form, the curious mythological world of some of Lethaby's drawings) and a host of other influences. His descriptive memorandum (1915), and other documents relating to his monument to Bishop Elphinstone, Aberdeen (finally erected in 1931) reveal a rather unorthodox approach to the Christian virtues, and a definite tendency towards esoteric symbolism <Thomas, 1992/EM, pp. 325-8>. A more thoroughly Christian use of symbolism, by Wilson, was the carving, in low relief, of the Medieval triangular Trinitarian diagram - described in the previous subsection - over the main porch of Holy Trinity, Sloane Street, London; this was another work begun by J. D. Sedding (1888-90), but completed by Wilson (early 1900s), who was responsible for most of the decoration.

It is notable that the more extreme fin de siecle esoteric imagery of C. R. Mackintosh (1868-1928) is absent in his church work, such as that at Queen's Cross church, Glasgow (1897-99); one suspects that the ghoulish humanoids of the "spook school" (as C. F. A. Voysey called the Glaswegians) were never to be considered for a work destined for the Church of Scotland.

The central problem with fin de siecle symbolism is that it is often intentionally arcane and obscure. It is hard to understand what so much of it may mean, or even if it has any specific meaning at all. Unfortunately, too little research has been done on the symbolism and meaning of Art Nouveau, and the other turn-of-the-century movements, or the sources of their visual imagery, and this may be because so far, they have largely been studied from the point of view of being precursors of the Modern Movement: the imagery of this kind of architecture and art tends to be contained in its ornament, decoration, and applied art-works, which - as such things are not a significant part of Modern Movement concerns - become overlooked in this assessment. However, there are exceptions to this. A recent book on Mackintosh, by David Brett (C R Mackintosh The poetics of workmanship, 1992) seeks to uncover the origins and meanings of the many curious decorative forms, revealing a connection between them and erotic, social, and occultist concerns - a long way from church architecture, but a first step in the explication of the powerful effect created by what might once have been dismissed as superficialities <Brett, 1992/CRMPW>. In an earlier article, Brett points out that

occultist (or at least Theosophist) doctrines were involved in the birth of the Modern Movement, affecting such people as Mondrian, Kandinsky, and Le Corbusier <Brett, 1988/EDS, pp. 11-12>.

One Art Nouveau church whose meanings are made specific by the client's original programme is St. Mary the Virgin, Great Warley, Essex (Charles Harrison Townsend (architect) and William Reynolds-Stephens (ironworker), 1902-4). This church was commissioned as a memorial to the brother of the patron, who had died in 1897; but the church was at first conceived of as a work which stressed the repose of death, and a spirit of peacefulness, rather than morbidity, and this is seen in the garden-of-rest design of the churchyard <Malton, 1976/ANE, p. 159>. Within, the building is decorated by a riot of flower-forms, which were carved, beaten, cast, embroidered, and painted; these are the flowers of Easter, of resurrection, and are meant to speak of new life. However, whether the casual visitor (even in 1904, when the churchyard's total lack of gloom was more revolutionary) would have realised this meaning, is at least open to doubt. And John Malton suggests that even within this exuberance of living forms, and the pervasive spirit of life, the fin de siecle ethos of decadence was present: the side-chapel screen is crowned with swirling forms of vegetation, in metal; but here Malton detects grimacing faces, which might appear like the ubiquitous patterns of wallpaper to a feverish child <Malton, 1976/ANE, p. 166>.

We cannot describe the early-20th century period without

some reference to the work of the very well known, if perhaps not very well understood, Catalan architect Antonio Gaudi (1852-1926). Gaudi, coming from the powerful ethos of Spanish Catholicism, was far removed from the esotericism noted above, or the intellectual agnosticism that was to follow it. His several very important ecclesiastical works have all had a strong effect on the architectural imagination of modern times, and yet the sources of his work (in Catalan Late Gothic <Beddall, 1975/GCG>), and its form and nature, bear little relation to anything done in the present century.

The forms and decoration of Gaudi's churches had many resonances and contained many references to aspects of the Catholic faith. Great use is made, particularly in the Sagrada Familia, his largest work (1883-1926, and later, by Gaudi's successors), of programmes of iconographical sculpture. Portions of the church are thus concerned with aspects of the faith and the persons/events involved in the Holy Family, to which the church is dedicated (Nativity portal, Passion portal, Rosary doorway, etc.). But within this traditionally-conceived religious architectural meaning-system, there is an abundance of forms and features which, one might suspect, seem to contain within themselves some deeper symbolism, in particular, Gaudi's use of biological and geomorphic shapes. At times, the seemingly-writhing stonework and ceramics emerge openly into creatures (dragons, turtles, doves); at others, they merely suggest the idea of things: masked beings of extra-terrestrial origin, strange humanoids, metamorphosed vegetables, molten

lava, and water. In Gaudi's work, the structural rationalism of Viollet le Duc (a strong influence) seems to have been transformed from steel members into living, or once-living, forms.

It may seem odd to close this section with a thoroughly non-ecclesiastical example of architectural meaning, and one from early in the period under consideration; however, much can be learned about the associational approach to architecture from the fascinating example of Kentish Town police station, London. This was designed by Richard Norman Shaw (1831-1912) in 1891, and built in 1894-6. On the street facade, the police station possessed two doors. One was of ordinary size for visitors, and was pleasantly designed, and welcoming - for those about their lawful business. The right-hand entrance was wider, allowed vehicular exit, and was designed in the form of a rusticated arch. This, says Andrew Saint, "reminded [the law-breaker] that the Metropolitan Police had teeth to show if they so required" <Saint, 1977/RNS, p. 341>, for a rusticated arch suggested the heavily-rusticated and gloomy prison (1765-7) by George Dance the younger - the infamous Newgate Prison, whose demolition was a few years in the future, in 1896. "No Londoner [writes Saint] of the 1890s, when Newgate Prison still stood, could mistake [the police station arch's] import" <Saint, 1977/RNS, p. 341>. Now, of course, Newgate has long gone, and if the power of the law has some architectural image it is of a different nature; and a rusticated arch suggests either (supposed) Georgian elegance, or the diversions of the Post-Modernists.

What we now refer to as the Modern Movement began as a whole series of architectural groups, factions, tendencies and lone voices - all dedicated to changing Western architectural culture in a radical way, in the years after the First World War. Above all, these groups and movements were very disparate in their ideas and objectives, a fact that becomes clear if we read the many manifestoes and propaganda writings, such as the collections produced by Ulrich Conrads (1970) <Conrads, 1970/PM>, and Tim Benton, Charlotte Benton, and Dennis Sharp (1975) <Benton, T, etc., 1977/FF>. Many propagandists aimed at complete revolution, the re-creation of architecture de novo (this was typical of the cultural climate in the post-imperial Germany of the socialist Weimar Republic); for others, the principles of the Secessionist movements (and of the Arts & Crafts movement, transported, as they had been, to central Europe) were still influential, as seen in the high regard for the value of art, and the artist's place in society (as was often expressed), and even in a concern with beauty (not that we should see this in 19th century understandings of the word). Another element that is found in the early Modern Movement, referred to in the previous section, is a concern with the esoteric, and even mystical, which is seen in the visionary ideas of Paul Scheerbart, and his plea for the widespread use of glass in building (1914). Scheerbart inspired Bruno Taut's

glass house (for the Cologne Werkbund exhibition, of the same year), which involved a multi-faceted egg-shaped glass dome, on an octagonal plan, producing a building with a mysterious interior, whose form and ambience suggests the sacral environment of one of W. R. Lethaby's drawings, or a work of the Byzantine Revival, say by Henry Wilson. The drawings of Taut, Hans Luckhardt, Wassili Luckhardt, and Hans Scharoun, provide further examples of this spirit <Whyte, 1985/AF>.

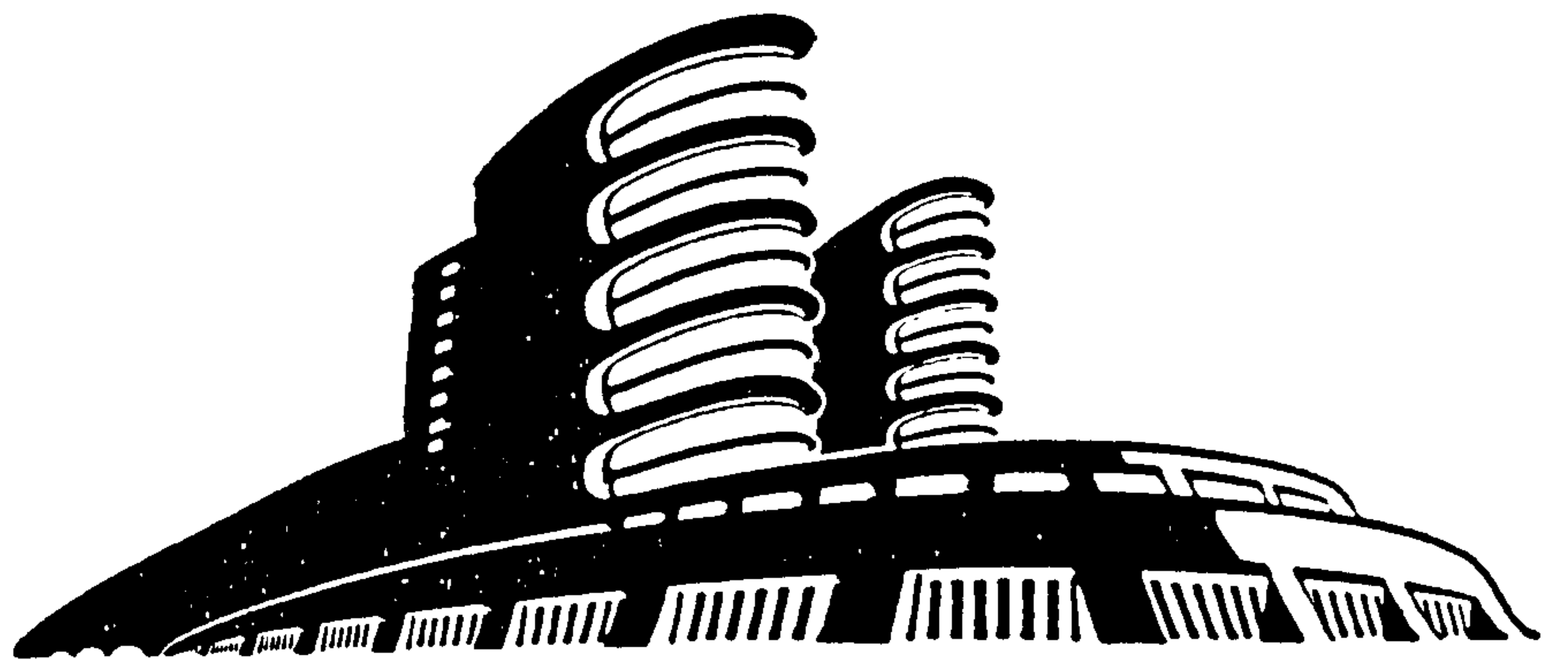
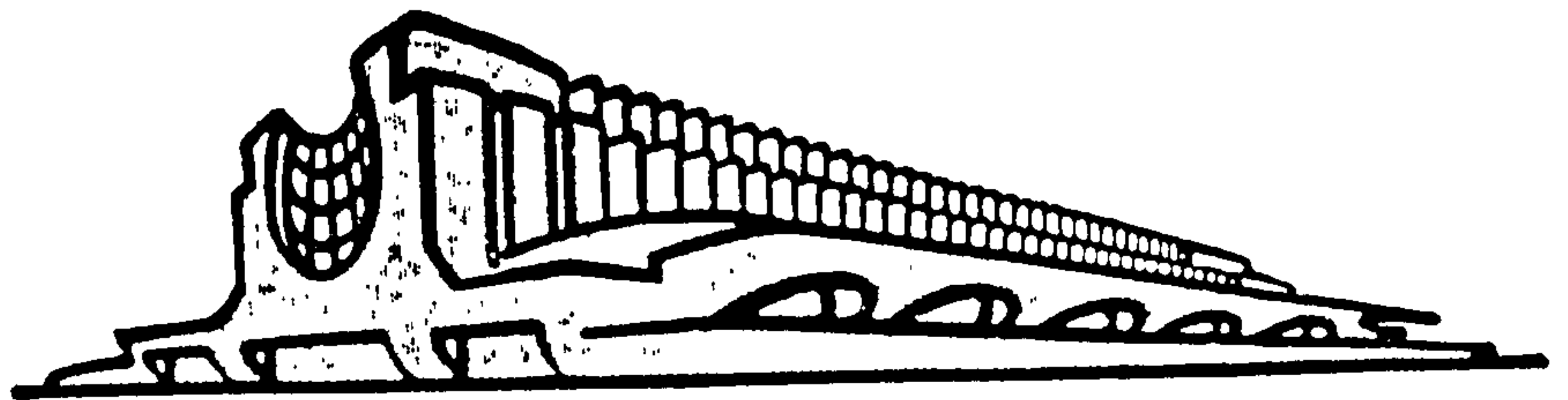
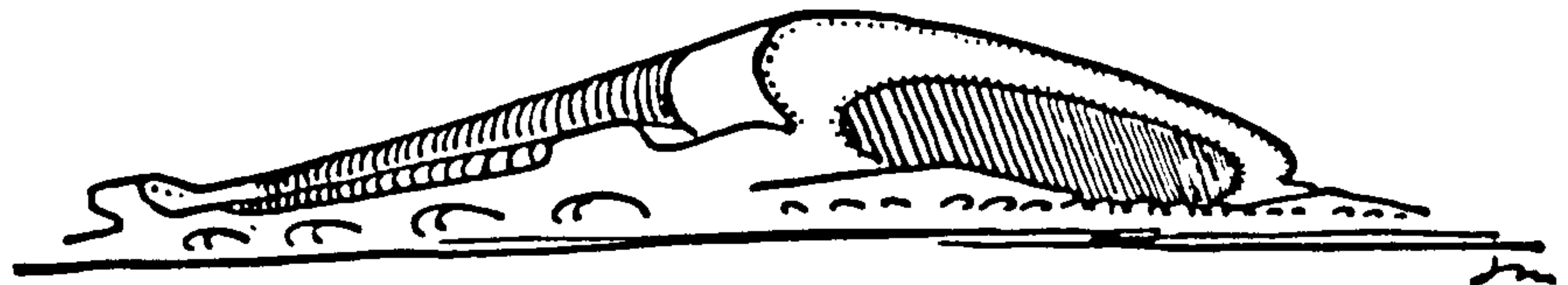
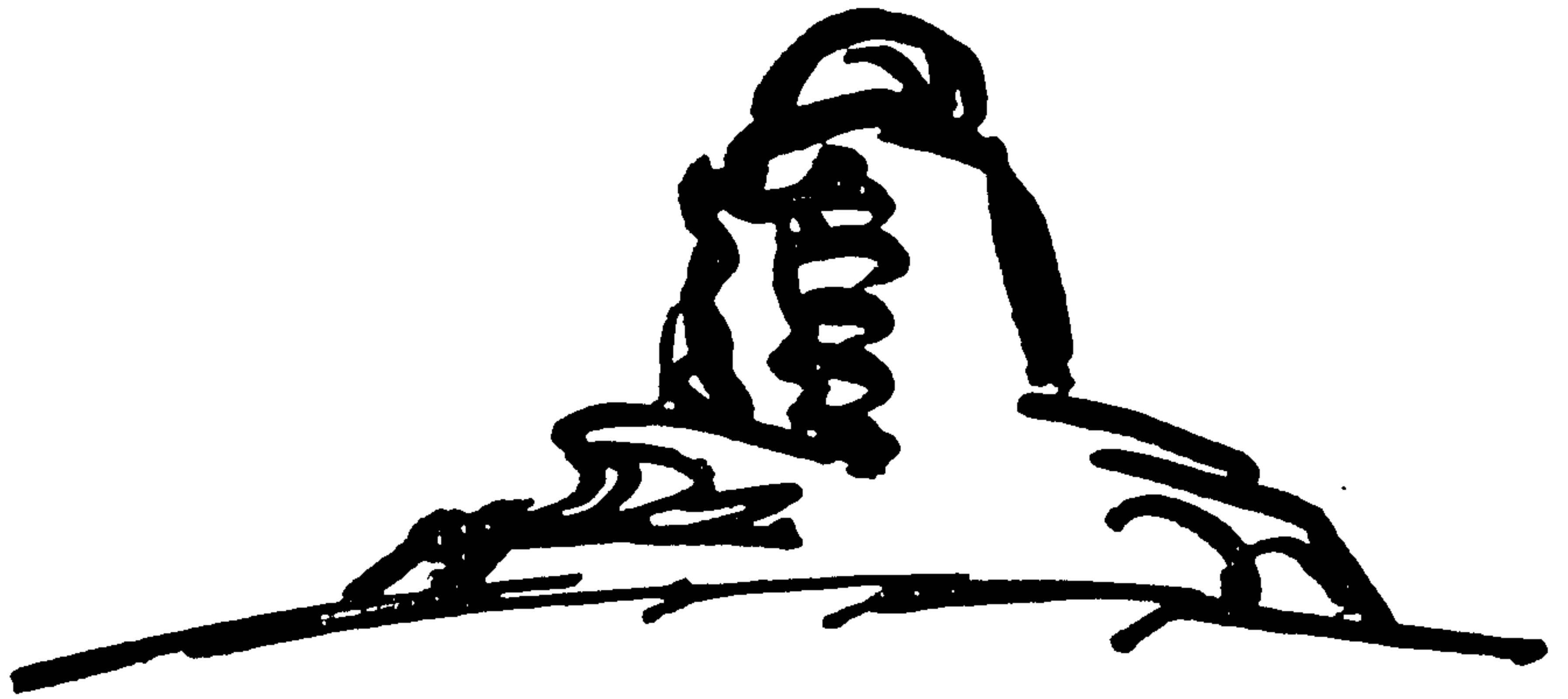
Despite the diversity of ideas and values, in the early years of the Modern Movement, one common factor, that recurs again and again in the manifestoes, is the rejection of architectural decoration and ornament, and with this the rejection of the styles and stylistic languages of the previous century; the rejection of ornament is perhaps seen at its most extreme in Adolf Loos's association of adornment with criminality, ideas expressed as early as 1908 <Conrads, 1970/PM, pp. 19-24>. This, in itself, had a radical effect on architecture's capacity to bear meaning, since so much of architectural language was - as we have seen - ultimately related to style or styles, or the components of styles; and the concerns of architectural symbolism, meaning, and reference - in the past - had been bound up with the traditional religion and culture of Europe, that is, Christianity. In this new cultural climate, the belief in science and politics - long nurtured - had come into its own, and the values and ideas of the past were often rejected totally. Many of the old empires and dynasties, which had been the sources of architectural

symbolism in previous centuries, also vanished. The creators of the new architecture thus had little reason to sustain or develop architectural meaning as we have looked at it in previous subsections. However, reference to religion is not totally absent in the early Modern Movement; Bruno Taut is one theorist (in his 1918 Programme for architecture) who refers to a "religious building" to be created at the centre of the ideal city (though of what kind, we are not told) <Conrads, 1970/PM, p. 42>; and such images as Lyonel Feininger's woodcut showing a three-spired church-like structure (it formed the frontispiece to Walter Gropius's 1919 programme for the Staatliches Bauhaus) <Conrads, 1970/PM, p. 51> show that the archetypal Gothic (or perhaps Romanesque) building still had power over the imaginations of some.

Naturally, we might suppose that the new movements would seek to find architectural meaning-systems related to the beliefs and ideas that upheld their new civilisation. This they did, but not in any way that can be seen as similar to the architectural languages of the past. Rather, they often sought to produce what might be called "images" of their new "gods". I do not mean "images" in any superficial post-1980s sense, but rather as deeply-felt visual statements designed more to impress - even shock - with their novelty and complete difference from anything that had gone before. Thus, the graphic visions of the Italian Futurist Sant' Elia (1913) provide images of the powerful new forces in modern life: mass transport, mechanisation, and the harnessing of electricity and

other kinds of energy. Right into the late-1930s, architects (eg. Giles Gilbert Scott) were to attempt to produce architectural imagery which celebrated - if not actually brought to mind - the enthralling power of electricity. A project that was no more than a monument to ideology was Vladimir Tatlin's tower (1919-20), designed to celebrate the Third Communist International. Dennis Sharp writes that: "it evokes through its interplay of spirals a new kind of architectural monumentalism, symbolic of the whole Constructivist movement [of which it was a product]" <Sharp, 1972/VH, p. 60> - but the forms in themselves, while being thoroughly Constructivist, have no specific connection with Communist ideology, and could easily be used to symbolise some other system of ideas.

One architect who used expressionist architectural forms was Erich Mendelsohn, and Arnold Whittick reproduces five sketches by Mendelsohn, which he calls symbolic (ie. of the buildings' functions) in form <Whittick, 1960/SSM, pp. 351-3>. The Einstein Tower or observatory, the first of these, was actually built (in Potsdam, in 1919-21). Whittick suggests that the curved windows, and tapering volume of the building, in themselves suggest an optical instrument - the whole form seeming "to symbolise its purpose of scientific investigation into the nature of the universe". The other sketches are described as: an aeroplane/zeppelin hangar; a railway terminus; a goods station; and an optical factory. It would be useful to know if the forms of the buildings, in these sketches, really



Erich Mendelsohn's sketches for: Railway terminus; Optical factory; Observatory; Goods station; Aeroplane/Zepplin hangar - but which is which?

did bring to mind such functions, at the time they were made (1914-19), and tempting to know if today's viewers, if asked, could accurately place the right caption (ie. building type) on the appropriate sketch.

A fascinating, if totally non-religious, example of architectural anthropomorphism, from the early Modern Movement period, is the 1919/20 drawing of a Popular Theatre for the Vondelpark, Amsterdam, by H. Th. Wijdeveld (not built). The drawing <reproduced: Vriend, 1970/AS, pl. 22> seems to show two outstretched legs, with the central section having a tall, narrow entrance suggesting the pudenda of a woman - labia, mons veneris, etc., and sure enough, in 1966, a vast recumbent-female-shaped sculpture/building was created (by Niki de Saint Phalle, for the Modern Museum of Stockholm), which visitors entered at the crotch, into a pleasure palace where they could enjoy food and cinema <Schuyt and Elffers, 1980/FA, p. 54>.

Despite the fact that the early-20th century cannot be regarded as a "great age of faith", many important churches were built in the decades between the world wars. In some cases (eg. Auguste Perret's Notre Dame du Raincy, 1922-3) the dramatic use of new materials tended to produce a church largely traditional in feeling (as well as liturgically); but the later churches (particularly those built in Germany) exploited the new materials to produce totally new forms, and, in terms of buildings whose form conveys meaning or association, we should need to say abstract in form, though often the result was very powerful in its effect; the churches

of Otto Bartning and Dominikus Bohm are examples of such work. A church architect who was wholly within the Modern Movement, and yet thoroughly committed to the needs of the Church, was Rudolf Schwarz (1897-1961). Schwarz's Vom bau der kirche (1938; published in English as The church incarnate, 1958 <Schwarz, 1958/CI>) is a long introspective study of the spatial relationships involved in the experience of faith and worship, and is thus a re-thinking, from first principles, of the nature of religious architecture. And Schwarz's work, literary and architectural, is thus fundamentally part of the Liturgical Movement (his Corpus Christi, Aachen (St. Fronleichnamskirche), 1926-30, is one of the most complete statements of inter-war Modern Movement ("International Style") architecture, in ecclesiastical form).

Peter Hammond says that this new spirit in liturgical study, thought, and practice, the Liturgical Movement, can be dated to Dom Lambert Beaudouin's talk of 1909 <Hammond, 1960/LA, p. 50>; it was for long a fundamentally Continental, Roman Catholic movement. If it can be said to have had any single approach to the nature and meaning of places of worship, it might be that such places are given meaning by the acts of worship, and people of faith, that they contain.

In the post-Second World War decades, the influences and principles of the Liturgical Movement became firmly established; but alongside the concerns with sacramental centrality and the gathering of the laity, etc., there are examples of churches where form, and religious ideas,

coincided. One church that might be mentioned is Frank Lloyd Wright's Unitarian Meeting House at Madison, Wisconsin, USA (1946-7). The structure of the hall is largely a single enveloping roof, and this form is often said to be suggestive of hands held together in prayer. A photograph exists of Wright with his own hands set in this position, showing that, in some sense or other, he himself related the form to the physical gesture; but which came first, the image or the roof-shape, is hard to resolve. Another account, by Wright, says that the building attempted to express unity, and this by way of the triangular shape that is found, not only in the roof planes, but throughout the building. But Brendan Gill points out that the praying hands "is a Gothic image, echoing Durer's famous drawing" (Unitarians having little connection with Medievalism), and the triangle is a symbol of the Trinity - the very dogma that Unitarians reject <Gill, 1987/FLW, p. 419>. And what of Wright's Greek Orthodox church, Milwaukee, Wisconsin (1956)? It resembles a spacecraft of some extra-terrestrial visitor - what does this form mean? The interior, however, is said to be Greek-cross shaped, in plan, suggesting ancient Byzantine forms.

The church which perhaps best encapsulates the idea of "symbol", for many of the war-time generation, is Basil Spence's Coventry Cathedral, Warwickshire (competition, 1951; consecration, 1962). Spence's building, unlike the many other competition entries, was conceived as a symbol of the destruction of war (as in his decision to retain the ruins of

the former parish-church cathedral, beside his new building), of reconciliation, and of the spirit of post-war reconstruction. Much has been written about this church, and in the early 1960s, and even into present times, the building has been interpreted and presented in terms of its symbolism of the tragic human experience of war. So much emphasis was laid on this, perhaps, that one of the early, and very perceptive, critics complained of reading far too much (in Spence's Phoenix at Coventry, 1962) about "what the building means and not enough of what is going to be done in it" (Basil Minchin <Minchin, 1963/CB, pp. 25-6>); this, of course, was the liturgical (indeed, Liturgical Movement) criticism of Coventry Cathedral, of which there was much. However - without wishing to add to, or seemingly attempt to revise, what I have written about this building elsewhere <Thomas, 1987/CC, pp. 161-190> - it must also be noted that Spence's first actual vision (a dream under the influence of anaesthetic) did involve him seeing a future building in which the altar was a powerful focus of attention; and seeing light - much was made, at Coventry, of the symbolism of light, which is connected with the large glass "west" wall. This example certainly highlights the way in which, in the post-1950 church-building situation, "meaning" and liturgical functioning, can be seen as rival claimants on the principles and motives of church designers.

A church of inestimable influence is Le Corbusier's Notre Dame du Haut, Ronchamp, France (1950-54). A pilgrimage church on the top of a hill, with dark internal spaces lit by coloured

glass, deeply-set in thick walls, the building has been described as having powerful qualities and effects that might be described as sacral or numinous (see subsection 3/3/4). Its siting has been compared with pagan hill-top sanctuaries. Thus Ronchamp often seems as much the opposite of what the Liturgical Movement advocated, as it is (with its hollow walls and abundance of sculptural flourishes) of that which Modern Movement purists believed in. Where have we read of such responses to a building's qualities, and its locus, before? In accounts of Lethaby's All Saints, Brockhampton (subsection 2/8). However, the sculptural form of the building, referred to, has made the church a prime target for that tendency to compare buildings with the visual parallels (or is it parodies?) that come to mind (nuns' headgear, ducks, boats, etc.) - and this is perhaps a straining after meaning/association-at-any-price, that is occasionally a feature of the Post-Modern analysis of modern architecture - which must be examined below (subsection 2/10/1, etc.).

The coincidence of Liturgical Movement-liturgical functionalism (if it may be called that), and buildings as symbols of the ideas/movement that produced them, is perhaps seen in its most complete form in Frederick Gibberd's Liverpool Metropolitan Cathedral (consecrated 1967). This building is generally thought to have taken the centrality of the altar to a logical conclusion that is positively counter-productive, and it seems to have been designed thus out of a desire to be visually and physically a symbol of centrality, so that the

requirements of the Liturgical Movement have been replaced by a symbol of the requirements of the Liturgical Movement, in a way that is (liturgically) self-defeating. The altar (large, stone, fixed to the floor) has been described as a splendid symbol of the nature of God (unchanging, permanent, in the centre of the cosmos, and of the human world), but obstructive and useless for anything else (it causes people to look, from each side, at one another). The roof rises above the altar to a steel and glass crown - perhaps intended, and now regarded, as a symbol of Christ's kingship. A very similar feature "crowns" another circular cathedral (the inspirational relationship with Liverpool being often disputed), that at Brasilia, Brazil, designed (1950s) by Oscar Niemeyer and Joachim Cardozo. Edward Norman points out how the circular church has moved from its origins (in martyria), to being a symbol of crowns (of thorns, of kingship) in recent times <Norman, 1990/HG, p. 294>; this is arguably the end-point, also, for domical churches, if we ignore recent churches which draw on Renaissance sources (eg. that at Milton Keynes (1991) <Smith and Muncaster, 1992/CCC>.

In subsection 2/7, account was given of a scheme by Charles Buckeridge for Holy Trinity Convent, Oxford (1864), in which the plan was to have been based on a Medieval diagrammatic symbol of the Trinity <Colvin, 1983/UO, pp. 113-6>. The 1970s/80s give an interesting, if abstruse, example of a building whose form has also been connected with the Trinity. Architect Raymond Hall, in the years 1974-77 and 1981-7, created a complex series of rooms and spaces in the shell of

the Georgian church of St. Matthew, Brixton, London (1822), which became known as "St. Matthew's Meeting Place", and then "Brixton Village". In an account published in 1988, Ray Hall described how the Trinity might be symbolised as a series of three overlapping circles (which coincide to produce a central shape, common to all three), and how a fourth circle might be placed around the whole. "Cast into three dimensions [writes Hall], the diagram becomes a series of spheres surrounding a central sphere where all meet. Spatially, this produces a central meeting space, enveloped by other spaces, and is realised at St. Matthew's by a volume two storeys in height, within which is set a brick drum containing lift and helical staircase" <Hall, 1988/BV, p 41>. But, as suggested, if the series of spaces have a centre, a heart, it is the staircase, not something spiritually significant (like, in the Oxford convent, the chapel) and no-one knowing the building would ever discern any connection between religious ideas, or theology, and the building, if they had not read Hall's article - though to be fair to him, Hall probably saw the idea as generative, rather than as an integral part of the experience of the building.

The architecture known as Post-Modernism had its origins in the late-1960s, but is really an aspect of the cultural climate of the 1970s and early-1980s. Robert Venturi's Complexity and contradiction in architecture was first produced by the Museum of Modern Art, New York, in 1966, but is more widely known (and

had its greatest impact) from the second edition of 1977 <Venturi, 1977/CC>. In this seminal work, Venturi produced a "gentle manifesto" of "nonstraightforward architecture", espousing "elements which are hybrid rather than "pure", compromising rather than "clean" ... ambiguous rather than "articulated" ...". He was against architects being "intimidated by the puritanically moral language of orthodox modern architecture", and, like one of his earlier sources of inspiration, Edwin Lutyens (1869-1944), sought "contradictory levels of meaning and use" in architecture <Venturi, 1977/CC, p. 16>.

Post-Modernism, and the rejection of Modernism - or the desire to go beyond Modernism - was bound up with the renewed interest in, and re-valuation of, historic architecture, the desire to preserve older buildings, and to halt "comprehensive redevelopment". This - the conservation movement - was given much impetus by such events as European Architectural Heritage Year (1975), and, in the ecclesiastical scene, in Britain, the Change & Decay exhibition and book <Binney and Burman, 1977/CD>. The growing tendency of architects to create "complexity and contradiction" in their work, and relate to the culture and presence of older architecture ("contextualism") was encouraged by the rediscovery of such architects as C. R. Mackintosh, Antonio Gaudi, and, referred to above, Edwin Lutyens - and a key event was the Venice Biennale "Presence of the Past" exhibition, held in 1980.

In 1977, Charles Jencks (co-founder, if not sole-founder, as

has been claimed, of Post-Modernism) published the first of many editions of The language of Post-Modern architecture. Post-Modernism is important to our present study - whether we like or loathe its architectural products - because one of the principal causes of its emergence was a concern with architecture and language/meaning, or rather, architecture as language. In the title of Jencks' book language is the key word <Jencks, 1981/LPMA>.

As early as the mid-1960s, various academics were beginning to apply the theories of semiology - the theory of signs - or semiotics, as it might more accurately be called, to architecture. This theoretical approach arose in the field of linguistic studies, and was then adopted by literary studies, and thence by cultural studies in general. A document perhaps even more significant in the rise of PM than Venturi's book, was Meaning in architecture (1969), edited by Jencks and George Baird <Jencks and Baird, 1969/MIA>. A selection of essays with margin-comments by other contributors to the book, some parts of it are exceedingly abstruse (intentionally?) and complex. The first group of essays concern architecture and semiology by Charles Jencks, Geoffrey Broadbent, Gillo Dorfles and Francois Choay. Later parts of the book involve another important strand in recent architectural theory, the anthropological approach (see also Appendix Z), with three essays on the habitat of the Dogon people, who live in west Africa. A fascinating later article is Jencks's "History as myth".

Charles Jencks claimed that the Modern Movement was not

concerned in any way with meaning and symbolism, but purely with form emerging from function (that is, "pure" function, the programmatic requirements of a building) and technology; Modern Movement architects had "dumped their cultural luggage and travelled light on the fast-moving train of technology" - to adapt a phrase in "History as myth" <Jencks and Baird, 1969/ MIA, p. 228>. Whether this was true or not, Post-Modernism (and there is much discussion as to the distinction between: postmodernism, post-modernism, post-Modernism, Postmodernism, and Post-Modernism [Jencks prefers the last of these, and my decision to use it in no way reflects an acceptance of his arguments, or even an understanding of the distinction]) must be seen, beyond all the crazy Disney hotels shaped like ducks, and preposterous over-sized chromium keystones (or reproduction of specific historical architectures), as a serious attempt to understand, and utilise in our designing, architecture's capacity to bear meaning, to produce a meaningful architecture.

This present work is also a product of the concern with architecture-as-language, originated, or revived by, the climate of Post-Modernist concerns, in that it examines church architecture - at least in part - from the point of view of church architecture and meaning. Earlier theses which studied church architecture (say, 1960s) inevitably concerned themselves with architecture and the liturgy, with design as related to the Liturgical Movement (ie., a broadly functional concern); those of, say, the 1970s, might have also introduced questions concerning conservation, contextualism, and re-use

(radical re-ordering). But in the mid- and late-1970s, it was noticeable that there had been no attempt to carry out a study of church architecture in terms of semiology and/or meaning (though most other areas of architecture had received this kind of attention); and hence this inevitable, if belated, involvement with "linguistic" concerns. For this, as well as other reasons, the actual Post-Modern, and other, theories of meaning will be removed from this subsection to the concluding discussion of religious architectural meaning (2/10).

But what of possible Post-Modern church architecture? Charles Jencks defines Post-Modernism as double coding, which means "the combination of Modern techniques with something else (usually traditional building) in order for architecture to communicate with the public and a concerned minority, usually other architects" <Jencks, 1986/WIPM, p. 14>. Post-Modernist works often present irony by way of suggesting earlier styles of building (or other building types) by "quotations" - putting a thing "in quotation marks", or marking-out the introduction of some feature not normally found - rather than simply putting it there, as in historical-reproduction architecture. Jencks explains this irony, or double-coding, by recounting an illustration provided by the Italian semiologist Umberto Eco: that a man, wishing to avoid "false innocence" and cliché might say to a woman, not "I love you madly!", but "I love you madly - as Barbara Cartland would say" <Jencks, 1986/WIPM, p. 18>.

One (anthropomorphic) concern of Jencks etc. is seeing, or designing, faces, in buildings; this may not be entirely a

modern tendency, as, if we were to use a George Hersey-like etymological approach, it might be possible to discover some ancient anthropomorphic thinking in the origin of words like "facade" and "facciata", etc., and if we look to the garden-architecture of 16th century Italy, we find the conscious, explicit construction of a face-building, in the form of a large, grimacing face/mouth entrance to a grotto in the Bomarzo, or Sacro Bosco, garden of Count Vicino Orsini <Schuyt and Elffers, 1980/FA, pp. 216-7>. Cartoonist Louis Hellman's Archi-tetes (where a well-known architect's physiognomy is suggested in a sketch of a building in the same architect's style), is a witty comment on this concern with face-like buildings.

One work where symbolism and meaning pervade every area (literally and metaphorically) in the design, is the house created by Charles Jencks for his own use, a work in which, with the help of other Post-Modernist architect friends, he rebuilt and refashioned an 1840s terraced house in west London (late 1970s-early 1980s) to be a "thematic house" <Jencks, 1985/TSA>. The rooms, and external features, of the house are all designed physically to embody symbolism, much of it of a "cosmic, historical and everyday" nature. It is thus fascinating to note that this chronological survey of architectural meaning ends, or nearly ends, with the same cosmological architecture with which it began. Rooms representing the seasons (spring room, winter room) have appropriate motifs and symbols, drawn from art history or myth.

There is a "foursquare bedroom" which reminds us of a chapter-title of Lethaby's Architecture mysticism and myth, and the decoration-motif (four squares, etc.) is suggestive of Mackintosh. The cosmic room (an oval) represents both ancient cosmological ideas and also modern theories of the earth's origin; there is even a "cosmic loo and bathroom". Externally, chimney-like "columns" are pierced with a fan-shaped void (representing the sun) and a "stagger" (zigzag) motif (said to be an Egyptian/Greek symbol of the earth). Time and again in the designs (and in Jencks's analyses of historic and recent architecture) there are to be found face-like forms; this is, therefore, a recent version of the ancient, and not only ancient, process of architectural anthropomorphism. Jencks's symbolism, however, has no reference to, or connection with, religious ideas of any kind, as he states: "even in a secular age, there are still objective standards worthy of symbolic expression in architecture, art and ornament" <Jencks, 1985/TSA, p. 89>.

There are various modern churches that could be described as Post-Modern. At one level, we have pure reproduction, or the conscious use of the architecture of another era (eg. Quinlan Terry's Brentwood Cathedral (later 1980s)) - but this would not strictly qualify as Post-Modern by Jencks's definition, since Terry admits of no irony (which he sees as cynical) or double-coding; it is not "quotation" of 18th century Classical architecture, nor is it truly traditional architecture (in the sense that it does not develop a tradition (ie. an ongoing 20th

century tradition of Classicism), in an authentic development of the style) <Derrick, 1989/CCStHB> <Walker, 1992/BCAT> <Walker, 1992/BCPS>.

Nearer to the development of a tradition, or sources found in a tradition, are Francis Roberts's churches of St. Mary Magdalen, Penwortham, Preston, Lancashire (complete 1987) <CB, 1988/StMMP> and St. Christopher, Blackpool (1989-) <Roberts, 1991/StCC> <Middleton, 1991/92/StCC>, the tradition in question being Arts & Crafts Gothic; or again, Ware Associates' St. Rene, Chicago (late-1980s), developing the American Rundbogenstil of such as H. H. Richardson <Smith, M. J. P., 1989/90/StRPC>; but even with these examples, there is an absence of double coding or any multiplicity of sources/identities. A more straightforward (crude?) use of features from traditional church architecture (Gothic-like gables) is found at St. Joseph's, Devonport, Devon (Christopher P. Bilson, c. 1985) <CB, 1986/StJCD>. A more complex and thoroughly PM building is St. Jude, Peterborough (Matthew, Robotham & Quinn, c. 1985) <CB, 1985/StJP>, where a new building has been created out of the remains of an earlier one - fragments from the old church are re-used in the new - and the main volume and tower recall themes in the work of Wright, Gaudi and early-20th century Gothic. But do these buildings really contain any symbolism or meaning-systems, outside the obvious suggestion of a building "looking like a church" because of the suggestion, to differing degrees, of Gothic?

One building that I have suggested (in a short review,

published in 1988) is filled with layers of meaning and reference, is a church built, not post-1977, but in 1937, a church which we have already met: Comper's St. Philip, Cosham <Thomas, 1988/NC>. The structure, or shell, of the building, is in a very "minimalist" brick Gothic. Some might dismiss this as Gothic "watered down" by the meanness and economy of the 20th century; but its architect is more noted for exuberance and display. In fact, it is consciously restrained and measured, and its style suggests at once a Gothic appropriate to its times (the 1930s, with its cubic brick and concrete boxes), but also - with its detailing - the Gothic Survival of the late-17th/early-18th century period; or perhaps there is a hint of "Gothick", the early non-academic gentleman's garden Gothic of the mid- to later-18th century, with its Rococo roots. Inside, the plaster "vault" is a simple groining of arcuated sections, devoid of rib-work, or any articulation or display; it has that "folded plate" or origami-like quality which we associate with eastern European Late Gothic. There is some window tracery, but ogival forms predominate (suggestive, again, of Tudor Gothic, or 18th century work). At the core of the building, however, is a gilded ciborium over free-standing altar; it is crowned by a typical Comper figure of Christ, whose form is Late Antique, and almost overtly pagan. This subtle blend of stylistic languages tells the perceptive worshipper that here is a church whose origin is in the Late Gothic/16th century world, yet much the product of the late-17th/early-18th century period, and it is not completely foreign to its own time; yet at the core is

the ancient Christianity of the Roman period, primitive and innocent, yet heir to a rich civilisation. And this was surely Comper's vision of the Church of England; ancient and Catholic, yet English and Reformed; the church is Gothic without possessing a shred of Medievalism, Revivalism, or other-worldly nostalgia - neither does it hint (in its use of Classicism) at the dropping-out into the pseudo-Ultramontane exoticism that was found in the contemporary "Baroque" Anglo-Catholic work of Martin Travers and others.

Recently, the pendulum has swung back to produce a re-evaluation of the Modern Movement, and a developing use of "hi-tech" (ie. the explicit presence, or outward display, of the use of avant-garde structural engineering and technological gadgetry). It may be too early to evaluate the influence of this on church design. A revival of interest in the work of early-Modern Movement church-builders (such as Rudolf Schwarz <Wormell, 1988/RS> <Gough, 1988/CCA>, Otto Bartning <Wormell, 1988/CA >, and Dom Hans van der Laan <Van der Laan, 1983/AS> <Padovan, 1986/NI> <Padovan, 1986/MC> <Padovan, 1986/TP>) may one day be seen as having prepared the way for a religious architectural neo-Modernism.

One significant British building is the chapel of Fitzwilliam College, Cambridge (c. 1991) by Richard MacCormac. The building is devoid of references ("coding") to earlier traditions and forms - it is not Post-Modern - but is considered to have reference and meaning contained within its

form and nature, perhaps in a way not unlike that detected at St. Matthew's Meeting Place, Brixton. The image in question is that of a boat or ship - the ark of Noah, or the ark of salvation, "the idea of passage and of protection, an archaic metaphor which recurs at conscious and unconscious levels - the "nave" of a church, the "night sea journey" of myth and of religious and human experience ... In the Christian symbolism of Medieval manuscripts, the ship signifies the way of salvation" (Richard MacCormac) <Stungo, 1993/AT, p. 21>. The image of buildings as ship-like is one that recurs often in the history of architectural ideas. The great Gothic cathedrals are often ship-like (and the timber roofs are often similar to contemporary naval architecture, upturned); to what extent Medieval churches were thought of as "arks" is, of course, uncertain. Alec Clifton-Taylor, in his book on English cathedrals, quotes W. H. Auden's lines: "Cathedrals,/Luxury liners laden with souls,/Holding to the East their hulls of stone" <Clifton-Taylor, 1967/CE, p. 23>. At Fitzwilliam College, the chapel does not have a ship-like form, but is said to have a floor like a raft above the crypt, with liner-like handrails, and other ship-like details <Stungo, 1993/AT, p. 21>; the roof might be considered sail-like.

2/10 THE MEANING OF CHURCH ARCHITECTURAL MEANING

2/10/1 THE SEMIOTIC ANALYSIS

" ... all buildings symbolise or at least "carry" meaning ... There is no getting away from it; just as Chartres Cathedral carries meaning, so does the meanest garden shed." - <Broadbent, 1977/PMG, pp. 474-5>.

This discussion of church architecture and meaning began with the idea that, for some writers (here Broadbent, but elsewhere, Charles Jencks) all architecture has to bear meaning, and there could not, despite all efforts, be an architecture that was devoid of reference, symbol, sign, metaphor or association - meaning, by one category or another (which we must soon examine). Broadbent, Jencks, Baird, and others of their movement, took the view that since architecture (as they considered it) had to bear meaning, it made sense to understand how this came about, and to use such knowledge to design "better buildings" - and better (Broadbent's word) meant, in effect, those which made a virtue of meaning, and used the faculty of architectural meaning to make buildings more humane and acceptable to building users as a whole, than those which had preceded them.

These writers analysed architectural meaning by importing, popularising, and developing ideas about meaning (referred to

in subsection 2/9), that had been current on the Continent since the 1950s, and some of those Continental studies had been concerned to apply their theories to architecture. This was the approach known as "semiology", which had developed in Italy and France from the discipline of linguistics. Ferdinand de Saussure, a Swiss philosopher, gave lectures in the years 1906-1911 which were later published as Course in general linguistics (English translation: 1959, etc.); an American philosopher, C. S. Peirce, produced a vast body of writings in the years 1860-1908, which, only published in the mid-20th century, treated many of the same areas: both analysed meaning, and produced a "theory of signs", or theory of the ways in which meaning is conveyed. The academics of the 1950s and 1960s, who developed this work, include R. Barthes, Umberto Eco (the Italian semiologist-Medievalist-novelist), Gillo Dorfles, Noam Chomsky, and L. Hjelmslev. A very influential work - whose title introduces the question that underlies all the other questions posed by these studies - was a, somewhat earlier, product of the English philosophical tradition, The meaning of meaning, by C. K. Ogden and I. A. Richards (1923; 10th ed., 1966, etc.). One product of the study of signs and language was a concern with the structure or grammar of meaning systems, which developed into the theory known as structuralism.

Needless to say, the early semiologists, and also the later ones, disagree about the details of the way in which meaning operates, or rather, later accounts tend to describe more stages in the process. Saussure (whose analyses often tended to

divide things into pairs, or dualities) referred to the signifier (which was the word, or symbol, or sign - in architecture, we may say form, as with some of the cosmological-model forms, referred to in subsection 2/3, etc. - and the signified, or the thought, content, or concept. These two were bound together by a social contract, in linguistics, the convention by which some people agree, say, to call a Christian worship-building a "church" - despite the fact that this word has no universal necessary connection with that concept, as shown by the fact that people in other parts of the world use completely different words, in their sign-convention system, or language. So the transmission of meaning or signification depends on the attachment of a convention of usage to an entity that of itself bears no inherent identity with, or origin from, the thing in question (as linguistics scholars now believe).

For Ogden and Richards, however, this simple process of the signifier and signified, was inadequate to describe the complex nature of language and meaning. They added a third, the referent, which is the actual thing or substance that is the subject of the communication (and the thought/concept); "signifier" they called symbol, "signified" - reference or thought. Thus was established a triangle in which there is an interrelation between the word, symbol or sign; the concept, thought, or idea; and the concrete entity involved, the thing or referent. This, the "semiological triangle", was further complicated by Hjelmslev, who sought (work of 1953) to divide the concept linking the symbol and the referent.

Charles Morris, a follower of Pierce, divided "semiotic" (as Pierce called semiology, and others have since) into three areas: "pragmatic" (the origins, uses, and effects (on their maker/user) of signs); "semantic" (the ways in which signs bear or contain meaning); and "syntactic" (the way in which signs are put together in a systematic whole, like words in sentences (syntax) in natural language; (Saussure, in one of his most influential dualities, distinguished between the "langue" (language) and "parole" (speech) of semantic communication). The "pragmatic", in the context of architecture, has been considered (by Broadbent) to be the whole way in which buildings and the built environment affect people "as a sign system" <Broadbent, 1977/PMG, p. 476>, and not only in a visual way, but also in terms of effects on the senses (eg. temperature, and also "kinaesthetics" (movement, equilibrium, etc.)). However, it is hard to see how all these environmental factors (other than appearance and physical nature, and physical effect) are sign systems; Broadbent refers to the effects on Ruskin's aesthetic judgement, of the cold of Salisbury Cathedral, and its consequences for his health; but it still seems less of a semantic factor, and Broadbent is thus right, perhaps, to proceed to describe the valuable work, in this area, of the architectural psychologists <Broadbent, 1977/PMG, p. 476>. No doubt all of this is correctly located in the "pragmatic", but is it part of architectural meaning, in the strict sense? If it is, then what is not? The "psychology of architecture" will thus concern us later, in the

consideration of the experience of religious architecture (subsection 3/2).

The "semantic", in Morris's analysis, is the relation of signifier and signified, described above, and Broadbent points out how this distinction was anticipated by none other than Vitruvius <Broadbent, 1977/PMG, p. 478>. Syntactic, or syntax, immediately brings to mind the analysis of sentences into their grammatical constituents, and linguistic scholars have studied the common structures which lie beneath such combinations of elements. Noam Chomsky (Syntactic structures, 1957) considered that people possessed an innate capacity to create sentences, which had its origin in basic human understandings of reality called "deep structures", and these lay beneath the "surface structure" of natural language. The deep structure is brought to the surface - into language - by means of "generative rules" (which, in English, take the form of the syntax of nouns, verbs, etc.), and such sentences can be changed around (in meaning and reference) by "transformational rules".

How do deep structures, linguistic syntax, and the semiological system of signifier, signified and referent, actually apply to architecture? This leads us to the further question of the extent to which the architectural semiologists' analyses, summarised above, aid our understanding of the nature of church architectural meaning. On the first matter, there is Broadbent's description of an architectural equivalent of the "deep structures" that involves four factors which lie beneath

our original need for buildings, and that affects our production of them <Broadbent, Bunt and Jencks, 1980/SSA, pp. 119-168, especially p. 137> - again, this is not greatly, it seems, concerned with meaning; but on the matter of linguistic syntax, a hint was perhaps given above, in the suggestion that building forms - the overall reality and shape of built structures - might be an equivalent of signifier, symbol, or word.

Or, we could analyse the components of a historical architectural style, and see each feature as a unit in the make-up of the whole, a "word" (parole) fitting into the "grammar" or overall structure (langue) of a "language". If we take Classical architecture, features like dentils and guttae form parts of orders, which are the handful of essential "grammars" of the language - or sub-languages - and writers such as Broadbent and Jencks seem on occasion to be making just such a suggestion. But was not this, devoid of its 20th century semiological terminology, just the position described, in subsections 2/6 and 2/7, as being present in the thinking of 18th- and 19th-century architectural theorists? In this understanding, the symbolic feature, part of a building, or even whole building, within a particular "stylistic language" - if we consider that styles can be languages - forms just one part of the threefold relationship, namely the symbol or signifier.

In fact, Geoffrey Broadbent went further, to suggest that a building could operate as all three parts of the triangle, not

just as the word-like thing, and operate as all three at the same time. Thus, a building like the Parthenon could exist as a referent (an object standing on the Acropolis), as signified/reference/thought (as an idea of a structure, as communicated by words and photographs) or as a signifier/symbol (of "all that was best in Greek democracy" <Broadbent, 1977/PMG, p. 478>). In the last of these, Broadbent seems to be using symbol in its higher form of being related to beliefs, etc., rather than simply the medium for some piece of information, as a word can be; and if the Parthenon is a symbol (signifier) of democracy, it is not signifying the signified, as the triangle seems to demand - the Parthenon is not serving as a sign of the idea of the Parthenon - but rather, some other thing, not in the triangle (democracy). But this possible objection does not remove the usefulness of the idea that a building, or part of a building, may operate in several ways, or have several roles, in the complex matter of meaning.

In the semiologists' analysis of language, it was noted that words bear meaning because of social contracts or conventions, whereby everyone agrees to use a particular sound to refer to the same thing. But is there any convention regarding buildings' (or parts of buildings') meaning? Broadbent states <1977/PMG, p. 478> that with a few exceptions there is not, and he calls this "a fundamental difference between architecture and language" (and elsewhere goes so far as to say that "Any attempt to describe architecture in linguistic terms can only be achieved at the level of analogy or, more particularly, of

metaphor" (Broadbent's emphases) <Broadbent, Bunt and Jencks, 1980/SSA, p. 126>. However, if we consider some of the complex relationships between: form / practice/belief, and: form / word / practice/belief, seen in George Hersey's analysis of Greek architecture (subsection 2/4), it might be possible to show that the meaning of words/forms were subject, in that particular society, to conventions of meaning, the loss of which it was Hersey's purpose to change. And what are the "exceptions" Broadbent has in mind? One instance of form and meaning that he and Jencks refer to is one which has occupied us in detailed discussions earlier, namely, Gothic churches and Christianity: "The Gothic cathedral obviously is a symbol of the Christian faith" <Broadbent, 1977/PMG, p. 180> (and Jencks calls Durandus a "13th century semiologist" <Jencks and Baird, ed., 1969/MIA, p. 16>, and refers to his interpretations of the word "Jerusalem"). However, can this convention obviously hold, always, in all places: even in the English-speaking world, Christianity, even non-Roman Catholic, may not be given the sign of a Gothic building, as I once noted when being given a leaflet by Jehovah's Witnesses, referring to the world's major religions. Islam was clearly indicated by a mosque-like sketch, Christianity by an Americanised Palladian church: in the American mind, the post-Gibbs Classical preaching-church is a more powerful image than a building with spires and points. Gothic and Christian has raised questions before, in this work, and surely will again.

This account of architectural semiology is, of course, a

very basic summary, and leaves out a mass of alternative ideas and details. By its own admission, semiology is a jargon-ridden enterprise, which piles complexity upon complexity, and delights in abstruse diagrams, the importation of ideas and concepts from other disciplines, and rapid shifts back and forth from the densely abstract to very obvious observations about the facts of architecture and building.

Architectural semiology is theory which far from presenting a mode of architectural meaning, for the use of architects, merely attempts to explain the operation of architecture's meaning as it has always existed (hence the claim that buildings must and will bear meaning). Thus, at a practical level, it principally served to raise the awareness of architects to the meanings which are present, or identifiable, in buildings. This tendency is particularly noticeable, I fancy, in the development of Charles Jencks's work, since he proceeded from the densely academic/theoretical/analytical work of his early semiological essays, to a series of descriptive books, filled with pictures, in which the appearance of buildings was analysed into meanings which he considered they bore. Revealing the meanings present in a whole variety of buildings became a kind of game, sometimes for several players (as with Cesar Pelli's Pacific Design Center building, Los Angeles (1976), which a class-full of Californian architecture students "saw as" a whole variety of building-like and non-building-like features <Jencks, 1981/LPMA, p. 50, 51>). The result of this was the Post-Modern tendency to see all kinds of

bizarre metaphors and/or associations in buildings, and even - as a final product - the labelling of buildings as "wigwams", "1930s radio sets", etc.

Jencks - for whom meaning seems a more complex matter in the early theory, less so later on - suggested replacing the referent/thing part of the triangle with "actual function or object's properties", so that the ultimate concern of meaning becomes the way a building operates, how it affects people, etc. <Broadbent, Bunt and Jencks, SSA/1981, p. 81>, and this seems to me to connect with the semiologist's concern to present a critique of the architecture of their time (the late 1960s/early 1970s), a factor noted in the work of Jencks, Broadbent, etc. - and this returns us to the concern of meaning as being related to building function and building use, as in Broadbent's "pragmatic", etc.

2/10/2 ORDERS OF MEANING

When considering architecture and meaning, it soon becomes clear - as the above subsections will surely have shown - that very different orders of things are present: specific ideas and exact meanings, or, what might be called meaning-in-general or "meaningfulness". In most of the historical resume, presented above, I have been carefully referring simply to the first of these, to specific ideas - such as religious beliefs - which

are actually embodied in physical matter; meaning in general or "meaningfulness" has been somewhat avoided. The semiologists' analysis of meaning contains both of these (a large portion of it being of the second category, eg. Broadbent's reference to the Parthenon, just quoted), and much mixed together.

The reason for the semiologists' concern with meaningfulness seems to be part of this architectural critique, referred to in the final paragraph of subsection 2/10/1, which was surely one of their prime motivations, the desire to criticise bogusly-functional architecture (eg. Broadbent's reference to the Sheffield University Arts Tower <Broadbent, Bunt and Jencks, 1980/SSA, p. 123>, etc.) and replace it with an architecture humanised, in effect, by meaningfulness (along with better building services).

These concerns are not ours, but in introducing the concept of meaning-in-general/meaningfulness, the idea of architectural meaning is vastly expanded (but much generalised) from the kind of "hard" meaning (as it may be called) that has been our concern in the last hundred pages or so. It is necessary to introduce meaningfulness - and broaden the scope of the enquiry - as we attempt to approach an analysis of architectural meaning as it may apply to church architecture. This "soft" area of meaning forms a necessary part of the whole, and gains in significance as we relate meaning to experience (or rather, look at the two as one). Meaning in general must not be thought, however, as some kind of lesser concern in these analyses, or in the capacity of architecture to bear meaning,

since the "powerful symbols" that certain buildings are often popularly described as being, or containing, are often of this vague, general - but extremely potent - variety. Such meaning is often very loosely attached to a kind or style of architecture (eg. Post-Modern office blocks and docklands developments, with the 1980s era of Thatcherism and the enterprise culture - ideas and kinds of architecture that have no essential connection), but the link between the two, in many people's minds, is very strong. To contrast "hard" and "soft" analyses of architectural meaning, in history, it is only necessary to look at Christian Norberg-Schulz's Meaning in western architecture (1975) <Norberg-Schulz, 1975/MWA> - and there are various books of a similar approach - and compare its account of, say, meaning in Greek and Roman architecture, with that of George Hersey and John Onians (subsection 2/4).

A concept, or two concepts, in semiological theory, which perhaps account for these two orders of meaning ("hard" and "soft" meaning) are connotation and denotation. Again, Eco, Jencks, and the others disagree over the exact interpretation and use of these; but Broadbent recommends the "much simpler" definition of Mario Pei (simpler than Eco's): denotation is the basic meaning of a sign (word, form) for those who use it [ie. by convention]; connotation is "The special shades of meaning ... that a form has for the individual user (the evil connotations of profits for labour leaders ...)" <Broadbent, 1977/PMG, p. 479>. And it is noticeable that Broadbent's use of "meaning" (in inverted commas; ie. not literally meaning) in

his essay in Meaning in architecture, is considered, in a margin note by Jencks, to involve connotational meaning - meaning in general <Jencks and Baird, ed., 1969/MIA, p. 54>. A key idea, in previous subsections, has been that of meaning by association; is not "connotation" simply another way of describing associationism? - indeed, in the same margin note <Jencks and Baird, ed., 1969/MIA, pp. 54, 55> Jencks suggests as much - and is not the "powerful symbolism", but very general and loosely-associated meaning (referred to in the previous paragraph, Post-Modern commercial buildings with "Yuppie Culture"), simply meaning by association? If architectural history had evolved differently, the age of enterprise and the free-market culture could easily have been enshrined in a sub-Mies van der Rohe minimalism.

An important concept in architectural thought, that can be seen in terms of non-specific meaning, is that which might be called the "social meaning" of architecture, or rather, the relationship of buildings, in their planning and ordering, with roles and relationships, activities, and structures of society and human organisation; this is considered in Appendix Z.

2/10/3 SYMBOL, SIGN, INDEX AND ICON - THE ELEMENTS OF MEANING

Our chronological account of meaning, it was noted, has been concerned with "hard" or specific meanings; and yet different

kinds of meaning (methods and means, and resulting communications) have been mixed in together. At the beginning, I eschewed the approach whereby analysis of meaning, and distinctions between kinds of meaning were made first, prior to a survey of how meaning was bound up with religious architecture, in practice, in history. I referred, very generally and vaguely, to "architecture as language", architecture as bearing meaning, to architectural symbolism, signs, and emblems. The time has now come to look at the specific nature of the different kinds-of-things involved.

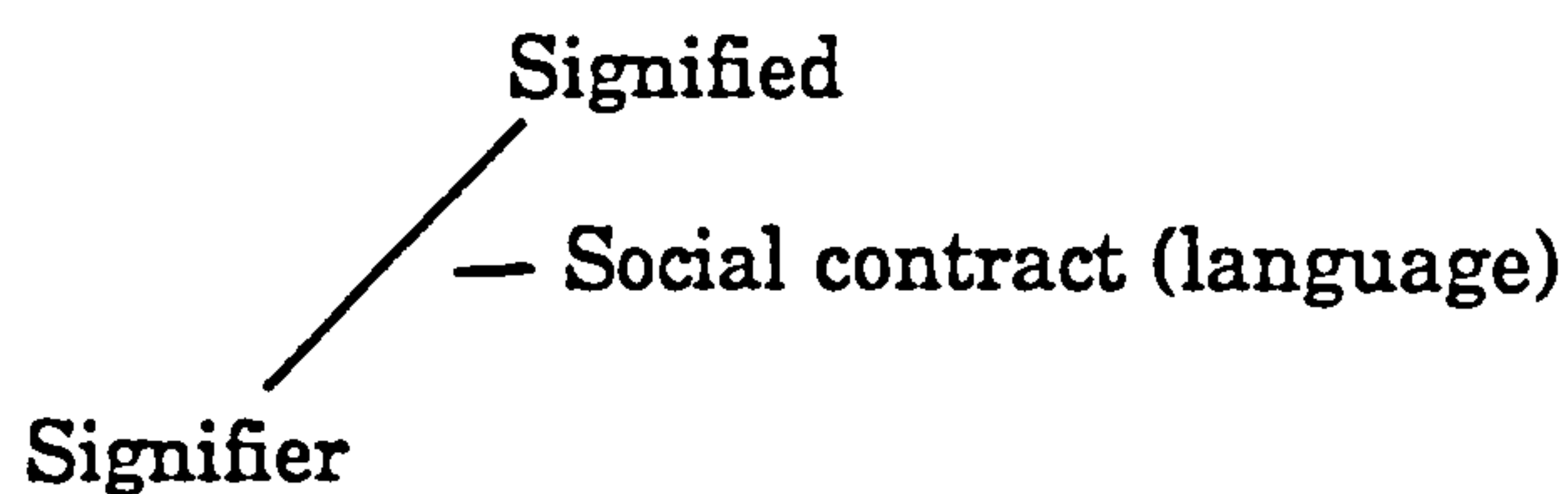
What forms of meaning, or vehicles - elements - of meaning are there, that can be involved in specifically architectural meaning? In "Sign language", a brief account of architectural semiology published in 1976, David Dunster described three kinds of signifier, or word-like thing: icons indices, and signs <Dunster, 1976/SL, p. 667>. The icon is a signifier that looks like the thing signified, as a portrait looks like the person painted, or the cantilevered boxes projecting from Stirling & Gowan's Leicester University Engineering building look like the lecture auditoria they in fact are (icon, of course, is a complex word with several other meanings, including the technical nature of the Orthodox painted icon, and the programme-of-signs called "iconography"; "icon" derives from the Greek for "image"). The index stands in a causal relationship between the signifier and the signified, as smoke is an index of fire, or a door - though itself solid - of a hole in a wall (all these examples are Dunster's). The sign is

more word-like in that it exists by human convention alone. (It may be noted that, for Dunster, the icon, index and sign all exist somewhat between signifier and signified, the signifier having an existence prior to the actual icon, index or sign that links it to the signified.)

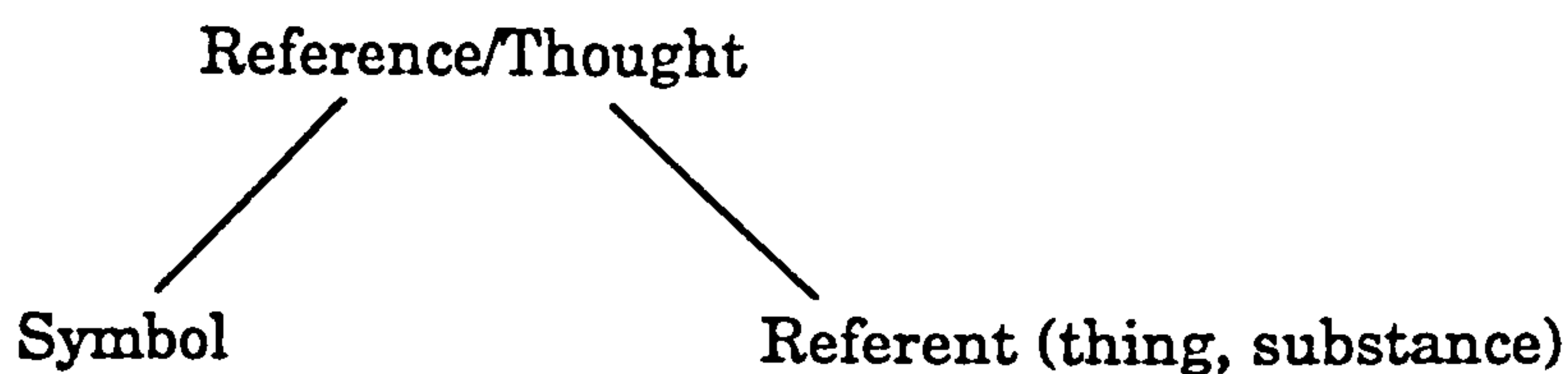
But Dunster's article does not mention that ubiquitous meaning-like-thing, the symbol. Is it a fourth signifier, which does not feature in his analysis, or does it exist in some generic relation to the others, in that some or all of icon, index and sign may be kinds of symbol (as in the analysis of Ogden and Richards)? Or is symbol a specific form of one or more of these? An account of meaning by philosopher John Hospers (An introduction to philosophical analysis, 1967) chooses <Hospers, 1967/IPA, pp. 2-3, 4-5> "sign" as a generic term, and divides signs into natural signs (clouds are signs of rain; this owes nothing to humans) and conventional signs, eg. words. These are the equivalent of Dunster's index and sign, respectively. Symbols Hospers sees as: 1) signs which suggest a concept, in which the thing represents an idea or 2) as in the more complex area of artistic, moral, and psychological symbolism - which he refrains from defining. Using the categories described above, it may be the case that Hospers' first and second understandings of symbol are denotative, and the third connotative, the third involving symbols that communicate many related ideas and complexities of thought; the first and second simply communicate the idea of a specific thing, whether literal or conceptual/abstract.

Theories of the Operation of Signs/Meaning/Language

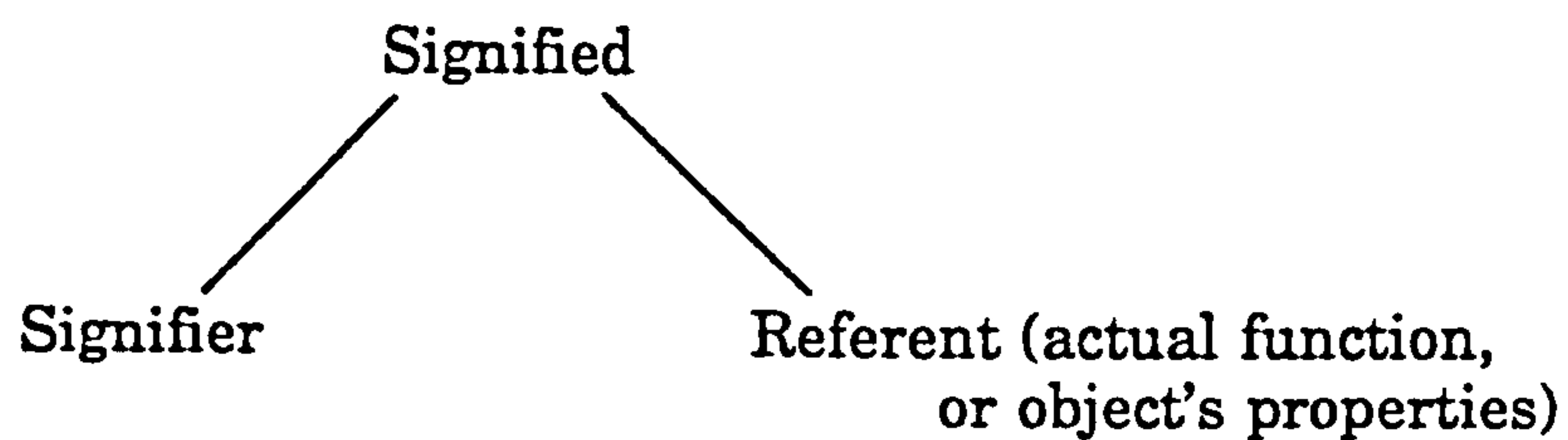
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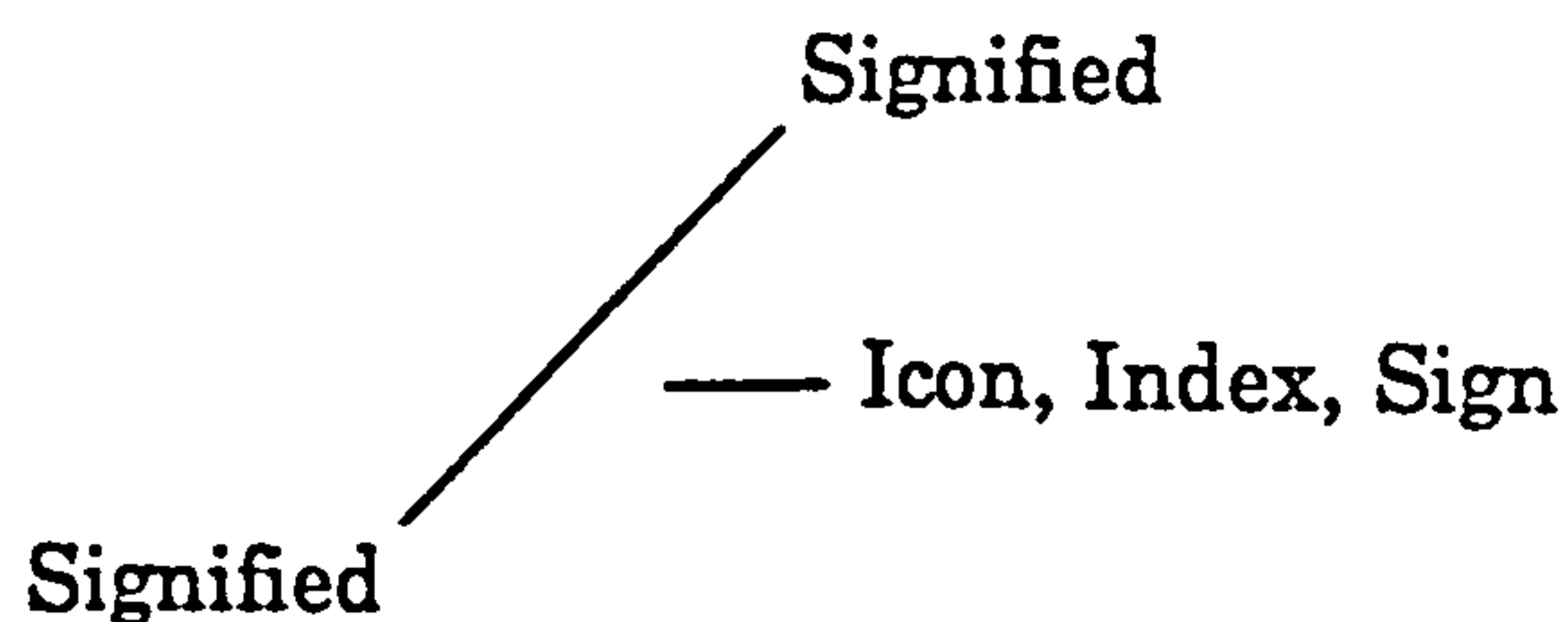
OGDEN & RICHARDS



JENCKS



DUNSTER



Psychological approaches to the concept of symbol are also wide-ranging and complex in their understanding of what symbols may involve. One definition refers to them as "any stimulus ... which elicits a response originally attached to another stimulus [ie. association?] ... In psychoanalysis, symbolization is the unconscious process in which emotional values are displaced from one object to another ..." <Harriman, 1972/DP, p. 317>. The associational nature of symbols (and the generalised nature of the area of meaning they may be concerned with) is seen in another definition, from the world of psychological studies, namely: "What we call a symbol is a term, a name, or even a picture that may be familiar in daily life, yet that possesses specific connotations and obvious meaning. It implies something vague, unknown, or hidden from us. Many Cretan monuments, for instance, are marked with the design of the double adze. This is an object that we know, but we do not know its symbolic implications" (C. G. Jung) <Jung, 1964/MHS, p. 20>.

It might be possible to find other schemes of defining, or employing, sign, symbol, index and icon - or to conflate the schemes of Dunster and Hospers, outlined above. By this last approach, we might choose to use sign to signify that which is conveyed by convention (conventional sign); index to signify that in which a result seems to be caused by a natural process; icon as a signifier which looks like, resembles, suggests, or presents, a thing; and symbol as that which brings to mind a concept, be it a simple thing, or a set of ideas, beliefs, or

principles. The last, symbol, may, as suggested above, be split into its denotative and connotative, or specific and general, forms.

These elements of meaning can be applied to the experience of meaning such as that which we saw in the chronological survey, which formed the majority of section 2.

2/10/4 MEANING IN HISTORY SUMMARISED

The chronological resume of ideas, examples, and instances of architectural meaning, produced a wealth of different ways and circumstances in which such thinking has operated, in church architecture, over the centuries. Different ages produced new ideas, and different versions of the old. Certain themes seem to have predominated, including: architectural anthropomorphology (ideas connecting buildings with the body/bodies); cosmological meaning (buildings connected with ideas about the cosmos, and its nature); numerology (buildings related to ideas by means of numbers); architecture as being somehow like language; and proportion (buildings related to ideas - perhaps including ideas about the cosmos - by means of proportions and proportions/numbers). Some of these - perhaps all in some cases - are interrelated or conflated. Another recurrent theme, as already suggested in this section, is association/ism. Among the recurrent objectives and concerns of

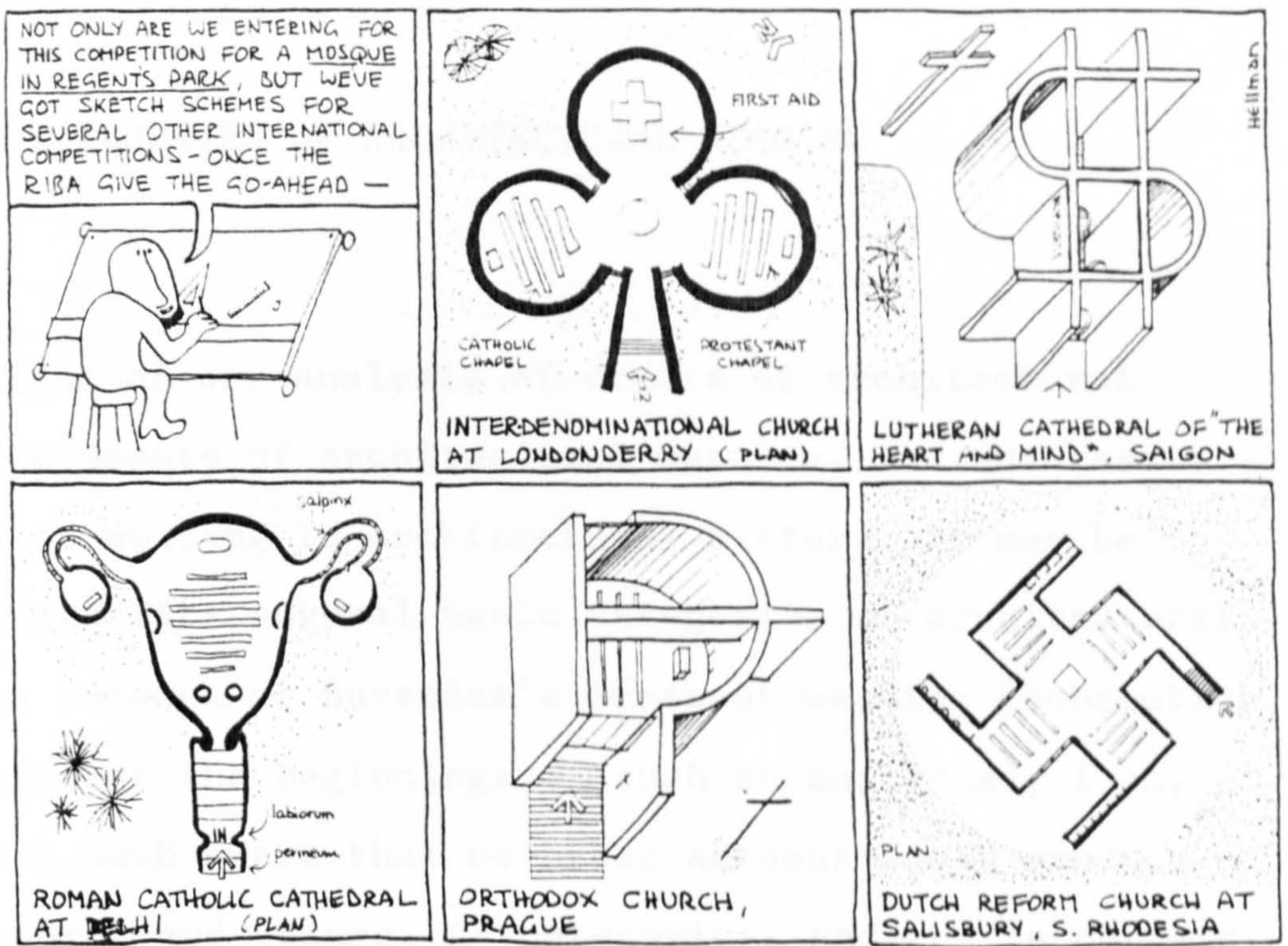
architectural meaning, there was the tendency to use, or understand, architecture as related to nations and races, rulers and dynasties.

To see the way in which one of these has been transformed, with its passage through centuries and cultures, it is only necessary to look at anthropomorphism. Firstly we had Greek columns like armies, Vitruvian columns/orders proportioned like humans. Then there were churches that were body-like - in plan - in that the Church was Christ's "body" on earth, and bodies-in-plan of a different variety in Ledoux's Oikema. Then there were the qualities of gender, creatureliness, human moral characteristics, and ugliness and cruelty, seen in buildings; the unpleasant-seeming 1966 Stockholm building like a giant female body, and finally, the modern (or rather, Post-Modern) tendency to "see" faces in buildings, or consciously design them.

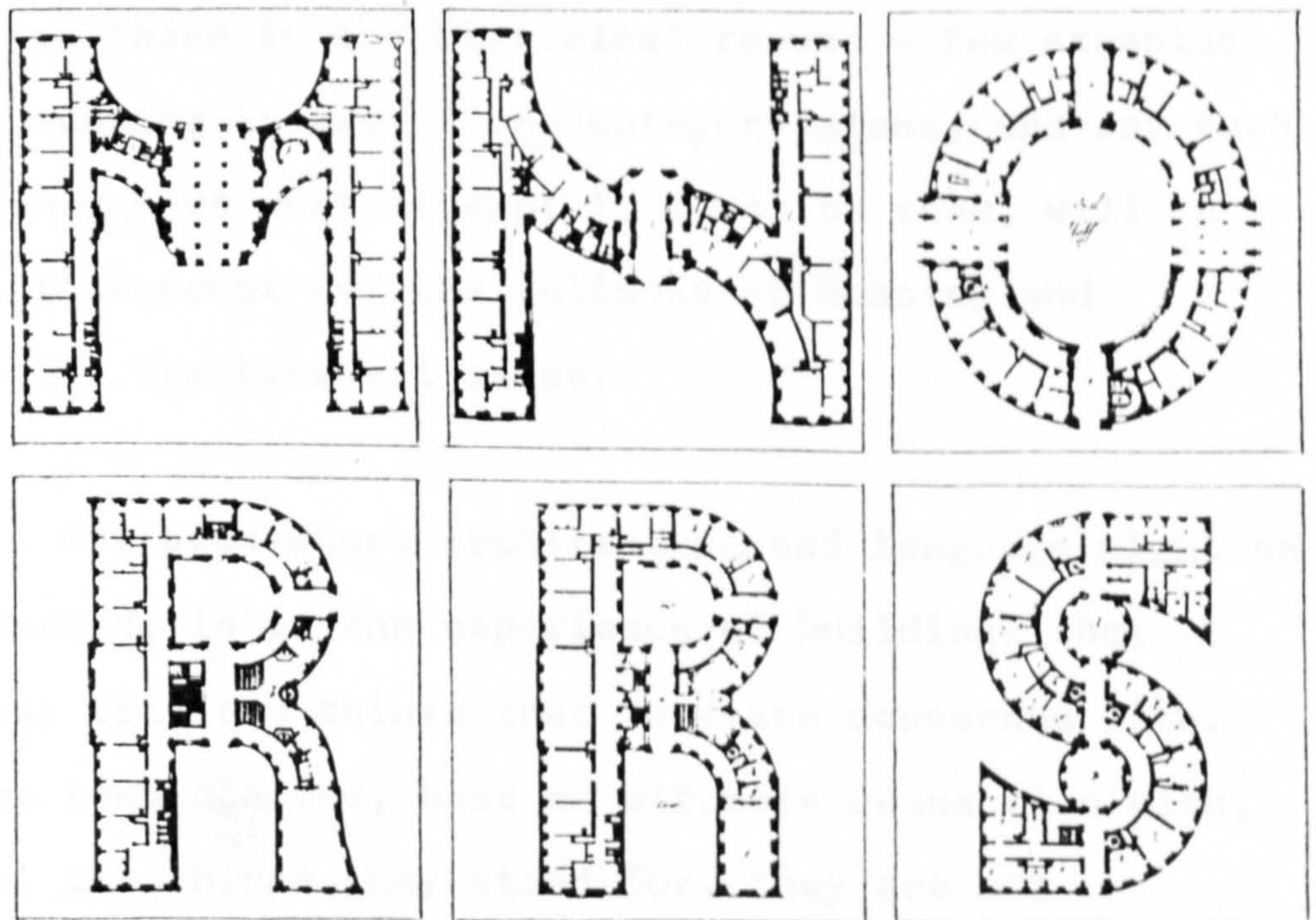
That architecture might be language-like is perhaps, in the light of Broadbent's wise suggestion, best kept just as that, language-like; and Peter Collins, also, referred to the "linguistic analogy" <Collins, 1965/CIMA, pp. 173-182>, shortly before architectural semiology burst upon the British scene. Perhaps John Summerson's The classical language of architecture (1963, 1964, 1980) is the best-known use of the analogy, to describe a style ("The Grammar of Antiquity", "Sixteenth-Century Linguistics" and "The Rhetoric of the Baroque" are among the chapter-titles); but the book concludes (with a survey of Modern Movement derivatives of Classicism) without

any attempt to ask how Classicism, or any kind of architecture, might operate as language, or bear meaning <Summerson, 1963/CLA>.

Perhaps the only other way that buildings could really operate as language might be by way of the curious building-plans, shaped like letters, of Johan David Steingruber's "architectonic alphabet" (1773) - put enough in a line, and we have words; the Holy Trinity Convent, Oxford (1864) (subsection 2/7), with its plan like a Trinitarian symbol, is not so far from this, using a diagrammatic plan in place of letters. A witty, but pertinent, development of the plan-symbol, is seen in Louis Hellman's cartoon (Architects Journal, 22 January 1969, p. 226) in which four church plans present comments on the supposed beliefs, practices, and morality of the church users in question: a swastika-like plan for the Dutch Reformed church in Rhodesia, a womb-like plan for rhythm-method-inclined Roman Catholics in Delhi, a Prague Orthodox church in the shape of a hammer and sickle, and a shamrock-shaped Northern Ireland ecumenical church, with two worship areas separated by a first-aid room (but did Hellman realise that Lancaster University acquired a three-lobed ecumenical chapel, at about the same time, with two chapels - Catholic and Anglican/Methodist - plus a service-area?). A crucial aspect of the idea of meaning derived from plans, however, is that building users have to be conscious of them - to be informed of them - of them to discern the message.



Louis Hellman, cartoon in the Architects Journal, 22 January 1969



Examples from the Architectonic Alphabet (1773) of Johann David Steingruber

In the light of our analysis of orders of architectural meaning, of elements of architectural meaning, and our resume of examples of meaning in architectural history, it may be possible to describe several basic categories of architectural meaning (the account of Durandus's ideas of meaning (subsection 2/5) will provide the beginnings of such an analysis); I am, however, very much aware that no other account would produce the same number, and nature, of categories, and that a concern with religious architectural meaning will of necessity produce an analysis that will differ from any that has no such preoccupations. Inevitably, when we look at meaning in specific cases - such as those in the historical resume - few examples will involve meaning by way of one category alone; and any such categories, though we must attempt to describe them, will in the end fail to account for the fullness of meaning and significance, in its broadest sense.

1 Literal. One area where architecture and language might be closely connected, is in the experience of buildings that totally appear like the things that they are concerned with. Words, it has been claimed, bear no ultimate connection with, or origin in, the things they stand for, they are all artificially linked to them. The exception is the onomatopoeia, words like "bang" and "atishoo", by which people use the vocal

chords, not to signify, but directly to imitate an entity in the world. Californian freeways are said to be littered with kiosks and stalls that literally look like the things that they sell (a kiosk like a huge camera, that sells cameras, a kiosk like a vast hot dog that sells hot dogs, etc.), and there is now a book, telling us about them, Jim Heimann and Rip Georges' California crazy Roadside vernacular architecture (1980) <Heimann and Georges, 1980/CC>. These little buildings bespeak their nature and purpose, not by being cameras or hot dogs, but by looking exactly like them; they rely on no visual similarity, or numerology/proportional code, nor even a physical/formal model-like correspondence - nor natural-language signs. They need no description to explain them, neither does the meaning have to be learned. It has to be said that Jencks gives a much more complex account of the architectural meaningfulness of these buildings <Broadbent, Bunt and Jencks, 1980/SSA, p. 104, etc,>, and California crazy calls them "Direct programmatic architecture" (my emphasis) <Heimann and Georges, 1980/CC, p. 19>. Might we not see this Californian architectural-linguistic "literalism" as an equivalent of the imitative sounds? (It has been claimed, though, (eg. by John Hospers <Hospers, 1967/IPA, p. 4>) that onomatopoeia could not be understood by a person who does not already understand natural language.) The "literalism" of the hot-dog kiosks is perhaps the most total form of architectural meaning - it means what it looks like - its meaning is

inescapable; but it does not tell us very much. The semiologists might call these buildings icons.

2 Suggestive. At one remove from the literal portrayal of reference, in buildings, there is the building, or part of a building, which merely seems to be like, or is suggestive of, certain things that we experience in the world, or ideas of things that we know of. Earlier, reference was made to aspects of buildings whose composition - windows, door, roof, architrave, etc. - has been said to suggest a face, and this is similar to, but one remove from, the face/mouth grotto-entrance at Bomarzo (referred to in subsection 2/9) or the Amsterdam theatre drawing, compared with the Stockholm woman-like building (also referred to in 2/9). In religious architecture, an area where form suggested - but did not literally reproduce - concepts, was seen in the cosmological physical images or models, domes like the idea of heaven/the heavens, columns and other structures suggesting the world-axis, etc. Cosmological architecture is almost always suggestive - physical means suggesting ideas of ultimate physical reality - not literal, and this is particularly so because of the ultimate and remote nature of its object - the world. Buildings related to ideas about the cosmos very often use other forms of architectural meaning as well (eg. numerology), and while such buildings use an architectural feature or features to suggest real physical things or places, the religious mind naturally goes beyond such entities, by way of them, to ideas about divinity and the human

condition; the underworld, and heavenly realm, are more than just places, they relate to human destiny. While there is a difference between "literalist" and "suggestive" meaning, they are perhaps both examples of icon, in that both, in some measure or other, "look like" the thing they refer, or are taken to refer, to.

3 Minimal. Another kind of literal meaning is seen in the way that certain writers reduce architectural meaning to its most basic form, in that things "mean" the activity that they make provision for. Thus, Umberto Eco, according to Broadbent <Broadbent, Bunt and Jencks, 1980/SSA, p. 126>, holds that staircases mean ascent - or rather, the staircase is the signifier, the act of walking up is the signified; likewise Peter Blundell Jones describes the porch seat at Philip Webb's Red House, Bexleyheath (1859-60) as meaning repose, where the visitor waits for the door to be answered (Durandus says (I, 32) that "The seats in the Choir admonish us that the body must sometimes be refreshed") - and Blundell Jones puts this in the category he describes as "implicit meaning", where the building, or part of the building, does not merely "express", or symbolise, but "embodies" <Blundell Jones, 1985/ IM, p. 34>.

So in this understanding, stairs mean ascent, seats mean sitting, dining rooms, presumably, mean eating, bathrooms mean washing ... - but by what order of meaning do they mean these things, and one wonders what the very basic requirements are for a room in order that it means cooking, reading, playing

music, etc.? Perhaps we are simply so used to these activities in familiar settings, that they are invested, by convention, with ideas that owe little to places themselves. A nomadic tribesman, who had never known a permanent building, at least not one with an upper floor, may understand nothing by staircases, and never venture to climb one. This minimal meaning, as it might be called, is seen in fact to be connected with activities - function - in the order of "it means the things that go on in it" - as was suggested (subsection 2/9) of the liturgical/functional approach to some mid-20th century churches. The complex functions of the living room make it that the room "means" so many things - in this thinking - that it is possible to explain this room in terms of living itself. Staircases may be conventionally associated by us with ascent, but they are signs of themselves just as much.

Signs, symbols, and icons, in their minimal forms, convey what is obvious to (and only to) those who know the activity that is intended, and while bedrooms may or may not mean sleep, small diagrams of bed-like things, in hotel directories, travel brochures or road signs, communicate the idea of accommodation, and the diagram-like designs on paired doors in public places indicate the "gender" of toilets. We are not far from iconic literalism, since the bed-like and person-like designs look like beds and persons, similar to, but not as much as, hot dog-shaped kiosks look like hot dogs.

4 Function/metaphor. "Minimal" functional meaning is transformed, however, if these basic functional meanings become metaphors for something else: and such an approach opens up a rich seam in the thought and experience of religion and spirituality. If a stair means ascent, but this ascent is taken further to be a metaphor of a spiritual process - ascent on the way of enlightenment - then a staircase may have a very special meaning. Durandus, in his reference to spiral staircases, talks of "ascent", namely "those who ascend to celestial things" (I, 37), and in his many-meaninged references to church steps (II, 15) connects steps with Jacob's ladder ("And his top reached to the heavens"), and with a manifestation of the "ascent of virtues". Though he may often be less than explicit, Durandus clearly understood physical processes, in buildings, as metaphorically implying spiritual processes. In the poem "On a dark night" (written 1577-8), which begins, and is the substance of, St. John of the Cross's Dark night of the soul, there is the image of the seeker after spiritual enlightenment ascending a secret stair, above his silent house, there to seek unity with God, and the ascent, and the stairway, is clear metaphor, related to a physical process, by means of a physical structure (see subsection 3/3/2).

One suggested practical function (alongside less practical functions, no doubt) of the labyrinth-diagrams set in the floors of Gothic cathedrals (see subsection 2/5), is that they were used by would-be pilgrims, denied the chance of a journey to Jerusalem, Santiago, or Rome, to trace out a convoluted

journey, leading to a central goal. The journey or process of such a practice could obviously serve no purpose in itself, other than that of suggesting and encouraging a spiritual journey, effected by means of prayer and meditation (in the same way, the use of the rosary involves a similar, if even smaller, "journey" or process). Mazes, whether of the lawn, hedge, or subterranean variety, may well have had some similar function.

The Chartres labyrinth, in this interpretation, involves process inward, and the metaphor - if such it is - of the idea of truth/enlightenment/God/wholeness, or whatever, being "within", is seen at its fullest, and most explicitly architectural, in St. Teresa of Avila's Mansions, or Las moradas. In this work, the mystic way, or process of achieving spiritual union with God by means of meditation and various degrees of prayer, uses a detailed and pervasive - though simple - architectural image of seven concentric buildings, or contained spaces, which must be progressed through, in order to reach the centre, where God may be known, as well as the "inner" truth of oneself; each building or room represents a kind (or degree) or prayer.

Of course, St. Teresa's castle (as it is also called), is a literary image, rather than an actual building, that was chosen metaphorically to contain or convey the meaning that she had in mind (the same is true of St. John's "secret stair"). However, it may be that some of the complex Spanish Late Gothic cathedrals, or even a former mosque, such as that at Cordoba,

supplied the idea (as well as the reference to mansions in the gospel of St. John 14.2). Journeys "inward", and the relation of space(s) to spiritual processes, must be considered in subsection 3/3/2, since they relate to the essence of the experience of buildings and spirituality; however, these examples demonstrate exactly how structures relate to functions, which, by metaphorically extending the meaning of the function, or use, or process, convey meaning, and meaning of a very significant kind. These "function/metaphors", unlike the literal, suggestive, or minimal meanings, are in no way obvious to beholders, they do not look like, or suggest, their deeper meaning; so perhaps we are here in the realm of symbol, by one understanding, or another, of that term.

5 Nature/metaphor. A similar kind of architectural meaning is seen in the building, or part of a building, where there is no process or activity involved, real or metaphorical, but where the very nature or essence of the structure may metaphorically suggest ideas, which may be religious/spiritual. Durandus's idea of the spiral staircase "hidden" in the thickness of the wall - meaning the "hidden" knowledge by which spiritual enlightenment comes, or the hidden nature of truth (I, 37) - is an example of this (ie. the physically enclosed/"hidden" nature of the thing/idea). His "meaning" of porch (entrance) (=Christ) comes from the fact that Christ allows us to enter the heavenly Jerusalem (I, 20), and this Christ-like nature of the porch must be connected with the fact

that the whole church is an image of Christ's body (as seen in subsection 2/5). This "nature/metaphor" is in effect a passive version of the active "function/metaphor", seen in the previous paragraph.

6 Plan/shape diagrams. The plan/shape diagrams, referred to in subsections 2/7, 2/9, and 2/10/4 are not dissimilar to "nature/metaphors", in that their form (ie. the form of the buildings in question) connects in a symbolic, non-literal, way with ideas - but as diagrams or cryptograms, they are not things that have a function or purpose in themselves (while staircases may be taken metaphorically to mean spiritual enlightenment, they still allow people to ascend buildings). The Oxford convent may have incorporated a Trinitarian diagram, a device for meaning embodied in the structure (had it been built), but it was not something in the nature of the building itself that referred to a spiritual reality, rather, something in the building which presented a device for conveying meaning (and Louis Hellman's cartoon has to be seen in similar terms). However, perhaps the form of the building at St. Matthew's Meeting Place, Brixton (subsection 2/9) might be seen as a "nature/metaphor" in that the nature of the building, like Durandus's hidden staircase, could be expounded in terms of Christian ideas. The church-pavement labyrinth, as at Chartres, has been seen as a "function/metaphor" - but only in its possible function related to physical "journeys"; alternatively, it most likely had some diagrammatic meaning

along the lines of the Medieval Trinitarian-diagram that lay behind, or rather beneath, the Oxford convent.

A measure of the extent to which "diagram" meaning must be taken seriously - the fact of buildings producing shapes that can then be related directly to ideas - is seen in the example of churches that are cruciform, "suggesting" the cross of Christ; however, this example vividly demonstrates the inadequacy of trying to categorise architectural meaning, since the cross-shaped building is a very pervasive source of Christian architectural meaning which, while exceedingly simple to understand, and very meaningful, could be understood in terms of various ideas suggested in this subsection. A strange reversal of churches' plan-diagrams relating to ideas is the use of plan-diagrams to suggest the idea of particular churches: both Liverpool (Anglican) and Guildford cathedrals use diagrams based on their buildings' plans as a badge device or logo - lacking, as they do, a Medieval sigil such as the cross of St. Chad, used by both Lichfield and Coventry.

7 Numerological. Not far removed from the instance of buildings in some way embodying/using diagrams which are connected with ideas, is the use of buildings, features within buildings, or physical forms, presenting numbers which are connected with ideas - "numerological" meaning, which has been seen in various subsections, above, the examples ranging from three/the Trinity, eight/Christ's resurrection, to Durandus's more cryptic examples (pillars mean wisdom (the seven pillars

of Wisdom), despite the presence, in reality, of a set of pillars numbering more or less). Numerological meaning, generally requiring communication and explanation in natural language (the actual number, however, is often perceptually obvious), has the capacity to convey both very basic, and very profound, ideas.

8 Crypto-numerological. Beyond "numerological" meaning, we saw the way in which numbers, and hence their meanings, can be hidden within complex systems of proportions - of length and area, dimensions and volumes - which can relate to ideas, and often these are ideas of a more profound nature, cryptically hidden within structures that might be revealed to few, and speaking of "higher", mystical, or ultimate truths. This "crypto-numerological" meaning was seen in Medieval, Renaissance, and perhaps fin de siecle, church architecture, and - certainly in its Renaissance form - involved ideas of cosmological meaning - which immediately returns us to the second, or "suggestive" category of meaning, described above. In this earlier category of cosmological architectural meaning, the world/nature/reality, etc., were suggested by the physical form of structures, by icons, things that looked like the referent in question (to return to Ogden and Richards' term). Here, cosmology is embedded in the proportional mathematics of spaces, volumes, forms, and dimensions - all of which are often, in reality, somewhat obscured by the forms of Renaissance Classical decoration. "Crypto-numerological"

meaning perhaps also connects with another pervasive concern that was seen, in particular, in the first few categories of architectural meaning, namely architectural anthropomorphism. In subsection 2/4, we saw how Vitruvius related columns, and orders, to people (human bodies) by means of the proportions of their constituent parts.

9 Etymological. Another cryptic (and uncommon) category of meaning, etymological meaning, is that related to the meaning of words, or rather, to meanings "suggested" by the meanings of words. I refer to the kind of etymological association, or trope, described by George Hersey, when discussing the lost meanings of Greek architecture (subsection 2/4) <Hersey, G, 1988/LMCA>. These included the meanings (or suggestions of meanings) of: Doric architecture related to the origins (real or supposed) of the word "Doric", namely fighting, killing, sacrifice, female genitals, the male body, etc.; the scotia (a concave column-base moulding) related to darkness, death, the underworld; and tympanum (the space within pediments) related to a drum of animal skin and bones. "Caryatid" had its origins in words related to women of Caryae, blood clot, mound, altar, evil and taboo. All of this means that an ancient Greek person, who knew of the suggestions, implications, and tropes, would be very aware of the martial/sacrificial/sexual/anthropomorphic meaning of everyday buildings.

While there are few examples of such meaning in Christian church architecture, one such is the German word "dom", for

"cathedral" which has links, in its origin, with "dome", and thus preserves the memory of early Christian (Byzantine) domed churches. While all German cathedrals (before the Renaissance) were built in Romanesque and Gothic styles, none had domes as such; but the word presents the idea of a domical church, with, as we have seen, cosmological-symbolic implications. Another example is the word "chapel", "capella", which is generally thought to derive from the building in which a relic of St. Martin of Tours (d. 397) - the cape which he gave to a beggar - was preserved. So in its origins, the idea of a chapel might be of a centrally-planned, enclosing building, such as many conical buildings designed to house modern liturgies. Such style-words as "Gothic" and "Baroque" - it was suggested in subsection 2/4 - may preserve a memory of when those kinds of architecture were held in low regard.

10 Conceptual. If there are instances of architectural meaning that are not accounted for in the above categories, they are probably of the variety where a writer such as Durandus, and others of his ilk, simply state that the church "means" this, that, or the other. Thus, Durandus's idea of a church being "a Virgin" or "an Harlot" (I, 4), meaning which directly relates "the Church" to "a church", and adds some curious ideas to that, despite no connection by shape or form, numbers or proportions, that which is perceptible, or imperceptible. This is meaning that is purely in the mind, and might be called "conceptual"; within a historical systems of

ideas, beliefs, and practices - such as Christianity - it may be possible to decide that any physical thing "means" something, and then expound it in writing or preaching, and build up a tradition concerning such meaning.

2/10/6 THE GROUND AND OPERATION OF ARCHITECTURAL MEANING

From where, ultimately, does architectural meaning come? How do people, who see/use/experience buildings or parts of buildings, come to acquire ideas, information, or communication of some kind or another? What are the processes involved in such communication, and the means by which it operates?

On a few occasions, in the chronological resume, it was noted that there were instances of meaning in which it was claimed that the building communicated of itself, without the assistance of any explanation in the form of natural language, however conveyed. Firstly (subsection 2/6), there was Alberti's idea, in the account of Wittkower, whereby if a building is constructed according to "essential mathematical harmonies", "an inner sense tells us, without rational analysis", that the building partakes of the force behind the existence of the universe <Wittkower, 1962/AP. p. 27>. Secondly (subsection 2/6), Thomas Whatley conceived (1777) of garden buildings which conveyed ideas without textual explanation. Thirdly (subsection 2/7), Neale and Webb, in their "Arguments for symbolism",

suggested (argument 4, "Analytical") that Gothic churches communicated the faith, to those ignorant of it, by themselves, unaided. Fourthly, there was the "implicit" meaning of Peter Blundell Jones, concerning seats/repose. We now need to ask if this can ever really operate, if a building can communicate purely on its own, in an absence of information on the part of the recipient? It certainly works by way of basic recognition or perception, as in the case of the "literal", "suggestive" or "minimal" categories, observed above: hot-dog-like buildings need no explanation - providing, that is, that one is fully familiar with hot-dogs - and buildings which suggest things depend on the same perceptual psychology involved in seeing objects in ink-blots. If Blundell Jones's "meaning" of seats is "implicit", this is presumably the case only in societies which have such objects (as with my reservations concerning the "meaning" of staircases); Hospers' doubts about onomatopoeia are surely a parallel, in this case.

It may be apparent from subsection 2/10/5, that the more obvious or implicit meaning may be, and the greater "ease" with which it is conveyed - eg. "literal" or "minimal" - the less the amount of real information, knowledge, wisdom, etc., it communicates. The "conceptual" has the slenderest hold on the possibility of ideas being embodied in structure, in any real way; and yet its realm of communication - once expounded - might be the greatest. "Crypto-numerological", or proportionally-based, meaning is among the intellectually most dense - it is not for the mathematically squeamish - and understanding its

complexities requires detailed initiation; but its concern is the whole of reality, and the force behind it.

Ultimately, I suspect, all architectural meaning, like all language, has to be taught or acquired in some way. If all words are ultimately conventional signs or conventional symbols - not visually-suggestive icons - then in almost every case of real communication by means of architectural meaning, there is a greater or lesser element of explanation, explication, education and interpretation, and this by means of natural language. One concept that has emerged from time to time in this study, is association, or associationism: operating in one way or another, an element of association can be seen to be present in most categories, or instances, of meaning. In some cases, the immediate rationale of meaning - as with the function and nature metaphors - is, I would suggest, subsequently taken over, in the mind, by association, direct recognition and understanding. The numerological way in which a font conveys resurrection, the Cross-like nature of churches, the heaven-like nature of domes, the connection of columns with human bodies, all ultimately depend on the prior communication of ideas, with words, and their subsequent association, in the mind. The idea of style meaning a particular religion or belief-system can surely be shown to depend - though Pugin and the Ecclesiologists might never agree - on association embedded in the mind, and the culture.

Style as association suggests that the nature of style in architecture is a simple matter of visual identity and

recognition, as Gilbert Cope once suggested to me, and this view, of course, contrasts with the dual understanding of Nikolaus Pevsner whereby "style" is contrasted with "manner" and "fashion"; "manner" and "fashion" are personal, ephemeral things, while "style" is a product of "the whole spirit of an age" <Pevsner, 1951/CC, p. 4> - here, style is removed from the area of basic architectural icon- or sign-language, and becomes a symbol, in the cultural sense, suggesting the cultural origin/nature/meaning of styles in the kind of terms that Pugin (and probably the Ecclesiologists) would have understood Gothic and Classical. Style is made, by Pevsner, into an aspect of meaning in its greater, more general form, the order of "meaningfulness", described in subsection 2/10/2, with its enlarged area of significance and concern, but more tenuous - more associational - connection with the nature of the thing that it is signifying.

While the ten categories of meaning (described in subsection 3/10/5) were largely concerned with specific meaning, association and recognition were, I suggest, ever present within them, which demonstrates the ubiquity and importance of simple cultural signs, such as the semiologists made much of, in their analysis of architectural meaning.

Religious architectural meaning must ultimately be bound up with knowing about meaning (and knowing about knowing), that is, with convention. The inevitability of architectural meaning (as Broadbent, 2/10/1) flows from seeing significance in forms, as with the UCLA students and Pelli's Pacific Design Center

(2/10/1) <Jencks, 1981/LPMA, pp. 50-1>; while the eye sees things, and structures them as ... - other things it has learned/been informed of - then there will be meaning in religious buildings.

The everyday "meaning" or connotation, that certain kinds of architecture and kinds of buildings come to mean (or to be said to mean), are culturally produced, and are thus changeable and indeterminate ("hard", specific meanings, linked to rational structures of meaning-system, such as fonts/resurrection, are more fixed). A good example of the cultural fate of a feature of church architecture, whose meanings are non-specific, is the tower or tower/spire. Often one reads that all such vertical features in religious architecture must have some ultimate origin in the place-marking/axis/navel feature (steles, stupas, etc). Then Pugin sees them as suggesting the resurrection, in their heavenward thrust. But mid-20th-century critics, with less respect for traditional architectural styles, suggested that they were, in origin, phallic symbols <Smith, 1972/TMC, p. 18>, or symbols of domination by ecclesiastical overlords, the Church triumphalist, rather than servant.

But if meaning depends on seeing, who informs the viewers' eyes? More than once in the chronological resume, the question was asked if the meaning intended and understood by theologians and scholars (eg. Durandus) or patrons/clients (eg. Suger of St. Denis) was also in the minds of the designers/builders, of specific structures. It may be that meaning is conveyed to building-users irrespective of the intentions of designers/

builders, and patrons/clients, and scholarly interpreters. Intention is a central concept of this study, for it concerns not only meaning, but also the prime concept of section 3, experience (see, particularly, subsections 3/4 and 3/5); indeed, it is another of those areas where we perforce move beyond meaning into experience - the possibility of a church's being understood (which is, in effect, a total experience) in a way that is beyond the intentions (intentions of meaning - and the religious architectural theory) of the designers, clients, patrons, etc. The semiologists' idea of studying buildings' meaning had the implication, I have suggested, of acknowledging and using this inevitable fact about architecture, to make meaning of positive effect; but could such intentions be realisable? Can something as small as Broadbent's garden shed (and Ruskin subtracted such mean buildings from his definition of architecture) communicate meaning and experience in a way that is constant, that we can understand, predict, and even determine? (see subsections 3/4 and 3/5). But do these reservations mean that church architects should not make use of architectural meaning, in their designing?

2/10/7 MEANING AND SACRAMENT

For one considering church architecture, the "elements" of meaning, discussed in subsection 2/10/3, require one addition,

namely, sacrament. The Christian church has various sacraments (a varying number accepted by different denominations), and among these, there is a measure of difference in nature, eg. the sacrament of marriage differs greatly from that of baptism or the eucharist/communion/Lord's Supper/mass - though arguably baptism and the eucharist have aspects in common. In addition, there is also the concept of sacramentality, which goes beyond specific sacraments, but might be a quality perceived in many things, or bestowed on many things (indeed, specific sacraments and sacramentality could be seen as a parallel to the "specific" meaning, and "meaning in general", described in subsection 2/10/2). F. W. Dillistone, in Christianity and symbolism (1955) eschews use of "sacrament", in favour of "symbol", seemingly because of the possible "extension of the use" of sacrament "to include the whole universe and any human activities within it" <Dillistone, 1955/CS, p. 17>. A classic definition of sacrament is "an outward and visible sign of an inward and spiritual grace" (Catechism of the Book of common prayer). A sacrament is thus seen as a variety of sign, or symbol, but one of great subtlety and power. But to Christians of what might be called a sacramental tradition, where there is any developed theory of the "real presence" of Christ in the "consecrated" elements, the eucharist, at least, proceeds beyond symbol or sign, or visible reality - beyond meaning - to inner, unconscious, unperceived spiritual effect. Before the use of Latin, the Greek-speaking Christians employed the word mysterion for religious rites, which was then translated into a

Latin term (sacramentum) which meant, originally, a legal sign of good faith and a military oath <Dillistone, 1955/CS, pp. 14-15>.

The idea of a church building serving as an outward and visible sign for the human Church is, as we saw in subsection 2/5, at least as old as Durandus ("The material [church] typifieth the spiritual Church" (I, 1, 2), etc.), whose thinking was taken up by the Ecclesiologists (subsection 2/7), and was surely behind the thinking of Pugin. In Reformed Protestantism, and the "secularist" approach to church architecture of the 1960s/70s (subsection 1/4), such thinking is, of course, rejected (eg. by Harold Turner - see subsection 1/4). In recent times, however, the idea of a church building as a sacrament, as an outward sign in the human environment, of Christian - divine - presence, has been talked about once again. In a short article published in 1986, Robert Van der Weyer wrote:

"... church buildings are sacraments: they are powerful symbols of the mystery of God. Moreover, for many people who do not regularly receive Communion they are the most visible and important sacrament. ... As with every sacrament, the value of the church building lies in its power to symbolise for us the presence of God in our lives." <Van der Weyer, 1986/CS, p. 4>.

Durandus's equation of Church with church seems to me to be an idea that, unlike some of his other absurdities, might indeed have validity. One of the problems with recent

evaluations of his ideas, such as Gilbert Cope's, referred to in subsection 2/5, is that while condemning Durandus's reduction (indeed, at times destruction) of meaning, they fail to appreciate the inner strengths of some of his thinking.

Of course, church buildings are not another sacrament, in addition to marriage, baptism, the eucharist, etc., but churches might well act as a valid, meaningful, outward sign. If Christians are the Church, the body of Christ, is not the church (building) Christ's body also, in some sense (as Durandus claimed)? To tie church buildings to human bodies, by way of plan and proportions, may be unrealistic - and unnecessary. If the Stockholm Museum can commission a pleasure palace shaped exactly like a woman's body, might not a church be built like a man's, suggesting Christ? Of course, such an idea would be preposterous, theologically dubious, and probably offensive; but perhaps a building can be thought of as being like a body by means other than form, plan, proportions, etc., but in some conceptual way - if that were thought to be desirable.

With certain sacraments there seems to be an avoidance of resemblance - they are deep symbols, not icons - such that few fonts look like tombs, or draw on traditions of tomb-architecture; rather, they keep meaning at one remove, by using the numerological symbolism of death and re-birth. In some Catholic churches, communion wine is white, not red, which I have heard described as a conscious attempt to avoid the "looking like" blood effect of red wine (symbols that are not

icons) - after all, wafers or bread do not look like flesh/bodies (some Catholic authorities deny this reason for the use of white wine, however).

Some theologians talk in terms of the incarnation, when referring to this or that aspect of a church community, its mission and its works, Christ's "body" made real in various activities, etc. And it may be possible to speak of body/building at one remove, in this way, church buildings as one "incarnation" (a making physical), among many, of Christ's body (the Church) on earth, in a community.

3 The Experience of Church Architecture

3/1 INTRODUCTION

In this section we pass from theory to the whole experience of church buildings, from structured ideas that might be formulated in advance of designing and building - religious architectural theories and theology, systems of symbolism, iconography, and intended meaning - to the actual way in which people experience, are affected by, and come to know and relate to, church architecture.

The possible difference between anticipation and intention, on the one hand, and the actual situation, on the other, was referred to in subsections 2/5 and 2/10/6, where it was suggested that architectural meaning is not a thing that can always be anticipated and predetermined, that intended or anticipated meaning and significance may in no way be identical with the actual reality of meaning. Likewise, the issue of whether architectural experience is subjective, arbitrary, and unpredictable, or whether it can be fore-known, determined, and designed, is a major question in this section, and this whole investigation.

Certainly it will be the case, however, that the phenomena we call "experience" will to a large degree involve elements that must be described as "meaning", meaning as understood in

section 2 (or rather, as described in subsection 2/10/2). And the study of experience will also involve religious architectural theory, and a wealth of specifically religious ideas. The experience of church architecture is a single event, not a series of separate events, each of a different order. "Experience" was present in section 2, since if a building conveys intelligible ideas to a person, that person has had an experience related to the building, and we may say that meaning is experienced. So the distinction between the three concepts that form the framework of this study can be seen (as suggested in the Introduction) to be in reality artificial - that is, in terms of real experience - but not theoretically or intellectually, and hence are necessary if we are to understand the constituents, and thus the totality, of the nature of church architecture; (Christian Norberg-Schulz, for example, makes a clear distinction between a "comprehensive theory of architecture" (ie., the one he describes in his book, Intentions in architecture) and "direct experience"; and he warns that the "investigation of architectural experience should not be confounded with an investigation of architecture itself" <Norberg-Schulz, 1966/IA, pp. 85, 195>). It is undoubtedly true that as "experience" is a unity, the experience of religious architectural theory and the experience of architectural meaning will be present in this section, and in a more complete way than religious architectural theory and religious ideas were present in the discussion of architectural meaning, section 2.

How do people experience church architecture? What is the nature of that experience? How do people respond to buildings and places of any kind, in any situation? These were the questions raised at the outset of this study, and now an attempt must be made to answer them, outside the confines of theory and intention.

3/2 THE AESTHETIC APPROACH TO CHURCH ARCHITECTURE

One way in which people have studied the effect of buildings upon experience is by considering them in terms of what might be called aesthetic factors: leaving aside questions of meaning, symbolism and association, and all matters of style, its nature, origin, and "language" of forms, architecture has been studied in terms of scale, symmetry, proportion, rhythm, texture, and other concepts that particular studies have described, eg. "balance".

Many studies of architecture which involve aesthetic factors as a major constituent, tend to be interpretive in concern (eg. Sinclair Gauldie's Architecture, 1969 <Gauldie, 1969/A>, and Steen Eiler Rasmussen's Experiencing architecture, 1964) <Rasmussen, 1964/EA>; but others set out to describe aesthetic rules, rules that will enable the designer to create buildings that will of necessity be beautiful, satisfying, etc., in the belief that experience of buildings is not purely subjective

and arbitrary, but governed by principles that can be stated, and whose operation can be described (reference was made to the presence of such ideas, in Renaissance Italy, in subsection 2/6). Aesthetic factors, such as those just listed, undoubtedly play a major part in the experience of architecture, and so do such additional factors as colour, olfactory, auditory and kinaesthetic sensations. Some see architectural experience simply in terms of visual perception, and the account of Roger Scruton (The aesthetics of architecture, 1979) proceeds from a discussion of the subject in terms of the psychology, and philosophy, of perception <Scruton, 1979/AA, p. 71>.

3/2/1 EASE AND DIS-EASE; THE RULES, REASON AND PSYCHOLOGY OF EXPERIENCE

Can experience of architecture, particularly a positive experience, be known and determined by rules and rational principles? A. Trystan Edwards (author of Style and composition in architecture <Edwards, 1945/SCA> (a revised version of Architectural style, 1926; subtitled "An exposition of the canons of number, punctuation, and inflection") might argue that it can. His three "canons" are considered to be "principles, not rules" <Edwards, 1945/SCA, p. 22> for the establishment of good architectural design: "In so far as the principles are complied with, to that same extent is the

quality of beauty manifested in a design, and wherever the principles are violated we have ugliness" <Edwards, 1945/SCA, p. 21>; "In so far as the building expresses these principles it seems to be imbued with vitality, but in so far as it violates them it appears dull and lifeless" <Edwards, 1945/SCA, p. 25>. The "principles" or "grammar of design" <Edwards, 1945/SCA, p. 20> are "an affirmation of the objective standard in architecture. The beauty of a building is held to depend upon the establishment of the objective standard in architecture" <Edwards, 1945/SCA, p. 23>. Edwards is at pains to point out that this "objective standard" has nothing to do with any "question of taste nor in any manner whatsoever a gift from the spectator to the object. The beauty is in the object and the spectator apprehends the beauty ..." <Edwards, 1945/SCA, p. 23>. Nor is beauty (or ugliness) dependent upon psychology, because the qualities of architecture are objective, not subjective; "This metaphysic banishes psychology, it warns psychology off the field of art" <Edwards, 1945/SCA, p. 24> - the "metaphysic" in question being the objective physical nature of architecture, unlike the pure emotions and ideas that literature concerns itself with: St. Paul's Cathedral exists in objective reality, and for a purpose, as well as being the source of emotions/ideas. The beauty and ugliness of architecture, indeed, the whole nature and appropriateness of a particular building, is dependent on the "character" that it may possess, and "character", its means of expression and method of fulfilling its purpose, comes

before style, style being subordinate to character <Edwards, 1945/SCA, pp. 14-16>.

These "principles", as with so many rules and systems in architectural theory, are claimed to be present in nature also: "Something, however, of the organic quality to be found in inanimate Nature is apprehended in the categories of Number, Punctuation, and Inflection. If these principles are complied with in the design of a building not merely the semblance of life but a measure of life itself has entered into it" <Edwards, 1945/SCA, p. 26>.

The principle of "Number" might be better described as "unity": "both nature and art abhor a duality which has not in some measure been modified so that it might partake of the character of unity" <Edwards, 1945/SCA, p. 29>. Thus, when buildings are composed of two visual elements they must be set together as one, or linked in some way ("conjugation"), thus avoiding the serious error of "unresolved duality" <Edwards, 1945/SCA, pp. 29-33> ("Nature abhors an unresolved duality" <Edwards, 1945/SCA, p. 42>). Three elements in a composition may form a unity, by means of their "trinitarian qualities", without "resort to conjugation" <Edwards, 1945/SCA, pp. 38, 29>.

"Punctuation" means an architectural composition having a satisfactory "boundary" or beginning and end, a marking-out or pointing-to the fact that ""Thus far do I extend and no farther"" <Edwards, 1945/SCA, p. 51>, and this need for termination is applied, by Edwards, both to the horizontal and

vertical extremities of buildings (including towers, gateways and bridges), and compositions of groups of buildings.

"Inflection" governs the relationship between one unit in a composition and another. Edwards compares it to words of greeting and leave-taking; it is the way separate elements of a single composition are set together. Inflection "governs the relation of the parts of an object to the whole and the relation of that whole to what lies outside it" <Edwards, 1945/SCA, p. 78>. Punctuation, a building's consciousness of its coming to an end - as Edwards puts it - is "but a special form of inflection" <Edwards, 1945/SCA, p. 79>. Good inflection, for Edwards, is the harmonious assembling of elements, the absence of violent contrasts and clashes, eg. of rhythms and forms, etc.

Compositions flouting these "principles" are dismissed by Edwards as "bad", "irritating", "ugly", "dead", "blemished", even "an atrocity and an abortion" - in the case of a facade needlessly subdivided vertically, causing unresolved duality <Edwards, 1945/SCA, p. 32>. However, the source of such reactions is not related to functional, cultural, or symbolic factors, thus "in order to understand" Chinese and Japanese styles, "we do not need to be Buddhists or to be otherwise acquainted with the life and history of the folk who created them, for these forms of building speak the international language of architecture, which can immediately be understood by applying to it the interpretive principles of Number, Punctuation, and Inflection" <Edwards, 1945/SCA, p. 76>.

Most of Style and composition in architecture is concerned with the external appearance of individual buildings (and, in a better-known book (Good and bad manners in architecture, 1924, 1944) Edwards applies his ideas to the composition of buildings together in "civic design" - as it was then called). However, his idea that the appearance or nature of buildings can give rise to good experience or bad experience is not without its application to the interior of buildings, including churches. He dislikes short, squat columns that have no true base (or, are not punctuated by "feet"): of a given example he writes: "...it has no feet, or rather such feet as it has seem buried in the ground, and one is harassed by an uneasy feeling that the sinking process is not yet over" <Edwards, 1945/SCA, p. 66> - and there are certainly churches with squat and/or baseless columns and piers, or with arches whose springing is very near the floor (eg. Lethaby's All Saints, Brockhampton (see subsection 2/8)), and these churches can have a very cave-like feeling.

Surely Edwards' theories could be extended beyond his own examples and areas of study, to discover how churches - particularly their interiors - affect people by way of conformity, or otherwise, to the aesthetics of number (unity), punctuation (articulated terminations) and inflection (means of composition together, of elements, in harmony). Not that Edwards would agree with my description, in the previous sentence, of his principles as "theories", or as being anything related purely to aesthetics (which involves perception, with

its uncertainties and ambiguities).

A rational, a priori and immutable law of beauty and ugliness, and resultant experiences of ease and dis-ease, is what Edwards, and perhaps his early-20th-century generation, believed in. Today, we have had at least four decades of experience of buildings whose facades are identical at the top and the bottom, the sides and the middle, without any kind of base or cap, or framing at the edges. Who, now, sees such buildings as irrationally, and disturbingly, cut-off before they have ended? Who experiences pairs of similar tower-blocks as unpleasant to look at, because they are neither closely related to one another, yet not sufficiently far apart? Who is depressed by the lack of relationship between buildings and nature? Who could confidently assert that low-structured, cave-like churches, or buildings where the design produces powerful contrasts of forms (the Mannerist, Baroque, and Post-Modernist architects all delighted in these things), are a source of wholly unpleasant experience?

It might be considered, when reading Edwards's work, and reflecting on present-day experience of architecture and attitudes to it, that in fact, though he could not see it, Edwards' ease and dis-ease, his perception of beauty and ugliness in particular kinds of composition, was the result of educated perceptions, of aesthetic training - human nurture, not nature - that is, of taste.

However, a significant fact about Edwards' view of architectural experience is that he clearly considered that

these kinds of buildings had these kinds of effects upon people, irrespective of whether they knew the principles (and knew why their experience was as it was) or not, and that such experiences might (for those in ignorance of the principles) be partly unconscious. Hence, we could claim - if we sought to defend Edwards' principles, today - that people actually are given positive and negative experiences, as a result of the way buildings are designed, though they may not be conscious of them and their sources, nor of the way in which buildings are affecting them. And the problem with such experiences is that they can hardly, therefore, be studied or measured, since the ease or dis-ease could not be known to come from a particular source, or not. Therefore we must reach the ironic conclusion that where there is a deterministic theory of architecture and architectural experience, it lies beyond the bounds of rational investigation, of proof or dis-proof.

Architectural determinism, architecture's ability to affect human experience and behaviour in a known way (as in the effect of particular architectural environments on inhabitants) has, however, been studied by the proponents of architectural psychology and sociology.

An account by sociologist Maurice Broady (reproduced in People and buildings <Gutman, 1972/PB, pp. 170-85>) says of determinism, "It asserts that architectural design has a direct and determinate effect on the way people behave. ... It suggests that those human beings for whom architects and

planners create their designs are simply moulded by the environment provided for them." <Gutman, 1972/PB, p. 174>. The architects and architecture that Broady is criticising are, of course, of the 1950s/1960s "social" architecture of slum-clearance and public housing, and he records the superficial social theories that were wedded to fanciful idealism in that vast and ill-fated enterprise of tower-blocks, deck-access, slab-construction, and the like. He disposes of the theory that architects and planners could create community by housing design, exposing some very naive beliefs that were once current.

His ideas, however, go beyond that of mass-housing architecture, and the post-war decades; for example: "The assumption which I have been criticizing is that environment is created by buildings and physical design" <Gutman, 1972/PB, p. 181> - suggesting that place, and the nature of community within it, depends on more than buildings, more than physical reality, and the purpose(s) for which they were conceived (or, design intention). Architectural design "may influence" social behaviour, he concludes, but cannot determine it; indeed, kinds of human activity may emerge in spite of physical environment <Gutman, 1972/PB, pp. 179, 180>. Architects make the "fallacious assumption that the users of buildings will react [to them] as they do themselves" <Gutman, 1972/PB, p. 181>. To move towards a more realistic approach, Broady suggests that architects adopt the idea of Herbert Gans, involving a distinction between "potential environment" (the physical form,

which provides "possibilities or clues for social behavior") and the "effective or total environment", (which is the physical reality, plus the people who use it, with their behaviour, way of life, etc.) <Gutman, 1972/PB, p. 181>. This is very different language than that of A. Trystan Edwards, and is concerned with a very different architectural situation, and with social effects rather than the perception of beauty; but here, Broady seems to be seeing architectural experience, or the effect of architecture upon people, as owing as much to the users of building as their designers (a "gift from the spectator to the object" <Edwards, 1945/SCA, p. 23>) - at least in part - and something ultimately separate from the architects' perception or intention.

In the mid-1950s, the psychologists Abraham H. Maslow and Norbett L. Mintz carried out an experiment in which undergraduates at Brandeis University (the "subjects") were questioned about the perceived degree of "energy" and "well-being" that certain human faces displayed, in photographs shown to them, which they had to rank on a scale of 1 to 6; in addition, subjects chose concepts of their own ("fatigue/energy", "displeasure/well-being", "irritable/content"), which they then ranked. A man and a woman ("examiners") were recruited to question the subjects. Both subjects and examiners were told that they were involved in a study of facial types and stereotypy, being told by Norbett Mintz about Cassius's "lean and hungry look", in Julius Caesar, etc. What neither

the subjects nor the examiners were aware of, however, was that the real investigation was into the effect of the aesthetic quality of environments and places upon human judgements and perception. In fact, the testing of subjects was done in three rooms, one designed to be as "beautiful" as possible (the "beautiful room"), another (the "ugly room") to be drab, cramped, and dirty, and the third, rather ordinary, not unpleasant, but very boring (the "average room"); the recruited examiners used "BR" and "UR", while Mintz used "AR", though the examiners in BR and UR were from time to time alternated. In each case, the subjects were given ample time to experience the qualities of the rooms, before giving their responses. The experiment is described in detail in two articles reprinted in People and buildings <Gutman, 1972/PB, pp. 212-228>.

When analysed, the data from the experiment showed that "The S[ubject]s in our "beautiful" room gave significantly higher ratings (more "energy" and "well-being") than Ss in either the "average" and "ugly" rooms" <Gutman, 1972/PB, p. 217>, and indeed, the results seemed to show that the reactions to AR and UR were closer together, rather than the reaction to AR coming somewhere near a mid-point <Gutman, 1972/PB, p. 218>. The idea that pleasant rooms have an unconscious beneficial effect upon the activities and products of their inhabitants (and unpleasant places a deleterious effect) is probably nowadays accepted by all, but the possibility that the strong aesthetic effects of environment condition reactions, judgements and subjective evaluations, is ultimately of concern to anyone

attempting to investigate the effects of buildings upon people, including - perhaps especially - in a case like that of religious architecture upon worship and spirituality. Various objections can be made to the Brandeis experiment, of course, such as the questions raised (by Robert Gutman <Gutman, 1972/PB, p. 213>) as to the nature and definition of a "beautiful room", and also (by Maslow and Mintz <Gutman, 1972/PB, p. 218>) concerning the temporary or permanent nature of the effects of the rooms upon judgements and reactions. Studies of the examiners' experience, however, convinced Maslow and Mintz that a temporary or "laboratory condition" effect was definitely not occurring. The examiners (themselves, in reality, subjects) expressed feelings of boredom, monotony, fatigue, hostility, discontent, etc., in the "U" room, but feelings of comfort, pleasure, enjoyment, energy, etc., in the "B" room <Gutman, 1972/PB, pp. 221, 226, 227>.

The idea that people are happier - and more productive - in a pleasant environment has prompted much study of work-spaces, with the hope of increasing production by means of attractive decor. However, studies (from the pre-war period) reported by Peter Manning, have shown that, for example, both increasing illumination in workplaces, and decreasing it, prompted higher production levels, leading to the conclusion that workers were responding not to the changes in environment, but to the fact of interest being shown in them, and possible concern for them being demonstrated <Manning, 1965/OD, p. 75>.

The capacity of buildings to have a strong positive, or

negative, effect upon people, and the desire to create wholesome and beneficial places, are among the central concerns of the current "environmentalist" approach to architecture. Christopher Day's Places of the soul (1990) has the subtitle "Architecture and environmental design as a healing art" <Day, 1990/PS>; his means and methods of producing places, however, are largely aesthetic, and include the wise use of proportion, "balance" (which is "life-filled") rather than symmetry (which is "rigid, [and] rigidity excludes life"), and the careful control of light and texture <Day, 1990/PS, p. 140>; free-form curves are more beneficial than squares or grids. Day's holistic aesthetic, however, seems to be more instinctual than strictly rational, and adopting his approach to place-making would have the advantages and disadvantages of design not being directed by rules or formulae, but by choices made afresh in each particular situation.

The problems, referred to above, concerning the nature and definition of a "beautiful room" leads us back to the questions of architectural determinism, subjectivity/objectivity of experience, and absolute beauty/taste. Can it even be said that one person's view as to the qualities of a particular space will be constant?

One relevant idea, perhaps, is the effect of colour on experience; this was mentioned in subsection 2/7, where the theory of William White was reported. White's 1861 "Plea for Polychromy" <White, W., 1861/PP>, reported by George L. Hersey,

involved colours physiologically manipulating human nerves, in predictable ways: the nerves are "excited" by red, "soothed by the presence of green and deadened or benumbed by the presence of blue. To yellow the eye is drawn as to light" (William White). The colour white is "bad for the spirits" (Hersey) and inappropriate for jails and hospitals; and also, levels of light produce different effects: "Darkness in moderation induces a frame of mind favorable to attention, contemplation and repose. In excess it produces melancholy and depression" (White) <Hersey, G. L., 1972/HVG, p. 40> <White, W., 1861/PP, p 51>. (Concerning darkness, see also subsection 3/3/4.)

Some decades before White's work, the great German poet Johann Wolfgang von Goethe put forward ideas about the nature and role of colour, in a group of writings collected, translated and discussed by Rupprecht Matthaei as Goethe's colour theory (1971) <Matthaei, 1971/GCT>. One of Goethe's concerns was the "sensual" and moral effects of colour, as he saw them (sensual meaning simply "transmitted via the senses"). "Warm" colours he saw in an essentially positive way, "dark" colours in a more negative way: yellow-red brought effects of a "vigorous" nature, red-yellow was "cheerful" "gently stimulating" and "agreeable". Blue-red had connotations which were "turbulent" and "unbearable", red-blue, "shadowy", and "lively, without gaiety" <Matthaei, 1971/GCT, pp. 168-177>.

If the effect of colours is, in this or any other way, predictable, it must be constant within individuals, and people as a whole, ie., it must - as William White believed - have

some essential physiological basis. Research done in Germany in 1957, by a team of psychologists, suggests that not the hue (red, black, white, etc.) but the lightness/darkness and saturation, are what subjects associate with meanings. In the report of the study, by B. Wright and L. Rainwater, first published in 1962, it is explained that subjects had to choose between six natural-language concepts ("happiness", "showiness", "forcefulness", "warmth", "elegance" and "calmness", when translated from German), when describing their feelings concerning patches of colour <Hogg, 1969/PVA, pp. 331-344>. Although "warmth" and "elegance" depended on hues (red, blue), "forcefulness" and "happiness" depended on the relative lightness/darkness of a hue <Hogg, 1969/PVA, p. 339>. The same article reports H. J. Eysenck's suggestion that associations depend on at least two different types of subjects, those who "like" saturated, and those who "like" light colours <Hogg, 1969/PVA, 340>.

The idea that different primary colours might have a different effect on emotions, etc., surely throws a new light - literally - on the matter of liturgical colours, which, in each ecclesiastical season, adorn both the church building, its furniture, and the person of the priest. The colours of clothing can be seen in the overall context of dress and its roles and functions. It is interesting to note that in the world of today's female business executive, clothing, its form, nature, and "colourway" are seen as crucial; "power-dressing"

is considered to be the way by which woman, in man's world of power, can make herself equal or dominant. In this setting, it is interesting to note reactions, on the part of males, to the associations, say, of bright red: where it once involved the idea of blood (and, in religious contexts, perhaps sacrifice and/or atonement), and then danger, fire, and death, it can now be considered redolent of sexuality and/or personal power.

Architectural psychologist David Canter is somewhat sceptical about the basis of rules about colour, considering that "personal variables" such as "previous experience and the situation in which the colour is encountered will have a large influence" on perceived meaning and experience <Canter, 1974/PA, p. 43>. Canter does not use the word, but operative here is a concept that was found to be important in the matter of architectural meaning (subsections 2/7, 2/10) - association. Ideas about colours generating emotions (and illusions of distance, etc.) work, Canter considers, more in the realm of concepts, not of actual examples/situations: there is a difference, he suggests, between asking people about the colour red (in surveys, etc.) and asking them about a particular red object <Canter, 1974/PA, p. 44>.

Certainly, to return to the situation of a church building and its community, it is very often the case that a church is divided by disagreement about the colour tones of a proposed redecoration - only to find objectors becoming pleased with the eventual result, and arguing against any subsequent changes.

Proportion in architecture can be seen to have three aspects, or areas of concern for architectural theorists; the three aspects are, naturally, interrelated. One is proportion simply as a device for creating plans and elevations - the devising, from a basic unit, of the size, form, and scale of volumes and masses, in a composition. In this way, proportion can be seen as merely a practical tool, and it is possible, even likely, that master masons in the Medieval period used proportional formulae in this way (see subsection 2/5, and Appendix Y). But further, systems of proportion have been regarded as a means by which the forms of a building - masses, volumes, dimensions and spaces - might be made to recreate the essential mathematical nature of the universe (cosmological theories of architecture; see subsections 1/5, 2/3 and 2/6). The cosmological approach to architecture, if taken even further, can be seen as a major ingredient in the esoteric theories of "sacred geometry" and the mathematical sacral validity of religious architecture, outlined in Appendix Y. Involved in most theories of proportion however, is the notion that by means of these mathematical relationships, buildings can be designed that are of necessity visually satisfying, pleasing, and even beautiful. This, of course, is proportion as a deterministic theory, similar to those of such as A. Trystan Edwards, with his rules for the creation of beautiful buildings

(subsection 3/2/1). Systems of proportion, with their rules and rationalism, mathematics and formulae, are both very ancient, and also the subject of considerable interest in recent decades.

Systems of architectural proportion take many forms: the simple root-2 formulae which have been detected in Medieval buildings; the use of the so-called Golden Section; harmonic, geometric, and arithmetic scales; anthropomorphic systems (Vitruvius), and, to reach our present century, the "Modulor" system of Le Corbusier and the "Plastic Number" theory of Hans van der Laan. These systems and theories, and the ebbs and flows of different variants and applications through long centuries, involve vast complexities, and can only be understood by one possessing a very great expertise in mathematical science (though P. H. Schofield, in The theory of proportion in architecture (1958) claims that Le Corbusier's system is "manipulated by means of rules for which calculation is not required at all" <Schofield, 1958/TPA, p. 120>).

Fortunately for my very non-mathematical brain, the technical details of these systems do not concern us in themselves, but rather, the matter of proportion and architectural experience. Proportion involves two issues, here: 1) if it can be a source of experience that can be understood and used in design (the issue of architectural determinism), and 2) the question of how it is that proportion might affect us, or in what way we experience it.

From Pythagoras and Plato, through a line of Medieval

philosopher-theologians, the idea persisted that the universe was structured by means of a mathematically-intelligible order. This was the source and ground of proportion, and architects and theorists partook of this wisdom, by means of borrowing the mathematical order observed in musical harmony, and turning it into physical dimensions. Alberti saw the human perception of harmony through the senses as deriving from the senses' affinity with the soul (the eternal part of humans), and thence came the instinctive perception, by people, of proportional harmony, the inner sense experiencing it (referred to, above, in subsections 2/6, 2/10/6). This, as Wittkower suggests, means that, according to Renaissance theory, churches should be designed according to perfect proportion, despite the possibility that this fact may not be outwardly apparent <Wittkower, 1962/AP, p. 27>. Palladio (in his 1567 memorandum concerning Brescia Cathedral) and Sir Henry Wotton (in his Elements of architecture (1624)) both expressed the view that proportions please the beholder of a building although that person may not know, or need to know, why, or how <Wittkower, 1962/AP, pp. 113, 143>. That people might consider that beauty might not be based on rational, objective principles, but be caused by intuitive judgement and experience, was a fact that Alberti - a staunch defender of reason in art - was aware of, and dismissed as resulting from ignorance <Schofield, 1958/TPA, p. 37>. While theorists of the early Renaissance did not doubt that proportion was one of the objective causes of beauty, Schofield considers that, despite many attempts, such theorists

failed to demonstrate that proportion is one of the external qualities of objects which "stimulate our sense of beauty" <Schofield, 1958/TPA, p. 38>. Many writers (including Schofield <Schofield, 1958/TPA, p. 38>) quote Alberti's definition of beauty involving the proportioned harmony of all parts, by which nothing could be added, subtracted or altered but for the worse; but "the worse" in whose view? Perhaps the un-beautiful nature of an object is in the eye, and intuition, of the beholder.

It is fascinating to note that a modern theory of the perception of proportion, that of Rudolf Arnheim (A review of proportion (1955)) has an approach not dissimilar from that of the Renaissance theorists. It is based, not on conceptions of the nature of the universe, divine creativity, and the human soul, but upon the theories of Gestalt psychology. His theory (as described by Richard Padovan, in a significant recent essay on architectural proportion <Padovan, 1986/NI, pp. 55-7>) suggests that proportions are perceived instantly, intuitively, and as a whole, and this as a result of an inherent "biological need to survive in a spatially complex environment - for instance to judge distances and shapes when they are foreshortened or distorted by perspective" <Padovan, 1986/NI, p. 55>. Involved in the idea of instant, total perception of a building's proportions, is the fact that mathematical exactness is not necessary to the experience (as in the dimensional irregularities - generally thought to be intentional - of the Parthenon, and in Palladio's villas - probably, in Palladio's

case, the result of builders' errors). It should be noted that Padovan considers that the "laws" of this "biologically acquired faculty" "must be sought in the nature of our three-dimensional spatial environment and in our powers of perception, and not in the esoteric geomancy put forward in recent books on "sacred geometry"" or "quasi-mystical manipulation of the building's surface measurements ..."
<Padovan, 1986/NI, p. 57>.

If the perception of proportion is, by some means or other, instinctive, in humans, it must be assumed that we must all necessarily perceive beauty in an instinctive way, if proportion is thus productive of beauty. If proportion is indeed an objective determinant of beauty in architecture, then all people at all times would have a common experience of the beauty of certain buildings (or the opposite). This would surely tend to mean Classical buildings, of some kind or other, since Classical architecture is the one which has most consistently followed the principles of proportional systems, whose origins, we have seen, go back through Renaissance theorists to Vitruvius and the ancient philosophers/mathematicians. But this would mean that no one would find Medieval churches beautiful, since such architecture as the Gothic style ignored such systems of proportions as that of Vitruvius (Gothic columns simply ascend to whatever height is required, irrespective of width, which is ultimately only governed by structural necessities); so it is not surprising that we find the Renaissance theorists dismissing the

"barbaric" pointed architecture. That which does not fit a theoretical system - of any kind, in any age - tends to be ignored.

English theorists of the later-18th century completed the demolition of the theory of objective beauty being created by harmonic proportions, a task that had begun in France in the preceding century. Claude Perrault considered (1683) that proportional ratios were pleasing simply because they were familiar <Wittkower, 1962/AP, p. 144>. In 1762, Tommaso Temanza dismissed the notion that architecture is the same as music, and introduced the question of the significance of the place, in a building, where the viewer's eye was located <Wittkower, 1962/AP, pp. 146-7>. William Hogarth's Analysis of beauty (1753) rejected any connection between mathematics and beauty, seeing the double or ogival curve as one of the principal sources of visual beauty, revealing its presence in objects as diverse as sea shells, ear-trumpets, and the shapes produced by ladies' corsets. An indication of the subjective nature of the experience of visual beauty can be seen in Lord Kames's dismissal (in his Elements of criticism (1761)) of the one-to-two proportion as unpleasant, in architecture - flying in the face of beliefs unquestioned in Renaissance theory. While the Renaissance architects were surrounded by (Roman) ruins, it is hard to imagine them, like the English theorists of the "Picturesque" school, and its successors, seeing those broken, irregular misshapen ruins as beautiful; the legacy of this Romantic aesthetic - the delight in "pleasing decay" - is

planted very deep in the Anglo-Saxon psyche.

Like Temanza, Kames drew attention to the limitations of human sight, and the difference of perception between that of the ear and the eye <Wittkower, 1962/AP, pp. 152-3>. By 1790 (Archibald Alison's Essays on the nature and principles of taste) the theory of association (considered in detail, in its relation to architectural meaning, in subsections 2/6, 2/10/4, 2/10/5, and 2/10/6) has entirely replaced proportion, as the origin of beauty: "trains of thought" produced by works or objects (of "taste") make them beautiful <Wittkower, 1962/AP, p. 153>. Ruskin accepted the idea of beautiful proportions, but considered that the number of possible proportions was infinite, and left it to the (intuitive) inspiration of the artist to devise them <Wittkower, 1962/AP, p. 154>.

Perrault's familiarity and Alison's association are not dissimilar, in that both are based on that which is learned, or otherwise acquired, as opposed to that which is inherent in all humans. In subsection 3/2/1, the question was raised as to the inherent, as opposed to the acquired, nature of positive experience of/responses to buildings. The early-20th-century gothic arches/vaults that are raised on very short columns, producing a very wide, low structure (perhaps dark) are badly-proportioned, in terms of classic proportional systems; but that may be an experience caused by what we are familiar with, and such spaces may be pleasing in spite of or because of their proportions, or because of other factors. The 18th-century objections to the "mathematical" nature of proportion-systems

(objectors included Edmund Burke, as well as Hogarth) may be objections to the possibility that mathematical relationships can be perceived in a building, rationally - an objection removed by Arnheim's theory, outlined above; and the same may be true of Temanza's and Kames' concern with the placing of the eye - the mechanics of perception - since Arnheim's intuitive perception involves the subconscious experience of space(s), as the person moves around a building. The debunking of the idea that architecture is like music is echoed by Richard Padovan <Padovan, 1986/NI, p. 55> who, like Lord Kames, drew attention to the specifically physiological perception of music (as opposed to the psychological perception of space(s)).

In some ways, Ruskin's approach to architectural proportion is the most fascinating, among the post-Renaissance reactions outlined by Wittkower. Unlike his 18th-century predecessors, he accepts the idea of beautiful proportions, but seems to falter before the immeasurable number of mathematical systems, seeing architectural beauty as perhaps ultimately rational, but beyond the mind of man fully to exhaust; the rational is the intuitive, not just by its perception, but by its creation also. And if we marry this to the approach of Arnheim and Padovan, we see that ultimately the rational and the intuitive reside together: there are such things as beautiful proportions (whether or not we can fully understand and recreate them), but our experience of them is not rational, or by means of a single viewing of the building. The experience of beauty in buildings goes beyond the letter-of-the-law of proportion's calculations,

since the most "perfect" works vary slightly from the "perfect" dimensions (Padovan: "The work of a supreme artist like Iktinos or Michelangelo cannot be reduced to a mathematical system" <Padovan, 1986/NI, p. 57>).

One architect who does rigorously employ a mathematical system of proportion, is the man whose work Richard Padovan has translated and interpreted in the English-speaking world, Dom Hans van der Laan, OSB. Van der Laan entered the Benedictine monastery of Oosterhout, Holland, in 1926, following architectural studies in Delft. The abbey at Oosterhout had been built by Dom Paul Bellot, also a monk-architect, early in the century. Bellot also built the great abbey and church (1911-12) of Quarr, Isle of Wight, another house of their order. Van der Laan discovered, from Bellot, that his works were designed on principles deriving from the Golden Section, but he himself became dissatisfied with that proportional system. When the priest of a nearby parish came to consult Dom Bellot concerning a chapel that he was building, van der Laan gained the commission, Bellot having left Oosterhout for France. When trying to design the chapel tower, and its relationship with the facade, he was led to discover the ratios that he later called the "Plastic Number", which, he believes, correct the errors, or limitations, of the Golden Section <Padovan, 1986/TP, p. 54>. The proportions of the Golden Section, he considers, relate only to two-dimensional forms, and hence would be "the system appropriate to a non-existent

two-dimensional world" <Padovan, 1986/TP, p. 55>. (These facts make it ironic, though, to note that Bellot's Quarr chapel involves a use of space and structure that is complex, dramatic and powerful, as opposed to van der Laan's work which consists of very simple, regular, cubic forms and volumes.) The proportions of the Plastic Number are derived, not from combinations of squares (as with the Golden Section), but from combinations of cubes.

The Plastic Number is simply a design tool, producing combinations of measures that can be used in structuring spaces and volumes. Van der Laan is insistent that his system is not in any sense "mystical" or esoteric, and Padovan records the disappointment that some members of his lecture audiences have expressed, when he has explained that van der Laan dismisses any connection with "spirituality" in his system <Padovan, 1986/MC, p. 54>. However, it is clear that in the ancient (and Medieval) sense, van der Laan conceives of reality and truth being enshrined in, and the product of, numbers and mathematics. An architect "is someone who is continually busy with measuring and counting" (van der Laan) <Padovan, 1986/MC, p. 54>. And rather than proportion being viewed as a tool or device for creating buildings, in his account, it is the creation of proportioned buildings that realise the Plastic Number. Number, and variations in dimensions, are experienced via the senses, the empirical experience of things (this view accords with Arnheim's theory of perception of proportion, outlined in Padovan's first article <Padovan, 1986/NI>). Van

der Laan's "identification of quantitative measurement with the highest - intellectual and spiritual - level of human experience" <Padovan, 1986/MC, p. 55> reflects St. Thomas Aquinas's ideas, which van der Laan, not surprisingly, has made much study of. Thus, van der Laan's architectural ideas, and buildings, involve a very different kind of spirituality, or theology, from that of the ideas of the "sacred geometry" school, or even Alberti, but it is present nonetheless, and so we must not be surprised to find Padovan referring to the "spiritual power" of the abbey church of Vaals (commissioned 1956, built 1961-2, 1967-8) or the Roosenberg convent, Waasmunster, Belgium (1972-85) <Padovan, 1986/MC, p. 54>.

Like all architecture, van der Laan's is a product of a cultural milieu, in this case, that of the early Modern Movement. The chapel at Vaals, in particular, with its Cistercian-like (or is it Functionalist?) austerity, and utterly plain unadorned surfaces ("architecture in the raw" (Jonathan Glancey) <Glancey, 1986/EV, p. 29>) contrasts sharply with the fin de siecle polychromatic brickwork and proto-Expressionism of Paul Bellot. However, Jonathan Glancey describes Vaals as timeless, citing the contemporary rejection of the scheme by planning authorities on the grounds that the scheme was "insufficiently modern" (presumably this was in the late-1950s) <Glancey, 1986/EV, p. 29>.

Modern Movement-inspired or not, Vaals was in some sense the product of a proportional system, unlike many Modern Movement buildings. Van der Laan considers its spiritual power is a

product of proportion, or measure, and that many visitors experience this initially, not as an experience of beauty, but as "a great peacefulness" that "goes out from it" (van der Laan) which his "measure" has produced <Padovan, 1986/MC, p. 54>. However, the use of a proportional system is pointless if it is not followed with great consistency and rigour (as van der Laan has surely done), and this can occasionally produce some rather odd results. Any liturgical space will have a point of visual focus, of one kind or another. In such a building as the Vaals chapel it is, naturally, the altar. Being related to the post-Vatican II liturgy, the altar (a rather low structure) is without reredos, or any other visual feature behind or beyond, or above. Instead, there are three dark openings beyond it. Above them, however, where the eye naturally rests, is a clerestory which, because of the demands of the system, has five openings in it, so that the right-hand termination of one vertical structure falls down - almost - on the left-hand termination of another, all of which looks very restless. It may be mathematically perfect, in some way that one's senses can perceive, subliminally; but of what value is such experience, since the disturbing effect of the five-over-three, being conscious, must surely overpower it <Padovan, 1986/TP, p. 57> <Glancey, 1986/EV, p. 30>; at least five and three, being odd, contain a central unit - imagine seven windows over four! Odd disturbances work when littered throughout a building, be it Mannerist or Deconstructionist, but not as an unexpected intrusion into a very ordered, rational space.

Symmetry is a prime consideration in this criticism of van der Laan's ordering of units in an elevation, and symmetry has long been seen as a component of proportion (eg. by Vitruvius, whose definition of symmetry, says Padovan, is virtually the same as his definition of proportion, and involves the idea of symmetry being a result of the principles of proportion <Padovan, 1986/MC, p. 57>); and yet symmetry need not actually involve the mathematical relation of dimensions in a composition. This is symmetry as the word is generally understood, the mirroring of one part of a facade by the other, as when a vertical line or axis divides a facade at its centre (symmetry of this kind might be seen as being at the heart of such considerations as A. Trystan Edwards' principles of Punctuation and Number (subsection 3/2/1)). Viollet le Duc, and Ruskin, made clear distinctions between symmetry and proportion <Schofield, 1958/TP, p. 90>.

However, Renaissance symmetry might be based on plan, and involve volumes reflecting, and balancing, one another across both axes. The result of this, when carried to its logical conclusion, is the cube-like building, where each facade is identical, such as Palladio's Villa Rotonda. An ecclesiastical equivalent of such symmetry is the centrally-planned church, such as the Greek-cross-in-square, or, a circular church such as Liverpool's Metropolitan Cathedral. As the Liverpool example (and surely, also, Rome's Pantheon) illustrates, a totally circular church can curiously disorient - literally - so that after some degrees of circumambulation, a person may be left

unsure just where the entrance/exit is located; it is as though the physical senses - the means by which we experience and understand our relation to the physical world - are confused. Such experience probably closely fits Arnheim and van der Laan's theories of the instinctive perception of proportion.

Leaving aside the symmetry of forms about two axes, there is the experience - perhaps more common, in northern Europe - of symmetry about the lateral axis, as in most Medieval churches, such that the disposition of volumes balances to left and right, at each stage of the building, as we progress along the axis; in this way, the symmetry reflects that of the human body (see also subsection 3/3/1).

Perhaps this brief review of the experience of architectural proportion reveals no more grounds for certainty than in our examination of other aspects of aesthetic experience, or that of architectural meaning - no certainty that we can truly understand, anticipate, and determine predictable experiences from particular design procedures, whose nature can be scientifically established. That proportion can produce effects upon people, though they may not know of them, returns us to the realm of mere theory, theory without the hope of proof, and thus belief in the deterministic value of such systems becomes a kind of blind faith. Yet there is everywhere a belief that "good" and "bad" proportioning of buildings does exist, since if people's positive experiences of buildings are examined, the "reason" of "good proportions" is often given, and perhaps (to

a lesser degree?) the reverse, negative experience put down to bad proportions. Probably there is, indeed, some physiologically-based sensually-perceived source for such experience, whether the experience is conscious, semi-conscious, or unconscious.

But can such experience be seen in objective terms while, clearly, some people may experience one kind of response, and others the opposite? (Indeed, there is a strong probability - as we shall see in other studies of experience - that an individual's response may not necessarily be repeated.) Even some of the "proportionists'" theories seem to marry the rational with a supra-rational element (the importance of exceptions to the demands of mathematical formulae, in actual building practice) and even take account of the inconsistencies and variations in human nature and being. Perhaps, as Perrault seems to have been suggesting, the pleasure gained from particular proportions is something not inherent, but learned, as it was suggested may be the case with other aesthetic rules (subsection 3/2/1). Like Ruskin, we surely cannot dismiss the reality of good architectural proportion, or its influence upon architectural experience, but perhaps we should, like him, abandon the possibility of its ultimate rational intelligibility, and look, instead, to the instinctual creative sensibilities of the architect.

A person approaches a building that he or she has never been to, or seen, before. There is some kind of demarcation between the building and the public space (wall, lawn, fence, or even a strip of water). There is a point of entry (archway, gate, door) into the building's "territory". There is a path leading forward, or a series of paths. Next, there is an entrance or entrances to an enclosed structure - the building itself. Within the entrance is a transitional volume, perhaps, which delays entrance to the inside of the building itself. Once beyond that area, there are probably corridors - circulation spaces - and staircases, a space containing lifts, and further staircases; then further passages - smaller, perhaps - leading to rooms, some very large, drawing the eye up to higher ceiling-spaces, others small, perhaps lower-ceilinged. Some spaces are darker, some filled with light, lighter, perhaps, than the exterior. In some, the floor covering, wall finishes and ceiling treatment - the colours, the textures, the qualities of sound, and even the smells - all differ, perhaps alternating from space to space, perhaps evolving and developing as progress is made along a series of spaces, perhaps displaying a hierarchy, of some kind, of spatial identity. In each space, the contents may vary, perhaps quite dramatically, in terms of those items that seem to be added to the structure, put into it subsequent to its creation, or part

of its essential structural nature.

The experience of entering a building - office, home, church, cinema, factory, parliament house, whatever - is the experience of spaces, volumes, colours, textures, light and sound. This experience we take for granted in our society, we are trained, "socialised" into expecting, and dealing with, such experiences. Entering a building for the first time, a "new" place, is an experience we are all familiar with, and it involves sensations that we would never bother to analyse or recount. We may enter a building that we know well, yet the light may be different from normal, the decorations changed, the acoustics transformed, and the furniture radically altered. Major effects may be made, upon the nature of our experience, and the ideas we have about the building (its nature, function, its pleasantness or unpleasantness, of our mode of behaviour in the building), by means of what we see and hear and feel, inside it. The building, then, will surely seem to "tell" us something about what it exists for (as a whole, and/or in its parts), what people do in it, what we may do there, and where we have to go, in conjunction with various activities, starting, of course, with us seeing a form/space which seems to tell us that this is where the building is to be entered. Once inside, the kind of series or hierarchy of spaces, mentioned above, may lead us naturally, without words, to the other spaces of significant activity for us (or, of course, they may not). The spaces inside the building (and the forms, spaces and objects outside it) will be meaningful, in some way or other

(perhaps usefully so, perhaps not).

We are back into the world of architectural meaning and the significance of structure, of architectural, spatial forms "telling" us things, providing information, the concerns of section 2. But the above concerns the meaningfulness of experience, or rather our experience being affected, modified, or conditioned, by the intelligibility of environmental conditions. Meaning, in this experience, is the often semi-conscious one of discerning the way to, and the identity of, a space, such as the physical facilities related to specific functions - the place to eat, the place to wash, the place to sit to watch television, the place to play the piano, or to sleep.

The means of this intelligibility (the sources of this information, whether it is true or false, useful or useless) are the physical/aesthetic facts of the building - spaces and volumes, forms and voids, light and dark, colour and texture, etc. Of these, forms and volumes, spaces and voids, take the form of physical boundaries or demarcations, basic components of all structures, artificial or natural. These include: floor (or ground), wall (fragmented, perhaps, into pillar, column, or arcade), ceiling/roof, and stair or ramp.

Thomas Thiiis-Evensen, in Archetypes in architecture (1987) <Thiiis-Evensen, 1987/AA> referred to these basic components as architecture's "archetypes", using the now-universal concept/term of C. G. Jung, who sought to describe a collection of fundamental, inherent, and ever-present original forms within

the unconscious mind. For Thiis-Evensen, these architectural elements are truly archetypes (rather than just elementary forms) because they belong to the "shared experience" of all people everywhere, and comprise a "common language" of forms <Thiis-Evensen, 1987/AA, p. 17>; This "existential experience" which people have, is based on motion, weight and substance, the essential realities of human existence <Thiis-Evensen, 1987/AA, pp. 19, 21, 23ff.>. Architectural creativity is seen as the way in which the archetypes, these "basic forms", are endlessly combined and varied, as opposed to new forms being created for situations as they arise, eg. out of new or specific functions <Thiis-Evensen, 1987/AA, p. 17>. Thiis-Evensen describes, in very great detail, the way in which archetypes can take a very varied - almost infinite - number of individual forms, so that a "floor" could be the ground between trees in a forest, or the paving of a large Italian piazza. The archetypes, particularly floors, paths, and stairs, have the power to unite and separate, to lead and direct, but also to demarcate. Such a path, however, might only be a sequence of red floor tiles, in the midst of a floor of black tiles. Steps, stairs - changes of level - can have some very subtle effects on the ordering and varying of spaces, and activities within a building (as in the case of the nave of Portsmouth Cathedral, etc (subsection 3/3/2)). In many ways, Thiis-Evensen's analysis of architectural experience is similar to those analyses of architecture, in terms of the aesthetics of building elements, which were described in subsections 3/2 and 3/2/1.

The experience of a building, described at the outset of this subsection, might seem, justifiably, to refer mainly not to a church, but to a large office, a government building, a department store, museum, or law-courts. The suggestion given was of a building that is complex in plan, ie. warren-like, with many changes of direction and level, having, beside the threshold and circulation-spaces, a large number of different inner-spaces, of very varied sizes. The question of the intelligibility of such buildings (because intelligibility is concerned with the activities going on within) becomes associated with debates about the functioning, and functionality, of buildings - what these things mean, in architectural design - as discussed in a recent series of lectures and debate at South Bank University <Adams, 1993/EF>.

Churches, even the very largest, are not often like this kind of building. Normally, the architectural archetypes or elements draw a person in one direction, towards one point, having one objective or goal as the termination or climax of a process. Often, that is, a church is one vessel or volume, organised around a single horizontal axis, the lateral axis. There may be a transverse axis, or cross-axis, such as in a transept, but often the transept, and the axis it sets up, may be only apparent above human level, and not affecting the ground-plan, nor the experience of the person within, at all. Most central-plan churches are even more simple in form, having one volume, circular, polygonal, or elliptical, the space of which is entirely to be appreciated at one glance, though a

centrally-planned church may have lesser spaces, or exedrae, set upon horizontal axes which intersect at the central point. However, there are churches where episodic and problematic building-histories have resulted in more complex overall forms. A good example is Sheffield Cathedral, where later, abortive, efforts to produce a large cruciform church from a smallish building, have produced an L-shape, so that a person may feel drawn in one direction, along one arm of the building, towards one architectural "goal", and then discover that there is an additional, separate, path that can be taken, towards another extremity of the building; and the "path" may not even be uniform with regard to one dimension, since the person may feel drawn up to higher, or down to lower, levels of the building.

Of course, in churches, as perhaps also in buildings such as law courts and parliament houses, steps, areas of floor/seating, and a variety of barriers (screens, low walls, etc.) separate areas on the basis of reflecting and/or creating the separations between hierarchies of people, and their functions, relationships, and distinctions which may be based on a variety of different factors (social, liturgical, ecclesiastical, etc.) [see also Appendix Z]. In subsections 2/5 and 2/10/5 we saw how movement, progress, and process within a building could be seen not only in terms of literal, physical, experience, but also, by way of metaphor, analogy, and symbol, as having spiritual meaning; the significance of such experience, in religious/spiritual terms, must be explored further when church architecture is examined in specifically spiritual terms

(subsection 3/3, and particularly subsection 3/3/2).

In addition to the analogical ways, by which the behaviour-modifying effects of the archetypes can be understood spiritually (eg. stairs causing physical ascent, understood as spiritual/mystic "ascent"), the essential experience of the archetype - an aesthetic factor - can in itself be seen as being involved with spiritual ideas (or having analogical meaning), as seen in Rosemary Budd's reaction to the experience, not just of church floors, but floors composed of different materials. In the article she produced ("What are floors for?"), following my request for an article to accompany my "Floors: meaning and experience" <Thomas, 1990/FME>, Rosemary Budd, whose writings are concerned with prayer and spirituality (see subsection 3/3/1), found stone floors to be "hard, defined and ungiving", "unyielding", and discouraging in any quest of spiritual progress or journey <Budd, 1990/WFF>.

The experience and intelligibility of the built environment is altered radically in the case of those deprived of certain senses, eg. the blind. For them, the over-emphasis on seeing-as-information/knowledge (as Claudine Arroman sees it, in The physical and the intellectual A study of sensory perception <Arroman, 1989/PI>) falls away, and touch and sound, and qualities of air/temperature, are the sources of information. For such people, various kinds of spatial demarcations, based on purely visual barriers - and perhaps some subtle spatial distinctions - are not experienced; experience via the senses, by way of the body - which Arroman suggests the exclusivity of

visually-gathered knowledge has robbed us of - is perhaps richer for the blind, and this might perhaps have spiritual consequences. The activities of a Birmingham-based project, "Cathedrals through Touch and Hearing" has revealed that for the blind, not only is the experience of great churches totally different from that of sighted people, but that for them, the concept of beauty - and a host of other aesthetic factors - is almost the reverse of what it is for most people (see Karen Taylor's article "Why Mr Sayce hugs cathedral pillars" <Taylor, 1991/WMSHCP>). The possible effects on spirituality of sensory deprivation, and the spirituality of the blind and deaf, is surely the subject of a detailed study, yet to be undertaken.

3/3 AESTHETICS, ARCHITECTURE, AND SPIRITUALITY

The notion that aesthetic factors - the areas discussed in subsections 3/2/1, 3/2/2, and 3/2/3 - can play a part, not just in experience of buildings, but also in spiritual and (in the broadest sense) religious experience, has been suggested on various occasions in this work already. The next few subsections will look at ways in which the nature and conditions of physical environments may, in some manner or other, relate to inner experience. The discussions, in the subsections of 3/2, suggested aesthetic factors, principles, rules and formulae which might produce a pleasing or satisfying effect upon the mind of the beholder, or even produce the experience of beauty; but now we have to consider if those factors, or those experiences themselves, might take us beyond themselves, into what can be called the spiritual or religious. Naturally, one difficult problem is that which relates to the relationship (or distinction) between spiritual and aesthetic experience, which, while not being an architectural matter, cannot be avoided (see Appendix W, and also Appendix V).

3/3/1 PHYSICALITY, SPIRITUALITY, AND BUILDINGS

In subsections 3/2/1, 3/2/2 and 3/2/3, it was seen that buildings were experienced by people through and by means of the human senses, by the physical act of moving through them, feeling surfaces, and sensing spaces, through physical processes and spatial progressions.

Increasingly, studies of the nature of prayer, worship, meditation and spirituality are revealing the interconnection between our religious experience and the physical, that is, the reality and nature of physical existence; and from this flows the realisation that attending to posture, gesture, physique, and our attitudes to our bodies, can serve to inform and enrich our disciplines of prayer and worship, and enhance the life of the spirit. The physicality of the spiritual is the source of the spirituality of architecture, of the relationship between architecture and the spiritual.

Prayer, meditation, contemplation and mysticism are subjects which have enjoyed an explosion of interest, in the religious scene, in recent years, and it is not only the more ancient or mainstream traditions which have been affected. This trend is seen in the frequency of conferences and meetings, and the production of associated books of various kinds. Closely allied is the retreat movement, which has also found followers in all denominations. South London has its SPIDIR organisation, whose work involves spreading the message of spiritual direction, and

encouraging new ways of meditation and prayer. The "Julian Meetings" is an association of meditation groups led by people inspired by Julian of Norwich, the 14th-century mystic and religious writer. The growth of meditation, which is practised as either a communal or private act, can be seen as a development that has occurred, in this country, since the establishment of the new liturgies, and in many ways has complemented the effects of the Liturgical Movement.

An essential ingredient of the thinking of the meditation movement, if such it can be called, is the realisation that the human being is a unity, a thing of one physical and spiritual nature, and that attention to the spiritual nature involves attention to the physical (indeed, it may even be the case that this realisation has had a causative influence on the growth of meditation groups, etc.). This realisation - as Rosemary Budd makes clear <Budd, 1987/MP, pp. 16-22> - is part of a latter-day desire to throw off the effects of originally-Greek ideas of body-soul duality, which gave rise to the presence of Gnosticism, flesh-denying asceticism, and a pervasive body-denying element that has caused distortions (and many evils, not least a prurient loathing of sexuality) throughout Christian and Western history (see also Una Kroll's The spiritual exercise book (1985) <Kroll, 1985/SEB, p. 4>. But more, this trend of thought is a response to the effects of modern scientific thought (with its unified conception of mind and body) and an almost universal reaction against centuries of rationalism, that is a feature of much modern thought in the

second half of the 20th century. Like many contemporary movements, there is here a concern with the "holistic".

The emphasis on spiritual progress, by means of the physical, starts with a consideration of the things that come to us through the senses, things seen, heard, felt, touched, and smelt, and accounts of prayer and its relation to the body (or seminars, etc., concerned with the subject) can thus be largely devoted to sensory experience - perception of the kind of aesthetic experiences referred to in subsections 3/2, 3/2/1 and 3/2/2, etc. - rather than purely bodily concerns (and this is seen, for example, in chapter 11 of Henry Morgan's Approaches to prayer <Morgan, 1991/AP, pp. 113-6>). The non-intellectual approach of such a work as that of Una Kroll, referred to above, thus contrasts strongly with the exercises prescribed in St. Ignatius of Loyola's Spiritual exercises (1520s), which, while making considerable use of the imagination, are essentially cerebral. Kroll's exercises are organised as an eight-week course, which involves different elements each day; in addition to a wealth of significant postures and movements, each day's exercise includes Bible reading, and meditations which employ a wealth of objects for touching, smelling, and experiencing (seeds, a stone, a flower, a bowl, etc.); they are used in a symbolic, meditative way.

In Moving prayer (1987), Rosemary Budd argues strongly for the sensual-bodily-physical nature of all our relationships and doings, and then suggests that our relationship with God must surely be similar <Budd, 1987/MP, pp. 11-42>. Instances, in the

Bible, of encounter with God, of acts of prayer and worship, are often explicitly set in real locations, and involve various significant postures - all of which the Biblical writer has taken the trouble to record and refer to. A physical position involves - displays, reveals, and can express - ideas and feelings; in a word, they are one's attitude, meaning both a mental stance or position, and an arrangement of the physique.

Yet most of us are brought up simply to use, unthinkingly, the "shampoo position", in prayer: head bowed, as over the basin. Budd describes seven bodily postures of prayer, and nine positions of holding the hands and arms <Budd, 1987/MP, pp. 46-60>. These include standing, sitting on a chair, sitting cross-legged on a floor, kneeling back on one's heels, kneeling upright, bowing, and lying stretched out flat. These mostly have Biblical precedent, and express the ideas/intentions (and create/express inner feelings) of supplication, obedience, intercession, and even love and worship. Open-palmed hands (with or without outstretched arms) express feelings and attitudes of openness, inward turning-towards, and desire for, the beatific vision. Hands crossed over the chest (the gesture of Mary, in many depictions of the Annunciation) express inward-turning, and assent, to the things of God. Worshippers often experience the need outwardly to express powerful inner feelings, and gesture is a means to this; sadly, many of these gestures, such as uplifted arms, with upwardly-held, open-palmed hands, tend to be associated purely with certain kinds of worship, found in particular sectors of the Church

(Evangelical and/or Charismatic). Such gestures, often spontaneous and informal, must still be seen as similar in kind to the formal and traditional gestures of priests, such as are found in the consecration of the eucharist, the blessing, etc. This "body language" - though our examination of the nature of language (subsection 2/10) must make us wary of calling any such thing language, as such - can never be disregarded, in religious practice, whether it seems wildly innovative, or boringly familiar.

Human physicality, and the (appropriate) use and valuing of the human body in worship, has been a central consideration in another area of recent liturgical thinking and experimentation, that of liturgical dance. J. G. Davies's Liturgical dance An historical, theological and practical handbook (1984) examines both the history of Christian attitudes to physicality, and the possibility (already referred to) of postures and gestures being used to express ideas, and ultimately to convey beliefs and teaching of a Christian nature <Davies, 1984/LD>. Using ideas derived from the meaning-systems of Hindu dance and Shaker dance, Davies constructs a fascinating "Christian movement vocabulary", in which every possible part of the body, and its movement, conveys ideas - eg. the foot conveys power, the arms protect or redeem, the outstretched neck expresses pride, and many more <Davies, 1984/LD, pp. 169-178>.

Dance, and also exercise and meditation, have significant implications for the physical environment. Dance above all

requires unencumbered space, a space that is central and easily-seen, and this reminds us that the idea of a central liturgical focus has strong natural links with theatre and performance-space, in visual spectacle; or rather, that liturgy and worship are themselves drama, and dance and drama had their origins in worship and cult. Surprisingly, in view of his important work relating to many aspects of church buildings, Davies offers no detailed advice concerning the physical environment of liturgical dance.

The environment of meditation, like that of dance, needs special consideration and attention. Churches which have used part of their building for this, either by re-ordering existing areas, or designing new ones, have usually produced relatively small, intimate spaces, with adequate insulation or separation from the sounds and activities of other worship-areas (silence, like stillness, is axiomatic in all aspects of meditation). Also important, as with the facilities for liturgical dance, is a suitable floor, this time, one that is soft (eg. thickly carpeted), and thus appropriate for prolonged kneeling (thus, perhaps, the dislike of hard floors expressed by Rosemary Budd, reported in subsection 3/2/3). Spiritual exercises, as a personal discipline, rely on the ubiquity of domestic fitted, underlaid carpet. (Buildings and environments for meditation, etc., will be discussed in more detail in subsection 4/3.)

In addition to the building, however, prayer and meditation - as with the eucharistic liturgy - have important implications for furniture and its design. Today's writers rarely advocate

the traditional prie dieu or faldstool type of prayer furniture, where the body is propped forward against a desk, or small table-like structure; this often terminates in a tilted panel or board which holds prayer books, etc. Writers who recommend sitting on a chair (eg. Denis Duncan, in Creative Silence Through inner silence to the harvest of the spirit. (1980) <Duncan, 1980/CS, p. 35>) seem to be suggesting a solid structure, with a fairly solid seat and back, and also arm rests; they are recommending, in particular, a posture of alertness, not relaxation. Kneeling down with the back straight, the head, eyes and hands perhaps raised upwards, is a posture that is often practised, but it can be a problem in that the body-weight tends to weary, even crush, the ankles which are beneath the trunk, and the constantly-folded knees are quickly a source of discomfort. An answer to these problems has been found in the use of a simple, low, wide, stool, made of just three pieces of wood, that is generally associated with the renowned monastery/pilgrimage-centre of Taize, in France. Small stools of this kind can be made to fold together (and are thus portable), and can easily be stored, unlike chairs. Naturally, this posture is only suitable for the physically able. Slightly more awkward, from the point of storage, is the back-supporting stool/chair-like contraption, recently popularised by various furniture chains; they were never devised or sold for religious purposes, but have the appropriate effect of producing a posture of relaxed alertness, without causing spinal bending.

Almost all of the above seems to be concerned merely with certain recent approaches to worship and spirituality, and the facilities required for them; but at the outset of this subsection it was stated that a consideration of the physical nature of human spirituality had deeper implications. This becomes apparent if we consider the concerns of this subsection (and of 3/2/3) beside those of section 2, and particularly of subsection 2/5. In looking at theories and instances of meaning, in the history of architecture, we saw that anthropomorphic concerns - ideas linking architecture with the human body - were one of the most, if not the most, persistent features. In that account of meaning, as it concerns Christian church architecture, the matter of anthropomorphism became central when we looked at the idea of the church building as being like a human body, and the human body as suggestive of Christ's body, and thus of the Christian Church itself, the Body of Christ (subsection 2/5), in the work of Durandus, and other Medieval symbolists, and its grounding in the ideas of St. Paul.

Because of those convoluted, subtle, and ancient identifications of the body/Christ's body/the Church, etc., the connection between the human form and church buildings must lie very deep in the psyche of believers. Time and again we hear talk of "building up the body of believers", "the living stones of Christ's body", of Christians as the different limbs or organs of Christ's body, etc. People, as we have argued, respond to buildings - churches in particular, perhaps - with

their physical senses, their limbs and organs, their aesthetic sensitivities (and, some would add, extra-sensory perceptions of which we may be only partially aware, if that, let alone understand). Centuries of architectural thinking have surely influenced people to experience buildings as body-like, as having physical, creaturely, associations (subsections 2/4, 2/5, 2/6, 2/7, etc.). We noted that people thought of cruciform churches as body-bearing crosses, vast reminders of the living presence of one particular body. To experience a greater church building as body-like is to see it as a vast organism, one in which bay succeeds bay, each volume or portion succeeds another, cell-like, and yet bound together in a single whole. Perhaps, subconsciously, the symmetry arranged about the lateral axis, referred to in subsection 3/2/2, enables some people who enter and move around, sit in and kneel in, a large church, to be conscious of the body-like disposition of the building, by way of the mirror-image of their own body, by means of which they experience the greater "body" around them. Perhaps Francesco di Giorgio's identification of church plan and human body (subsection 2/5) refers to inner experience, as well as matters relating to proportions, nature, etc.

At least one part of a church is explicitly connected, symbolically, with the body: the baptistery/font. In Symbolism in the Bible and the church (1959) Gilbert Cope writes that "The font is unmistakably a womb" - the place wherein initiated Christians experience rebirth (St. John Ch. 3, v. 3-6) <Cope, 1959/SBC, p. 102>. The font is connected, symbolically, with

the grail (which has its origin in the mythical Celtic cauldron of rebirth), and also the chalice, spiritual rebirth being implicit in the spirituality of the eucharistic sacrament. The modern font at Audincourt, France, actually resembles the writhings of a bodily organ, such as the uterus <Davies, 1962/ASB, p. 159, pl. 54>. In addition, as we have seen, the font is also the symbol of death, of a tomb, and in recent years there has been a move, in the Roman Catholic Church and other denominations, to practise total immersion baptism, and this has required the creation of total-immersion fonts/baptisteries; these naturally form a major ingredient in a church's assemblage of liturgical spaces/furnishings <Nugent, 1985/BI>. Total immersion in the waters of death, for adults, is surely an event in which a person feels their whole body, their whole self, to be partaking in an act of worship.

Perhaps in a whole variety of ways, a church building, like the body, might be a means of seeking the way towards that spiritual enlightenment, or vision, which the mystics and contemplatives sought, as also do today's devotees of meditation and prayer.

3/3/2 PROCESS AND JOURNEY, PHYSICAL AND SPIRITUAL

In the previous subsection, the body, its connection with buildings and spirituality, were considered in a static way

(indeed, stillness is an essential part of meditation and contemplative prayer); but we have already seen that physical process, movement, and journeying can be understood as metaphors for spiritual processes (subsection 2/10/5, category 4); and that physical movement around a building is an ever-changing, developing event, in which aesthetic factors can have a strong effect on experience (subsection 3/2/3). The time has now come to look at physical/spiritual process within and around buildings, beginning with a more detailed account of physical images of spiritual process, particularly that of St. John of the Cross, and St. Teresa's Moradas, both referred to in subsection 2/10/5.

St. John of the Cross's description of ascending a staircase is an image of physical/spiritual process; it comes from the poem that is the basis for his large, complex work The dark night of the soul (1577-8): "Upon a gloomy night .../I went abroad when all my house was hushed./In safety, in disguise,/In darkness up the secret stair I crept" <Campbell, 1952/PSJC, p. 11>. Spiritual ascent - the "ascent of Mount Carmel", in the phrase of the Spanish mystics - is a distant descendant of the spatial/spiritual image of the three-decker universe, heaven and salvation - like the top of Jacob's ladder - being somewhere "above". More fascinating, perhaps, are those images, like St. Teresa's, of the journey inwards, of reality (metaphorically a place) being inside one.

Las Moradas was written in 1577 by Teresa of Avila (1515-82), one of the great Spanish mystics. It is usually called The Mansions, but in English is often known by the excellent title The Interior castle <Teresa of Avila, 1944/ICM>. Its intended audience was the sisters of the various discolced Carmelite convents which the saint founded and oversaw. It is unusual among mystical writings for its use of a sustained and complex architectural image, an image which is at the same time the structural organisation of the book, and the schematic organisation of the spiritual process which is the work's chief concern.

The writer asks us to imagine a great castle or palace or mansion which has seven parts or zones. These areas are not placed one after another, along an axis, such as a series of bays or enfilade of rooms, but are concentric, like the "many layers of a palmito tree". Each of these mansions is not one physical entity, however, but is itself a collection of spaces, hence each is called "first mansions", "second mansions", etc. The great complex building, or series of buildings, is an image of the soul. The religious seeker-after-truth must journey into this building by degrees, the soul having its fullest being or residence in the seventh, the final mansion(s). Such a person must thus enter into herself, and St. Teresa is aware of the problems associated with such a suggestion. A second meaning is involved at the same time, however: the mansions are the dwelling place of God, the palace of a divine king, and as the first few mansions are the outer courts of this royal

residence, so the seventh is his private inner-chamber, the place where he can be truly known. The two meanings are not merely piled one on another, but are to be understood together - God takes his pleasure, we are told, in dwelling in a pure soul; at the core of the innermost mansions, God and the soul have their discourse. The whole structure is vast and intricate, and involves different levels, or kinds, of spiritual life:

"Thus this palace has around it many rooms, and the same above, because the things of the soul have to be considered in their fullness, without fear of exaggeration, because the soul's capacity is greater than we can imagine, and in its every part the light of that Sun, which is within the palace, is diffused ..."
(1st Mansions, Ch. 2).

The difficult journey of entering into one's own soul is to be achieved by one basic means of passage: prayer ("The door by which to enter this castle is prayer" (2nd Mansions)). The journey is not described in terms of any allegorical story, but by means of a description of the different kinds of prayer, or stages in the process of mystical union, the via mystica. The "mystic way" has been described in different terms, and with different numbers of degrees or stages; one account of the mystics' experience is F. C. Happold's division into three (the Way of Purgation, the Way of Illumination (or Contemplation) and the Way of Union (or Unitive Life)), but these three subdivide into other stages or "ways" <Happold, 1970/M, pp. 56,

73-7, 342-354>. Different stages of the journey, in St. Teresa's account, are completed with varying degrees of ease and difficulty: the first few mansions are quickly moved through (by a spiritual adept), but then come the obstacles - the Devil and his minions - which increase, rather than diminish, as each new mansion is entered.

The physical image, which is our concern here, is used at various levels, assuming more importance at the beginning, but never being abandoned. From what source did the saint acquire the image? Certainly the germ of the scheme goes back to 1565, when The Way of perfection was written; but it was the vision of 1 June 1577 (when the castle appeared before her in a crystal sphere) which inspired the work itself. One obvious origin was St. John Ch. 14, v. 2, "In my Father's house are many mansions". The Latin Bible had mansio, "halting place", "lodging", "inn", and the Greek behind mansio is monai, "stopping place", "station". C. K. Barrett connects this with dwelling, as in "Anyone who loves me will heed what I say ... and we will make our dwelling with him" (verse 23) - but he also refers to an ancient idea that the reference is to progression in the heavenly life <Barrett, 1955/GASJ, p. 381>. Certainly, for St. Teresa, the understanding of a "dwelling" is crucial, though the idea of spiritual progression seems to have been within her understanding of the passage, also.

Though this image, from the Fourth Gospel, was surely the source of the idea, many other influences may have contributed to the way in which it was used. Dante created a world of

celestial realms or spheres, through which his hero and heroine travelled (see subsection 2/3), and, nearer home for St. Teresa, Juan de Mena wrote El laberinto de fortuna (Seville, 1496). In this mixture of theology, astrology, and world history, a Beatrice-like beautiful woman ("Divine Providence") is guided, by the poet, through three concentric realms, past, present, and future. The work is in seven parts, and the mystically-significant number seven derives, ultimately, from the Ptolemaic planets. The title of this work suggests that it, and many others, are products of a great chain of stories based on the myth of the underworld or labyrinth journey. The labyrinth was referred to in subsections 2/3 and 2/5, its connection with mazes (particularly those set in the floors on Medieval churches), and the possible meanings of such stories/structures.

However, St. Teresa's degrees, or stages of prayer, do not precisely fit the number seven. Her use of seven was surely in conformity with tradition. In Medieval thought, where numerological symbolism - we have seen - was ubiquitous, seven was considered the most important number, being the sum of four (representing the body) and three (the soul). It is the number of humanity, and expresses man's double nature (Male, 1961/GI, p. 9-10, Ch. 36, etc.). We know that 16th century Spain was possessed of an intellectual climate in which there was much fascination with the esoteric approach to religious buildings and their symbolism, as in the interest in Ezekiel's vision of the Jerusalem Temple, and the meanings involved in the

palace/monastery of the Escorial (outlined in subsection 2/6). The Escorial (1559-1584), like the Temple, and St. Teresa's castle, had various courtyards, though there is some disagreement as to whether the Temple and the Escorial had seven or nine. In addition to the Escorial, it is tempting to link St. Teresa's castle with the vast, complex Spanish Late-Gothic cathedrals, also vaguely contemporary, and such former-mosque churches as that at Cordoba.

For St. Teresa, the architectural image of the great castle or palace is only a device; there is no suggestion that buildings play any part in the process of the union of humans and God, and the mansions are not used as a means of describing the states of religious experience themselves. The image remains external, but it is pervasive and continuous, and perhaps helps prevent the saint from falling into the formless wanderings that mystical works can seem to be subject to. The book describes, by means of a physical process into physical spaces, a journey within, a journey to a person's interior, and in that sense can be seen as similar, not only to maze and labyrinth diagrams (which, we saw, can be taken as representations of the journey back into the centre of one's being), but also to the Eastern mandala, a concentrically-created diagram of lines or forms, designed to draw the eye, and the mind, of the contemplative, inward, towards spiritual experience and ultimately enlightenment; and various Eastern temples, eg. Borobudur, Java, are set out on a mandala-plan, and are the setting for a physical process - inwards and

upwards - in Buddhist worship. (A parallel is the Orthodox icon; this is a religious picture for seeing through, a window onto spiritual truth; the contents of the picture are simply a means to this vision.) A simple diagram, of concentric circles enclosing seven spaces, could easily be created, graphically to illustrate The Mansions <Thomas, 1982/AIVM>.

Not only within Eastern traditions are religious buildings associated with spiritual processes. In the Christian sacralist tradition, we saw (subsection 1/3) how the separate areas/parts/spaces of a great church, or buildings within the totality of a cathedral precinct, could be invested with ascending or developing qualities of holiness or sacredness, this originating in the three areas of the Jerusalem Temple, and surviving in Medieval, Renaissance, and Baroque practice and thought. The process of entering into a succession of spaces of ascending degrees of holiness is seen if we imagine a person entering a great church or cathedral, in the Middle Ages: coming from the countryside to the town, then entering the cathedral precincts, and next - with an Early-Christian/early-Medieval church, perhaps, such as S. Lorenzo, Milan (c. 378) or the Church of the Nativity, Bethlehem (later-6th-century) - entering an open atrium, before the building proper, a space which may be a square surrounded by a cloister or arcaded walkway. Next, the narthex is entered, then the nave, the progression of columns - with their rising and falling arches, above - drawing the visitor on, and each space more

significant, more important, more holy than the last; each space deeper into the heart of the spiritual reality that the believer is entering. Next may come the under-tower, or transept-crossing area, and then, up a few steps, a tall ornate screen, and beyond, the choir. Next is the presbytery, perhaps, and finally the sanctuary itself, with its high altar, perhaps with a tabernacle or pyx, and the presence, probably, of reliquaries and holy remains.

In reality, few people (and probably no lay-persons) would ever be allowed beyond the screen (in front of which might be an altar for the laity, a precursor of today's nave- or crossing-altars); and pilgrims visiting saints' shrines were often admitted by a side-door, to a shrine that might be sited beyond the sanctuary (thus removing undue interference with monastic worship, if at a monastery-cathedral), so they might never process along the length of the building. But the significance of the spaces and their sacral hierarchy - the gradual enrichment of decoration and ornament - would not be invisible, and would probably be understood by all, and the Medieval pilgrimage was itself a (literal) journey which was understood, and used, as a spiritual exercise <Davies, 1988/PYT, pp. 184 ff.>. Certainly a church would have been used for a spiritually-edifying physical journey when the building was used for religious processions, and a post-15th century development of this was the observing of the Stations of the Cross, in which a moving group of worshippers would gather beside a structured series of images of the Passion, a

miniature version of the walking along the via dolorosa, the route taken by those few pilgrims fortunate enough to be able to follow in the footsteps of Christ, in Jerusalem, on Good Friday. The Stations of the Cross are still used in this way; and in subsection 2/6, we encountered versions of this (in the Baroque period) where the stages are set upon an ascending staircase.

Today, with ancient, or modern, buildings, the spaces and the process are open to all, and a great church building is still a complex of large and small spaces that lead from one to another, with differing surfaces, textures, kinds of decoration, and differing horizontal levels, with their significant demarcations, as we have seen. A large church, today, might be a place in which spaces can be connected with spiritual processes. That parts of a church building can be used as the places, and the subject and source, of prayers, is shown by Simon Bailey's excellent book Stations Places for pilgrims to pray (1991) <Bailey, 1991/S>. In this, the author arranges a series of prayers and meditations (perhaps for individuals, but also, perhaps, for groups) to be used at various points in a church, which people are visiting as pilgrims in the journey of the Christian life. The eighteen stations include: the porch (a threshold-place "between the world outside and a place of sanctuary" <Bailey, 1991/S, p. 2>); the door (a border or division, marking ingress into a special place); the font (where we become part of the Church, of the life of Christ); a large open space (echoing with the

prayers, thoughts, and songs of long years of worship); the nave (like a ship, sailing towards God); the pulpit and lectern (where the Word of God is present); the altar (where Christ's "sacrifice" is real again, where his Life is present among us); a dark corner (which may "remind you of the mystery we seek, of the secrecy of prayer, of the hidden presence of God" <Bailey, 1991/S, p. 12>); the churchyard (where we may sense immortality); a spire or tower (by which "we are lifted up to everything beyond us" <Bailey, 1991/S, p. 18>). Following this, there are sets of stations relating to one's home, the town or city, and finally there are seven stations "Around your body": the ears (with which we might listen to our body's sounds, to inner voices, and the movement of the spirit); the eyes; the voice (which gives joy, in speaking words that come from the heart - but there is also the joy of silence); the insides; the feet; the hands; and the mind (which, so full of things, must become still, like a pool).

As churches have been, and are, the setting for a procession, and process, of devotion concerned with the events of Christ's Passion - as we have seen - and are images of the human body, and images of Christ's body, then it should be possible to conceive of prayer and meditation, deriving from Christ's body, to be related to parts of the building; and in Devotions to the Lord Christ (1936) <Barnes, 1936/DLC>, we find a collection of meditations on the Passion related to various themes, including Christ's five wounds (hands, feet, side) (VI)

and the body of Jesus (VIII). Perhaps some future spiritual writer will make this connection.

A building partially created, and fully exploited, for communal worship of movement and process, is Portsmouth's Anglican cathedral. This comprises a sanctuary which is Medieval, an 18th-century choir, with an early-20th-century crossing-area (by Sir Charles Nicholson) built around and beneath an 18th-century tower. Nicholson began a nave, beyond the crossing, and planned to complete it, and a western termination; this was delayed by war, and finally abandoned. When David Stancliffe came to Portsmouth in 1977 (becoming Provost of Portsmouth in 1982) thought was given to the cathedral's completion. Stancliffe worked with architect Michael Drury, who designed a termination based on a model that had been found, which revealed Nicholson's intentions for that part of the building; but between the termination and the crossing-area, Drury created an almost-square nave (completing the portion begun by Nicholson). This nave is set a few feet below the level of the nave aisles (which extend around the western end of the square, and are partially separated, or screened, from the nave by columns). There is thus a (roofed) atrium-like space, similar to those set before early churches, referred to above. Beneath the tower, in a smaller, darker, crossing-space, there is a free-standing font which is designed to allow baptism by immersion (but not submersion). Beyond this, the building opens out into a light, wide area where

there is a free-standing altar on dais, ambos, etc. - a liturgical focus - in the 18th-century part of the church. Beyond this, the spaces become smaller and darker, as one enters the Medieval building, which has a further altar, free-standing, but near the eastern termination <Thomas, 1993/DSJ>.

Setting the floor of the nave a few steps lower than the nave-aisles, and the rest of the church floor, creates a virtual arena-like space, which inevitably "concentrates" and gives special significance to, the liturgical activity set at the nave's centre. Such a nave is not new, since that at Liverpool Cathedral (the plan of 1942, built in the 1960s and 70s) has a sunken nave. That such a space can be created in re-ordering is shown in the work of Gerald Murphy Burles Newton & Partners (1984-) at the Anglican church of St. Peter, Dulwich, London (1874), which became St. Peter's Ecumenical Community <Thomas, 1989/StPEC>.

The spaces at Portsmouth lend themselves to a wide variety of uses and liturgical events. The nave, in particular (where there is also a dais and altar), can become a setting for many different styles of worship, and activities of all kinds; and the cathedral, and its spaces and places, are used for liturgy which progresses and moves. An example is the confirmation/baptism that I witnessed in January 1993, which began in the nave (with the profession of faith, etc.), proceeded to the font (where the death and re-birth of all of us, in baptism, was recalled in a simple ceremony, involving aspersion; the font is lined with black material, representing its tomb-like

nature), and then came to its climax with the actual confirmation (the cathedra being set up at the north east side of the liturgical dais).

The movement, and its significance, are intentional, as are the parts played by the spaces and places, and their significance, as shown by Stancliffe's article "The cathedral as a pilgrimage church" <Stancliffe, 1991/2/CPC>: Portsmouth Cathedral, he writes, "is a series of spaces, each leading on to the other. ... the building invites you to go on a journey ... What do these different spaces say? ... [in the nave] the tourist or pilgrim may find himself challenged ... Is he to go further ... by following Christ ... or not? ... [the dark under-tower is] a space where each of us can commit ourselves to follow Christ, who leads us from darkness to light. ... [Beyond] the deep waters of death [in the font] ... you enter the Old Church proper, with its classical balance between Word and Sacrament [where the liturgy of the Church is celebrated]. But God does not call us simply to be members of his Church, he calls us to move beyond that, to recognise that he is Lord, not only of the Church, but of the whole world ... That is why, in the 12th-century chancel beyond the new principal altar, there is ... a hanging pyx containing the Sacrament as a focus of Christ's presence among us, yet lifted up from us ...". Of course, these ideas - like some of the meanings examined in section 2, are not always explicit in themselves, and need exposition, explanation, and interpretation; but such work is part of the liturgy of movement and process, which is perhaps

found at its most innovative and rich, today, in Portsmouth Cathedral <Thomas, 1993/DSJ>.

A source of inspiration in the planning and designing of Portsmouth's nave - and of its liturgical uses - was Peter Brook's 1968 essay on the theatre, The empty space <Brook, 1968/ES> <Thomas, 1993/DSJ, p. 30>. Brook is generally connected with the "minimalist" approach to theatrical staging and stage-direction of the late-1960s and 70s, and such trends naturally influenced theatre planning and design. Brook's work is a passionate plea for life, energy, power and "holiness" in the theatre; he was reacting against the "Deadly Theatre" of tired conventions, cliches, and "deadly sentimentality and complacent worthiness" in the theatre of the 1940s and later <Brook, 1968/ES, p. 51>. His approach to theatre was applied to churches in his fascinating criticism of the then-new Coventry Cathedral, in which "new ceremony" should have replaced the old "threadbare" ritual, and before the church was planned <Brook, 1968/ES, pp. 50-1>. Brook's concept of "holy theatre" may remind us of Bernini's theatrical holiness, or "theatrum sacrum", referred to in subsection 2/6.

Tim Gorringer, in his article on sacred space <Gorringer, 1992/SS> (see also subsection 1/3) also drew on Brook's ideas, claiming that churches, like theatres, could become sacred space through the activities carried out there <Gorringer, 1992/SS, p. 4> (see also subsection 1/4). But Gorringer and Stancliffe are not advocating an empty, stripped-out box of a church, devoid of Christian symbols and religious objects (far

from it, in Stancliffe's case, as we have seen), and it is significant to note that the world of theatre has also reacted to minimalism, as Michael Reardon has pointed out, in an article commenting on Gorringe's article <Reardon, 1993/TES>. Reardon's work, as an architect, has involved design of theatres, and re-orderings of such churches as Birmingham (Anglican) and Hereford cathedrals. In referring to the symbols which are required to be present in a church, he writes: "Since the symbols will stand for all to see, regardless of whether the building is in use for a formal "Act of Worship" or not, a church without the congregation present is not merely an empty shell but a symbolic work of art which proclaims at least some part of the message by its very existence" <Reardon, 1993/TES, p. 6>. The common, ancient, origins of liturgy and theatre might remind us that theatre, like worship, can be occasions of searching for, and encountering, truth, purpose, and goal.

In the previous subsection, we saw that architectural images of spiritual process were often related to movement inwards, the idea that reality, truth, one's own true nature, revelation, god - call it what we will - lies within, the idea that the mystic journey, or the quest for enlightenment or unity, is somehow a journey into ourselves. St. Teresa, we have seen, is quite specific about this, but also sees this as a journey into the reality of God; and the search for truth, experienced as a search into a series of spaces, is also seen in one of C. G. Jung's dreams, reported in Memories, dreams reflections (1963, etc.). In this, Jung found himself in a two-storied house. He stood in the upper room, in which there was Rococo furniture and old paintings; but he then felt a desire to go down to the lower floor, which he discovered to be a much older structure, the furniture Medieval. Amongst the dark rooms of this floor, he discovered a staircase that led down to a lower, subterranean level, which he realised must date from Roman times. In the stone floor of this level, he discovered a trap-door which gave access to further stairs, which took him far below the earth, into a cave, and on the dusty floor of this space he discovered bones, and ancient human skulls. He interpreted the dream as a journey down into the psyche, into the common memory (or "collective unconscious", as he was later to call it) of the darkest origins of the human race <Jung, 1983/MDR, pp. 182-4>. (In a curious way, Jung's dream parallels the primitive concept of the

cosmos, reported by W. R. Lethaby (subsection 2/3).)

In some sense, this is a process by way of space - the three-dimensional spaces in the outer world, which we inhabit - to some kind of "space" within. Why might it be that space could have a relationship with spiritual reality? Many religious, mystical and spiritual writers (as suggested from the outset of this work) may disregard the fact of space - that we all live in the three-dimensional, physical world - and their works may not make much reference to places, and their nature; but such reality is inescapable, the only mode of being we have, that by which we have our existence, by which we know and fix our being, ascertain it, and describe it. Thus, angels, gods, and spiritual beings of all kinds, are ultimately thought of in hypostatized form, and their being and doings related, as though they existed in real space.

Why do these mystics, and the like, refer, however metaphorically, to movement into one's self? What is this inner place or space, and from where does the idea of it come? Such thinking is so common that few have probably asked these questions. The answer that I would suggest is that all our conceptions of space come, ultimately, from within us, the original space we first knew being an internal space; and because of this, in some place within us, ultimate reality seems instinctually closer. Where "within" did our conception of space originate? It resides, now, in the psyche, in the memory, but where did it come from?

To explain my suggestion, it is first necessary to examine the nature of the human conception of space. For people, space is not

simply the unbounded infinity around us, but rather it is that volume which is defined by the existence of limitation, of enclosure. A room becomes a thing we perceive and know by means of the walls, floor, and ceiling, by means of the physical and aesthetic qualities, and physical processes, referred to in subsection 3/2. Without such boundaries, space is not truly capable of being experienced; thus, looking up into a clear sky is like looking at a great sheet suspended some uncertain distance above. (Where a space is partially bounded by walls, or screens of columns, etc., we sometimes refer to space "leaking away", where there is no firm boundary.) Our conception of space comes from enclosure, from containment, and this means our containment within it, as part of the whole. All of us have been "contained" on many occasions, as whenever we enter a building, but there was one time of immense, primal, significance, that time from which all our experience began, the time in the womb. This was the first and most important space we experienced, and this containment the most significant experience of all; and recent studies in human memory suggest that knowledge of experiences go back to much earlier, in our lives, than most of us might generally think. Upon this experience, perhaps, all our relationship to space and the three-dimensional world may depend. This primal space remains with us as a subconscious memory of this first confinement. There is thus a significant, formative, relationship between the "space" "within" us, and the spaces we know in the world, between the material realities which define the spaces in which we exist, and the material reality which we are.

If the origin of all our experience is encapsulated within us, in subconscious memory, then perhaps this is why the source of ultimate reality seems to reside "within", or at least seems knowable there; perhaps memory of primal three-dimensional space is the key. For the Christian mystic, the principle behind the origin of human existence is God; so this may explain St. Teresa's idea that God was present in her seven mansions of the interior (and most totally present, and knowable, in the seventh). By her paradox of entry into herself we are perhaps to understand that her quest is for (so-far) unconscious knowledge of her divine origins, and her physical image is perhaps to be seen as far more than simple metaphor.

More than once, in this work, we have passed from the purely factual, to the theoretical, and finally to the speculative. If this origin of the experience of space is accepted, it helps to explain the strong effects that the experiences of some buildings (or at least their interiors) can have on people, particularly, the experience of church architecture. The spaces which contain us, and the matter which binds them, perhaps produce some recollection of the subconscious memory of primal experience, the outer space linking with the "internal space". In studying subconscious ideas behind the notion of the house, French architect Olivier Marc travelled the world asking children to draw their idea of a house. Invariably they drew square boxes with four windows and a door (a shape that could perhaps easily resemble a face). This was a form that persisted whether the children lived in a small box-like house, a high-rise block of flats, a Third

World shanty town, or some other kind of building <Marc, 1977/PH, Ch. 7>. In "Heavenly mansions", a fascinating essay written in the 1940s, John Summerson looked at the tendency of young children to play with small boxes, as houses, an idea he saw as lying behind the ubiquity of aedicules and other small structures, in the composition of Gothic buildings <Summerson, 1949/HM, pp. 1-4>. Both these investigations point to inherent conception (we might call it an archetype) of space, or inner space.

The original, or archetypal nature of architectural space, and its womb-like nature, can perhaps be glimpsed if we look at the connection of buildings with the cave, the original dwelling of humankind. For how long people lived in natural spaces may be the subject of disagreement among those who study prehistory, but it may be that in constructing their first dwellings from the materials around them, humans, preserving their memory of their first home, in some sense imitated its form, which itself may have resembled the form of the womb. Certainly some of the first Hindu temples were formed in natural caves, or created in "caves" cut into natural rock (ie. within the holy mountain; see subsection 2/3). Later, temples built of hand-cut stones preserved, in their most central, holiest part, the idea of a cave <Mitchell, 1977/HT, pp. 69-71> (and the process of entering a temple, and its inner shrine, is not unlike the various physical/spiritual processes examined in subsection 3/3/2).

The idea of a cave can be relevant to some church buildings, also. I remember the first time I entered Liverpool's Anglican cathedral (1975), and experienced a vast empty space which,

because of darkness (it was a winter evening, and there was a power-cut) had taken on the characteristic of a large cavern (I was reminded of the enormous caves that lie beneath the Derbyshire hills which, the guides had told us, were large enough to contain a great cathedral; now the great cathedral was itself the cavern; later I read how Liverpool Cathedral's foundations had been taken down to a great depth, to the rock below, so that the church seemed to have grown out of the earth beneath us, out of the very stuff of our world). We have seen that a symbol of the womb is present in all churches; perhaps we can see, not just the baptistery/font, but the whole building, in terms of this womb/cave idea, and the "space" within us as one at the still centre of our being, where - as with St. Teresa's final mansion - all questing and striving ceases.

The idea of the womb/cave, of inner "space", may be experientially related to the quiet place, set separate, into which a person, or a few persons, can retreat for the purpose of prayer and meditation, the kind of space or structure described in subsection 3/3/2. In the new western termination of Portsmouth Cathedral, referred to in that subsection, there is a small upper room which is reached by means of a small staircase, hidden - as it seems - in the thickness of the western facade structure (and this recalls St. John of the Cross's secret stair image, and Durandus's idea of stairs hidden within the walls of great churches (subsection 3/5)). The room is devoid of fixed liturgical furniture, and has a thick wall-to-wall carpet; it is thus

particularly appropriate to the needs of individual or group meditation.

The notion of worshippers entering an inner place, to concentrate on prayer, on their interior life, has its origins, perhaps, in Jesus's instructions "...when you pray, go into a room by yourself [or "thine inner chamber" (Revised Version)], shut the door, and pray to your Father who is there in the secret place ...[New English Bible]" (St. Matthew, Ch. 6, v.6). In A private house of prayer (1958) Leslie D. Weatherhead, a Free Church minister, tells how he pondered the meaning of "inner chamber", Jesus living in a society where people mostly lived in one room (a lamp on a stand could light the whole house (St. Matthew Ch. 5, v. 15)). Eventually it occurred to him that the reference was to an imaginary, or cerebral, house, and he quotes Catherine of Siena and Brother Lawrence as earlier Christians who had referred to imaginary "oratories" (prayer chapels), present in their hearts <Weatherhead, 1958/PHP, pp. 5-6>. He then proceeded to devise a scheme of personal prayer - set out in the book - in which the worshipper is asked to imagine a house of seven rooms (seven again!) in which each is to be "entered", in order to: Affirm the presence of God; Praise, thank, and adore God; make Confession and receive forgiveness; receive Affirmation and reception; express Purified desire and sincere petition; make Intercession for others; and for Meditation. His book presents prayers, for each "room", for a month. In effect, Weatherhead has intellectualised the meaning of St. Matthew Ch. 6, v. 6, and in doing so has produced something like a Protestant equivalent of St. Teresa's

Moradas (not that the idea of physical/spiritual process is involved here); yet in his conception of a cerebral room or house there is contained the idea of an inner "space" of mystical quest, described above.

Reference has been made to a connection between the experience of churches and caves; and it may be that aesthetic quality or aesthetic factors might be the psychological link between our experience of our inner "space" and the constructed spaces around us, between the buildings we use and our experience of our origins, namely, darkness. I remember experiencing the immense interior of Milan cathedral, and feeling it to be "compact", even "intimate", descriptions justifiably treated with mirth by people who knew the building. Perhaps in some way its darkness dissolved the distances, and made the containment more complete and real to the senses, and perhaps with smaller, truly intimate spaces (such as the small chapels for prayer/meditation, referred to), a measure of darkness, or absence of direct light, can induce a "warm" feeling of spatial, and physical, cosiness, into which one can withdraw, retreating from the external world to that of within, entering the physical intimate space as a medium for entry into that connected world of our own interior.

3/3/4 LIGHT, DARKNESS, AND THE NUMINOUS

Christian symbolism and imagery, of light and dark - the Bible, the writings of theologians, spiritual masters, etc. - is unambiguous: light is of God, and the sign of goodness, truth, salvation, and love; darkness is the thing of error, confusion, blindness, and evil. The opening verses of the fourth gospel are a hymn to light, or rather the Light Being of the Divine Logos, the Word of God, which light is the life of man, the light shining in the darkness.

Such is the power of the symbolism or metaphor or analogy of light, that at times it is hard to remember that it is symbolism. In the Medieval period, under the influence of Neoplatonism, it is more accurate to speak of metaphysical, than of symbolic, light. For Medieval philosophers, light was the source and essence of beauty. In the arts, love of the luminous and "lucid" involved substances such as gold, jewels, and mosaic, that glittered or shone; but the chief product of the Medieval artistic concern with light was the development of large areas of stained glass window, and this by means of the new building-system that replaced large surfaces of thick, solid stone walls with glass. The beauty of stained glass, von Simpson tells us, was not a thing in itself but rather "the radiance of truth, the splendor of ontological perfection, and that quality of things which reflect their origin in God" <von Simpson, 1956/GC, p. 517>. Light is the closest approximation to pure form and is (according to Grosseteste) a spiritual body or embodied spirit (this, of course, is Platonic, or Neoplatonic thinking); such ideas move - as do St. John's - beyond natural light to something mystical and transcendent, that

is "only symbolically invested with the qualities of physical light" <von Simpson, 1956/GC, p. 54>.

As light in Gothic churches was generally admitted through stained glass windows, it became, of course, coloured, changed, diffused; yet the light filled the whole space of the church in a generally uniform way. The metaphysical nature of light, as conceived of in the Gothic period, is now all lost to us, says von Simpson <von Simpson, 1956/GC, p. 55> and it had surely already vanished by the time of that other great epoch of religious architectural light, the Baroque. The Baroque architects and artists seem to have cared less, we saw, for ideas and concepts than for sensual, or emotional, effects; in their buildings they mastered the capacity to control and direct light, to cause it to shower down in one particular place, leaving comparative gloom in another. For them, the directed light that fell in a bright ray onto the ecstasy of this saint or that, was something that flooded, not the whole of creation, but merely specific powerful acts of God. Such light produced not potent symbols of God's truth and salvation, but feelings, religious emotions, the ravishings of the heart that such as St. Teresa described, and Bernini brought to life - to produce such feelings in ordinary worshippers - in a church building.

In both cases then, natural, clear light, light pure and simple, was not allowed to fill the whole of the building. The stained glass of the Gothic transformed ordinary daylight, conditioned it, dulled it even, rendered it into something charged with the spiritual; and Baroque light was controlled with the

magic of theatre, falling only where desired. Both are not just light, but special light, light shining in the darkness, light made special because of its relationship with darkness, and there is thus an overall ambiguity of reality, and of space (and such interior light-conditions are not just found in the Middle Ages and the 17th century, since obvious similarities can be seen in the respective examples of Auguste Perret's church at Le Raincy and Le Corbusier's at Ronchamp). When churches were filled with completely clear glass - in the post-Reformation period, in Protestant countries - that which was admitted was mere light, light having been divested of all its mystery, its spirituality, its symbolism and metaphysics being all evaporated. This light had no divine power, and knew no balancing, complementary darkness, conditioning, or delimiting.

The Gothic builders intentionally created that jewel-like, fire-like glow that Abbott Suger of St. Denis speaks of <Hess and Ashbery, 1969/LA, p. 65>, but despite being the glory of their art, they created, as we have suggested, darkness, or light mixed with darkness, or a certain gloom. They created partial light, and there is good reason to believe (from a source from the end of the Gothic period, when the use of plain glass was increasing) that darker churches were also thought of as spiritually affective: "Niavis", a monk, describes the old church of Annaberg as "a strongly built old-fashioned building and not light, because people formerly thought that it encouraged religious fervor when a church was not too light" <Hess and Ashbery, 1969/LA, p. 108, n. 8>; and Paul Frankl, from whom this quotation is transcribed, says

of Niavis, that "his chief aim seemed to be to recommend the mystic light of ancient tradition" <Frankl, 1960/G, p. 220>. How old, it may be asked, is the idea that partial darkness "encouraged religious fervor"? This question may be unanswerable, but this positive concept of gloom received what might be called its classic description, not in the Middle Ages or the age of the Gothic Revival (see below), but in the 17th century, and from the pen of one who was firmly in the Reformed (Presbyterian) tradition, John Milton (1608-74):

With antique pillars massy proof,
And storied windows richly dight [composed, ordered],
Casting a dim religious light.
There let the pealing organ blow,
To the full-voiced quire below,
In service high, and anthems clear
As may, with sweetness, through mine ear,
Dissolve me into ecstasies,
And being all Heaven before mine eyes.

The last of these lines, quoted from Il Penseroso (ending at line 158; a poem composed in the years 1632-8) suggest that the phrase "dim religious light" is not meant in any sense of irony or negation, though it has often been quoted in a somewhat sarcastic manner (though Milton, or his poetic subject, seem more spiritually inspired by music than anything visual or physical).

Certainly the effects of darkness/areas of light and dark/conditioned, transformed light, have a powerful effect on building interiors, and, perhaps, on human psychology. In the previous

subsection it was suggested that such darkness affected - at least for the fully-sighted - our sense of the scale and nature of space (just as darkness affects the motorist's perception of the speed of other vehicles), and perhaps subconsciously transformed our experience, by way of this, and this may mean in a spiritual, as well as an aesthetic, way; in subsection 3/2/1 we encountered William White's 1861 suggestion that moderate darkness induced a frame of mind "favorable to attention, contemplation and repose", while an excess of it produced "melancholy and depression" <White, W., 1861/PP, p. 51>.

Our account of the Medieval experience brings home to us the issue, suggested above, of real or natural light, or spiritual "light" and "enlightenment". In his essay "What color is Divine Light?" <Hess and Ashbery, 1969/LA, pp. 103-124>, Patrik Reutersward contrasts real light with the "light"/power of God, in 15th-century religious art and architecture, pointing out how, beside the natural light, there might be traces or clues (in altarpieces, for example) of something totally other, and this being an entity with the power to destroy all natural light which it comes into contact with (the recent ingress of the Holy Spirit into Mary's womb, he argues, has just snuffed out the candle, in the Merode Altarpiece (by the Master of Flemalle (1378/9-1444)) <Hess and Ashbery, 1969/LA, pp. 110-111>. Byzantine and Russian painters avoided symbolising divine light with gold "because it resembled physical light too much. ... the Divine had to be expressed in terms of difference rather than in terms of analogy or likeness." - and this is equally true in Gothic churches:

"Difference ... has been the main principle in the Christian East as well as at Chartres in the West ..." <Hess and Ashbery, 1969/LA, p. 124>.

In the Seventh Mansions, St. Teresa often uses metaphors of light and dark, and enlightenment; but the two are not one (indeed, there is a suggestion (Seventh Mansions, Ch. 1) that divine beings, present in a dark room, will be known despite the darkness, and even a hint that bright light does not always facilitate vision) <Teresa of Avila, 1944/ICM, p. 106>. Before the primordial darkness was split into dark and light, it had something of a neutral quality, it "corresponds to primigenial chaos" but also is "related to mystic nothingness ... a path leading back to the profound mystery of Origin" (Cirlot, 1971/DS, p. 76). Gilbert Cope, in a somewhat Jungian way, suggests that dark and light are symbols that "signify the contrast between the unconscious impulses and conscious thoughts" <Cope, 1959/SBC, p. 104> - the first of which may not necessarily be evil. And the Bible itself, as well as the vast number of places where it affirms the good/evil symbolism of light/dark, also contains references to this original, neutral complementarity, and common source: for the Psalmist, to God "darkness and light are both alike" (Ps. 139, v. 12), and Isaiah, speaking the words of God, says: "I make the light, I create darkness;/author alike of prosperity and trouble./I, the Lord, do all these things." (Isaiah Ch. 45, v. 6-7). Satan's origins are identified with Lucifer, the light star which fell from heaven (which is connected with interpretations of Isaiah Ch. 14, v. 12); by the time of the

Revelation, Jesus has become this "bright morning star" (Revelation Ch. 22, v. 16). The "easily" acquired "strong moral significance of [dark] evil and [light] good" <Cope, 1959/SBC, p. 104> is only part of the truth, which is, in reality, rather more complex.

If divine light ("light") is different from natural light, if only transformed light is spiritually affective, the idea that churches can possess some symbolism or meaning, or any positive quality, by being over-glazed or over-lit, is entirely fallacious. Churches of the 1950s, 60s, and 70s were often treated to vast glass cliffs in place of solid wall, with the justification that they thus admitted "light", metaphorical, spiritual light, that is, goodness and truth. The main culprit was surely Coventry Cathedral; but Coventry's "western" screen-wall was intended to aid the visual (and thus symbolic) linking of the new building with the old, with the Medieval ruins, the new being seen to grow out of the destruction of the old. Other churches have no such justification. Basil Spence, Coventry's architect, himself produced a church with a "western" glass wall which was, with some variation, erected on three housing estates in Coventry; but laterally-planned churches with an "eastern" glass wall - where glare can seriously interfere with sight of the persons, furniture, and ceremonies of the liturgical focus - are perhaps the worst examples of inappropriate lighting, and some traditional east windows can be too large and too light, as well as those produced by modern patent-glazing systems. From any point of view, therefore, but particularly the functional, an over-lit building,

flooded with bleaching, blinding light, is simply bad design. That real light in buildings can effectively blind by way of excess may suggest that it is misguided, or even fallacious, to state, as Patrick Brock does, that light (along with colour and space) is necessarily "conducive to praise, rejoicing, and a lifting of the heart", or that "the gloom prevailing in many older churches" may "reinforce" the "pain and hurt", and the aspect of the Cross, in Christianity (which, surely, we should not wish to evade) <Brock, 1985/TCD, p. 7>.

Of course it is appropriate for a building to be adequately lit, particularly when - as is usual - worshippers need to see service books, notices, perhaps visual displays, as well as the liturgy and one another. But this is best achieved with electric lighting, which can easily be controlled, conditioned, and directed, and allows, by electronic means, great versatility and easy transformation of space, and generally this includes the ability to reverse the less fortunate effects of dying natural light in evening or winter (what is worse than a glass - and this includes stained-glass - wall which is turned murky and opaque, on a winter night?).

Darkness, along with silence, are the two ways "Western art" has of "representing" the numinous (my emphasis), according to Rudolf Otto, in his book Das Heilige (1917), translated as The idea of the holy (1926, etc.) <Otto, 1926/IH, pp. 70-71>. Otto understood the holy as the mysterium tremendum ("wholly other", unusual, wondrous; but also evoking awe, fear, and dread) and fascinans (fascinating, attractive) <Thomas, 1987/ON>, and called

this "numinous" after "numen", the most common Roman term for "god", as "ominous" comes from "omen". (Curiously, perhaps, Otto also says that "oriental art knows a third direct means for producing a strongly numinous impression, to wit emptiness and empty distances" <Otto, 1926/IH, p. 71> - but why only oriental? What of the vast empty spaces and distances in great churches, old and new, and in such modern, smaller, churches as Rudolf Schwarz's Corpus Christi, Aachen?

Church architects, and those writing about church architecture, often make much of "numinous" and "numinosity", and at its worst, this may be simply a cliché that is brought out to make a description of a building's environment seem to have some seriousness and weight. For Otto, the numinous is the holy or holiness, the object of experience; churches and their affective qualities can only, strictly, be suggestive of the numinous, or have evidence of the numinous, or in some way be places that bring the numinous into our mind, or experience; churches themselves are not numinous, since the numen is the god, and the numinous is the emanation or quality of the divinity.

In effect, Otto argued for the supernatural concept of the holy and god, and the "inbreaking"-into-the-natural-world understanding of god's dealings with humans, and humans' experience of god. This supernatural, numinous, and wholly other thinking was remorselessly attacked, at considerable length, by J. G. Davies, in The secular use of church buildings (1968) <Davies, 1968/SUCB> and Every day God (1973) <Davies, 1973/EDG>. Davies argued for a this-worldly experience of God and the holy, that these things are

to be "encountered" within communal worship, personal relations, sexual relations, and death. This is no place to examine Davies's many pages of argument, but it has always seemed to me curious that it must be assumed (it seems) that these two understandings are required to be mutually exclusive, that we have to choose, either/or. Could not the holy be the numinous and the every-day (is not God transcendent as well as immanent? - for "secularists", presumably not); cannot the holy be encountered in and by way of church buildings, beauty, and aesthetic qualities, as well as in personal relations and human situations? Why did not Gordon Davies have a chapter on "encounter" and the physical things of the world? These are not architectural questions, but theological ones; and there is no need for us to have to take sides on the precise nature of holiness (Otto's or Davies's ideas) in order to examine ideas about darkness and silence, and other aesthetic qualities of churches being in some sense productive of spiritual experience, or rather - as the religious believer would have it - churches as places that mediate or communicate the divine.

3/3/5 CHURCHES AS MEDIA OF SPIRITUAL EXPERIENCE

""Does it send you on your knees?" This is the question you should ask, Pearson said, when you go into a church, not "Is this admirable - is it beautiful?"" - here Anthony Quiney is quoting the words of John Loughborough Pearson (1817-97), architect of

Truro Cathedral (1880-1910), and many fine later-Victorian churches <Quiney, 1979/JLP, Preface>. The idea that a church should affect or inspire people in a spiritual way, creating the desire for prayer and worship, is thus at least as old as the later-part of the 19th century, and probably any authority on the Gothic Revival could trace such thinking back through Sir Gilbert Scott, G. E. Street, the Ecclesiologists, and Pugin. Quiney does not tell us exactly how Pearson considered that a church might send one to one's knees, but the answer would possibly include such aesthetic factors as composition, scale, proportion, colours, darkness and light, silence, space and distance, etc. - the factors that have been under consideration throughout subsections 3/1, 3/2, and 3/3; and Pearson, as the heir of the Ecclesiologists, Pugin, etc., might point to symbolic forms, which "embody" (Pugin), and somehow instil, the influence of Christian ideas and doctrines.

We began subsection 3/2 by considering the idea that architects could, by means of rules and principles, intentionally create a place of beauty, or a place having positive effects on those experiencing it; now, we have proceeded significantly further, to the suggestion that (far from beauty being the intention, as Pearson makes clear) architects can choose to design a building which, by aesthetic means, might, in effect, create spirituality, arouse faith, infuse thoughts and/or feelings of a spiritually-positive nature, suggest the infinite, the timeless, or the nearness of god/the holy, etc. This motive or intention, we saw (subsection 3/3/3), extends back in time, in some form, as far as

the late Gothic period. In the later, 20th-century, part of the Gothic Revival, such thinking was commonly held by church architects. Of the church of the Ascension, Malvern Link (c. 1901) by Walter Tapper (1861-1935) C. H. Reilly writes: "The whole effect of the interior ... with its windows placed high up and a great space of plain wall below, is highly devotional. One feels the thickness of the walls ... The world is well shut out. In this first church of Tapper's ... one could worship in peace and quietude." <Reilly, 1931/RBA, p. 163>.

The spiritual power of churches was certainly believed in by Giles Scott, architect of Liverpool Cathedral. In an interview, broadcast in 1944, on the occasion of the fortieth anniversary of the cathedral's foundation-stone laying, Scott spoke of the special qualities of the building, which many visitors had referred to, and the building's "atmosphere": "This quality of atmosphere is essential for a cathedral, and, indeed, for any church, for it forms a background for prayer and services without which a cathedral could not function properly ... The practical requirements [of a cathedral] are few and simple, but appeal, both aesthetic and emotional ... is an essential requirement ... " and then: "it might well be said that this building gives expression to the strong spiritual forces of human nature which cannot be repressed." This "atmosphere", Scott acknowledges - it should be noted - "has been my main object to create ..." <Scott, Giles G., 1944/FYAG, p. 44>.

Also of Liverpool Cathedral, H. S. Goodhart-Rendel writes that it produces "upon many spectators an emotional effect of

extraordinary intensity. ... it is either a great engine of emotion or nothing." <Goodhart-Rendel, 1953/EASR, p. 252>. Thus, emotion is bound up with the experience of the building, and perhaps with its spiritual affectiveness. Powerful, positive experience of a building is inevitably an emotional affair, we inevitably say that they inspire feelings; and occasionally buildings can inspire strong negative feelings, and when this occurs, they are often feelings that cannot be explained (see below, and subsections 3/4/1 and 3/4/2).

Few architects or architectural writers, at the time of Scott, Tapper, and their contemporaries, attempted to provide detailed, structured, or properly-argued accounts of these ideas, or offered any examination of how such experience might be understood. The nearest we come to such an attempt is, perhaps, the pamphlet of J. N. Comper (1864-1960) - whose St. Philip, Cosham, has been referred to in detail (subsection 2/9)- entitled Of the atmosphere of a church (1947) <Comper, 1947/AC>; and much of its 25 or so pages are devoted to Comper's dislike of the emerging revival of secular uses of churches (and this 21 years before J. G. Davies's Secular use of church buildings). Comper refers to the positive quality that a church may possess as its "atmosphere" - using the term, we saw, which Giles Scott had used four years earlier - though he does not define this, nor account for it in any detailed way; this "atmosphere" may well be what today might be called "numinosity" (see subsection 3/3/4).

As with Pearson and the others, Comper claims that "The purpose of a church is not to express the age in which it was built or the

individuality of its designer. Its purpose is to move to worship, to bring a man to his knees, to refresh his soul in a weary land" <Comper, 1947/AC, p. 9> - and atmosphere is the means for achieving this: "The atmosphere of a church should hush the thoughtless voice" <Comper, 1947/AC, p. 8>; "Like the liturgy celebrated within it, the measure of its greatness will be the measure in which it succeeds in eliminating time and producing the atmosphere of the heavenly worship" <Comper, 1947/AC, p. 10> - and Comper links atmosphere to the idea (which must be examined below) that a church may "pray of itself" <Comper, 1947/AC, p. 7>.

The sources of "atmosphere", or the ways in which it is caused to be present in a church, are not, he points out, anything that can be determined by rules, or prescribed <Comper, 1947/AC, p. 26> but they are such (aesthetic) factors as colour and lighting, and, not surprisingly, Comper approvingly quotes Milton's lines on the "dim religious light" (see subsection 3/3/4), which he interprets as being like "the light of early morning or of the evening when the Lord walks in the garden" <Comper, 1947/AC, p. 27>. He makes a distinction between darkness pure and simple and "qualified light" <Comper, 1947/AC, p. 27>. He also makes it clear that there can, with validity, be "management of light in creating atmosphere" (my emphasis) <Comper, 1947/AC, p. 27>. What can be created can also be destroyed, and Comper lists certain kinds of restoration/cleaning <Comper, 1947/AC, p. 7> and inappropriate electric lighting <Comper, 1947/AC, p. 28> as causes of the "stripping out" of atmosphere (and this "stripping out" phenomenon is a matter more appropriately referred to in subsection 3/4).

One possible ingredient in the production of "atmosphere", which Comper, coming from the Anglo-Catholic tradition might have mentioned, is incense. In referring to aesthetic factors in church architecture (subsection 3/2) mention was made of the olfactory sensations, along with other factors known by the senses. Architects normally operate with those factors known by the eyes, or by the senses of touch, feeling, and hearing (ie. perception of space); however, it is the experience of many people that smells can have a curious, and very powerful psychological effect - particularly, perhaps, the power of instantly unlocking memory, and, above all, perhaps, very early memories - and that power is the power made use of when incense is employed in the liturgy. The traditional, or Biblical, explanation of incense is that it symbolises prayer; but far more affective than the knowledge of its symbolic meaning, is its immediate aesthetic/ psychological power, which - as with the experience of space - it might be possible to suggest is a capacity to draw the mind and spirit of humans to their moment of origin. Incense creates, literally, an atmosphere, and the atmosphere may well itself create "atmosphere" of the kind that Comper and others refer to. Perhaps that "atmosphere", though metaphorical, has its roots in literal truth (just as, I speculate in Appendix W, the aesthetic/ artistic idea of "taste" may be linked with the physical/sensual perception we experience in physical taste). Sadly, incense has long ago become embroiled - it seems permanently - in fruitless and divisive matters of denomination, allegiance, tribalism, and odium theologicum.

If architects knowingly created spaces possessed of positive spiritual effects, or considered that they were able to do so, many people might be inclined to question this, not only whether it is indeed possible, but whether it is a valid aim or intention, or appropriate in any way; and architects and theologians in recent times have considered such aims and efforts to be very bogus indeed. Otto Bartning, an early Modern Movement architect in Germany (and one of the founders of modern church architecture), when describing the aims of the founders of the new ecclesiastical architecture, referred to "... Evangelical-Lutheran churches in neo-Gothic or neo-Romanesque trappings ... where mighty ashlar towers aped an ecstasy long dead, where dim interiors ... feign atmosphere, ... there we directed ... our attack, not only against the artistic falsity [of historically-styled churches] but above all against the "atmosphere"". In a somewhat revealing vein, however, he continues: "and this we did all the more violently since we felt that false and superficial means were being employed to give us what we had denied ourselves and yet just as consciously yearned for deep down" (my emphasis) <Schnell, 1974/TCCAG, 33-4>. In the second part of this quotation, Bartning reveals that such intentions (whatever means were used to achieve them) were still ones that he and architects of his circle shared. A problem is also provided by the phrase "feign atmosphere"; either a church has "atmosphere" or it does not, and this means to the people experiencing the church. They cannot be fooled, either they experience it or they do not; and if I do, you may not; and if I do today, I might feel entirely differently when I enter/see

the church tomorrow (see subsections 3/4/3 and 3/5). "Feign" is, of course, a translation from German; perhaps what Bartning really means is something to do with the architect's intention or design-programme; perhaps he meant "strive for".

The questioning of architects' motives, in using their design skills to produce positive experience (in this case, of a spiritual/religious nature), has to be put into the context of architects using such skills, for such positive effects, in other situations - in the urban environment, for example, in schools and medical centres, housing and the workplace, etc.; here, the appropriateness of such intentions - the making of good places - is rarely questioned, indeed, it is generally considered that such aims are an architect's duty to society.

Perhaps criticism comes from something to do with the fact that the experience hopefully being "induced" is spiritual/religious; but many, in our age, have been happy with the use of mind-changing substances to produce such results, or with the hysteria of emotional evangelical events. When music has such effects, there is less criticism. That Bach and Handel could use the emotive power of music to express, and possibly instil, powerful religious feelings (and they surely did) is a thing that few consider bogus and inappropriate, the work of some kind of charlatan, as in the story of the Emperor's New Clothes. One reason for the opposition to aesthetically-overpowering buildings, and suchlike, is possibly the feeling (more than rarely justified) that such churches, and their interior decor, are not soundly and solidly built, but rather (in the Baroque period or the Gothic

Revival) partake of the theatrical and the gimcrack, with gilded plywood panels (Martin Travers, the early-20th century creator of Baroque-style church interiors, occasionally used discarded tea-chests) and ghastly painted "marble". Disparaging use of "theatrical" and "scenic" occur in many modern criticisms of architecture (such as of Post-modernism), and here is no place to outline the long and honourable connection between theatre and architecture (see also the reference to Peter Brook and Michael Reardon's ideas, subsection 3/3/2).

But if beautiful buildings are solidly constructed, out of real, quality materials - ashlar, marble, etc. - with fine, expensive finishes and decoration, then they suffer from a moral criticism, as it may be called, an argument largely bound up with the secularist approach to churches. This holds that spending anything above the necessary amount on buildings - by the Church - is a wicked denial of Christ's compassion for the needy of the world (see also subsection 1/4 and Appendix T).

The effects that buildings, and their nature - their "atmosphere", or whatever - have on people, is surely (as suggested previously) very varied and unpredictable, indefinable and inconsistent; and in subsection 3/4 examples of such experiences, and approaches to these questions, will be looked at in detail. Certainly responses just occur, and the psychology of them seems to be little understood, indeed, little studied or considered. The reaction to light, for example, to darkness and empty space - to take some of the factors referred to - are often

different from person to person, and they cannot, it would seem, be rationalised, nor are they affected by argument; if one person's experience is powerfully negative, or positive, we cannot, by reasoning and ideas, or by recounting our own contrary experience, change theirs, nor change their view of a place, or feelings about it.

That an experience may be religious/spiritual may be a fact beyond, and complementary to, the aesthetic; or, its interpretation as specifically "religious", may be something overlaid upon the experience itself (see Appendices V and W concerning both these approaches). The nature and range of religious/spiritual experiences, of and in churches, must now be outlined, and also ideas about how, why, and in what way, they occur.

The idea that a building or place could affect people in a spiritual way, or could in some positive way influence worship, spirituality, or religious experience, is the concern of section 3, and throughout subsections 3/2 and 3/3, these matters were considered from an aesthetic point of view: the possible role, influence, or effect, of such factors as architectural composition, proportion, colour, light and darkness, etc. However, there is clearly a variety of ideas and beliefs, encountered among those who use, visit, and generally concern themselves with churches, that such buildings - and perhaps the place as much as the actual structures - can be spiritually affective in some way that is not related to aesthetic matters at all. These ideas are of differing kinds, as we shall see, and range from what we might consider to be feelings or suppositions of a non-rational variety (indeed, they include the kind of "folk religion" which is often present in certain areas of sacralist thinking), to include, at the other end of the spectrum, concerns which border on the paranormal, and even the purely scientific.

These concerns take us (even more so than those of subsections 3/2 and 3/3, perhaps) into the realm of the unknown, in the sense of that which has been little-studied or examined, and which is difficult to verify, quantify, or produce any body of data about. These are areas where much

appears to depend on personal psychology; and yet very little study seems to have been carried out by those qualified in the relevant disciplines; and where it has, the results tend to be exceedingly technical and abstruse, and productive of little that is of value in any real situation.

So, subsection 3/4 attempts to grapple with various complex questions, since, despite the reservations about such a quest, outlined above, these ideas are very real to many, and very much present in the experience of religious believers, and even those who would not so describe themselves. Thus it is wrong for such ideas to be ignored by way of the excuse that they are incapable of being understood or structured, "proved" or refuted.

3/4/1 THE POWER OF PLACE

" ... You are not here to verify,
Instruct yourself, or inform curiosity
Or carry report. You are here to kneel
Where prayer has been valid. And prayer is more
Than an order of words, the conscious occupation
Of the praying mind, or the sound of the voice praying
..." T. S. Eliot <Eliot, 1944/FQ, p. 51>.

The place referred to is Little Gidding, Hunting^donshire, where, in the 17th century, Nicholas Ferrar and a community of

forty people lived, under a religious rule. While their house has gone, the church they used is still present, and the place has been a focus of spiritual interest and revived community, in modern times; and hence T. S. Eliot made "Little Gidding" one of his Four Quartets. The implication of his words has always seemed to me to be a suggestion that here is a place where spirituality and worship have existed in the past, and that, somehow, because of its "validity", our own worship there today will be valid also; but this fact is not due to the visual, aesthetic, or indeed overall physical nature, of any buildings, but something to do with the place itself, and what has occurred there. This may not seem a rational idea, but it is one of a kind that is very often expressed, and is at the heart of the ubiquitous notion of a "holy place" that has generated a thousand popular books, and created an industry in pilgrimage, retreat, and travel organisation. Foremost among such places, of course, has long been the sites and setting of the life of Jesus, and of other people and events described in the Bible, and very powerful has been the belief in the especial spiritual value of being able to stand in those places <Davies, 1988/PYT, pp. 10-11, etc.>.

At work, here, is the creative power of the religious imagination, without which faith would be a dessicated collection of lifeless propositions and spiritless worship, as dry as dust. Here, "holy place" (I have not examined this kind of application of the phrase in the discussion of religious architectural sacralism, subsection 1/3) means, above all

perhaps, a place having power over the imagination, a power derived from age, venerability, and association. Association and associationism were seen to be important components in the operation of architectural meaning (subsections 2/7, 2/10, etc.), and here association creates connotation and significance not principally by aesthetic elements, but by purely mental connections and cerebral processes. Often such places are significant because we have been told, by natural language, that such-and-such took place here, a venerated, spiritual person lived here, particular experiences were had here, etc. (and there is the possibility of error, with such information, not that that fact matters to its significance for us, today, so long as we accept the information given).

Connected with the idea of a place where prayer has been, and therefore is, "valid" (thankfully we do not have to get involved in the horrendous theological problems of the nature of valid (and presumably "invalid") prayer), is the notion of venerable places/buildings which retain or "absorb" prayer, perhaps the prayer of long centuries, and that this fact is of significance to us, today. This idea, which has been expressed in a variety of different ways, is that our prayer is validated, but also aided and strengthened - our spirituality and religious experience enhanced and enriched - by the still-somehow-present spirituality of the past. And connected here, also, is the idea that churches might in some way, of themselves, "pray along with us"; and great age need not be necessary for this to be thought to operate, as in the case of

a clergyman who, a few years ago, told me that this effect was at work in his own church building, which was, at the time, a decade-or-so less than a century old.

The idea of a church "praying" or "worshipping" of itself (with, but also without, us present), in a constant act of spirituality and silent witness, and having a positive effect on our own worship and spirituality in the building, is surely derived from sacralist principles, say, from the perpetual presence of the reserved sacrament, or the eternal nature of the effects of consecration upon a place, and upon matter. But the idea of a church's ability to "pray of itself", when we see it expressed, is often connected somehow with the fabric. J. N. Comper begins his booklet Of the atmosphere of a church (1947) with the statement "The Doyen of Fecamp, in Normandy, years ago said to me of his church that it "prays of itself"" <Comper, 1947/AC, p. 7>, and this idea Comper proceeds to relate to the fabric, the "atmosphere" of the building, and this, as we have seen (subsection 3/3/5) is ultimately created by aesthetic factors: darkness, colour, etc.

Perhaps the physical, visible contents and constituents of a place may, indeed, play a part in the communication of past spirituality, spiritual experience being related to the presence of a building's remnants from many different eras (which is often the situation found in an ancient church); Allan Doig has referred to such buildings as being like a mosaic, or rather palimpsest, in which layers of spirituality, one upon another, can be read-off the walls and parts of

churches, like the multiple layers of writing on re-used Medieval manuscripts, each level of experience partially-preserving that beneath it. Often, these fragments are pieces of sculpture, painting, woodwork, etc.; but it is a mistake to see them (as others have) merely as works of art: "Works of art, most particularly works of architecture, are not ravishingly beautiful surfaces which tell a technical story and are situated in history, but without content. They are material expressions of the human situation and its spirit" and "Every act of worship has an effect on the building in which it takes place: the building may be [changed and re-ordered over the centuries, but these changes] all contribute to the patina, a "patina of prayer", or palimpsest of meaning; that is, they all contribute materially to spirituality in the making." <Doig, 1993/SM, p. 20>. Clearly the crucial point, in Doig's thinking, is the conception of artworks as something greater than their physical constituents, as things which retain, and somehow recreate spiritual experience, for our present benefit.

The capacity of a place to contain spiritual power may not merely, therefore, exist by way of pure association. For a place, such as a church, to fire our imagination with feelings about past events and spiritual "heritage", it often needs to contain at least some physical, visible remnants, as we know from visiting historic sites where there is no conceivable surviving remnant indicating the scene of some event (and where, latterly, much effort has gone into bogusly re-creating such remnants); and hence the approach of Allan Doig, and the

significance/nature of the monuments, paintings, woodwork, etc., to which he refers.

If these are removed (this argument seems to suggest) the power of place goes with them, or, if there is a certain quantity of modern intrusions (particularly of a technological variety), the same thing occurs. This is the concept of the stripping-out of the power of place, referred to in subsection 3/3/5. In that context, such power ("atmosphere") might be stripped-out by the destruction of a particular quality of aesthetic environment, and here, by the removal and/or addition, of physical items or constituents. Where the spiritual power of place is seen not to depend on visible elements or constituents, presumably that power must be thought to be discernible despite the physical changes which the place in question may have suffered, as when a former ancient monastery or megalithic construction has been entirely razed, to be replaced by a rubbish-dump or scrap-yard.

The idea of a church as containing a brooding presence, within its fabric, and within its aesthetic qualities of place, is found in R. S. Thomas's poem In Church:

Often I try
To analyse the quality
Of its silences. Is this where God hides
From my searching? I have stopped to listen,
After the few people have gone,
To the air recomposing itself
For vigil. It has waited like this

Since the stones grouped themselves about it.
These are the hard ribs
Of a body that our prayers have failed
To animate. Shadows advance
From their corners to take possession
Of places the light held
For an hour. ...
... There is no other sound
In the darkness but the sound of a man
Breathing, testing his faith
On emptiness, nailing his questions
One by one to an untenanted cross.

<Thomas, R. S., 1973/SP, p. 104>

It hardly needs to be said, however, that the reality, or experience, of such power, or of the power possessed by (or discerned in) such places, is a purely subjective affair, and while it is very real to some, and on some occasions, it is not to others. For some, all these discussions will be totally irrelevant and meaningless; for others, they will be the most pertinent and necessary part of any discussion of church architecture.

The idea of churches, buildings, and places, as repositories and media of spiritual experience, takes on a new significance when we consider the theories that have been put forward involving the capacity of materials (particularly stone) to "record", and reproduce, instances and effects of powerful human experiences, particularly, that is, the theory of Dr. Don

Robins. From beliefs, feelings and intuitions we thus pass instantly to the physicist's perplexing world of subatomic particles, forces and fields, with the bewildering prospect of eventual scientific understanding, explanation, and proof.

Don Robins studied solid state chemistry before joining the Institute of Archaeology of the University of London where he developed the technique of analysing archaeological food remains using electron spin resonance. He later studied prehistoric standing stones and sites, and his theory of stone, brick, and other materials being able to "record" and in some way reproduce, or "play back" human experience(s) is the subject of his book The secret language of stone (1988) <Robins, 1988/SLS> which, unlike his other works, is written for a lay audience. Robins is at pains to argue that his theory involves study of rational phenomena and processes <Robins, 1988/SLS, p. 130>, and is in no way research into the "scientific graveyard of the paranormal" <Robins, 1988/SLS, p. 3> (though this is clearly "unorthodox" scientific work when set beside his "orthodox" work, which is concerned with energy anomaly research).

His theory involves a detailed examination of the molecular structure of stone, and his book has several sections which give detailed accounts of the molecular nature of crystals, subatomic particles and their processes, and passages containing arguments which link the structure of stone with that of semiconductors and microchips - to mention but a few concepts for which detailed technical knowledge would be

required, in order fully to understand, prove, or refute his theory. The understanding of stone which emerges from this analysis is not that of a dead, inert, passive substance, but a material filled with energy, power, and potential. If stone is able to absorb, record, or in some sense retain, a trace of human activities (and among them, Robins refers to powerful instances of human emotion and experience, such as torture, death, ecstasy, etc. <Robins, 1988/SLS, p. 150>), then a means for the reproduction or re-experience of these is also necessary.

This is effected by human action, by "triggering", which can result from touch or the presence of sound. Touching of stones Robins sees as a central activity in many religions, and particularly where such faiths employ carved images, as in the touching, or even kissing, of the statues of saints <Robins, 1988/SLS, pp. 34, 107, 151, etc.>. But it is sound that plays the major part in this process. In archaeological studies of prehistoric stone constructions (eg. the Rollright Stones, in Dorset) a significant event has been the discovery of waves of ultrasound that such stones emit <Robins, 1988/SLS, p. 107> (and this came as something of a surprise as, for decades, attention had been given to the possible presence, and role, of magnetic fields, in and around the stones, although these can be detected also). "Acoustic triggering" <Robins, 1988/SLS, pp. 134, 164, etc.> can be effected, he suggests, by such sounds as rhythmic chanting, drum-beating, and music, produced in the proximity of the stone(s). An obvious example of this is seen

in the great Medieval churches, in which hymns, chants and prayers regularly and constantly filled, and still do fill, the space of vast stone structures <Robins, 1988/SLS, pp. 110-111, etc.>.

Robins lays much emphasis on "the human factor" or "the human dimension" <Robins, 1988/SLS, Part 3>, on human interaction with stones, throughout long millennia <Robins, 1988/SLS, Ch. 3>, and the nature of human ritual, belief, and behaviour from prehistoric times to the present. Buildings, he has the honesty and wisdom to acknowledge, have "witnessed" a whole range of human emotions, and it is right, therefore, to ask why they only seem to affect us with one kind of influence, and not others (eg. stone churches: they have surely been the scene, in their original building, of the complaining and moaning of any construction workforce faced with difficult circumstances and financial constraints, etc. (and, he might have added, site deaths)); and yet they seem only to communicate the spirituality and peace of subsequent worship that has been carried out in them <Robins, 1988/SLS, pp. 150-1>).

This last point suggests, accurately, that in this context, and others, Robins is referring explicitly to the "atmosphere" of stone buildings, stone structures, and other places <Robins, 1988/SLS, pp. 105, 149, 155, etc.>, but "atmosphere" in Robins's theory (unlike in Comper's thinking) is produced by processes occurring in the material, related to human activity. The "human factor" inevitably leads to different experiences known by different people, and this is paralleled by the way in

which some people, but not others, seem to be "successful" at dowsing, and related kinds of divination, where the skills, knowledge or abilities of the dowzers in question seem to be irrelevant <Robins, 1988/SLS, pp. 152-5, etc.>; and the kinds of forces that the dowser may be sensing (magnetism, ultrasound, etc.) may be involved in creating a place or structure's "atmosphere".

Robins's section on dowsing and divination refers to the experience of places which seem to have a negative quality (what Cambridge archaeologist Tom Lethbridge is said to have called the "ghoul effect"). Lethbridge, it is suggested, connected such places, not with the presence of evil, but with cumulative quantities of humidity. Subterranean water springs are one possible source of this, and they have been connected, in myth and legend, with evil influences and effects <Robins, 1988/SLS, pp. 158-9> (see also subsection 3/4/2).

Don Robins's book is a popular account of serious, if "unorthodox", scientific ideas and theory, an attempt, using science, to find reasons behind a wealth of experience and belief which, like the spiritual validity of certain places, has often been attested to and described; it is not a book which sets out to investigate and test the theories, or apply the scientific approach of reproducing results of controlled experiments, etc., though when I spoke with Dr Robins, he did express the desire to proceed with such work, if suitable opportunities could be found or created. His book makes clear the kinds of things that stone and other materials, and

possibly places may "record", and the kind of human activity that might cause such "recording" to be "reproduced"; but what is not, perhaps, explicitly stated and explained is the kind of "playback" that might be experienced, and the form(s) it might take - other than the possible chaotic emergence of unpleasant entities from the past <Robins, 1988/SLS, Ch. 1> - and, therefore, of what possible benefit or result any "playback" might be to people, including religious worshippers. Robins writes outside the context of religious faith, but his ideas do seem to offer, to religious worshippers, the possibility of the faith, spirituality and ("valid"?) prayer of the past, being able to be experienced today, albeit by a process understood in rational and/or material terms, as opposed to in the more poetic, subjective, or whimsical terms (depending on one's view) expressed by such as Allan Doig, or implicit in the thinking of such poets and religious writers as T. S. Eliot, R. S. Thomas, etc.

However, there can be no suggestion in such an approach as Robins' - unlike in some of the ideas discussed in parts of this section (eg. subsection 3/3/3, 3/3/4, 3/3/5) - that anything other than purely human spirituality can be experienced in/by way of churches, buildings, and places; only human emotion can be glimpsed, by means of these processes, not ultimate reality beyond us, which may be called the divine.

"When I was there [in Coventry Cathedral, in 1966] a great spiritual feeling came over me and a presence which I find very hard to describe, except that I was uplifted beyond measure ... " (submission to Alister Hardy number 1896, by a female, then aged 68).

The idea of spiritual/religious experience being "triggered" by some special factor is central to the thinking of Sir Alister Hardy, and his studies of religious experience. In Appendix U, an outline is given of the background, method, and results of Hardy's work in the field of collecting and collating accounts of experience(s) <Hardy, 1979/SNM>.

Of the first 3,000 submissions of experience(s) made to Hardy - those whose contents and nature have been analysed and classified (see Appendix U) - only a few refer to "sacred places" (category 11b) as "Antecedents or "triggers"" of the experience(s) in question - 26 per thousand, as opposed to the 123 per thousand which referred to "natural beauty" (category 11a). Of the 65 or so listed in 11b, however, there are accounts which are very revealing concerning the way in which buildings and places might be involved with (or be thought to be involved with) spirituality. It should be stated - to repeat a point made in Appendix U - that while some of the submissions involve experiences of a pronounced paranormal nature - visions of God, Jesus (submission 1840), or "spirits"; hearing of

voices and sounds; out-of-body experiences (sub. 2027), etc. - a large majority of the experiences (as shown by those in 11b) simply involve strong feelings of well-being, peace, joy, and benevolent power(s) and presence; the stated result of such experience(s) has often been a new "vision" of life (sub. 459), renewed energy, or hope, or faith, etc. Sub. 689, for example, reports the experience in (or of) King's College Chapel, Cambridge, as convincing the person that God exists, and filling her with "an all-pervading joy". The presence of the sacrament, and/or the altar, is seen as significant (eg. as a cause of experience(s)) in various submissions (2897, 1840, etc.). Sub. 565 refers to sensing the presence of the reserved sacrament, either in Catholic churches, or in Protestant, former-Catholic, churches, where the sacrament seems to have been "hidden" in the fabric, since the Reformation.

Often respondents refer to a "force" or "emanation", that they experience as a physical or quasi-physical phenomenon: a "spiritual bath", inside Manchester Cathedral, in 1924/5 (sub. 400); an experience of "almost unbearable intensity", in Basle Cathedral (sub. 244); a feeling of "transcendent joy" that streamed from the east window of Saltash church, Norfolk (sub. 1341); an enveloping "mist of benignity and peace" in the vicinity of Iona Abbey (sub. 1788); a woman who felt "spun into a web by the rhythm of the mass" at a Roman Catholic service. The instance of physical effects - often, only accompanied by feelings of joy/peace - is possibly one that accompanies very powerful aesthetic experiences, also: a "sort of prickly

feeling" in the skin, felt in churches, and during services (sub. 450) is also found in sub. 1505, and is similar to the "tingle" experienced by the author of sub. 1889; sub. 443 reported a "peculiar feeling in the pit of the stomach" in cathedrals, such as Notre Dame, Paris; the author of sub. 2440, however (writing of an event in the upper chapel of the Holy Sepulchre, Jerusalem, the traditional site of the crucifixion) experienced the physical weight of the Cross - yet, strangely, as a positive experience.

Not surprisingly, some of the 11b submissions report beliefs/experiences relating to the factors discussed in subsections 3/3/4, etc.: sub. 452 felt the presence of God in the crypt of Canterbury Cathedral, where (it is stated) it was almost dark, despite (reported) light entering through clear windows; an organ was playing, and her hand was touching the "rough texture" of the stone. If modified darkness, or light within darkness (see subsection 3/3/4), might be playing a part in this experience (as well as music, and the touching of stone), several kinds of light-experience are reported in the 11b submissions. Sub. 485 reports experiencing a "pinkish light" on various occasions, which made even the mundane look beautiful; 682 reports experiencing a church (during an early-morning communion service) "pulsating with light", which "came nearer and nearer and finally flowed into me between my eyes"; after this "wonderful" experience, she awoke to find her bedroom, and other parts of her house, filled with a "rosy" light. For the woman making sub. 724, the experience was one of

her garden at home seeming significantly "bright and brilliant" after visiting a large, old, disused church on Romney Marsh. Sub. 2365, also from a woman, reports a strong light, but flowing in from outside her kitchen window. In 1947 a man (sub. 1983) went into a disused church in Norfolk, and felt what he believed to be the presence of God, and experienced the building becoming lighter (for a few minutes only), and producing feelings of great peace; when he returned three years later, however, he did not experience any such feelings, etc. Sub. 1996 writes of the glowing, and moving, of a statue at Iona.

All together, these accounts seem strongly to suggest that "light" is a physical phenomenon, as well as being the cause (and/or product) of spiritual "enlightenment", and yet it seems to be totally unlike natural daylight or that created artificially; it is light experienced physically, yet of a nature wholly other than the natural (perhaps this is why it is experienced as "pinkish", etc.). These submissions strengthen, in my view, the suggestion made in subsection 3/3/4, that real light and spiritual enlightenment (Biblical "light") should not be confused.

The presence of an "atmosphere" is reported several times. On one occasion (sub. 2514) it is said to be experienced by the person in unspecified "historic places", or in natural settings; for this person, however (an early-middle-aged man) it is definitely not of a "simply aesthetic" nature. In sub. 512, the person (female, Roman Catholic) describes the

"atmosphere" as "numinous", using the term discussed in 3/3/4; this atmosphere she seems to connect with times when the church (at Lourdes) is empty, empty churches being preferred (to ones holding a service) by the woman making sub. 2740, and others; experiences in the context of communal worship (including the sacramental liturgy), however, occur often (eg. 450, 565, 1840 and 1986). Sub. 1160 describes "feelings of something otherworldly in places of great beauty of holiness". The idea of the prayers of those who have worshipped at a church before, being present in a place (see subsection 3/4/1), is ascribed to Iona (the place which is most often specified by name, in these submissions), and at Fountains Abbey, past devotions are felt to have "coalesced to give the place a corporate holiness", which made the person feel "in touch with life and all its continuity and purpose" (sub. 853).

Places which are experienced as being or manifesting evil are not large in number, but include the reported manifestation of a ghostly cat (sub. 1160), feeling of evil at Bedruthan Steps, Cornwall (sub. 2365), and the curious experience of a young man intent on stealing from a church: the "cold and evil" stare of the Virgin Mary's eyes (a statue) burned into him, but actually saved him, he believed, from a life of crime. Prehistoric stone structures or standing stones produce feelings of awe and "humility before holiness" in sub. 632 (but are not a marked feature of these submissions).

Sound of a paranormal variety, and the presence of the sacrament/altar, is seen in the curious case reported by

Rosalind Heywood, which she calls "the singing". Heywood's book The infinite hive (1964) describes a long life filled with experiences of paranormal effects of many varieties. The "quasi-sound" that is "the singing" takes different forms, she suggests, in different places, mountain-sides or churches; however, that experienced in churches she labels "Christian Singing". This she consciously "listened for" in empty churches, and found that the sound would "pass over into a more intense experience" in churches where the sacrament was reserved, where it became "an inner force streaming from the altar". Heywood herself is surprised by experiencing such things in adult life, long after abandoning religious belief <Heywood, 1964/IH, pp. 176-7>.

The case of Rosalind Heywood, and many provided by the submissions to Alister Hardy, raise, of course, not only the question of the possible relationship between aesthetic and religious experience(s), referred to above - the subject of Appendix W - but also the many complex questions relating to the nature of such experience(s), the possibility of studying them, and their relationship to faith and/or belief(s) - concerning which, see Appendix V, as well as U.

If buildings and places, the context of liturgy, music and prayer can be said to "trigger" these experiences - which, after much study of the records appear, in the main, to be very normal and ordinary - in what way might that occur? In the previous subsections of this work, there are possible factors that might be suggested: some would look to the effects

(perhaps unconscious) of symbolism, of buildings laden with signs and pointers to meaning, connotation, and significance; others would point to the powerful effect of the scale, composition, proportion and symmetry of carefully-designed (and some would say "inspired") religious buildings; others would add the effects of colour and texture, the psychological power of smell and touch; some might point to the recurrence, in the accounts, of ancient churches/sites (Canterbury, Coventry, Iona, and Medieval churches) and look for the hidden power of geometry and number, or the power of consecration and/or the presence of the sacrament. Others would claim - and openly do - the significance of something present in the site, the ground beneath the building, or the presence of a hidden power within the fabric, experienced by the effect of touch, of sound, and of rhythm.

3/4/3 NON-REPEATABILITY, INTENTION, AND MULTIPLICITY

The submissions to Alister Hardy clearly reveal confirmation of a suggestion made repeatedly in previous subsections: that special experiences of a spiritual nature tend to occur in a place on some occasions but not others; or, in a particular place, some people have an experience, but others do not. This is seen to be the case at a more-obviously aesthetic level. People who constantly use a church, work in it, or visit it

frequently, often testify to the changing nature or character of the place at different times (my second visit to Liverpool Cathedral, unlike my first (subsection 3/3/3), was an experience of powerful lightness, brightness, and of a building whose very stones, and windows, glittered and glowed, a place where all those present seemed filled with joy). Of course, different times of the day, different light and seasonal/ weather effects have much to do with this. Also, there are the differing psychological states of people at different times of the day, etc.

But the unpredictability of experience, seen in several of the submissions, goes beyond this. The man who made sub. 1341 (experience at the church at Saltash, Norfolk) clearly tested-out the repeatability of his experience in that disused country church (see subsection 3/4/2): he returned to discover the reality of non-repeatability, the fact that experiences do not, of necessity, recur. In a talk given in 1991, I referred to this as the "randomness" factor, which is perhaps a more accurate term <Thomas, 1991/BPRE&S>, but should it ever be thought possible to study such experience(s) in a quasi-scientific way, it is worth remembering the scientific procedure of attempting to repeat the results of controlled experiments, in further tests.

If these experiences are really "religious" experiences, if they are some kind of revelation or disclosure of the divine, it might seem right and appropriate to us that this is the way that things would be, that nothing can be predicted, fore-

known, or made certain of in this world, that God is not to be confined to one place or set of circumstances, always to be found where and when wanted; that God is a God of surprises - and of disappointments. But perhaps the changing nature of conditions of place, referred to above, may play a part in the fact of non-repeatability, or the changing nature of persons: a member of the audience of my 1991 talk made just this point, during the question-time, that it is we who change, from moment to moment, not necessarily the place, and its essential nature.

However, the fact that churches are experienced in different ways, might be crucial to our understanding of that important factor mentioned time and again in previous subsections, namely, intention, the idea of an architect designing a church with a particular series of ideas and principles in mind: ideas about the framework of religious architectural theory that the building is thought of as embodying; the systems of meaning and connotation devised within it - and how and what they are to convey to users; and the way in which a church building is intended, and anticipated, to be experienced.

A case that illuminates these questions in a very vivid and significant way, in my opinion, is one which concerns Professor Denys Hinton, and the church of St. George, Rugby (Denys Hinton & Assoc., 1961-2), and which is recorded in Hinton's own account <Cope, /CMNT>. A product of the Modern Movement, the church was designed after a long process of consultation with the client, which took the form of a committee of parishioners. At these meetings, Prof. Hinton appears to have explained his

approach and ideas, and these, it seems, the building, in his mind, embodied. However, a few months after the church was opened, Hinton met there a former-member of the building committee, who proceeded to recount an experience he had recently had in the church. It had been a grim, stormy night, and rain had bounced off the pavements; but the man was in the church, sheltered from the storm, and had found himself thinking that "outside are the tempests of life, and inside all is peace" <Cope, 1968/CMNT, p. 60-61>.

For the man (and Hinton seems to have realised this) the church building had communicated very strongly the idea of a place of shelter, but not only from a real storm, but more, from some kind of "shelter" from the "storms" of life in the world. The church building had perhaps become identified with the Church as a body of believers, representing Christ's promised salvation; and in various places in section 2, we have encountered the idea of church buildings as being understood, metaphorically, or symbolically, as "arks of salvation". Hinton considered that the man's words were "not a very original remark" and his ideas "not very sophisticated". He then writes: "I wondered whether [the man had] understood much of what had been going on [in the building committee meetings, where the architect had outlined his own thinking] since I had never for one moment thought of the building in the way he now described it" <Cope, 1968/CMNT, p. 61>. Then he continues: "Yet in some personal way [the building] had communicated itself to him" - and he, Hinton, felt happy about the fact. Clearly Hinton

thought that his own (surely very different) interpretation was in a sense the "correct" or valid one, and the one that the building actually embodied.

Fallacious approaches to the question of embodiment (of church architectural theory, meaning, and experience) must be examined, below, in subsection 3/5; without anticipating that discussion, however, I would put my own view that no such valid embodiment can take place, and that the old man's interpretation/experience was just as valid as Hinton's, — Hinton's architectural authorship of the building notwithstanding. Further, I fancy Hinton's satisfaction (that his church had "communicated" itself to the man) was ill-founded, for the church which had "communicated itself" to the man was a different church altogether. That buildings we experience are truly different from those which others experience; that in any one place, there are as many different buildings present as those people who experience them differently (and on different occasions); that part of ourselves is present in their reality (since we can only ultimately experience them by way of our own conception of space, that has its source within ourselves (an interpretation suggested by me in subsection 3/3/3)): this phenomenon I call the "multiplicity" of church buildings.

The Rugby church was surely one inspired by the church building principles of its time: those of the Modern Movement in architecture; the Liturgical Movement approach to church planning; and perhaps also the secularist religious

architectural theory, then widely advocated and accepted. But it cannot be stressed too strongly that - as will be seen in subsection 3/5 - "multiplicity", and the inability of design intentions to be of necessity realisable, apply equally to churches designed according to very different principles, theory, and intentions.

Involved in almost all of this, is the notion that there can be some other reality to buildings, beyond that intentionally created or rationally knowable, beyond design, creation, and control. "The mind" - wrote W. R. Lethaby in his 1911 book Architecture - "unconsciously pierces far beyond mere shape to the soul of a building" <Lethaby, 1911/A, p. 12>, hinting in a brief sentence, that a building might have some reality over and above the purely physical facts of its material nature, which a person may in some way experience, consciously or not. One of the most curious submissions to Alister Hardy came from a female, then aged 41; when 32, she had applied for a job at a college. In the reported experience, she had seen the college building descending in the air, near her; but it was unlike the actual college building, of a form unreal, beautiful, and fairy-castle-like, its foundations set in a cloud. This building she connected with the holy city (recalling various images from the Revelation of St. John); she reports that she saw this vision, or whatever, as the building's "real inner self" (sub. 1840); I seem to recall that the woman did get the job at the college.

Of course, it will be said, this is fantastic. Buildings cannot have souls or non-material inner forms, and Lethaby must have been using some kind of poetic language. In dreams, buildings, like all else, are transformed, distorted, a reflection, surely, of our current psychological state. The woman making sub. 1840 must have been having a waking-dream-like experience, due to anxiety about her future job, or lack of it; but the nature of such fantastic structures as she testified to, the differing inner-reality of buildings, in our experience, must surely cause us to take seriously the principle of multiplicity, in any concern that we might have with church architecture.

In subsection 1/1, it was suggested that religious ideas about church buildings may be valid or invalid, that, as religious architectural theory was a body of ideas about buildings deriving from, and dependent upon, the theology of the religion in question, such ideas might be consistent, or totally inconsistent, with the theology. This fact, of course, derives from the theoretical, rational and logical nature of theory, theology, and structured ideas. Experience, we have seen, is not like this, with experience, things occur seemingly-arbitrarily, and little can be said about them; they have an autonomy and validity all of their own, simply by their existence. Meaning, however, has a foot in both camps; meaning can depend - we have seen - on a rationally-conceived system, eg. shapes and numbers having a rational connection with specific ideas. But much architectural meaning, we saw, was not like that, not dependent upon such connections, rather, it depended on association; but, like natural language, such association could form something like a standardised convention of meaning, accepted by all.

What emerged in subsection 3/4/3, however (particularly with the case of St. George, Rugby, and the concept of "multiplicity", suggested there) was that what was invalid - indeed fallacious - was the idea that experience could be intended, designed, and determined; in the Rugby case, I would suggest, not only experience, but religious architectural theory, and the meaning

the building ultimately conveyed, were bound up with this also; here, as suggested at various points in this work (eg. the Introduction), the distinction between these basic concepts breaks down.

Fallacious approaches to meaning and experience can, in fact, take various forms, and an attempt to introduce and name some of these now follows. (That architectural ideas and principles could be fallacious, was the foundation of Geoffrey Scott's 1914 book, The architecture of humanism, which attacked the "Ethical Fallacy" (that kinds of architecture could be immoral), the "Biological Fallacy" (that architecture and styles had phases of youth, maturity, senility and death), the "Mechanical Fallacy" (that style and building-technology are inseparable), amongst others, ideas deriving mainly from Ruskin, and other 19th-century theorists. <Scott, Geoffrey, 1914/AH>).

The Embodiment Fallacy

This might be called the fallacy of failed intention. It is the inability of a church (whatever the intentions and ideas of its original designers, who may have lived centuries ago, their church building principles perhaps unknown) of necessity, invariably, predictably and unequivocally to contain within itself, and make manifest for all to see, particular kinds of religious architectural theory, and architectural meaning, and the inability

of churches to convey, communicate, or "trigger" a particular kind of intended experience.

It cannot for one moment be denied that there are irrefutable links, indeed causal connections, between church buildings and liturgy and theology; the theory of the development of church architecture rests on the foundations of such a reality. Thus, in most periods of architectural history most churches were designed specifically for the liturgy of their age and society; they are a product of that liturgy, as of the particular religious architectural theory which proceeded from the Christian theology of the times (also, they are products of the culture, taste, and society which produced them; and also, architecture influenced changes in liturgy: see <Davies, 1973/IALC>). The Roman Baroque church (subsection 2/6) developed in conjunction with the Post-Tridentine liturgy and Counter-Reformation theology, in that it functionally provided for that liturgy which was a product of that theology. This holds true for a Medieval Gothic church, a Byzantine church, a Gothic Revival church, a church inspired by the Liturgical Movement, etc.

Such buildings can obviously be said to "embody" the theory and theology of their age; but the communication of this, and of meaning and spiritual experience, is not something that we can be certain about.

Imagine a lone Baroque church in some remote Italian country town, which has been converted - as today it might well be - into a gymnasium. Suppose that the users have never used any other gymnasium, and that they have never seen another Baroque church at

all, never having travelled to any other town which has one. When finally they do visit another place with such a church, they will surely think, when they see it, of gymnastics, and expect to find its interior equipped appropriately; at work here is association.

To us, the Baroque church, and the plain, 17th-century Quaker meeting house, may seem to "speak" eloquently of their own (very different) concepts of religion, and the contrasts of these testimonies may ring loud. Thus it may seem that physical reality is inseparable from two such theologies and ideas of worship. But this is not a matter of actual communication, for this understanding of ours comes from other, natural language, communications, things of a very different nature. Imagine some people who know nothing at all of religion or churches. If they visit the meeting house, will they learn about the tenets of Quakerism? They will probably think, looking at the railed areas of raised seats, and the central table, that they are in some kind of court-house. They will know nothing of the ideas of the real users, or their principles, and they will probably suppose them to be very poor. The Baroque church they will probably connect - admittedly with good reason - with some theatrical entertainment, and will not learn from it such doctrines as transubstantiation. (However, the Ecclesiological Society leaders J. M. Neale and Benjamin Webb might not agree with this conclusion: the "Analytical" argument for symbolism, in the introduction to their edition of Durandus, argues that the mythical complete stranger will learn something of a Church's theology from its building; see subsection 2/7).

We may often suppose that as particular kinds of beliefs and worship have often been known in connection with certain particular physical realities, that things must be like this. But this is not so. Consider Rudolf Schwarz's church of Corpus Christi, Aachen (1926-30), referred to in subsection 2/9. A great white concrete box, it is totally plain and empty, inside and out. It might well suggest the light, white purity of early Protestantism; but it is Roman Catholic, not Reformed, and was built by the church not of Vatican II or RC Modernism, but in the age of the Piuses, when traditional sacralism very much held sway. Consider also a church often referred to in this work, Liverpool's Anglican cathedral (1904-80): ornate, grandiose and lavish, it might easily pass for a Catholic building; in fact, it was built for a very "Low Church" Anglican diocese in a city most staunchly Protestant.

The case of St. George, Rugby, and the experience of its former building-committee member, related in subsection 3/4/3, surely exposes the fallacy of considering that we can produce a building which embodies, and conveys, certain theory, meaning, and experience. But equally ill-fated were the attempts of some of the Gothic Revival architects who attempted intentionally to create buildings which, by their physical and aesthetic qualities, would instil spirituality and spiritual experience (see subsection 3/3/5). Such things certainly happened, and still do, in such buildings; but they do not always, predictably, and invariably happen. To take Liverpool Cathedral once again - an excellent

example of such a building: by spending a day in the building, and talking to many people about their responses to it (as I have done, more than once) it quickly becomes clear that while there are people moved to strong feelings - possibly of an ultimately spiritual nature - by the spaces, the scale, the soaring vaults, and beautiful surfaces, there are also people who feel oppressed and alienated, by the same (aesthetic) qualities.

The Identification Fallacy

Rather than being concerned with intention, the identification fallacy is largely a product of interpretation, of people seeking to interpret, ie. to perceive meaning, in a church building after the building has been created; this means that the place we most often find this kind of thinking is in critical writings, produced by someone other than the architect/client. Identification - a particular vice of architectural writers - involves the false connection of certain physical facts of the building (that is, as the critic sees them) with the community who use the building, and thereby, perhaps, of the Church as a whole (such identification is particularly ironic, perhaps, in view of the fact that, in the post-war decades, we were told ad nauseam by writers on church architecture and theologians, that the Body of Christ was not to be confused with a church building).

An example of this kind of writing is to be found in the review of Holy Innocents church, Orpington (Michael Blee Whittaker,

Architects, consecrated 1981), by Richard Bassett. The writer describes the newly-built Catholic church, and then, in his last paragraph, fastens on the design of the entrance and threshold-area:

"Yet despite the thoughtfulness which has pervaded the architect's thinking, there are perhaps reservations over an exterior entrance which, guarded by two plain slabs of wall, provides so severe a facade to the visitor. Should the Church really seem so much on the defensive these days?"

- and the article is entitled "Church defensive" <Bassett, 1981/CD, p. 529>. The suggestion here is that the Catholic Church, or at least the Catholics of Orpington, are "defensive", with the further implication that they are attempting to be discreet, to hide, or even to be exclusive, and shelter as a separate sect, from the world. But is this meaning in any real way contained in the church's entrance? Indeed, is there any significance whatever in the form of the entrance-area? The two "slabs of plain wall" are the outsides of walls which produce vital internal spaces. The corridor-like entrance is one of several radiating avenues which draw the worshipper, and the light, inwards to the liturgical focus. Such things as "defensive" churches possibly exist in that there have been churches designed to be sited in decayed inner-city areas, where attention is given to making them secure and vandal-proof, avoiding such things as large sheets of glass and badly-lit entrances (and there were certainly embattled, fortress-like churches in the Medieval period, see: <Cotton, 1990/FCF>).

This is real defensiveness of a literal nature, but it does not mean that such a church must necessarily be unwelcoming and exclusive, or have a negative attitude to the world and the local community. If these different kinds of "defensiveness" are identified with one another, the result is surely a confusion of thought.

This question of interpretation, of seeing meaning in mute physical entity, such as building structure, is not to be confused with the very different question of the effect that a building may or may not have on its community of users, one of the central concerns, of course, of the Liturgical Movement, the question of how the building could bring people together in worship, as one worshipping community focussed on a central liturgical event. Buildings may indeed influence communities and individuals, their attitudes and their behaviour, for good or ill (a truly defensive, ie. highly-secured, church might just possibly cause people to acquire a "siege mentality" - though I fancy we should be somewhat wary of such conclusions), but that does not entitle anyone to infer such an attitude from a sight of the building.

In his 1984 critique of the Garden Grove Church, California (Philip Johnson, 1975-80) <Walden, 1984/CM>, Russell Walden pointed to the way in which the plan "splits the congregation into five separate segments", and complained that the plan's "logic as a means of helping people to be members of one another is suspect". Such a plan could, at least physically, be divisive, and perhaps foster social divisiveness. But going further, Walden considered the congregation to be "passive", "mere spectators", an

idea which seems to be connected with his observation of the "theatre seats" which are sited in "segments" of the building <Walden, 1984/CM, p. 30>. But, whether or not such a building arrangement can affect individuals and communities in these ways, no writer or interpreter is really able to know these things from looking at the building; again, the writer has committed the fallacy of identifying, in his interpretation, the nature of the building with the nature of the community, and this approach can lead a person to claim that the building "means", or even produces the "experience" of, anything that a sight of it happens to bring to mind.

It may be objected that if, as described, these writers really infer from things about the building to things about its users, this is not a problem about church architecture, since the writers are really concerned with Christianity and Christian people. This is not the case, in fact, for the motivation for such writings is always a concern with buildings, and the implication, in each case, moves back to the building, the building - in most cases - being equally disparaged. The confusion of the identification fallacy reacts both ways.

A compounding of confusions of interpretation - which are bound up with some indirect suggestions about the church community in question - are seen in an (anonymous) critique of a 1970s Catholic church in Steelstown, Northern Ireland <AR, 1978/TUC>:

"The Steelstown church stands on an open site ... the sight of

it evokes the "impersonality" which is such a hallmark of serious modern design. Crucial to this is the apparent absence of windows: remove those framed holes-in-the-wall designed for looking out of and you remove the "eyes" from a building; and in doing this, remove the specifically human reference. Should a church lack the specifically human note?" <AR, 1978/TUC, p. 174>.

- the absence of windows is said to involve a lack of "human reference", by way of the identification of windows with eyes. This is the anthropomorphisation of buildings, examined in subsections 2/9, 2/10/4, etc.; that such thinking can be harmfully misleading is seen here where it produces the suggestion that a building lacks human reference, for this carries the subtle implication of inhumanity, of some kind. This might be justified if the author was saying that windows in a building are a humanising feature, and that churches without windows are unpleasant, or worse, for the people inside - which is not what is being said here. The confusion of the type involved in this criticism becomes obvious if we devise an exaggerated, ludicrous, example of the same procedure. We could decide that a church spire or campanile is a phallic symbol. We could then say of a particular church which did not have one, that it was "emasculated", and we could then suggest that it was "unmanly" or even "effete". We could then round-off our product of the identification fallacy with an equally-suspect moralistic flourish to the effect that "the Church today is a weak organisation, lacking in virility and strength".

In the same article, the author connects the Steelstown church with the ideas of Teilhard de Chardin:

"... we think of the church building pre-eminently as a "presence" in landscape. The move [in this instance] to make it part of the landscape could perhaps be taken of the Teilhardian view which sees the Incarnation as an event which affected not only men, but all created things." <AR, 1978/TUC, p. 174>

- the fact of the author being caused to think of Teilhard's ideas, when seeing the church, is beyond comment; but that such an interpretation (perhaps, again, we are really referring to the idea of a building's embodiment of a particular theologian's ideas) might be valid surely depends on the ability of the building to cause other people to think of those ideas, on seeing the church, on at least a few other occasions, or the possible rationale - however tenuous - of such an identification.

The Historical Fallacy

A somewhat different variety of fallacious approach to architectural meaning is that perhaps best called "historical" ("historicist" is too complex, ambiguous, and controversial a term). It is perhaps a fallacy which is concerned essentially with cultural/social meaning and connotation (see also Appendix 2).

Around the end of the 19th century, many architectural writers were keen to criticise and attack the idea that buildings, including churches, could with validity be built to recall previous eras and cultures, or at least, to attack the appropriateness of such intentions <Thomas, 1975/SG>. Clearly, as we have seen, such stylistic signs and languages could communicate the image or idea of a past age; but they could not, obviously, recreate the society and culture of an age that had long-since vanished; such buildings were surely - in addition to anything else - products of their own time, yet perhaps not necessarily a true reflection of the great age of industry and commerce, science and Progress; these architects and theorists wanted a "style of our times" <Thomas, 1975/SG, p. 158>. In The architecture of humanism (1914), referred to above, Geoffrey Scott criticised the "Romantic Fallacy", by which he meant the idea that architecture could, in the hands of Romantic dreamers, re-create the past: "[Romanticism] is always idealistic, casting on its screen of an imaginary past the projection of its unfulfilled desires" <Scott, Geoffrey, 1914/AH, p. 39>; "To recreate the mediaeval vision was incongruous with men's life" <Scott, Geoffrey, 1914/AH, p. 42>, etc.

By the time of the post-Second World War decades, the rejection of past styles for church building was beginning to create a new version of the historical fallacy, and one which was clearly an outcome of the hopes expressed by some of the progressive Edwardians: namely, that churches could be expressive of "our

time", or of "the present".

Peter Hammond's seminal work Liturgy and architecture (1960) set the tone for much of the writing in succeeding years. Though he was far from being the first, he argued for the necessity of churches that were "genuinely modern" <Hammond, 1960/LA, p.2>, and which would "speak to the twentieth century in the language of the living". Being something of a manifesto, his book was (perhaps understandably) rather rhetorical, and devoted less to analysis or structured argument than the requirements of the party-political broadcast. This is perhaps why it is peppered with such phrases as those quoted above. He writes about "creating a living architecture", which, though "firmly rooted in tradition", is wholly of its time" <Hammond, 1960/LA, p.1>. Churches, he says, must embody the "theological vision of our time" <Hammond, 1960/LA, p.9>, and the "theological vision of the twentieth century" <Hammond, 1960/LA, p.11> (my emphasis, in each case). The churches built in the previous two decades or so had included many examples in the historical styles (Gothic, Classic and Romanesque). These, by comparison, have "no message for the contemporary world", and "confirm the agnostic in his conviction that the Church of England is no more than a curious anachronism" <Hammond, 1960/LA, p.3>. But worse, such buildings "scandalise the unbeliever and corrupt not merely the taste, but also the faith of those who use them" (this idea of "bad" architecture corrupting peoples' faith is thoroughly Ruskinian, and Romantic, of course); in effect, their architects "address themselves to an uncomprehending world in a dead language" <Hammond, 1960/LA, p.

5>. Hammond also believed that the church architecture "of our time" should be the same as all other kinds of buildings. His thinking as a whole, of course, involves the zeitgeist thinking, influential at the time. He quotes Edward Mills, "If we do not build churches in keeping with the Spirit of the Age, we shall be admitting that religion no longer possesses the same vitality as our secular buildings" (Mills) - and Hammond says: "This is manifestly true ... " <Hammond, 1960/LA, p. 6>.

Hammond's real motive, of course, concerns the relation of the church to the liturgy, and he is clear and insistent in his claim that the church building "of our age", which embodies the "theological vision of the twentieth century" (etc.) is not just something possessing a particular visual appearance: "The task of the modern architect is ... to create a building that works as a place for the liturgy" <Hammond, 1960/LA, p. 9>, he says, and what is critical is "whether or not it is informed by a theological programme which takes account of the new insights of biblical theology and patristic and liturgical scholarship ... " <Hammond, 1960/LA, p. 7>.

Another (Nonconformist) product of this kind of thinking was published in 1966:

It is essential that the church builder seeks to be contemporary. We need to build in an idiom of our time, just as the cathedral builders of old erected their magnificent structures in the design adopted for the civic and domestic buildings of their day. If the church is not to be thought of as an obsolete institution ... we dare not follow any other course. Our buildings have to be examples of modern

architecture just as much as ... blocks of flats or ... shopping centres. Our God belongs to the Present as well as to the Past.

<Phillipson, 1966/MCBD, p. 20>.

There are various objections that could be made to the ideas found in these writings. The assumption in these excerpts is that certain buildings can be created which mean "the present" or "our times". A building can be created, in fact, that says "Now!" to those who see it. This is achieved, according to Hammond, because it speaks a language, the "language of the living". The living, of course, inhabit "our present age". Not only do the buildings converse in the language of the living, but are themselves (as we have seen) part of "living architecture". It must be noted that these buildings do not speak of any particular time (as a building bearing a date may be said to do), and this is because such would not be "our times", but a time, a (real) time which is quickly in the past. It hardly needs to be said that, examined logically, these references to "the present age", and suchlike, are absurd and totally nonsensical. These phrases, and also the "Spirit of the Age" do not refer to any really-existing entity, and statements about them are meaningless.

The fallacy propounded in this thinking is not only that buildings can be designed so as to say something about contemporaneity - perhaps this is the best way to describe the idea under discussion - but also, there is the idea that such communications are of necessity brought to the mind of any person

who sees buildings which have a particular visual appearance. Conversely, other kinds of buildings will bring to mind, without fail, different ideas; but the content of these will not be actual historical periods as such, since these writings are ultimately not concerned with real historical connotation, but rather with value-judgements about kinds of Christianity, or Christian attitudes, which have become associated in the minds of these writers (rather than those of viewers of churches) with a view of history. History, for these writers, divides into the bad old past - anachronistic, incomprehensible, and dead - and the exciting present, the "twentieth century", whose architecture and theology are somehow totally different from that of every other time that has ever been, and uniquely possessed of special validity.

The principle that the church building should appear the same as all other buildings is, of course, something that was most completely developed by religious architectural theorists of the secularist school, and involves the idea of Christianity being, and looking, like all other kinds of activity. The quotation from Phillipson seems to involve the idea that the church can visually carry the meaning that Christianity is concerned with "the present age" and "our time", in that as the post office, etc., are irrefutably operating in the present, so the church/Church, in looking the same, must be also.

It is perhaps a truism that the object which strives most forcefully to be most up-to-date, is most quickly outdated and passe. So if we cling to this need, in our designing of churches, the (visual) form adopted would have to be changed on a fairly

regular basis, changed, that is, to the way of building "of our age". But what is that to be? Modern architects in the post-second world war decades seem to have believed that in every age there was one kind of architecture that was "authentic", valid, and necessary, and that this was produced by an ongoing process of history. But this is to believe that there is at work, in history, some necessary process that creates, and demands, certain things, and that such things as kinds of architecture only come about by the work of such forces (ie the zeitgeist, etc.). The emergence of styles in the past are explained in this way, and considered - in the past - to be valid, by way of such creation. But if we look at the history of architecture, the fact of a style having come into prominence can often be due to the activities of a comparatively-few influential propagandists. The revived Gothic architecture only became supreme, in England, in the period c. 1840-80, because of the work of a few people: if Pugin, Ruskin, the leaders of the Ecclesiological Society, and a few clergy, had perished at birth, Gothic would never have developed beyond the "Gothick Taste" of the Georgian world; the same is true of the replacement of Baroque by Palladianism (the work of just one very influential man, and a few disciples), and there are surely other examples. Thus, "the style of our age" is created by the tastes and efforts of a few people: the mythical "process of history" is yet another "historical fallacy".

4 Christianity and the Making of Christian Places

4/1 THE SPECIAL NATURE OF CHURCH BUILDINGS

The time has come to draw together the threads of this enquiry, the insights and observations that have issued from this "study of church architecture from many viewpoints"; to reach conclusions and make recommendations; to concentrate, more than has been possible before, on actual buildings, designs and schemes. Now, the three basic concepts of religious architectural theory, meaning, and experience can be referred to, as they really are, as one event, and all must be put in the wider context of the whole of Christian culture.

The "secular" was intended to be a concept that would resolve and replace the old duality of sacred and profane, abolish the "two worlds" of ancient dualism, and all its overtones of moral struggle and cosmic forces (section 1); but it has not. As is widely recognised, "the sacred and the secular" are merely a new duality, as opposed to one another, and as irresoluble, as the previous two. Increasingly, the secular has meant that which is ordinary, drab, mean, and even ugly, compared with the attraction of "sacred space", which is a subject of constant interest and speculation among many (and of a stream of new books (eg. A. T. Mann's Sacred architecture, 1993 <Mann, 1993/SA>), contrasting

with the dearth of new books on church architecture). The source of much of this interest is from beyond Christianity, from the newly-interpreted, freshly-packaged religions of the East, which are an essential ingredient of the "New Age" movements. For some, this origin confirms the irrelevance of sacralism to Christianity; for others, its ubiquity points to an essential human urge and longing which the Christian faith once legitimately fulfilled, only, latterly, to abdicate, and abandon, to its - evident - loss. Yet the presence of so much non-classic sacralism, which at times firmly rejects consecration and objective holiness, on occasion suggests an emerging synthesis, a real resolution of duality, based not on the total rejection of spatial sacrality, but on the acquisition of understandings of how Christian architecture might be truly special, in a truly Christian way.

The experience of church architecture, and the spirituality of/by way of churches and buildings - examined in section 3 - surely shows that church buildings are special, and can be holy in a very real sense - to use the theologians' phrase. Real, objective holiness exists, in Christianity, in the sacramental tradition found in various denominations. In that thinking, the eucharistic sacrament is truly consecrated, truly changed - in a spiritual way - and thus made truly sacred. It does not diminish the special nature of buildings and places if we reject the idea that they can be treated in the same way as the eucharistic elements. They can indeed (as has been suggested above) be sacraments in the sense of being an outward sign of an inner

spiritual truth (a physical sign set up in the world, to tell of the presence of Christian faith, truth, and love), but not in the sense that they are sacraments like the eucharist. (Theories of the sacramental nature of church buildings have to be seen in the context of the various accounts of religious/spiritual experience(s) in churches (reported in subsection 3/4/2), in which there is a suggestion that the presence (or sometime presence) of the actual eucharistic sacraments, may have had some kind of causal effect.)

Churches are special because they can be a place of experiencing the holy, of encounter with the divine; but this fact is due in part to their nature, they are not simply a shell in which God is known by way of people and human relationships. A "shell" of this kind could be any building, any place; churches are not like this. This experience - of the holy, of God, or whatever - is created or rather nurtured by many factors, which have been examined in the previous sections. Aesthetic factors and influences, whether they can be determined by rules or principles, whether they can truly be designed or not, whether they can be discerned consciously or not, play a part. The seemingly arbitrary nature of experience and effect seems to disturb and unsettle any such principles, but to allow inconstancy to cause us to abandon these insights is shortsighted; what religious tradition holds that the experience of God, and of God's actions in the world, can be determined? (the sacramentalist, with the consecration of the elements, could be thought to be one example; but the sacrality of the eucharist

is not experienced, as such). The human factor of mental, spiritual, and physical flux, and our experience of these, must make us wary of dismissing factors which are changeable because we are - because our perception depends upon our physical nature - not because places are changeable (though, as has been suggested, they are).

Church buildings, when they cause us to experience the holy, do so by way of ourselves, by way of our totality, by way of our bodies, and the reality of ultimate space "within" us (subsection 3/3/3). The spirituality by way of spaces, which we can experience, is the act of joining, in a unity, that which we are, with the special physical qualities of the place that contains us. This fanciful metaphysics is that which is known rationally in the crude-sounding idea that darkness, shafts of light, soaring spaces, and the like, "bring people to their knees"; such notions, while much mocked, are pervasive, and like many old cliches, not without truth, truth which has to be understood by going deeper into their reality, as I have tried to do. Such aesthetic/spiritual design intentions only become a mockery when we suppose that they must always be effective, like scientific laws, describing something which is always seen to occur. If they are seen as possibly playing a part in a process that is ultimately far beyond the deeds and designs of people, they avoid the hubris that often mars honourable motives.

But many kinds of buildings, it will be said, possess those aesthetic factors that can be present in churches, and possibly have the effects suggested above; are churches really different,

special, or necessary? Yes, because theirs is the context of a place dedicated to ongoing worship of various different kinds, and above all, filled with objects of symbolism and meaning. God can be known anywhere, and spirituality has no particular spatial context; but a place specifically created for worship and spirituality is perhaps necessary in order to reveal that the divine is everywhere present. Where a church building is physically indistinguishable from a community hall, it might perhaps be regarded no differently, like the stripped-out shell referred to above; but it will still, unlike the community hall, be the setting for ongoing worship. (The idea that such a shell might form a domus ecclesia reveals great ignorance as to the layers of symbolism, objects of significance and meaning, and things of great value and deeper function, that real homes possess; a home, as architectural psychology has revealed <Marc, 1977/PH> <Lee, 1976/PE, Ch. 4>, is among the most charged spaces of all.) The context of a place which has long been the setting for prayer and spirituality (subsection 3/4/1) may well have a positive effect on today's worshipper, but only if that person is so surrounded by mnemonics of such spirituality, signs and reminders that act upon the imagination; the community hall-like church rarely has these.

Discourse and disagreement concerning the appropriate nature of Christian church buildings - the temple/meeting house, domus dei / domus ecclesia traditions - are unlikely to cease. Sacred, profane, and secular begin and end as theological, not

architectural, problems. But the idea that one can argue that one tradition is wholly non-Christian and "wrong", and the other the whole of the Christian truth of the matter, seems misguided, and lacking insight into the fullness and depth of our Christian legacy, even if, like Harold Turner, one fills four hundred pages thus arguing.

4/2 CHURCHES, MEANING AND CULTURE

In section 2 we saw that churches could mean many things, and this in a variety of different ways, involving different orders of meaning. Some objects of church architectural meaning were clearly of temporal, and temporary, significance (eg. churches filled with signs of a particular dynasty, patron, empire or state), others were seen to be of the essence of Christianity. It was seen that a church could mean, or be a sign of, such things as the body of Christ and his crucifixion; Christ's "body", the Church; the re-birth and regeneration of people in baptism; a city, and the heavenly city, New Jerusalem; the universe and the created order; the spiritual ascent, or mystical journey inward; the spiritual journey of the Christian life; a ship, and the "ark" of salvation, etc. In the thinking of Durandus, it was seen that many parts and places of churches and their precincts could "mean" - because he says they mean - a wide variety of theological, spiritual, and moral things. But Durandus does not

say they truly mean these things, were designed in order to mean these things; he says, in effect, "we can take them to mean" such-and-such, "for us"; and Simon Bailey, in his book Stations (1991) <Bailey, 1991/S> does much the same (see subsection 3/3/2). This is very different. It is, as we have seen, the idea that anything can mean anything - if we choose it, if, for us, such meaning is useful. A building can be filled inside with (and displaying on the outside) a wealth of possible vehicles for meaning (for associations, if we choose to make them, use them, and propagate them). Churches can be used didactically, both in the nurturing of the spiritual life, for worshippers within, and as a meaningful symbol - even one that attracts - without. The key to this meaning, this use, is of course communication, telling people.

Churches are not like other buildings, in the way they need to appear (or, as we should know them, in their inner reality). The call for churches to be totally like other buildings, made in the 1960s and 70s, and at other times, does not truly, in my view, refer to Christian church buildings. Religion, truly, is not like all the other activities which people carry out in their lives. Any kind of worship activity, be it a Christian eucharist or Moslem prayers, is not the same as administrating in an office, buying in a shop, travelling from a railway station, reading in a library, arguing in a council chamber, etc., etc. "Postreligious" churches (subsection 1/4) can only exist insofar as there might be postreligious religious buildings - a contradiction in terms; any building where people are intended to pray, communally or

alone, is of necessity designed for quintessentially religious activity, though, in its form, appearance, or contents (like the community hall-like churches, referred to in 4/1), it may seek to deny its purpose. "Non-religious Christianity" is no Christianity at all, and the advocates of supposed Christian belief which disposes of the objective existence of God are ultimately involved with a kind of post-religious Humanism. Christian faith which claims its only appropriate activity is not Religion (worship, prayer, liturgy, etc.), but only feeding the hungry, healing the sick, housing the homeless, etc., is in truth a variety of Humanism with a thin veneer of sentiment.

Religion, realistically conceived, is different, and this means not only its world-view, values, and activities, but, ultimately, its entire culture. Christianity (like all other religions) has, and must have, a culture which is different from that of the materialist, non-theist culture which (in most western experience) surrounds it. To be a Christian, it is necessary not only to believe in the saving acts of Jesus and one's eternal destiny, but in the ultimate difference of the general cultural environment - radically different in its values, concerns, and ideas - from that of the Church. This fact often goes unrealised, particularly where a person enters the faith later in life (long after unconsciously absorbing all the values, principles and concerns of materialist society); belief in Christ, alone, is not the totality. If the person enters a denomination that provides no context of Christian culture, then that person will remain inhabiting two conflicting worlds,

probably without realising it.

Of course all religious believers, in western society, inhabit two worlds (a new kind of sacred and secular!). The cry of the 1960s secularists and theological radicals was to be "in the world", "of the world", "for the world", the "world setting the agenda"; religion and religiosity was only for people "escaping" from the world, into a "holy enclave". But no one can do this, and never could have; we are all in, and part of, ordinary everyday culture, and could not be otherwise. The "need for Christians to be in the world" hardly needed saying, as it was inevitable; "existing for the world" refers only to the extent to which a Christian person is concerned with evangelism and service, as opposed to with personal spiritual development/salvation; the need for both of these at once would also seem rather obvious. The logical conclusion of the process of Christian identification with the world, for the world, etc., is the possible situation of the person becoming totally like the world, ie. no longer Christian at all. The 1960s concern with churches being "of our age", and "speaking of the present", etc. (subsection 3/5) came originally from a thoroughly non-Christian (Marxist?) idea that a process had been going on throughout history which made that time totally different from all others, and people totally different and changed, in that era, from what they were before, there being no such thing as an inherent, unchanging human nature; there might indeed be a "theory of history", that issues from Christian theology, but it certainly cannot be this one.

Christianity has its own culture, its own signs, symbols and forms, its own artistic and spiritual heritage, its own traditions of ideas. To ignore all this, and imitate everything else outside, is to abandon faith. Thus, a building that looks just like every other building, is understood as being no particular building, because the appearance of churches is a vital part of Christianity which people outside it experience. Yes, they experience people who are Christians, existing, as they must do, amongst all the people who are not; but fixed, physical Christian presence, has an importance just as great. To set a large unadorned box amidst lots of other such boxes, is to ensure anonymity, to hide away; in effect, a Christian exit from the everyday world. An empty box or shell is meaningless and de-Christianised because it is de-cultured, stripped bare; it is not sufficient to say that it physically shelters and minimally-provides for the liturgy. The function of churches involves much more than the crude functionalism of shelter, namely, the true, sophisticated functionalism of providing for faith, spirituality, understanding of who we are, and where we have come from. Inside, churches, or parts of churches, may be "empty spaces", but they should only be empty in that they provide adequate space for encounter, for journeying, for finding origins and truth; they should be "empty", but also charged, empowered.

George Fox thundered on about not confusing the "steeple house" with the Church of Christ; but in 17th-century England, all people were Christians, and the Church had no need of a sign to proclaim its presence and its message. And even in Fox's day,

people were surely too sophisticated to confuse a sign with the reality it pointed to. This is certainly the case today, and thus Durandus's plea that the church building might symbolise the Church militant can validly and purposefully be accepted, and utilised.

The objection is often made that the symbols of the past are dead and obsolete, no one understands them now, therefore they are to be rejected. If their meaning is not understood, why is that? Or rather, if it was ever understood, how did that situation come about? The symbols and signs of past centuries were understood because people valued them and their significance, and so they then took the trouble to explain them to people, to educate people and society, to propagate the whole of the Christian faith, message, culture and ethos, not just the facts of salvation. No one ever learned these meanings without being told them, and the fullest participation in Christian faith and life involves learning of these things. Recently I heard an excellent sermon in which the preacher (the Rev. Lyle Dennon, St. John the Divine, Kennington, London) took twenty minutes or so to explain the meanings of various signs, symbols, Christian monograms, etc., found inside his church, and then discuss the various kinds of vestments: what they were called, their historical origin, who wore them and why (the ancient offices of bishop, priest, and deacon), and the essential Christian meaning that each possessed. Such sermons should be mandatory, not rare.

Similarly, it is often said that people prefer a style of worship and a kind of building in which all is brought to its

most basic, and there are no objects, words, music or dress that are not found in everyday life. This is normally the view of clergy, or from within the establishment of a denomination; at worst, it is a kind of Middle Class condescending attitude that claims, groundlessly, to know what "unchurched" "ordinary" people really want, and what's good for them, people who have been denied access (often by the Church itself) to the vast riches of culture which two millennia of Christianity have created, and beside which any other productions, from any other source, in the west, are not worth trying to recall. We must not, in Charles Jencks' phrase (subsection 2/9) "dump" our "cultural luggage" and "travel light", since it is not a burden, but essential for our travelling. Christian culture is not an adjunct, something which Christians can jettison, and hand over to the world of commerce and media-people to re-package in a form divested of meaning, but a vital path to the fullness of truth.

But what might be the form, nature, and appearance of a kind of building whose exterior can proclaim Christian truth, can stand as a testimony to an alternative set of values and beliefs? What is it that makes a building "look like a church"? (While churches should be a product of Christian culture, such culture and civilisation can have no single form, as Pugin believed.) This is a question for which there is no easy answer, and certainly it would be wrong to propose a formula, a model, or say that any particular kind of architecture is, in these circumstances, of necessity right, or totally wrong - and these

are all approaches which have been attempted in the last two hundred years. The answer to such a question can only emerge from the actual design process, in the planning and creating of individual churches.

Of course, the obvious physical and visual distinction of a church building should emerge clearly from its provision for a special function, from its creation of spaces for liturgy and worship, which are, of course, very unusual activities; but it has been argued (subsection 3/5, etc.) that the functional requirements of particular kinds of worship, liturgy, or cultic activity do not of necessity create a building whose overall form is totally unlike all others and totally unambiguous in its visual connotations - it is, after all, possible to create a liturgical space, with liturgical focus and furniture, in a very plain box-like building, even a central altar and circular-plan seating within a rectangle. It might be considered appropriate and valuable - and clearly is, as we have seen (subsection 2/9), by some - to look to the historical traditions, and their architectural languages, which have been referred to above.

If the present moment in architecture has any overriding characteristic, it is that of total liberation, and freedom for all. Ours is a pluralist society, where it can no longer, in any area of activity, be realistically said that any single approach is the only right one, and that others are simply not valid, authentic, or logically possible. But within this pluralism, the architect has to strive for some formal language which makes the nature and purpose of a church as clear as possible, to passers-

by. The traditional styles of architecture, it has been suggested, are deeply embedded with specific connotations, and nowhere more so than that of Gothic, and certain kinds of Classical architecture, with Christianity, in Britain, Continental Europe, and the English-speaking parts of the world.

The effect of the historical forms of churches is important in that many re-ordered and re-created churches are built in the shell of a Gothic or Classical church. To take an example referred to in subsection 2/9: St. Matthew's Meeting Place, or Brixton Village, despite its total removal of the original interior, continued, externally, to "look like a church", to the many passers-by in a very busy area. The interior, we saw, involved a system of meaning that was deeply hidden within the structure of the building (and the intellectual "structure" of the architect's designing), such that a person on the look-out for meaning - myself - missed it until reading the architect's natural-language account.

To use these forms, of course, raises all the problems of how, and in what way, it is appropriate and possible to design in historical styles. My own view is that a clear distinction has to be made between the straightforward reproduction of specific forms of architecture from any one moment in the past, and the process of working within a broad tradition, and developing it, evolving it, and re-making it. All architecture of any worth and significance, in past centuries, did the second of these; the Classicism of, say, Hawksmoor and Soane changed, developed and re-created the forms of the past without any regard or desire for

any orthodoxy, and without reproduction of any particular Classical style(s) of earlier times. The same is true of the Gothic of, say, Butterfield, Bodley or Maufe. In truth, "traditional" means an evolution and ongoing development of a broad cultural stream, it does not mean crude importation of actual precedent; almost all architects working today will ineluctably be the heir to, and product of, a particular approach, set of principles, or tradition in which they have been trained, and subsequently work. Thus, the best architecture of today that would be called "Modernist", is not some crude reproduction of things that were done in 1925, but something that reflects decades of development and evolution.

Modern Movement church building has not produced distinctive Christian forms and features that are quite so deeply-fixed in the popular mind as some of the historical traditions; however, some non-traditional ecclesiastical forms are visually very strong. Many good modern churches, avoiding the rectangle or box, have intentionally made architectural virtues out of the forms implicit in the (liturgical) function, ie. centralised forms; despite all the valid criticisms of Liverpool Metropolitan Cathedral, it clearly appears to be a special kind of building. But some of the less-striking creations of modern liturgy, produced on a necessarily smaller scale appropriate to parish and local churches, are less expressive, and able to be confused with community halls, social centres, or public libraries. Another approach is to create a church whose form is exceedingly characteristic, strange even, and memorable. Such buildings are

often called "expressive", or even "Expressionist" (Corbusier's Ronchamp Chapel is perhaps the best-known example; another is Giovanni Michelucci's Chiesa dell' Autostrada, Florence, 1964); but they sometimes leave us wondering "what, actually, do such forms express?" Ideas about nuns' headgear and ducks are irrelevant to any Christian communication of identity or beliefs. The very worst kind of church is the one created out of a simple nondescript box, with an apology for Christian proclamation, in the form of a big cross, crudely bolted to the side, like the office-building of, say, an insurance company, with a fibre-glass reproduction of the company logo placed on the building, which is easily removable when the company moves to better premises.

The defence that a prime function of the anonymous Christian building is actually service to the community, is of little validity, since special and distinctive architectural forms can house such functions as well as any plain box (many Victorian Gothic churches, with sensitive re-ordering, now house doctors' surgeries, play-group spaces, Relate counselling rooms, etc. - as well as worship-areas); and if the Church sees provision of community service as a vital part of today's evangelism, then it must make clear, from the moment of a person's entry into the building, or even approach to it, that this is a Christian church, not a redundant church that has been re-used; and many people, who hear of social services in 19th-century Gothic church buildings, assume too readily that the Christians have long-since sold-up and vanished.

In the 1960s, the call was to "make the building serve the liturgy", as seen in the 1962 book, edited by Gilbert Cope, with this title <Cope, 1962/MBSL>. The liturgy referred to was the new understanding of worship, brought about by the Liturgical Movement, with its central altar, emphasis on understanding and participation, and the corporate wholeness of the central act of Christian worship. Those aims were fully realised. There is almost no church, in any of the main denominations or sects, which has not, in some way or other, been influenced, in its manner of worship, and mode of church building (or liturgical re-ordering), by the aims and intentions of those 1960s liturgists. The new building, or the building made new, was required to provide functionally for worship, as it had become understood, and this buildings have done; a vast amount of experience exists, enabling architects to draw on that which has been found to be successful, and avoid some of the mistakes which inevitably have been made: design precedent has been the subject of much study (eg. that described in: <Murta, 1970/RUCB>).

But the function of church architecture is greater than all of this. This is what might be called basic functionalism, the functionalism which sees the function as being simply shelter, and essential physical provision, for certain acts. Greater functionalism knows that of any human activity or mode of

being, much more is required, and the functions of the building will be much more complex. Worship is more than a group of people linked by a few acts, it is the journeying of the spirit. The building needs to serve spirituality, in that in only a few, very rare, cases, can worshippers hold in their minds the experience of faith. Faith cannot simply be ideological assent, the consciousness that one believes certain propositions (though members of certain Reformed traditions may disagree about this). Religion must involve feelings, as well as thought. Bearers of meaning, and psychological affectiveness, help preserve the necessary balance between thought and feeling, without which faith descends into arid cerebration. If the church building is to function truly and fully, it must effect much more than was ever conceived of in 1962.

How does an architect begin the task of creating (or re-making) a church? I suggest that firstly there has to be a context of some kind of religious architectural theory. In the Introduction, it was suggested that religious architectural theory was prescriptive, that it proceeded from stating what (on the basis of the religion's theology) was required to be the case; yet, by subsection 3/4 and 3/5, I was arguing that architects' intentions as to how a building might be experienced/interpreted, in religious terms, carried no weight whatsoever, and were regularly swept aside. I stand by this second belief, but suggest that nonetheless, some kind of

starting point, of a religious architectural theoretical nature, has to be worked out; some framework of understanding is necessary, at least initially.

To this must be added a liturgical framework, the whole way in which worship, in all its different forms, is understood within the Christian community whose building is being created. The principles that flow from these two can perhaps form part of the brief, which, in the best circumstances, will be evolved in a process of constant discussion and exploration with the client, the church community.

Religious architectural theory and understanding of worship will flow from the same source, the church community's theological and ecclesiological tradition. But the process of making a church involves more than these. To these must be added some kind of symbolic matrix, some overall scheme of appropriate sign, meaning, and reference that should be found throughout the building; not just in the items that are placed in it, and the iconography which they bear, but also, where possible, in the whole form of the building itself. Meaning, in churches, is not something that we should choose to have present just in a few objects, things which are only visible inside the building, and can be removed, but in the totality of the building, and even beyond the physical structure. There is nothing new about this suggestion; Coventry Cathedral's meanings of rebirth from destruction, and reconciliation, are found throughout the building, both in its macrocosm and microcosm. Few buildings can be devoted to such a theme, yet

there are many other themes that can be chosen, from many areas of the Christian faith, in its origins, and in its centuries of subsequent history. Our chronological account of church architectural meaning - while we saw that it contained some obsolete elements - suggested a few themes.

It is no longer appropriate, perhaps, for us to create a church which, at one level or another, involves an image of the created order, as was seen in the case of some Byzantine and Medieval churches; yet there is every reason to suggest that it can be valid - in a scheme of decoration, perhaps - to use forms, signs, symbols, and Biblical text, in such a way as to remind people that, despite the value of scientific accounts of the universe's origins, God created, and is lord of, all that exists. The imagery of death - water - rebirth is, and always has been, appropriate for the setting of baptism; the further enhancing of a baptistery with the physical imagery of tomb/womb is no less valid, indeed is to be recommended, though to devise such symbolism needs much imagination and care.

Often the connotations of a dedication can serve to provide a theme that may evolve into, or become a part of the symbolic matrix. The recently-completed Gethsemane Episcopal Cathedral, Fargo, North Dakota (Moore/Anderson Architects) includes a small chapel (an "intimate place of worship"), looking onto a cloistered courtyard, and "After it is landscaped the court will evolve into a metaphor of the Garden of Gethsemane" (Stephen A. Kliment) <Kliment, 1994/GEC>; the symbolic use of a

garden recalls St. Mary the Virgin, Great Warley (subsection 2/8), and gardens and precincts can be used to create a context of some kind of spiritual progression or route, say of the stations of the cross, or some other scheme of stations.

The lives and emblems of saints can be a source of symbolism, as we saw in the case of the church/monastery of the Escorial being planned in a grid-like form, after the instrument of St. Lawrence's torture (subsection 2/6). A church planned in a series of ranges and courtyards, like the Escorial, would be totally inappropriate; but a grill-pattern, like the English Heritage logo, could be used as a decorative/symbolic theme found in various parts of a building. The cathedrals of Guildford and Liverpool use such plan-derived "logos", we saw; but these are, in themselves, devoid of meaning. The life of St. Martin of Tours - we saw in subsection 2/10/5 - is thought to have provided the word "chapel", from his capella or cape, which was later housed in a small building/space, which itself acquired the name of the "capella", Anglicised "chapel". For a church of St. Martin, it is not inappropriate that the crowning form that rises over the liturgical focus may be made/ interpreted as suggesting this original cape, and the act of charity involved.

As suggested above, however, the use of any kind of architectural/decorative imagery must be treated with imagination, subtlety and care, otherwise the crudities of the duck-shaped hotel or hamburger-shaped kiosk will be apparent. That which is explicit is often superficial, and insubstantial,

and could not, in any way, inspire faith or instil truth.

Of course, any such scheme of meaning depends on communication; not only must the visually-obvious be avoided, but also the arcane, which involves the error of setting such meaning-features too "deeply" (in visual/intellectual terms) in the design. The hazards, to meaningfulness, of such abstruseness, have been seen above; if meaning, as suggested in subsection 2/10, is largely some ultimate association, it must be association easily capable of being made, explained, understood, and retained. A symbolic matrix does not exist, and should not be used, to provide visual interest or effect; above all it should avoid gimmickry. The purpose of church architectural meaning, it must be remembered, is the teaching of the faith, and the provision of devices and means by which spirituality, and the spiritual journey, may be encouraged and enriched.

In subsection 3/3/2, it was seen how churches, particularly larger/more spatially complex buildings, could be designed and used to embody and create spiritual process. Perhaps little needs to be added to that account, except to stress the factor of use, the importance of the way in which liturgy is designed, practised and interpreted, in such a setting. At Portsmouth Cathedral, the appropriate setting was created de novo, but it is possible, with imaginative adaptation, use of spaces, and interpretation, to embody spiritual process in existing churches, particularly larger churches and cathedrals.

The creation and use of spaces for meditation was also referred to in parts of subsection 3/3; more attention can now be given to examples of such spaces, and their nature. St. Peter, Streatham, London, is an Anglican church originally built in 1870, and extended in 1886-70 by G. H. Fellowes-Prynne. The church received a major re-ordering in 1985-7 by architect Derek Phillips. In this, the church was turned around 180 degrees, creating a liturgical focus, set on a dais, which is open on three sides. On the fourth, the space extends into a semi-octagonal exedra (which used to be the (western) baptistery, and now houses a large, raised, tabernacle). Either side of this baptistery there were two porches, north-west and south-west, the pair of them seeming to exist, as so often with 19th-century churches, more for symmetry than functional necessity. At this point there is a falling site, and so the church floor is raised one storey from the ground (a ubiquitous feature of Fellowes-Prynne's work). The north-west porch received bomb damage during the Second World War, and was subsequently used as a chapel, the external staircase to it being removed. In the 1980s re-ordering, the chapel was re-created as the Oratory, an irregularly-planned space, but one possessed of considerable intimacy and sense of enclosure. It can comfortably contain 10-12 worshippers, and has a fine crucifix (by J. N. Comper), an icon, and some painted panels (probably from the rood screen, dismantled during the re-ordering), set on the walls. Small windows look out, through trees, to the road, which descends a hill. The door leads down

into the space, down a small step, which increases its containment qualities. A very thick carpet covers the whole floor. Fixed on one wall is a small collection of books, shelved in such a way as not to project into the space. The Oratory is used for Julian Meetings (subsection 3/3/1), which currently take the form of forty minutes' un-led silence. This is also a fitting space for sacramental confession, whose intimate, personal nature is perfectly provided for by the qualities of the space. The only shortcoming that the room presently has is a lack of soundproofing of the door, which could easily be padded between the framings, and panelled and carpeted over.

A building described (by Tim Gorringer) as "a place of silence and mystery, which draws you into itself, into its heart" is the croi (pronounced "cree") at the Corrymeela Community, Ballycastle, Northern Ireland <Gorringer, 1993/HM, p. 3>. Corrymeela is a long-established Christian organisation which attempts to draw together, and promote reconciliation among, the youth of Ulster's divided communities. Its first buildings were those of a former holiday-camp; but it lacked a chapel. The kind of chapel eventually provided was based on the croi of ancient Celtic monasticism. Corrymeela's croi (by Norman Hawthorne) is composed of three interlinking circles, which create a spiral-shaped building, "suggesting the womb or the inner ear"; "...its fundamental design is Trinitarian ... It proves a place of meeting in the context of an emphatic assertion of the mystery of the love at the heart of creation."

<Gorringe, 1993/HM, p. 3>). The building is low and stone-clad, and is thus at one with the rocky headland site. The inner-spaces are lit by windows either hidden, or set in the ceiling, above.

A chapel created inside a larger space is St. Matthew's Chapel, at St. Matthew's House, Croydon (a building which provides spaces for meetings, offices etc., for the Croydon Episcopal Area). The work of architect the Rev. John Hawkins, the chapel is broadly rectangular in plan, with two corners curved. Being within a meeting/conference area, lighting comes only from a lantern- or cupola-like skylight, with pierced-panelled sides, which in fact gathers light from one of the building's perimeter, high-level, windows; so the space is entirely enclosed, and top-lit, except for dimmable electric lights, and lights set in the coving or soffit, which leads to the lantern. A circular table stands in the centre of the space; candles, books, sacramental vessels, etc., can be placed on it, as required. There is no seating, except a wooden bench, fixed to one wall, the one whose corners are curved. There are two small shelves, one holding a crucifix, and these can function as credence tables. An icon is set on the wall, opposite the bench, above a shelf. One door leads from the larger room to the chapel; a second leads to an inner-room, a storage space, which cannot be otherwise reached. The surfaces are given soft coverings, carpeting on the floor, hessian on the walls; thus sound, and light, are totally restrained and controlled. In all, the space is perfectly contained,

insulated, and conducive to silence and the journey inward. This excellent example of a meditation-space shows the advantages that may be grasped, when building such a chapel from new.

Another chapel built within a much larger space can be found at Christ Church, North Brixton, London. Christ Church is a fascinating, and very important, instance where a conventional parish church (albeit a far from conventional church building), facing redundancy, was re-created (by the Rev. Nigel Godfrey, and architects Brigitta and the Rev. Peter Ansdell-Evans) as the home of a religious community, one which has done a great amount of valuable work in one of London's most deprived areas. The re-ordering and re-use of, (and also addition to) Beresford Pite's amazing Byzantinising church (1899-1902) has been described in CHURCH BUILDING Magazine <CB, 1985/CCNB> <CB, 1994/CCNB>. Among the new work is the creation of the Chapel of Christ, a free-standing, enclosed octagonal space, sited in the north transept of the church. A short exedra, on one side, provides space for an altar and reredos; the ceiling draws on one of the oldest symbolic ideas, found in the chronological account in section 2: its painting suggests the sky. In all, the chapel has an Orthodox feel (appropriate, perhaps, in a building of this style). Seven sides of the chapel, however, are glass, so the space, unlike others that we have looked at, is not visually separated from the other worship-areas of the church. The regular, centrally-planned shape (with fixed seating around the perimeter) does produce, however, a space

possessed of a certain spiritual "intensity" (illustrated: <CB, 1994/CCNB, p. 47>). Eventually, however, it is hoped to extend this space as part of a larger chapel.

A meditation-space found in a retreat house, is that at The Old Stable House, Newmarket. This property was converted for retreat/conference facilities by the Roman Catholic Sisters of St. Louis. One room is reserved for silent meditation. It is decorated in a very "restful" way, and simply furnished. Taize-style prayer stools are used, as well as chairs. The visual/spiritual focus is a simple monstrance raised slightly from the floor; the reserved sacrament can either be exposed or enclosed. A few appropriate images are found on the walls.

The creation of prayer, meditation, and week-day-service chapels may have another aspect: security. It is possible to create a small space that can be entered from the street, yet separable from the main church, thus allowing part of the church always to be open (a desire, justifiably, that is frequently expressed), while the main church is secured. In re-ordering, this can often be created by using one of the many separate porches usually found in Victorian churches, and solid internal screen-work, which forms the chapel, yet denies access to the main body of the building. Such screens can have lockable doors allowing intercommunication, when required, and - using ironwork and/or glass - may allow a measure of visual access between the greater and smaller spaces; like any re-ordering, such work will stand or fall on the quality (design, materials, and construction) of its screen-work.

A fascinating project, completed in 1988, is to be found in the church of St. Padarn, Llanbadarn Fawr, near Aberystwyth, Dyfed. St. Padarn was one of the Celtic saints, who founded a monastery near the valley of the river Rheidol in the 6th century. Celtic monasteries were small communities, comprising a few tiny buildings. In the 11th century, under Bishop Sulien, Llanbadarn was a centre of learning and manuscript-illumination, possessing a large library. Early in the 13th century, a large church (by Welsh standards) was raised on the site, being cruciform, with a central tower, built of a very simple, massive stone construction, yet with considerable (uninterrupted) internal space. The church possesses two pillar-crosses from the period 9th-11th centuries, of about nine and five feet high respectively, decorated in a Celtic style. In the 1970s, these crosses, along with disused furniture, etc., were to be found in the south transept.

A work of local history drew the church community's attention to the importance of the village, which has connections with various other figures in Welsh history. This raising of consciousness helped bring about a scheme to convert the south transept into a series of spaces which not only inform visitors of local history, events and persons, but also re-created a cell of the kind that St. Padarn and his community would have built, on the site. The work (by designer Peter Lord, and a team of craftspeople) includes a central chapel, which houses the ancient crosses, plus a rough-hewn altar. Flanking this space, there is an exhibition/"intereptation"

area, a room celebrating the work of a local 11th century poet, Rhygyfach, and, to the left, the cell, a place of a positively spiritual character, which draws people in to its silence and intimacy. It has a candle burning in it, and an image upon the wall. The two crosses, in the chapel, are now seen in a context which makes them have a spiritual relevance, rather than being merely a dusty exhibit, as they were before. This is not just an exhibition area, it is not a bogus attempt to reproduce the vanished past, rather it is a significant using of Christian history and tradition in a way that can affect the visitor in a spiritual way, can convey, not just a sense of the past, but an experience of the power of Christian spirituality which proceeds from the very source of Christianity in these islands, the Celtic church.

The Church's response to tourism and "heritage" interest has raised many issues and provoked a variety of views; however, in coming to appreciate the value of a special building - a building filled with meaning and connotation, and with significance by way of its mere existence - we have come a long way from the view, expressed in the past, that the sole purpose and value of a church is as a provider of shelter for acts of communal worship. Places such as that created at St. Padarn's, and the chapels, churches and meditation-spaces described in this subsection, are truly Christian places which feed and nurture the spirit.

Appendices

APPENDICES

The Appendices appear in no particular order, and fulfill different functions. Some (T, X, Y) are concerned with matters of differing relevance to the main discussion. U, V, and W, while having no place in the main text, provide vital explanation for subsections 3/4/1, 3/4/2 and 3/4/3. Z concerns a vital area of discussion related to subsection 10.

APPENDIX T: MORAL AND ETHICAL ARGUMENTS CONCERNING CHURCH BUILDINGS

No discussion of church architecture can evade the moral and ethical arguments that have been put forward in recent times, however separate such matters may be, in purely rational terms, from theories of sacralism, concepts of meaning, etc. In the outline of secularist theory (subsection 1/4), for example, it was seen that wherever there is a situation in which church authorities may be spending money to build and/or re-order, issues of the right Christian use of resources come to the fore.

Former ages and Christian traditions, their theologies and ecclesiastical politics, surely had views concerning these matters. The Medieval Church undoubtedly considered it right to spend vast resources on buildings to the glory of God, but they also did it (without apparent moral conflict) in order to give prestige to their religious order, their city, or the dynasty of princes of the church to which the patron belonged. The reformers, and such as George Fox, can have had little regard for the extravagance of the past, but the Puritan destroyers of Medieval church art were hardly motivated by egalitarian principles when plundering the chantries and other monuments - as they can be seen - to proud men of wealth and power.

In the 19th century, moral and ethical considerations become more conscious and explicit. A. W. N. Pugin appears to have believed that the holy priests of the glorious Middle Ages humbly served the poor and sick, while erecting beautiful "temples" to the service of the divine King, and while there was surely a spiritual imperative upon the wealthy to serve the poor and sick, in those times - as demonstrated by the many almshouses and hospitals that were established - Pugin can hardly have had real, objective knowledge of his hallowed past. With John Ruskin, the moral arguments intensify. The seven lamps of architecture (1849, 1880) contains as its first chapter, "The Lamp of Sacrifice", which argues that Christians have a solemn duty to build churches

that are fitting for God, using the best of human resources. His idea is that people - monied people, that is - have a duty to give of their resources to effect this, and he mentions the Biblical "tithe", or tenth (I, VI). Ruskin surely had in mind the situation, earlier in the century, when churches were still built in the plain, late-Georgian manner, which, for a Medievalist like Ruskin, would have been "mean" and "poor", and not unlike the "Conventicles of Dissent" - at a time when the landed classes of the Church of England spent all their money on fine houses (I, VII). Ruskin is reacting, then, against the misuse of wealth: "... I say this, emphatically, that the tenth part of the expense which is sacrificed on domestic vanities ... [would] if collectively offered and wisely employed, build a marble church for every town in England" (I, VII).

By the later Gothic Revival, and the early 20th century, the idea of "the best possible for God" had become fossilised, and reaction was inevitable. In the secularist thinking of the post-war decades, emphasis was put on serving people and human needs as the Christian's first priority, and beautiful buildings became thought of as unnecessary and inappropriate (see subsection 1/4). J. G. Davies put the forceful argument: "if the choice is between erecting a church and meeting a human need, the Christian community has no grounds for hesitation" <Davies, 1968/SUCB, p. 211>. The Rev. Ted Roberts' Housing and ministry (1975) took the principle of human needs, before church buildings, as far as advocating a programme of demolishing churches, in London's East End, in order to give the sites over to housing. In this climate of thought, human material needs occasionally became elevated far above other needs, such as the aesthetic, cultural, and spiritual. Fine buildings, such as churches with tall steeples, far from being spiritual symbols (as Pugin would have seen them), became thought of as images of a despotic, domineering Church.

Secularists may have seen beautiful, ornate churches as a gospel-denying flight from the real world; but time and again, in the later-19th century, we come across references to Catholic (Roman or Anglican) priests, in "slum parishes" (now known as

Inner Cities or Urban Priority Areas) who valued their decorative churches, with their gilded altarpieces, jewelled chalices, gorgeous vestments, etc., not because they thought such things were demanded by God, or were an appropriate offering to God, but because by means of them, the Church was able to bring a measure of beauty and even joy into the drab, joyless life of the "deserving poor". By the age of the Welfare State, such palliatives were beyond serious consideration.

In fact, Ruskin had anticipated some of the secularist arguments when he made clear that "The question is not between God's house and His poor: it is not between God's House and His gospel. It is between God's house and ours." (I, VII), and to those who loved marble churches for their own sake he wrote: "It is not the church we want, but the sacrifice ..." (I, VIII). However, the secularist thinking did not always see it as buildings or human needs, since it strongly advocated the creation (by means of new buildings, or radical re-orderings) of buildings that could be used for worship, but also be used as centres giving service to people, and answering their needs.

Perhaps the Rev. Roger Sainsbury turned these arguments on their head when, in building Shrewsbury House, in one of the most deprived areas of Merseyside, in 1974, he insisted on the best possible quality of materials being used, not because only the best was good enough for God, but "because we wanted to communicate the message "God loves you and values you"" to a people who had long become used to their homes and infrastructure being made out of the "cheapest materials available", at the direction of politicians who thought of these buildings as being ""only for an inner-city area"" <Sainsbury, 1988/RGL, p. 1>. Shrewsbury House was not a church, but a badly-needed community centre, provided by the Church. Other buildings in the area became vandalised, but Shrewsbury House did not; showing the people that they were valued resulted in the centre being valued by the people.

APPENDIX U: THE STUDY OF RELIGIOUS EXPERIENCE

In his 1968 book The secular use of church buildings, J. G. Davies writes: "... scholars have not been unaware that modern man seldom appears to have these [religious/spiritual] experiences and that an encounter with the numinous is something which many today fail to have." <Davies, 1968/SUCB, p. 224>. There may, in 1968, have been some grounds for such a statement, but in a few years that situation was to be reversed completely.

In 1925 an Oxford zoologist had begun to collect information concerning people's unusual experiences (or, "transcendental", as he puts it). His studies of biology and the life-sciences had convinced him that "man was by nature religious" (my emphasis) and that research into such experience(s) was "one of the greatest contributions biology could make to mankind ..." <Hardy, 1979/SNM, p. 3>. Alister Hardy, the scientist in question, was in some measure building on earlier studies, particularly William James' The varieties of religious experience (1902), a classic work in the field, and Edwin Starbuck's Psychology of religion (1899); in Hardy's own time there also were the studies of Marghanita Laski (Ecstasy, 1961) and Abraham Maslow (Religions values and peak experiences, 1964). His interest was first aroused by seeing a newspaper report of such an experience, and wondering how often such reports emerged; a press-cutting agency promptly supplied an answer, stimulating Hardy to conceive of the idea of proper research into the scale and nature of these instances (throughout his work, Hardy was concerned with the incidence of experiences among the vast number of people in ordinary situations, and less so in the more-extensively studied occasions of experiences referred to by the great religious mystics, who might be considered extraordinary cases). Hardy sent an article, requesting such information, to a number of religious journals, but the results tended only to come from a

narrow sample of the population, elderly women, in the main <Hardy, 1979/SNM, p. 17>. Hardy does not make quite clear when this occurred; no doubt his professional activities (as Linacre Professor of Zoology at Oxford) precluded such work for some time. However, in 1968, Hardy secured the use of two rooms at Manchester College, Oxford, where he began the work of the Religious Experience Research Unit.

On 20 September 1969, an article appeared in the Guardian, telling of Hardy's work, and appealing for information of people's experiences, and there were similar, subsequent, articles in The Times, the Observer, and the Daily Mail, and also a lecture to the Royal Institution. The result of these efforts was that many reports were submitted to Hardy - in the end numbering well over 3,000. Only after these submissions were examined and classified did Hardy, with reluctance, turn to the method of producing questionnaires; Hardy believed, at least initially, that people were reticent and naturally discreet about such experiences, regarding them with a sense of privacy which the questionnaire technique might invade; and the kind of framework questionnaires involved might distort the result. However, subsequent work, by those who joined the Unit, made much use of this approach.

The idea, and method(s), of classifying, categorising, and examining the submissions were clearly, as Hardy acknowledges, a product of his training in the life sciences <Hardy, 1979/SNM, p. 23-5>; (not only Hardy, but some of his associates at the Research Unit, were initially trained in these disciplines). Hardy's first attempts at this activity, however, he considers to have been crude and inadequate; other systems of classification, such as that used by C. Y. Glock and R. Stark in their work of 1965, were also rejected, largely because none took adequate account of the diversity of elements and factors that were often present in a single submission: few submissions could be classified as belonging to one type alone, or to another. What was being classified, it was realised, was "written accounts of ... experiences" which were one stage

removed from "the subjective feelings themselves" <Hardy, 1979/SNM, p. 23>.

Hardy eventually devised a "provisional" classification <Hardy, 1979/SNM, pp. 26-9>. This included: four kinds of Sensory or quasi-sensory experience, Visual (1), Auditory (2), Touch (3) and Smell (4); Supposed extra-sensory perception, (5); Behavioural changes, (6); Cognitive and affective elements, (7); Development of experience, (8), Within the individual (8i), In relation to others (8ii) and Periods of significant development (8iii); Dynamic patterns in experience, (9), Positive or constructive (9i) and Negative or destructive (9ii); Dream experiences, (10); Antecedents or "triggers" of experience, (11); and Consequences of experience (12). Sensory or quasi-sensory experience, (1), (2) and (3) subdivide into Visions (1a), Calming "voices" (2a), Deja vu (1f), Feelings of warmth (3c), etc. Out-of-the-body experiences (1e) are found in 59.7 submissions, and transformation of surroundings in 24.3 subs. [while the classification, etc., was applied to the first 3,000 subs., the number of occurrences, cited, refer to "a thousand accounts, based on an average of the first three thousand received" <Hardy, 1979/SNM, p. 25>].

The submissions, as suggested, contain many instances where a number of experiences are recounted; some involve a person's summation of the spiritual aspect, as they perceive it, of what may have been a long, and busy, life. Some give accounts of amazing para-normal experiences, involving visions, voices, physical effects, apparitions, and other elements (present, but not statistically very important, in the classification and analysis); but far more subs. simply involve strong feelings of comfort, security, peace and joy, as the statistics of these categories/subcategories bear out: (7a): Sense of security, protection, peace (253); (7b): Sense of joy, happiness, well-being (212) - as opposed to 15.3 for (5c) Clairvoyance and 5.3 for (1f) Deja vu. Feelings of New strength (7c), Sense of certainty and enlightenment (7f), Feelings of love (7k) and of Exaltation/ecstasy (7g) are also found - as is a Sense of a

non-human presence (202.3) (7v). The most common of the three subcategories of (12) Consequences of experience is (12a) Sense of purpose or new meaning to life (184.7). Clearly analysis could - and did - proceed further and further into statistics of sex, age-group, most and least common features, etc. <Hardy, 1979/SNM, pp. 26-30>. All of this work, its origins, methods of classification, results and conclusions, etc., are found in Hardy's 1979 book The spiritual nature of man <Hardy, 1979/SNM>.

Following the work of collecting and studying these submissions, Hardy's associates and successors - such as Edward Robinson and David Hay - made many other studies, looking at religious experience in specific groups of people, such as particular age-groups and occupational groupings. Much of this work was done in the 1970s, at which time other independent researchers produced other studies (eg. Michael Paffard, see Appendix V). Following Hardy's death, the organisation he founded was re-named the Alister Hardy Centre for Religious and Spiritual Experience (AHRC), and is now part of Manchester College, just outside Oxford.

For my own work, the records collected by Alister Hardy, and the work done by AHRC, were extremely valuable (see subsection 3/4/2). Because of the place given to "Antecedents or "triggers"" of experience, in Hardy's analysis (forming category 11), it was possible for me easily to study category 11b, Sacred places, and other such categories as 11a, Natural beauty, which I did, at the AHRC offices, then in George Street, Oxford, in September 1987; and Hardy discusses these and other such factors in his 1979 book <Hardy, 1979/SNM, Ch. 6, "Triggers and consequences">.

Hardy's initial work, in inviting accounts of people's experience(s), had intentionally been non-specific as to such factors as these "triggers", and, it seems, to the experience(s) themselves, thus, there was no question of him eliciting information about such special concerns as my own,

namely, the relationship of buildings/places/spaces with religious/spiritual experience(s). This point was brought home to me by the author of sub. 166, who tantalised me with the comment that he/she (no information given as to sex or age) could have given much information about buildings and his/her experience, but had not been asked to do so, so did not. It has long been my intention to try to fill this gap, with research into peoples' spiritual experiences related to buildings and places, particularly churches; however, it has increasingly become my conviction that such an investigation has to be outside the context of theoretical ideas about churches and buildings, or any such study as presented here; while this work has experience as a central concern, it does proceed from specific concerns with architectural and religious ideas; studies of pure experience should perhaps be that alone, and not made within any other context. Perhaps a single, overriding, interest and concern - Church architecture and Christian spirituality and worship - could ultimately prejudice research into experience(s) and buildings/places, etc.

The appropriate context and basis of such study as has been described, raises the entire, much fraught, issue of the validity of research into religious experience. Time and again it has been argued, by scientists, psychologists, theologians and others, that the study of religious experience and spirituality is simply impossible. Some merely claim that there is no such thing as "religious experience", but for many others the problem lies elsewhere, namely, in the idea of study, that such experiences can be treated as objects of knowledge, or that any kind of "scientific" or even "quasi-scientific" method, results, or conclusions, can be applied to such alleged phenomena.

One variety of method of study (and objection) resides in the techniques of the psychologist/sociologist: that of questionnaires, or other data-gathering devices, which are carefully created according to controlled criteria, so as to

make them statistically valid; the results are then analysed accordingly, producing quantifiable data, the idea of something that can be rationally established and known. A problem, here, has been suggested above: that the fact of facing people with a questionnaire causes reticence, and ultimately a wish to withhold what might be the most valuable information; it is not that Wordsworth's objection holds, regarding destroying the object of study in the process of studying it ("We murder to dissect", as with the study of life-forms first killed for dissection), since the experience has happened prior to any attempt to study it, or otherwise. However, the method of collection and study might be preventing the data being disclosed, and hence producing a (false) negative return. One problem with the psychological/sociological method, suggested in subsection 3/2/1, is that in their effort to be as truly-scientific as possible, psychologists seem to produce "results" that consist only of a mass of statistician's abstruse mathematical concepts, which seem to bear no common-sense information, or significance, at all.

An objection made by Michael Paffard to Alister Hardy's own approach, is that, rejecting the questionnaire, Hardy straightforwardly confronted people with the question: "Have you had an experience which is of a special nature, transcendent, spiritual, etc.?" - or some such phrase - thus inclining the results of study to the kind of data that the researcher might be said to have desired to find <Paffard, 1991/WIER, side 1>. It has been suggested more than once that such study is, or could be, the intentional production of "evidence" that such experiences are common, by a person or persons who wish to prove, to others, themselves, or both, that a higher reality exists. And next there are questions raised as to the precise nature and origins of such experience(s); need they necessarily be, in any sense, what can be called "religious" or "spiritual"? - and these questions and issues are outlined in Appendix V.

APPENDIX V: EXPERIENCES AND FAITH

"When is an experience religious?" - this is the title of a lecture given in 1991, in the same AHRC/Birkbeck College series as my own <Thomas, 1991/BPRE&S>, by Michael Paffard <Paffard, 1991/WEIR>, whose work in the field of studying religious experience, along with others, is referred to in Appendix U.

Michael Paffard has spent much of his career teaching and studying the work of William Wordsworth, and the Romantic poets. Much of Wordsworth's childhood and early life were filled with powerful experiences, of a type which Paffard prefers to call "transcendental", and these - as anyone familiar with the poet will know - were largely bound up with nature; thus, Paffard also calls spiritual experiences "Wordsworthian experiences". Wordsworth was often filled with feelings of awe, wonder, and even terror, by the sight of mountains, sky, and water, etc. In Alister Hardy's language (see Appendix U) the things of nature (or is it Nature itself?) can be a "trigger". But what kind of experiences were these, or, experiences of what? Were they "religious"? That people, not known to have extraordinary gifts, living in our own century, have had similar experiences is shown by the submission to Alister Hardy number 1341 (woman entering Saltash church, Norfolk; see also subsection 3/4/2): "...I became aware of an overwhelming sense of transcendent joy"; the flavour of which is very similar to: "And I have felt/A presence that disturbs me with the joy/Of elevated thoughts; a sense sublime/Of something far more deeply interfused ..." (from Wordsworth's Lines composed a few miles above Tintern Abbey ..., of 1798). Wordsworth's early experiences are known from his long autobiographical poem The prelude. In its later editions, Paffard tells us, the early, frankly pantheistic, language of the experiences was complemented by various glosses of a more orthodox Christian tone, to disarm Wordsworth's critics in the ecclesiastical establishment of his later years.

The possibility of non-Christian, pantheistic experience(s) raises the issue of whether such powerful experiences have to be "religious" in any orthodox sense whatsoever.

Michael Paffard carried out his own study of "transcendental" experience(s) among young people (sixth-formers and first-year undergraduates; this seems to have been in the 1970s). He used a questionnaire, but one designed to disguise the real object of his enquiry (a technique used also by other researchers in this, and other, fields). Out of the returned questionnaires, Paffard, in his lecture, recounted three cases. In addition, Paffard quoted several instances of accounts of transcendental experiences that are found in the autobiographies of prominent 20th-century figures: scientists, artists, churchmen, etc. In each case, he asked the question: is this experience specifically religious?

Being "religious" he connects with certain possible criteria, including: the stated belief that a deity could be perceived as being the source and/or content of the experience; confirmation/initiation of religious practices/observances in the subsequent life of the person; changes in the moral quality of the person's life and dealings with others, as a confirmation of a stated divine source. One perceived problem with such experiences, referred to by Paffard, is the possibility, often suggested, that certain recorded experiences are in fact "merely" aesthetic, as opposed to religious ones; some of the accounts of such experiences can be interpreted in this way, by a person reading them. Presumably, by the criteria given at the beginning of this paragraph, that possibility is ruled out, in certain cases where divine origin is claimed, in the account; and relevant here is the concept of "over-belief", see below. The question of how the aesthetic and the religious or theistical (where it is believed in) may co-exist, are discussed in Appendix W.

The first case that Paffard quoted from amongst the respondents to his own survey tells of a 16-year old female who had been a nominal Christian with a habitual religious

observance pattern; but following a "conversion experience" (my phrase) of a familiar type (during hymn singing), she gained a personal conviction of salvation, and sought to change her life for the better. The third case he quoted, an 18-year old female undergraduate, felt "a power or a presence" on the Wiltshire Downs; while such elements came within Alister Hardy's understanding of a "religious experience" (Paffard said), the girl in the third case did not specifically consider her experience in terms of religion as such, at the time, neither did she subsequently "realise" or develop any consequences of it in her life. The youthful experiences of Julian Huxley (read from his autobiography) show powerful feelings of oneness with nature, and the fact of Huxley being brought up in determinedly-secular circumstances might be a factor in his lack of experiencing this, or later interpreting it, in a theistical way.

Paffard made references to experiences - common in autobiographies, he claimed - which removed religious faith, rather than instilling it (experiences instilling faith being a common feature in the submissions to Alister Hardy), an example being that of A. L. Rowse. Normally, such experiences are so powerful, beautiful, and moving, that they contrast strongly with staid, conventional religious observance (or fears instilled by narrow-minded hell-fire religious instruction), and thus cause the person subsequently to reject religion. Another example is the curious case of submission 636, a 17-year old Jewish boy, whose experience in Bruges Cathedral - despite his nurtured abhorrence of Christianity and its places of worship/symbols - caused him to reject the Orthodox Jewish faith of his upbringing: being ashamed of the fact that his only religious experience had been in the worship-building of an alien faith, he considered that his own religion/its special buildings, having never supplied such experience(s), was without purpose. And in subsection 3/4/2 we referred to the case of Rosalind Heywood, whose whole life was filled with para-normal experiences, despite her having rejected religious

belief in youth <Heywood, 1964/IH>.

The experience that Paffard recounted from a further biography (Morag Coate?) suggests an encounter with a "life force" (my phrase), indeed, the person repeatedly calls it experience of, and oneness with, life; yet part of the reception of this joyful oneness seems to come from definite rejection of (or, liberation from rejection of) theism, and conventional religion. Perhaps this person, like Huxley and others, had experiences that we must call pantheistic and Wordsworthian.

Another revealing case from an autobiography is that found in the second volume of memoirs by Kenneth Clark, the eminent art historian, curator, and broadcaster. When in his early forties, Clark had an experience in a church in Italy (he explicitly discounts the idea, however, that the church's aesthetic qualities played any part in this). He writes that he is certain that he had experienced God, that he became conscious of failings and shortcomings in his life, and that he considered that he had glimpsed the kind of experiences referred to by the great mystics; but he also tells how he considered himself too involved with "the world" to act on the experience, "realise" any consequences, etc. His life continued as before, by a conscious act, and the experience did not repeat itself. Paffard contrasts this with the autobiography of church historian and clergyman Alec Vidler, which, according to a reviewer, is totally filled with trivia and the details of a seemingly-boring life of tedious activity; no mention, there, of religious experience(s).

Ultimately, "religious" and "religion" are a semantic problem, depending on what the people, who have the religious experience, decide to call "religious" or as being like "God" or "heaven" (as opposed to "bliss"), etc. Here, what matters, are the concepts, and appropriate language, which come with nurturing. A person receiving Christian teaching from childhood, while having no religion (at the time of the experience, or when reporting it) will use "heaven" rather than "nirvana",

and is likely to speak in terms of the divine, rather than any kind of "life force", as seemingly referred to, above.

In addition to the acquired use of language/concepts, in a person's understanding and interpretation of their experience, there is the existence of a person's "over-belief" (a term from William James): a powerful experience, for a lifelong Christian, is likely to be interpreted as the presence/product of the Holy Spirit (even if its contents are only a non-specific joy, ecstasy, etc.), and if a person is a Hindu or Muslim, some different source and/or nature is likely to be detected, and believed in; a Buddhist - Paffard quotes Ninian Smart as saying - never had an experience of the Virgin Mary; and while the Jewish boy, cited above, felt the desire to pray, in a church, he does not record specific experience of a Christian nature.

Is the conclusion of Paffard's enquiry that, ultimately, it depends on my interpretation as to whether my experience has been "religious"? - and that nothing else can be said, in that as far as such experience(s) is/are knowable, we only can know our own, and that we can thus interpret them how we will, with no possible outside interference? And so must all "religious experience" be arbitrary and totally subjective? And how can people study that which is entirely internal and subjective, unknown except by our telling of it, and unformed as to its origin and significance, outside of our interpretation? But - despite possible inability to "study" such experience(s) - many would object that being personal and interpretive were two indicators of something authentically religious, since faith is by nature personal convictions concerning things that one can understand in a variety of different ways (as others do), something beyond demonstration, rational analysis, or falsifiability (as when an experience can be shown actually to be of another nature/source, despite the convictions of the one experiencing it).

Paffard's criteria for "religious", involving subsequent

changes of life, outlook, behaviour, etc. - "signs" of the truly-God-inspired nature of the experience - surely only apply to "conversion" experiences of the "unconverted"; a practising religious believer might have several such experiences, over many years, without feeling the need for major changes in life; they may appear, religiously, as "confirmatory" experiences.

APPENDIX W: AESTHETIC AND RELIGIOUS EXPERIENCE

On several occasions, in subsections 3/2, 3/3, and Appendix V, it was suggested that experience and experiences could possibly be understood in terms of being "aesthetic" and "religious", or possibly either the one or the other. Also, it has been suggested in this present work that the aesthetic experience of architecture and art might "trigger", or be bound up with, the origin and nature of religious experience; and approaches to this idea have been outlined (subsection 3/4).

In his article "Religious experience or aesthetic indulgence?", in The Cathedral and the arts (1976, edited by J. G. Davies and B. S. Moss), Peter Cannon-Brookes considered the question of "whether Art has a role in the religious experience, and, if so, what is the nature of their interaction" <Davies and Moss, 1976/CA, p. 19>. The conclusion which emerges from his brief discussion is that the "religious response ... to a work of art with religious subject matter is entirely separate" from the "aesthetic response"; (Nikolaus Pevsner, in his 1953 account of J. N. Comper's St. Cyprian, Clarence Gate, London (1903) wrote: "There is no reason for the excesses of praise lavished on Comper's church furnishings by those who confound aesthetic with religious emotions" <Pevsner, 1953/LEC, p. 329>). Cannon-Brookes adds, however, that a good work of art can "help to induce a state of mind open to religious experience" <Davies and Moss, 1976/CA, p. 20>. Thus, the two experiences are separate, though the one might help a person be receptive to the other.

In the discussion of experience, in section 3 and Appendices U and V, it may seem to have been suggested that we can talk of "ordinary" everyday experience, and "special" experiences that have been called "religious", "transcendental", etc., (though a Christian's normal experience of worship, liturgy, prayer and spirituality, while seemingly coming in the "ordinary"

category, is still truly to be understood as "religious"). Is there, it must be asked, a clear distinction between these two, a great void of difference dividing them? At times, in the subsections and Appendices above, it may seem that the subject under discussion has veered wildly from the normal and "ordinary" to the "special" and abnormal, each perhaps alternating as the area of interest. I would suggest that this is not the case, that all experience is ultimately linked, and that the discussion of church architecture and spirituality with validity concerns spirituality of whatever apparent kind and nature (and the possible role of buildings in "special" experiences is thus relevant, I consider, to the part played by buildings in "ordinary" spiritual experience). The same ultimate connection may be true of what we call "aesthetic" and "religious" experience.

Aesthetic experiences we think of as experiences of works of art, or perhaps, works of art experienced in a particular way, or experiences of qualities found in (some?) works of art, but also in other things (see also subsections 3/2 and 3/3). Religious experiences must be held ultimately to be the experience of the divine. Unless divinity is identified with aesthetic qualities, as pantheism identifies divinity with nature, with the whole physical realm, then there must, as Peter Cannon-Brookes seems to be suggesting, above, be an ultimate distinction between the two. The God of Judeo-Christian theism is other than things, the creator of the created, beyond the effects, qualities and sensation of aesthetics, and beauty itself.

Aesthetic and religious experiences, however, are not the only kind known to humans: others include all the types and degrees of physical experience which characterise the animal mode of existence. Others are connected with the higher mental faculties of the human, including moral experience, emotional experience, etc. But all of these are known in a single person, and all are interrelated and nurtured by the mutual interaction of a unified system. Thus contemporary science conceives of the

intimate contact between physical processes and mental activity, between the body and what was traditionally called the soul, and all its realm. In subsection 3/3/1, reference was made to the importance of considering psychosomatic wholeness and sensual/spiritual/physical unity, when considering worship, and its relationship with its environment and context.

Out of the kinds of experience listed, we can with validity, I consider, build an ascending scale, from those that are purely involuntary, animal-like and instinctive, to those "higher" and apparently less-physical; but the physical-spiritual unity, referred to, shows that "higher" and "lower" are metaphorical, that these two cannot ultimately be separated. It is still, however, meaningful to refer to an "ascent", from the most basic animal experience, to, ultimately, the religious/spiritual.

If the chain begins with involuntary physical acts, such as breathing - barely "experienced", most of the time - next come such experiences as eating and excreting, which are perhaps best considered semi-voluntary. Food introduces us to a higher mode of experience than the physical, indeed, to the aesthetic, for human physical response to food clearly involves an aesthetic element. Taste is physical, involuntary, and beyond reasoning and choice; yet it is clearly an aesthetic affair, and food raises the whole area of gastronomics and haute cuisine, where the blending of flavours, presentation of dishes, and appreciation of the results, is truly an aesthetic feast. The sense of smell - as seen in subsection 3/2 - is an aesthetic factor, and is a major source of taste. And "taste", in relation to art, aesthetic taste, may not be entirely metaphorical; perhaps certain aesthetic factors - in art, buildings, nature, places, etc. - do affect the sense organs, more than just by way of visual perception, in the psychosomatic unity of the human mode of being. Sex is clearly of a physical, instinctual, animal nature, linked to involuntary actions in other, non-human, forms of life; and yet in its totality it may transcend the physical in an aesthetic, moral,

and spiritual way.

It is perhaps right to refer to the "highest" point on the chain as being spiritual/religious experience, the experience and experiences known in religious worship, in all its many forms. If the seeming "desert" of occasions of "dryness", or "fruitless" prayer (and also joyless, boring, over-familiar liturgical worship) appears devoid of powerful effects and positive feelings, the "spiritual masters", and writers on prayer and worship, assure us that this is not so, that such occasions are creative beyond our perception, and formative of those perceived, sensually-experienced moments of joy, "vision" and insight that may be considered the goals and objects of our efforts, the "higher" spiritual/religious experience(s), that we might have supposed to be totally different in kind from worship's daily routine. Mystical experience is perhaps, indeed, beyond this and separate, in that the mystics insist on the wholly otherness of their ... whatever, which is perhaps, truly, beyond language, and only describable by analogy and metaphor, the language of love (but also, perhaps, the metaphor of the senses, even of place - see also subsection 3/3/2); indeed, perhaps it is not correct, even, to call it "experience".

Art ultimately proceeds from the sensual (there is no painting for people without eyesight), but in its "higher" and "finer" forms, is concerned with more than aesthetic or sensual experience, hence the attention given to the ethical, philosophical, political and spiritual content and purposes of art. These two kinds of things need not be seen as separate, however, as in the older thinking of "beauty" being inseparable from "truth". Kierkegaard, in his ascending chain of three modes of existence, spoke of the Aesthetic, the Ethical, and finally the Religious.

If the spiritual/religious can be placed at the highest point of an ascending chain of our experience, each "link", it should be noted, is intimately bound up with its predecessor.

But communication or progress is not simply a matter of moving up or down; there is direct communication and transition from any one link to any other, since while one may be filled with one kind of experience, at a given moment, one is always susceptible to another, completely different one, and the body, the senses, or the mind, can instantly create a new experience of a totally different order; experience is a chain, but it is also a circle (mystics, by contrast, kick away the steps by which they ascend, to use Wittgenstein's image). This two-fold nature of the unity of experience ("linear" and "circular") is perhaps a key to the fact of experience being capable of ultimate, theoretical, distinction, while (in practice) being bound up together. While, as suggested, the distinction between aesthetic and religious experience may be a real one, I believe that it may not be one that can actually be made, at least not on all occasions and in all circumstances. The distinction may exist, but it is not necessarily one that can be made. And if the aesthetic - as in a work of art or architecture - can, indeed, be a trigger of the religious, we cannot necessarily draw a line where the trigger "ends", and the actual experience begins (Michael Paffard, incidentally, in his talk, suggests that triggers are less important than the contents, nature, and effects of experiences see: Appendix V, <Paffard, 1991/WEIR>).

Of course, the idea that a religious experience is an event which cannot be separated from aesthetic and other kinds of experiences, presupposes that an experience can be religious, can be known to be religious, can, indeed, be understood by way of, and in terms of, religious faith; and this is the subject of Michael Paffard's 1991 talk, outlined in Appendix V.

APPENDIX X: FENG SHUI

Western ideas about orientation, siting, and the most satisfactory planning of buildings, rooms, and spaces, are thrown into vivid relief by a comparison with oriental body beliefs and practices, concerning these and other matters, known as feng shui ("fung shway"). Feng shui also contrasts very strongly with western ideas and theory concerning religious buildings. It arose in China, though other variants are known in Japan and other parts of the Far East; while suffering much under the influence of official ideology in Communist China, concern properly ("auspiciously") to order one's home, office, and life, on the basis of its teaching, currently seems alive and very influential, even in China itself.

While feng shui has its origins in ancient religious ideas, it has very little connection with religion or religious buildings, and its central principles seem to be dependent upon beliefs now virtually lost. Feng shui is geomancy, divination by means of reference to the earth, giving insight and wisdom - almost, indeed, telling how things will come to be - by means of reading place, and the forces and influences of location and position. Geomancy comes in various forms, Western versions of which are perhaps rather more our concern; and yet the connection, between feng shui and Western ideas, comes in the form of the terrestrial forces that are believed, in both, to be present: chi and sha in feng shui, ley lines and magnetic forces in Western thinking (it has been pointed out that the Chinese believed in such forces long before Westerners discovered magnetism).

"Wind" and "water" are the literal meanings of feng shui, and these two indicate that the art, or science, or whatever it is considered, has, at its core, belief in the omnipresence of two kinds of force or current that, like air, flow in and through and around everything in our world. They are the

beneficial force chi, and the malignant sha. Sha takes the form of so-called "secret arrows" which, if not resisted or deflected, shoot out into places, houses, rooms, and ultimately into people, and do unseen but significant damage. While chi is beneficial, it can also be stimulating to an excessive extent, and so may not be good in the wrong doses, in inappropriate situations. Chi can also become "stale" and ineffective, if planning (design of furnishings in a room, rooms and spaces in a house, etc.) allows it to be deposited into a corner where it lingers. Sha forces are encouraged principally by straight lines and direct routes, so it is thought harmful to have one straight path leading to the (square-set) front door of a house, and even worse if that door leads, by a straight corridor, into principal rooms, or up the main staircase. This, of course, is totally the opposite of the Western Classical tradition, whereby broad avenues lead to a large entrance in a principal facade, and thence into an open hall, terminated by a grand staircase. So, feng shui designers (feng shui geomancers, we should describe them) prefer a curving, non-direct path, to the entrance, which is best set to one side, or - even better - set at an angle within the wall. If a staircase is terminated with a change of direction, then sha is less likely to flow up it. If this cannot be arranged, however - and in many other circumstances - the "secret arrows" can be deflected by a screen, strings of hanging beads, or, if all else fails, the use of strategically-placed mirrors.

Of course, the beneficial chi, it is hoped, will not be denied entry; but neither is it useful if the rooms are planned so that such forces simply pass through the house before they can affect the lives and destinies of the inhabitants. It is thus wrong to plan a single straight corridor leading from the front door to the back door, otherwise chi will simply flow straight through, and effect nothing. The result, in the ideal house, is inevitably an irregular plan, one which will evenly distribute chi (while keeping it moving), but also deny access to sha.

It is stressed that feng shui is a mixture of ultimately religious beliefs, ancient science, aesthetics, and practicality. A single corridor linking the front and back of a house gives a bad impression to honoured guests, since on entry their first sight is the exit. While it is thought inauspicious to have a bedroom door directly facing a bed (a suitably-placed screen deflects secret arrows, in this situation) it is almost common sense, since such a situation, without a screen, allows people to walk in directly towards people who may be undressed, etc. At the same time, it is obvious that if the secret forces are given prior consideration in every situation, some planning nonsenses - as Westerners might consider them - can result, the awkward, costly, and inelegant construction of a door set at an odd angle to the wall being a simple example. It may not be always possible - as feng shui prefers - to have a set of double doors both opening the same way, and with their hinges on the same side; though this seems an example of aesthetic consideration, which lies behind the beliefs. Likewise, the beneficial feng shui of a house's siting may cause its principal side to face a steelworks, while the rear looks out onto a meadow.

The matter of orientation itself shows how feng shui differs from Western geomancy. In Western and near-Eastern religious beliefs and ideas, orientation is ultimately based on cosmological considerations; we have seen that the path of the sun, related to the earth, and the pattern of day and night, lie behind beliefs related to directions, and siting in the landscape. Feng shui is ultimately astrological in its concept of orientation - not in that it believes in placing buildings by way of the positions of the stars, but by the situation found most favourable from the personal horoscope of the client. Traditionally, the head of a household or family built the house, its site, situation, and plan being based on geomantic ideas derived from the builder's date of birth, which was interpreted by the feng shui geomancer. Hence Chinese orientation is a mixture of a belief in unseen forces, plus

astrological interpretation. Another feature in these calculations are the magical meanings of the five elements (wood, fire, earth, metal, water), the eight trigrams, (which contain information as to the auspicious orientation of specific human activities), and a proportional, or numerological element, the magic numbers. Calculations are made, by the geomancer, using a compass known as the lo p'an, which brings together all of these considerations, plus a whole series of portents and other ideas. Thus, compass directions have portentous meanings (eg. North: longevity; North-East: disaster; East: vitality, etc., based on the reading of the horoscope). The result can be that not only does a person's time of birth determine directioning of a house, but also it determines the most favourable day on which construction might begin (not always timing that agrees with the needs of construction management and economics), and also the timing, and route, of a journey. <Walters, 1988/FS, pp. 8-15; 24-32; 34-55>.

APPENDIX Y: SACRED GEOMETRY, FREEMASONRY, AND ESOTERIC THEORIES OF ARCHITECTURE.

There exists a whole agglomeration of ideas, beliefs, and speculations, concerning the nature of religious architecture, that have only been briefly referred to in the main text of this work. These ideas are to a greater or lesser degree connected with those found in parts of the text (particularly section 2), yet either proceed beyond the bounds of relevance to my concerns, or disappear into the borderland between knowledge and speculation (indeed, in some cases fantasy), and hence require special treatment. I have called them an agglomeration, because while distinctions exist in the subject-matter of these ideas, they have a tendency to overrun all boundaries and become indistinguishable one from another.

An idea that is found in various books of the 1970s and 1980s, that can be traced back to accounts in the 18th and 19th centuries and earlier, is that which is most conveniently described as "sacred geometry". This holds - if one summary can be made, from many accounts - that the forms of geometry, which reflect the divine order of creation, and run through the essential nature of all that is in the universe, serve as the generative means by which all religious buildings since the dawn of time have been brought into existence; but more importantly, the basis of these buildings in such geometry is the one source of their religious validity, the one necessity which makes a temple, church or pyramid the means by which humans may commune with god(s), or offer worship as such divinity requires. As George Lesser writes (1957): whatever the origin of religious buildings, "only the rule and efficacy of sacred geometry will make that fabric a holy shrine inhabited by the god and a place worthy of sacred acts" <Lesser, 1957/GCSG, I, p. 2>; this is very similar to the ideas of Alberti (subsection 2/6), indeed, Alberti goes further, in

suggesting that God's self-revelation depends on spatial geometric harmony.

The essential geometric forms include the circle, square, vesica piscis (or mandorla), triangle, hexagon and rectangle. Accounts of sacred geometry make much of the early accounts of these shapes in Pythagorean and Platonic philosophy, crediting the ancients with their "discovery", and knowledge of their divine nature and significance. In every case, however, the ultimate origin of all sacred geometrical lore (for such it is), lies with the ancient Egyptians and their buildings, particularly the pyramids. Such writers (eg. Nigel Pennick) are insistent that these forms bear meaning, and have great significance. "Each geometrical form is invested with psychological and symbolic meaning." <Pennick, 1980/SG, p. 13>. However, there seems to be a certain absence, in these writings, of any overt explanations of the meanings of each, or at least, specific meanings. Pennick writes that the circle "represents completion and wholeness, and round structures peculiarly echo this principle" <Pennick, 1980/SG, p. 18>. The vesica piscis is perhaps the most referred-to form, in these accounts; its name simply means "fish bladder" (and mandorla means "almond"). It is considered to have its symbolic origins in representations of female genitalia, ie. of the Earth Mother <Pennick, 1980/SG, p. 21>; it is certainly a form which is often used as a setting for images of the Virgin Mary in Medieval art (but also for images of Christ).

A significant aspect of this lore is revealed in a passage in which Pennick discusses the square, namely, the fact that sacred geometry is also cosmological; he refers to the "foursquare" building, images of the world's stability, and the concept of centre (as in the central point of squares (or circles, presumably) as the omphalos, or world's navel) <Pennick, 1980/SG, pp. 18-25>. Hence, sacred geometry here connects with the cosmological theory of religious architecture that was outlined in subsection 1/5, and cosmological meanings, examined in detail in subsection 2/3. However, while such

geometrical ideas were clearly vital to the making of this early symbolic architecture, it must be remembered that cosmological buildings, as we have looked at them, were actual physical structures whose built form clearly represented, depicted, or "modelled" the cosmos, as it was physically understood to be.

If one understood the heavens to be a great hemisphere above, the sight of the inside of a dome, at Hagia Sophia or the Roman Pantheon, would actually "look like" and remind one of such a heavenly form. In sacred geometry, the nature of cosmology is more symbolic - hidden in the geometrical basis by which underlying forms may be created - rather than literally, physically, or outwardly present, and this fact becomes much more apparent when we discover that such writers apply their ideas (or claim to detect their objects of concern) within a very wide range of buildings throughout human history, buildings whose architectural style, but also physical form and function, vary very considerably (see also subsection 2/10/2).

Naturally, geometry that lies behind the designing of buildings will not necessarily affect architectural style, so that a building designed on a particular geometrical principle in the Classical world will understandably have visual differences from one designed in the Gothic age, or the age of the Baroque. However, if the geometrical principle is the same, there should surely be some basic formal similarity, so that, once style, decoration and the trappings of context and culture are stripped away, a basic physical similarity will remain, a formal "essence" generated by the geometry (which, we are told, is timeless, immutable, possessed of the divine nature and divine changelessness) and apparent to all. In fact, the Egyptian pyramid, the Greek temple, the Gothic cathedral, the Baroque church - to say nothing of the works of Antonio Gaudi and Le Corbusier - bear no essential similarity whatsoever.

One telling aspect of sacred geometry - readily apparent in the above - is what might be called its a-cultural, non-historical character. More than this, however, it is in one

respect non-religious. Much reference is made to the sacred, and worship of god(s), and yet the sacred is undefined, indeed, it seems to mean somewhat different things at different times, in these accounts. "Worship" and rite seem to exist in the mind, as something purely cerebral, a vague attitude, divorced from any real religious beliefs or practices. This kind of thinking clearly appeals to those who long for a kind of unity among all religious experience, those who subscribe to the perennial claim to have found a religion that unites all and contains the best of all, or all truth within itself, so that one can jump instantly from the mysteries of Isis to the (alleged) mysteries of Chartres cathedral, without any concern for real aspects of theology, worship, religious ethics, etc. The ultimate consequence of having (trying to have) everything - in religion as in much else - is often that you end up having nothing.

The religious syncretism inherent in this is paralleled by a vast and complicated amalgam of ideas that are present in any of these accounts. The approach to geometry is in fact that of geomancy, divination by means of reference to the earth, reading the nature of place, in order to gain insight and wisdom. From cosmological concerns such as omphaloi, we move to geomantic understandings of the earth: lines (ley-lines) and forces ("telluric currents") are said to spread across the face of the earth, extending a kind of macro-sacred-geometry, far above the scale of buildings, to link ancient sites into a kind of grand geomantic pattern. The placing of buildings (temples, mausolea, churches, etc.) is, as we might expect, said to have depended in all ancient cultures, on geomancy and orientation by means of cosmology (Chinese orientation, as has been seen in Appendix X, does not depend, like Western orientation, on the movement of sun, moon, and stars, despite the implied claim of the universality of all ideas, found in many books concerned with sacred geometry).

Strongly present in sacred geometry is numerology, the attaching of mystical importance to numbers, numbers which are

here derived from geometrical forms. Most books on the subject refer to the fact that Christopher Wren designed St. Paul's Cathedral to be exactly 365 feet high (the number of days in a year), but is this supposed to have some significance, either astrological, cosmological, sacral, or any other? It may have been a whim, or more likely, not design at all but a coincidence. Another ingredient is gematria, a branch of numerology, whereby words have special significance by means of numerical values ascribed to letters.

Numerology, and meanings linked to numbers, was undeniably an element in Medieval thought, in the age of what we now call Gothic architecture, as seen above in subsection 2/5. Much of the sacred geometry interest is concerned specifically with the greater Gothic church, which is here seen as a vast repository of arcane lore. Above all, it has been suggested that Gothic architecture owes its origin to secret knowledge concerning geometrical forms and their meaning ("The gothic style sprang fully armed from heads that had astonishing knowledge in them", wrote Louis Charpentier in The Mysteries of Chartres Cathedral <Charpentier, 1975/MCC, p. 44>), an idea in part encouraged by the sudden flowering and rapid spread of High Gothic architecture in the Ile de France. The place of sophisticated geometrical and proportional procedures, in Gothic design, is denied by no one. But these writers claim that the geometry and its forms, and proportional systems (often seen - it is claimed - only in the construction lines that invisibly divide and describe portions of the building) served not merely as devices whereby the master masons could set-out large churches, and determine the forms of moulding and tracery, that banker-masons would then cut and erect - a purely technical procedure - or as a means to reflect divine ordering or mathematical harmony detected in the cosmos, but rather was present as the building's source of sacral validity, without which it could not function as a religious building (ie. the rationale described above).

Clearly, Chartres Cathedral is a building in which - like other High Gothic churches - there is a wealth of symbolic and iconographic forms. Durandus (see subsection 2/5) shows how the Medieval mind was almost obsessed with meanings, and their links with forms and numbers. Also, astrology clearly played a part in Gothic art and Medieval theology (the signs of the zodiac are often present); yet this fact cannot justify the inference that Gothic builders were in reality driven by esoteric doctrines (all carefully hidden from the vast body of believers) to create structures that in truth served the virtual occultist requirements of small groups initiated into the true meaning of their works. In an article published in 1838 (Essay on the symbolic evidences of the Temple Church. Were the Templars Gnostic idolaters, as alleged?), Edward Clarkson claimed that the Knights Templar, builders of round churches in London, Cambridge, and elsewhere, were in fact heirs, via Gnosticism and the mystery religions of the late Classical period, to the religion and knowledge of the ancient Egyptians, much of which was hidden within the forms that can be found (or superimposed upon) their church in London, and, no doubt, other Templar buildings <Billings, 1838/ITC, pp. 1-26>.

Conventional academic Medieval scholarship has long been very wary about "sacred geometry", so much so that most books produced by such writers totally avoid confronting the "fringe" and its ideas. Eric Fernie, in Medieval architecture and its intellectual context (1990) writes (of proportional systems in Medieval building) "so much of what has been written on the subject is nonsense (a nonsense which unfortunately lends itself to the use of the computer), consisting of webs of literally unbelievable complexity and corresponding intellectual nullity ...", and he complains of "the almost pathological condition once described as pyramidiocy" <Fernie and Crossley, 1990/MA, p. 229>. With caution has his own work, and that of Peter Kidson, sought to recover proportional systems of design from the benighted world of magic to the

realm of practical construction methods. The importance of proportion, in architectural design in past centuries, has long been the province of serious, rational, scholars.

The Gothic builders - so the sacred geometrists would have us believe - were in possession of arcane knowledge handed down from the time of the Great Pyramid; but from where did they get it? One unavoidable destination that many of these books inevitably lead us back to, is a world that up to very recent times was unknown to all except a few, that of Freemasonry.

Like many, I read Stephen Knight's best-selling book The brotherhood, out of a vague interest, when it was published in 1983. In a chapter concerned with the Church of England, Knight described a certain Reverend Mu, recent incumbent of Epsilon in Berkshire. The church turned out to be the setting for major events in the calendar of local Freemasons, of whose activities Mu became suspicious <Knight, 1985/B, p. 254-262>. A letter from one of the Masons' leaders bore "a masonic symbol, which I recognized immediately as being a symbol in [Epsilon] church" <Knight, 1985/B, p. 257>. In his researches into Masonry, Mu discovered more and more symbols in the church, "to the extent [he wrote] that I now really wonder if it is a church at all" <Knight, 1985/B, p. 262>.

Studying symbols, and meaning in churches, I was fascinated by what I read. Surely Mu was referring to much more than the common interlaced set-square and compass, that are found on graves and tombs of Masons in churches and cathedrals the length and breadth of the land, and on the outside of many Masonic halls? Had I visited many churches, and glanced idly at a host of simple decorative devices, which, in reality, carried some very specific meanings, for those suitably initiated? I wrote to Knight, with the hope that he might pass on my enquiry to Mu, or attempt to elucidate this symbolism himself. I got no reply, and Knight is said to have died shortly after publication; and Mu and Epsilon were, of course, fictitious names. What I did get, however, was James Stevens Curl's The

art and architecture of Freemasonry (1991) <Curl, 1991/AAF> and John Wood Architect of obsession, by Tim Mowl and Brian Earnshaw (1988) <Mowl and Earnshaw, 1988/JW>.

The esoteric knowledge, required to make Gothic building possible, was transmitted - in the account of the "sacred geometrists" - by way of the Knights Templar, who made secret discoveries (concerning the Ark of the Covenant, etc., etc.) on the site of the Jerusalem Temple, of which they had custody in the early decades of the 12th century. But the Ark - in this account, of Louis Charpentier - contained the geometric and numerological lore of buildings older than the Temple, in fact, of the Egyptian pyramids themselves. Next, the Templars swiftly conveyed their valuable finds to the Ile de France, thus allowing the construction of Chartres Cathedral, and many others. But in the "sacred geometry" account of architectural history, the story, far from ending in Gothic France, continues to our own day, for the repositories of this geometrical knowledge - the lodges of the stonemasons, whose work filled Medieval and Renaissance Europe - became the lodges of "speculative" or "accepted" masons, which arose in the 17th century, and blossomed in the 18th into powerful forces in the spread of Enlightenment culture and Neoclassic architecture and art; music, of Mozart and others, is particularly seen (eg. in Curl's account) as being specifically Masonic music. Curl takes the ancient-modern connection further, by strongly arguing that the Templars, when suppressed by Pope Clement V in 1312, survived by decamping to Scotland and Ulster (where the Pope's power was ineffectual), and there playing a part in the rise of modern non-"operative" Freemasonry.

The truth behind all of this is none of our concern - thankfully; however, the recent account of that strange 18th-century architect John Wood the Elder (1704-54), referred to above, shows that at least one church exists (outside "Epsilon", Berkshire), where a large amount of decoration is in fact Masonic symbolism, and this was consciously the intention of the architect, who was as fervent in his Freemasonry, as in

his concerns with mystical interpretations of Stonehenge, Solomon's Temple, Druids, etc. <Mowl and Earnshaw, 1988/p. 90-1, etc.>; the patron also played a part in this work. The work in question is the (extant) chancel of Tyberton church, Herefordshire, where, in the late 1720s/early 1730s, Wood decorated pilasters with low-relief symbols of Christ's passion; but they also include such masonic symbols as an open-triangle, a flaming sun (with face), and circled snake (tail in mouth). But as Mowl and Earnshaw point out, these are equally symbols of contemporary religious culture, or rather, that of the previous century, found both in Emblem books, and the poetry of Quarles, Donne, and others <Mowl and Earnshaw, 1988/JW, p. 55-9>. In addition, Curl lists a large number of other masonic symbols: the Seal of Solomon (pentangle), the moon ("light shed in the night"), the All-Seeing Eye, beehive (an emblem of the Ark), kneph (a winged egg or globe), triple tau within triangle, turtle (conjugal affection), rocks (soundness, wisdom), pentalpha (three triangles set producing five points), etc., etc. <Curl, 1991/AAF, pp. 232-246>.

The appearance of a few odd symbols from previous centuries in a handful of churches make it hardly worth our while struggling through the vast amounts of material concerned with all of this; and if this is true of Freemasonry it is equally true of "sacred geometry", the claims of which, as I have suggested, have been soundly dismissed (note, for example, the damage done to "geomantics" by such as the spiritualist-archaeology of F. Blight Bond <Thomas, 1981/82/KECM>). Charpentier, and others, fill books with fanciful stories (he gives no argument, no evidence, no references, but just makes vast claims, requiring blind belief; he is not alone). But J. S. Curl's depth of scholarship cannot be dismissed so readily, and his forceful view of the very positive contribution of Freemasonry to all that is good, and all that might have been achieved, in modern civilisation, takes the whole subject beyond the at times obsessive anti-Masonry, that critics such as Stephen Knight acknowledge.

One reason for my attempted account of sacred geometry is my conviction that all the many ways of looking at buildings (in history, and in contemporary terms), must be considered together. Academic ignoring of such things will not of itself make them go away, and as this present work attempts to produce a unified, "synthesised" study of church architecture from various viewpoints, not previously considered together, these "fringe" approaches must be included also. Another reason for this Appendix is the fact that contemporary interest in such as sacred geometry is not insignificant; Charpentier's work was re-published, in English, because of the sponsorship of the Research Into Lost Knowledge Organisation, and some of the researches into the Chartres maze have been carried out by architect-geometrician Keith Critchlow, who once taught at the Architectural Association, but is now part of the Prince of Wales's Institute of Architecture. RILKO, and the work of Nigel Pennick and others, must be seen as related to a kind of interest that is found in rich measure in the many-faceted "New Age" movement, whose followers have much sympathy for certain concepts of sacred space; such thinking (and feeling, we must say), is strongly affecting Christianity, and even mainstream religious architectural thought, and may increasingly continue to do so.

The other reason why the subjects of this Appendix are vital is because they are intimately concerned with the vast subject of architectural proportion (see subsection 3/2/2), and also a subject that is never far away in any consideration of church architecture, the Jerusalem Temple and its significance.

APPENDIX Z: THE "SOCIAL MEANING" OF ARCHITECTURE

The study of buildings in terms of human activities and functions, social hierarchies and structures, rituals and relationships, is one which many would consider the most fundamental means of architectural analysis - historically, and in relation to contemporary practice. By this means, we can look at the way in which many varieties of churches and religious buildings reflect not only religious architectural theory and liturgy, but also the divisions (effectively "status") between clergy and laity, between members of religious communities - monks, friars, nuns, etc. - and lay clergy and laity; between clergy of different levels in a hierarchy, and also the social/professional orders of laity. These groups, their relationships, and their roles, are physically reflected in churches (and similar relationships, in other kinds of buildings), and in some cases, such relationships become almost permanently fixed in what seem like atrophied building-plans, long after that social or hierarchical relationship has ceased to exist: when the present Coventry Cathedral was built, it was pointed out that the virtually-separate choir area was a feature inherited from the Medieval monastic choir, which separated monks and laity in former centuries; Coventry, of course, was not to be a monastic cathedral.

Courts of law, buildings for government assemblies, even lecture theatres and dining halls, are all buildings which evolved in close relationship with the activities, and the roles and status, of the people that inhabited them, and it is often a fascinating question as to what extent building design shaped activities and relationships, or the practices of government, law, etc., affected the design of buildings. Winston Churchill's oft-quoted comment ("We shape our buildings, and then our buildings shape us!") was made in the context of the new House of Commons (bombed 1941, re-building

completed by 1951). The first English parliament had assembled in a chapel shaped like a monastic choir (or Oxbridge college chapel), with two rows of seats facing one another. This seems in some way to have encouraged two bodies of opinion, who opposed one another, the pattern for subsequent Houses of Commons, and centuries of British politics. In choosing to rebuild the House on the same pattern, in the 1940s, the desire to perpetuate the same system of Government and Opposition was enshrined, or rather embodied, in a building. The House of Commons possesses a variety of details that divide party territory, and convey the presence of traditions and forms of government. Other nations have evolved totally different forms of government house, sometimes by originally adopting the use of a different kind of building (eg. post-Revolutionary France: not a chapel, but the tier of a theatre, with its "centre" and "extremes").

A. W. N. Pugin was an architect/theorist who understood the social and hierarchical distinctions that were present in buildings, as shown in his analysis of Magdalene College, Oxford, in True principles - the relative sizes of chapel, dining hall, gatehouse, and living accommodation - and this he contrasted with a contemporary, Neoclassic, college, designed as a uniform rectangular block.

Much work has been done, and surely much more remains to be done, concerning the relationship of activities, social distinctions, and forms of building. Another approach to the study of functions and building forms is that of the study of primitive or traditional types of settlement, what might be called the anthropological approach to architecture. Writers such as Aldo van Eyck, Paul Parin and Fritz Morgenthaler <Jencks and Baird, 1969/MIA, pp. 172-213>; Amos Rappaport and Peter Blundell Jones <Blundell Jones, 1985/IM, p. 34> <Blundell Jones, 1990/SR, pp. 93-95> have approached architecture in this way. These studies are concerned with the relationship between the social structures and physical structures of primitive tribes, and the ways in which rituals

use space (often a place only temporarily inhabited and defined, with no creation of buildings) for such rituals as rites of passage.

These studies, however, are not produced simply out of an interest - such as a pure anthropologist might have - in primitive peoples and their use of space/habitation, etc., or out of a merely historic interest, where they might be concerned with societies that no longer exist. Rather, these architectural writers attempt to get back to some basic understandings of the way in which people and places interact; like W. R. Lethaby, when writing Architecture mysticism and myth, in the later-19th century, they wish to get back to unsophisticated essentials, before considerations of taste, precedent, architectural theory and - above all - style destroyed everything that was natural, rational, and ordered; here, instead of Lethaby's recourse to the cosmological and mythical roots of architecture, there is concern with the details of primitive sociology, belief, and ritual.

Valuable as these studies, and their theoretical approaches, are, we must ask to what extent they are concerned with architectural meaning. Do the two rows of benches in the House of Commons mean two-party government, with two opposing groups? It is surely true that the physical arrangement directly reflects (is a product of) reality, and may - as suggested - in itself be responsible for creating/sustaining this political situation; but is this really meaning? The superior size of Magdalene's chapel no doubt reflects the fact that God was seen as so superior to man that his house was not only bigger but more splendid; but reflecting is only meaning by connotation (see subsection 2/10/2), meaning at second-hand. Blundell Jones describes how the positioning of huts in a Bororo village (Brazil) reflected precisely the place and responsibility of members of the tribe. The physical layout and arrangements "did not merely "express" or symbolise social organisation; it embodied it" <Blundell Jones, 1985/IM, p. 34; author's emphasis>. He shows that the social/physical structure also

upheld the social patterns, in that, once the Bororo were persuaded to abandon their settlement pattern, their social organisation disintegrated; and he claims that while such a society is very remote to us, "implicit patterns of organisation still exist in our buildings ...". But care must be taken, I would suggest, with seeing these many pertinent observations in terms of meaning, except in a general and loose way. Does the choir (in the physical sense) of Coventry Cathedral "mean" that clergy and singers are "superior"/of necessity separated, from the lay congregation, or simply that aesthetic factors and ingrained church planning traditions have formed a building in that mode? Buildings not only reflect/are products of social factors, but also climatic ones (high-pitched roofs proliferate in rainy climates); do high-pitched roofs mean "this is a rainy climate"?

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Most documents involve references to specific pages of a specific edition. In the references, and bibliography, I have normally given details of the specific edition I have used; in these circumstances, I have indicated the date of the original edition. With some "classic" works, often reprinted and reproduced (eg. Ruskin's Seven lamps of architecture, Appendix T), I have given references to chapters and sections in the text, rather than cite the pagination of a particular printing, which can be less than useful.

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