

The connection between religion and urban planning

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Indeed, twentieth-century city planning came out of the complex emotional reaction—part pity, part terror, part loathing—of the late-Victorian middle class to their discovery of the urban underclass. That reaction... took the form of a secular Last Judgement: the virtuous poor would be assisted to go directly via the settlement house or the municipal housing project to the garden-city heaven; the vicious would remain perpetually repressed in their own urban hell, or go to penitential labour colonies where they might at last see the light.... Half a century later, in the welfare-state era of the 1950s and 1960s, came the triumph of liberal theology: now all—even the urban underclass—were instantly perfectible; all might gain immediate access by the strait gate to the Corbusian city of towers. (Peter Hall in *Cities of Tomorrow*—1988: 364)

A year before I began to study town planning, I had been converted from a free-thinker family background to a fundamentalist, pentecostal fellowship (led by two women ministers). I could not help but draw parallels between the two total belief systems (planning and Christianity) which were fighting for my young heart and mind. (Clara Greed in *Women and Planning*—1994: 12)

Planning is not so much a subject for the social scientist as for the theologian. (Aaron Wildavsky in *If Planning is Everything, Maybe its Nothing*—1973: 153)

After a brief review of literature related to the history of urban planning, this essay will explore the research question; 'Is there a link between the religious urge and urban planning, and if so, what is its nature?' When reading the quotations at the head of this essay, one may be tempted to think that the connections between religion and planning are simply rhetorical—Peter Hall using metaphor, Clara Greed simile and Wildavsky hyperbole. However, this essay will argue that there is a literal connection and that the history of urban planning cannot be fully understood unless this connection is taken into account. It will show how the first recorded cities contained a strong element of urban planning and that this was directed by the priesthood who incorporated geometrical designs, tied to mystical explanations of the universe, into designs for the religious centre of the city, and often for the entire

city. It then looks at the explosion of utopian city dreaming and social reformation at the turn of the twentieth century—activities that led to the establishment of the current urban planning profession. This essay concludes that the urban mythologies and symbols provided by Christianity formed the basis of this social movement. Finally it examines the changes in the 1950s and 60s when urban planning was revolutionized by systems planning theory and became a serious 'science'. While at first glance it may be thought that urban planning had finally cast off 6000 years of close connection between religious thought and urban planning, quite the contrary is the case. The mythologies and symbols provided by Christianity for the movement at the turn of the century are still dominant, though subterranean. Scientific positivism and rationalism have become the new religion, but the practical outcomes are still the same. Planning is still the search for certainty and the creation of meaning through a 'purified identity'—the central core of the 'religious urge'.

Literature review

The first difficulty encountered in reviewing the literature connected to the history of urban planning is finding agreed definitions of urban planning. What constitutes an urban environment or city? This question preoccupied a lot of the discussion of the early fathers of sociology; Weber, Wirth, Park and Simmel. Sennett, in *Classic Essays on the Culture of Cities* (1969) shows how these thinkers rejected definitions tied to population size and tried to define the city in terms of social, economic and institutional arrangements. As a working definition, we will adopt that provided by Morris who expands Gideon Sjoberg's definition of a city as 'a community of substantial size and population density that shelters a variety of non-agricultural specialists, including a literate elite' by adding a number of other requirements: production of a surplus of food by one section of the society; existence of some form of writing; social organisation to ensure continuity of supplies to the urban specialists; and technological expertise to transport and store materials and to undertake civic works (Morris 1972: 5). In adopting this definition, it is acknowledged that transition from village/town to city, like the transition from child to adult, is not a clearly definable process. Even a primitive tribal compound has many of the elements of a city in embryo form.

Having a working definition of the city, the next question is what constitutes urban *planning*. There is a tendency in the literature to categorize cities as 'organic' or 'planned' (e.g. Morris 1972, Cunningham & Auster 1992). Organic cities have a chaotic street pattern that has resulted from ad hoc placement of buildings, streets

being defined by the placement of buildings over time. Planned cities have a recognizable pattern to the street network, usually a gridiron. In these cities, the streets define where the buildings are placed, and not vice versa. For those writers who use this distinction of organic and planned, the assumption is that there is no urban planning in the organic city. The weakness in this way of defining urban planning is that it imposes the modern *manifestations* of urban planning in Western cities since the turn of this century, chiefly zoning and gridiron street patterns, as the yardstick for judging whether planning took place in particular cities of the past or not. It is possible that the so called organic cities were also planned to some degree or another. If we take the common-usage definition of plan or planning—'a scheme of action' (Macquarie Dictionary)—then all cities, regardless of time or place, exhibit *degrees* of urban planning. There is an assumption in many historical accounts of urban planning (e.g. Morris) that planning must encompass the entire city to be classed as urban planning. Unfortunately this is logically impossible, even in modern city planning. It is simply not possible to plan *everything*. Aaron Wildavsky believes that modern urban planning is based on the illusion that it is comprehensive and summed up his view in the title of his article: *If planning is everything, maybe it is nothing* (1973). Much modern urban form is left to blind forces which planners do not, and cannot, consider in their plan making. In ancient cities, the creation of defense walls, public buildings and squares, public facilities such as central granaries, the regulation of trade, etc. all required a degree of planning. Hugo-Brunt in *The History of City Planning* defines town planning as 'the coordinated modeling and molding of physical form in an ordered or methodical arrangement' (1972: 1). We will therefore adopt a working definition of urban planning as *a scheme of action aimed at molding the physical, social or cultural form of a city*.

Historical accounts of the narrower version of urban planning can be found in numerous books: *Towards the Planned City: Germany Britain, the United States and France, 1780–1914* (Sutcliffe 1981); *Cities of Tomorrow: An Intellectual History of Urban Planning in the Twentieth Century* (Peter Hall 1988); *The Rise of Modern Urban Planning 1800–1914* (Sutcliffe 1980); *The Urban Habitat: Past, Present and Future* (Huth 1978). A slightly different perspective on this narrower history of urban planning can emerge from biographies of the key figures, as found in Robert Fishman's *Urban Utopias in the Twentieth Century: Ebenezer Howard, Frank Lloyd Wright and Le Corbusier* (1982), Helen Miller's *Patrick Geddes: Social Evolutionist and City Planner* (1993), or Peter Hall's biographical sketches in *Cities of Tomorrow* (1988). In these accounts we begin to catch glimpses or find strong evidence of how the personal belief systems of these founding fathers played a pivotal role in that which they gave birth too.

This switches our attention from a history of actions to a history of the ideas, mythologies and symbols which shaped the actions. For example, Clara Greed's *Women and Planning: Creating Gendered Realities* (1994) examines the underlying belief systems of planning to show how the desire for order, both in the founding fathers and the continued practice of urban planning, reflects 'male' reality and is used as a means of suppressing 'feminine' reality. As such she examines the forces that give rise to the urge to plan and finds that these had their genesis, historically, in religious beliefs and practices and that they continue to be grounded in religious beliefs. In a similar vein, although not emphasizing the religious connection, Elizabeth Wilson in *The Sphinx in the City: Urban Life, the Control of Disorder, and Women* (1991) argues that a male reaction against disorder motivated the modern planning movement. Women are a problem of order, 'partly because their presence symbolized the promise of sexual adventure. The promise was converted into a general moral and political threat (6). Wilson sees the very heart of the city as a war between the male and female 'principles' (7). Richard Sennett in *The Uses of Disorder: Personal Identity in City Life* (1971) pursues a similar theme. Disorder threatens personal identity by exposing a person to experiences and information which may call the beliefs and assumptions of that identity into question. Planning is an attempt to control this exposure to disorder, and in so doing create a 'purified identity'. Sennett continued his arguments in *The Conscience of the Eye: The Design and Social Life of Cities* (1990). In this work he traces the roots of our 'fear of exposure... how the wall between inner and outer life was built' and concludes that the 'wall arose in part from our religious history' (xii).

Hillier and Hanson in *The Social Logic of Space* (1984) tackle the issue from a different perspective, but with surprising synergy with Wilson and Sennett. Their concern is how the patterns of social relationships are manifested in urban form. They argue that urban form is not merely an artifact of society, but that it is the 'body' of a society. For them a society does not exist apart from its manifestation in time/space. They therefore see urban form as the incarnation of relationship patterns and belief systems. Hillier and Hanson examine two types of relationships, 'spatial' and 'transpatial'. Spatial relationships are those that are based on sharing common territory, transpatial those not relying on geography but special interest. Spatial relationships rely heavily on the random encounter, transpatial on the planned encounter. They then demonstrate how these two forms of relationship demand very different urban forms. The spatial relationship requires that when people are moving, they traverse a maximum number of encounter spaces in order to maximize the opportunity of the chance meeting. Transpatial relationships require minimization of the number of encounter spaces traversed in order to maximize the

efficiency of the planned exchange. Spatial relationships therefore require a balance between chaos and order; the transpatial relationship requires a highly ordered environment. Hillier and Hanson argue that women's relationships tend to be spatial and men's transpatial. They show how that over time, particular urban environments have changed in favour of the transpatial—that is the ordered and planned environment.

There is one other area of literature used in this essay for understanding a history of the ideas behind urban planning—that dealing with the nature of rationalism. Rationalism is the mode of thinking that lays at the base of modern urban planning. *Rationality in Planning: Critical Essays on the Role of Rationality in Urban and Regional Planning* (edited by Breheny and Hooper 1985) contains some excellent critiques of the rise of rationality in planning. Particularly pertinent is the contribution of Goldberg, *The irrationality of 'rational' planning: exploring broader bases for planning and public decisionmaking*, and the contribution of Weaver et. al. *Rationality in the public interest: notes toward a new synthesis*, which gives a historical overview of the paradigm shifts in planning, even though this is limited in scope from 1900 to the present. Other critiques of rationalism are contained in some of the works already cited such as Greed's *Women and Planning: Creating Gendered Realities* (1994). Two works not cited are Michael Oakesoft's *Rationalism in Politics and Other Essays* (1962) and Stanley Tambiah's *Magic, Science, Religion, and the Scope of Rationality* (1990) all of which demonstrate how that religion (particularly Christianity) gave birth to rationalism and why rationalism continues to be an act of faith.

Finally, Lewis Mumford's *The Myth of the Machine: Technics and Human Development* (1967) provides another essential framework for understanding a history of urban planning and its connection to the religious urge. Mumford argues that historians have over-emphasized the role of the machine and technique in humanity's development. Even before language was available, our ancestors 'had a dim consciousness of the mystery of their own being' (21). For Mumford, the formative forces that shaped humanity's ascendancy was the dream, ritual, and language. 'The great cultural implosion that took place around the Fourth Millennium B.C.: what is called 'the rise of civilization'' was 'not the result of mechanical inventions, but of a radically new type of social organization: a product of myth, magic, religion and the nascent science of astronomy' (11). Mumford maintains that to the present day, it is these forces, not the tools we invent, that shapes our history. Planning is not so much a tool we use to shape our urban environments as it is an expression of a continued belief in myth, magic and religion.

The early connection

Egypt

When one looks at all early cities, there is one consistent factor: religious beliefs form the basis of city building and the priesthood are the technocrats who drive the process. Mumford argues that the machine age did not have its genesis in the so-called Industrial Revolution, but rather in the Pyramid Age where the first archetypal machine was composed of human parts.

Two things must be noted about this new mechanism, because they identify it throughout its historic course down to the present. The first is that the organizers of the machine derived their power and authority from a heavenly source. Cosmic order was the basis of this new human order. The exactitude in measurement, the abstract mechanical system, the compulsive regularity of this 'megamachine'... sprang directly from astronomical observations and scientific calculations. This inflexible, predictable order, incorporated later in the calendar, was transferred to the regimentation of the human components...

The second point is that the grave social defects of the human machine were partly offset by its superb achievements in flood control and grain production, which laid the ground for an enlarged achievement in every area of human culture: in monumental art, in codified law, in systematically pursued and permanently recorded thought... (1967: 11-12)

In Egypt it was the priesthood of the sun god Ra, with their beliefs in life after death, who drove this process. The pharaoh would rise through the apex of the pyramid in his death boat to ride forever through the skies with Ra, a journey in which all Egyptians would mystically share. It is debatable as to what extent the megamachine imposed order on city form because there is almost a complete absence of urban remains. We do know that pharaohs chose different locations for their mortuary works and that cities were moved or created to support these works. Tel-el-Amarna, a partially excavated city between Cairo and Luxor, was created by Pharaoh Akhenaten because he found it difficult 'to institute religious reforms in the existing capital of Thebes' so moved down river to the new site (Morris 1972: 12). Tel-el-Amarna is laid out in grid fashion and is dated around 2670 B.C. It is cited by many as the first example of a planned city. Morris rejects this, saying it was only a city for construction workers and may have only had a life of 40 years. But as argued in the literature review, the grid pattern is almost incidental. What is significant is that religious beliefs motivated the establishment of a whole new town—a significant act of planning.

Ur

The connection between urban planning and religion may actually go back to the fifth millennium B.C. if one considers the evidence regarding Ur, the Babylonian port at the junction of the Euphrates and Tigris river.

A caravan arriving from the Arabian desert looks down from the last sandy hills into a flowering valley where a white city rises out of wheat fields and date palms. Its characteristic feature is a tiered pyramid, about a hundred feet high, built upon a black foundation, its terraces shimmering red, blue and gold. A temple is erected on the uppermost platform, where priests pay homage to the moon god... Arranged in a semi-circle around the imposing tower, in the midst of palm and cypress trees, are five temples and some treasury buildings with mighty walls, some almost three hundred feet long, with fountains and sacrificial altars in the inner courts... Not far from the temples is the burial place of the kings... (Schneider 1963: 18)

While the street layout of Ur was organic, they did boast a city sewerage system, and the typical home was two stories, containing up to 15 rooms. There seems to be clear evidence in Ur of *schemes of action aimed at molding the physical, social or cultural form of a city*, and that at least some of these planning efforts were closely associated with religious observations.

Harappan cities

If some may like to debate whether Ur exhibited signs of urban planning, there can be no doubt with the Harappan cities in the Indian subcontinent — 2154–1864 B.C. The lower cities all had a gridiron street pattern. For Morris, the evidence that convinces him that the Harappan cities were the earliest planned cities (according to his narrow definition) is the striking similarities of their layouts, even though separated by vast distances. The reason for the similarities is that 'one highly significant aspect of this new civilisation is the evolution of a theoretical and practical basis of urban planning, according to strictly applied religious principles, which involved the selection and application of a suitable predetermined plan-form, the term for which is *mandala* (1972: 18). Harappan cities had their entire urban form planned, based on the predetermined patterns of the mandala.

...the *vastu-purusha* mandala is an image of the laws governing the cosmos, to which men are just as subject as is the earth on which they build. In their activities as builders men order their environment in the same way as once in the past Brahma forced the undefined *purusha* into a geometric form.... building is an act of bringing disordered existence into conformity with the basic laws that govern it. This can only be achieved by making each monument, from the hermit's retreat to the layout of a city, follow exactly the magic diagram of the *vastu-purusha* mandala. (Volwahren, cited Morris 1972: 255)

The *vastu-shastras*—the general architectural manuals—defined thirty two ways in which the *vastu-purusha* mandala could be formed by the priest-astrologer.

Jerusalem

There is a strong connection between Egyptian civilisation, Jewish civilisation and the act of planning. Genesis tells the story of how Joseph (great grandson of Abraham, the patriarchal head of the Jewish race) was sold into Egypt as a slave, but rose to be Pharaoh's right hand man, administering the construction of grain storage facilities, and the taxing of agricultural output in order to prepare for a seven year drought. Joseph had forecast this drought from his interpretation of one of Pharaoh's dreams which Pharaoh's own magicians and wise men could not interpret (systematic planning based on dream interpretation). Joseph brings his 11 brothers and his father Jacob to Egypt to survive the famine. After 400 years, their descendants find themselves as slaves in the public works program of Egypt. They are liberated by Moses and spend the next 40 years wandering in the desert, enroute to the 'promised land'. Not long after their liberation, Moses climbs Mt Sinai where he meets with God and is given a detailed blueprint for all aspects of the social and cultural life of the people. These instructions—engraved in stone—included codified laws, public and private health regulations, dietary restrictions and detailed plans for the layout of their tent city. The center piece would be the tabernacle, laid out in geometric form, each element containing specific religious and spiritual meaning. The blueprint included specified 'zoned' areas for each of the twelve tribes around the tabernacle, arranged in symmetrical design. When they finally reached the promised land and Jerusalem became their spiritual home, Solomon built a permanent temple based on the design handed down at Mt Sinai.

Other world cities

It is not within the bounds of this essay to examine the other emerging civilizations of this time such as the Chinese. Even today there are practitioners of the Chinese *Feng Shui*, 'whose job is to study and expound the shapes which the spiritual forces of nature have produced and to prescribe the ways in which all buildings, roads, bridges, canals and railways must conform to them' (Hall 1988: 82). What emerges from what has already been discussed is that in the earliest cities there is strong evidence of attempts to create ordered environments. While some of this ordering may have been for practical reasons such as improving health (sewerage systems) or for safety (defense walls and moats) much of it was tied to the religious impulse—an attempt to grasp the meaning of life and the universe. This resulted in cosmologies in which the secrets of the universe were unlocked via sacred shapes and forms. The geometric shapes and religious rituals provided reassurance that there is meaning in the universe. There was no such comfort in chaos. (Chaos

science had not been discovered then.) The significance of planning in these early cities is not therefore whether *all* domains were planned, e.g. the streets. In fact, leaving the streets chaotic *may* have been a deliberate part of the planning act—just as one may plan to leave the market decide rather than introduce regulation. This was certainly the case with Christian city builders under the theological influence of Saint Isidore of Seville (ca. 560–636). The neighbourhood was *deliberately* left chaotic because they believed 'that secular space had to look unlike sacred space' (Sennet 1990: 12). However, as Hillier and Hanson (1984) have shown, there is a hidden 'social logic' in the layout of the chaotic street patterns of the organic cities. Even Morris concedes that 'despite their meandering and seemingly illogical route-structure' they do seem to 'clearly conform to some indefinable natural pattern' (1972: 9). This does not mean that these organic layouts can be classed as 'planned', but it does show that the boundaries are not as black and white as they first appear. The significance of much of the imposition of order on city form was primarily an act of defining identity and creation of a sense of certainty about that identity.

Christian theology and the utopian city

The turn of the twentieth century is the period that many writers identify as the birth of the modern city planning movement. The reason is a mass social reform movement which went hand in hand with a number of utopian urban visions, each with their own prophet—Ebenezer Howard and his Garden City; Frank Lloyd Wright and his Broadacre City; Le Corbusier and his Radiant City; and Daniel Hudson Burnham and his City Beautiful. This section shows how the mythology and symbols that informed this utopian dreaming came from a long tradition of Christian theology, which stretches back into Jewish mythology and cosmology, and in all probability is connected to mythologies and cosmologies developed in the first cities.

The basis of the Christian mythology is the Bible, which starts with a cosmos which is dark, empty, void and without form—in a state of chaos. God broods over this chaos, producing paradise which comes in the form of a garden. Adam and Eve succumb to evil, introducing suffering, work and a certain kind of disorder into the created realm. They bear two children. The elder, Cain, a tiller of the soil, murders his younger brother and is then banished to become a refugee and wanderer. However, he settles in the land of Nod and builds a city. Thus the first city is viewed by the Christian theologian as being conceived in rebellion and violence. Kellermann comments:

By murder Cain has broken his relationship to humanity, to God and even the earth... He has destroyed his home and so sets out to build his own security... Cain's bold pretension is to construct... his own new world. Violence is the kernel of alienation by which the brave new city is seeded (1989: 18)

The next recorded city is Babel (Babylon), a symbol for Christians of humanity's arrogance and the construct of the city as an act of idolatry:

As men moved eastward, they found a plain in Shinar and settled there. They said to each other, "Come, let's make bricks and bake them thoroughly..." They said to each other, "Come, let us build ourselves a city, with a tower that reaches to the heavens, so that we may make a name for ourselves and not be scattered over the face of the whole earth." (Genesis 11: 2-4)

Kellermann comments on Babel: 'The city, then, is not a Promethean act reaching up to God. It is the act of making an identity by making a world, an urban environment, a great city. It is the act of excluding God from creation. It is incipient and express idolatry.' (1989: 18)

Just a few chapters on in Genesis, we have Abraham and his nephew Lot, both born in Ur of the Chaldeans, being commanded by God to leave the city and begin a pilgrimage. Abraham and Lot have a falling out and Abraham (the godly one) chooses to live in tents in Canaan, while Lot 'lived among the cities of the plain and pitched his tents near Sodom' (Genesis 13:12). It was not long before Lot was seduced by the city and moved in. When two angels arrive to rescue Lot and his wife before the city is destroyed in fire and brimstone, the men of the city surround the house and call to Lot, 'Where are the men who came to you tonight? Bring them out to us so that we can have sex with them' (Genesis 19:5). The imagery is clear. The city becomes synonymous with sexual deviance.

Later in the scriptural records, Babylon re-emerges as the personification of evil. *Bab-ilu*, meaning 'Gate of God', became the capital of Mesopotamia in the period 1728-1686 B.C. and was actually where the Tower of Babel was built as part of the priesthood of Marduk's effort to increase the power of their Calf of the Sun god. During the reign of Nebuchadnezzar, Babylon became one of the greatest cities of antiquity. In 597 Nebuchadnezzar conquered Jerusalem and took the Jews into exile in Babylon. Some of the writings generated while in exile (Isaiah, Jeremiah, Ezekiel, Daniel) became part of Jewish scripture and their theme is an outpouring of hate and condemnation against the evil city:

Prepare a place to slaughter his sons
for the sins of their forefathers;
they are not to rise to inherit the land
and cover the earth with their cities.
"I will rise up against them,"
declares the Lord Almighty,
"I will cut off from Babylon her name and survivors..."

I will turn her into a place for owls and into swampland;
I will sweep her with the broom of destruction,"
declares the Lord Almighty. (Isaiah 14: 21–23)

This mythology of Babylon as the personification of evil was adopted by the early church. For the early Christians, the culmination of the ages will be the destruction of the great harlot Babylon.

I saw a woman sitting on a scarlet beast that was covered with blasphemous names... The woman was dressed in purple and scarlet, and was glittering with gold, precious stones and pearls. She held a golden cup in her hand filled with abominable things and the filth of her adulteries. This title was written on her forehead:

MYSTERY
BABYLON THE GREAT
THE MOTHER OF PROSTITUTES
AND OF THE ABOMINATIONS OF THE EARTH
I saw that the woman was drunk with the blood of the saints, the blood of those who bore testimony to Jesus... After this I saw another angel coming down from heaven... With a mighty voice he shouted:
"Fallen! Fallen is Babylon the Great!
She has become a home for demons
and a haunt for every evil spirit,
a haunt for every unclean and detestable bird...
Therefore in one day her plagues will overtake her:
death mourning and famine.
She will be consumed by fire,
for mighty is the Lord God who judges her." (Revelation 17–18)

This imagery of the city as the centre of evil, particularly sexual sin, has exercised a powerful influence for at least the last 2,500 years—ever since the Babylonian exile. Considering the emergence of the modern planning movement, Hall observes that, 'Most of the philosophical founders of the planning movement continued to be obsessed with the evils of the congested Victorian slum city (1988: 48). This, as we shall see, was not just a result of the actual conditions they saw, but also conditioned by their Judeo-Christian tradition—particularly a strong preoccupation with sexual deviance. In the quote from Revelations above, this sexually deviant city is personified as a female harlot. Elizabeth Wilson, in *The Sphinx in the City: Urban Life, the Control of Disorder, and Women* (1991), contends that the 'urban consciousness' that developed during the nineteenth and early twentieth century, was essentially a 'male consciousness' which was preoccupied with a 'sexual unease' bought on by the increased possibility of sexual encounters outside the constraints of family which is inherent in the city.

This in itself made women's very presence in cities a problem. The city offers untrammelled sexual experience; in the city the forbidden—what is feared and desired—becomes possible. Woman is present in cities as temptress, as whore, as fallen woman, as lesbian, but also as virtuous womanhood in danger, as heroic womanhood who triumphs over temptation and tribulation... Many writers... posed the presence of women as a problem of order, partly *because* their presence symbolised the promise of sexual adventure... (1991: 5–6)

There is strong evidence of the part this preoccupation with the sexual dangers of the city played in the formation of the modern town planning movement. In 1883 Congregationalist clergyman Andrew Mearns wrote *The Bitter cry of Outcast London*. According to Hall, 'it proved one of the most influential writings in the whole history of British social reform; Stead later claimed that through its triggering effect on the appointment of the Royal Commission, it was responsible for the birth of modern social legislation' (Hall 1988: 15, 16). Here is one brief extract from *The Bitter cry of Outcast London*:

Then if you are not driven back by the intolerable stench, you may gain admittance to the dens in which these thousands of beings who belong, as much as you, to the race for whom Christ died, herd together... [in a single room lived] a mother who turns her children into the street in the early evening because she lets the room for immoral purposes until long after midnight, when the poor little wretches creep back again if they have not found some miserable shelter elsewhere... Ask if the men and women living together in these rookeries are married, and your simplicity will cause a smile. (Cited Hall 1988: 16, 17)

Lord Shaftsbury, in giving evidence to the Royal Commission on the Housing of the Working Classes (1884)—the Royal Commission triggered by Means tract—testified:

A friend of mine... going down one of the back courts saw two children of tender years, 10 or 11 years old, endeavouring to have sexual connection on the pathway. He ran and seized the lad and pulled him off, and the only remark of the lad was, 'Why do you take hold of me? There are a dozen of them at it down there.' You must perceive that this could not arise from sexual tendencies, and that it must have been bred by imitation of what they saw. (Hall 1988: 22)

John Ruskin wrote in his 1880 *Letters to the Clergy on the Lord's Prayer and the Church*:

...the great cities of the earth... have become... loathsome centres of fornication and covetousness - the smoke of their sin going up into the face of heaven like the furnace of Sodom; and the pollution of it rotting and raging the bones and the souls of the peasant people round them, as if they were each a volcano whose ashes broke out in blains upon man and upon beast. (Cited Hall 1988: 13)

Christian theology therefore provided the symbols and mythology for the anti-city bias that fuelled the emerging city planning movement at the turn of the century. However, Christian theological tradition also provided a counter and paradoxical stream of city symbolism which fuelled the utopian dreams—a symbolism which occasionally bubbles to the surface during history but for the most part lays hidden beneath the 'evil-city' tradition. This tradition sees the city as God's home, the Celestial City, instrument of redemption, place of wholeness and justice. For example God instructed Moses to build cities of refuge where those who were refugees could come. And throughout the Bible Jerusalem is constantly referred to

as a *holy city* or *the city of God*. It is referred to by Isaiah as the *City of Righteousness* and the *Faithful City*. Songs were composed that poured forth adoration on this city:

By the rivers of Babylon we sat and wept
when we remembered Zion.
There on the poplars
we hung our harps,
for there our captors asked us for songs,
our tormentors demanded songs of joy;
they said, "Sing us on of the songs of Zion!"
How can we sing the songs of the Lord
while in a foreign land?
If I forget you, O Jerusalem,
may my right hand forget its skill,
May my tongue cleave to the roof of my mouth
if I do not consider Jerusalem my highest joy. (Psalm 137)

For the exiled Jews in Babylon, the return to Jerusalem became the Messianic dream.

I will return to Jerusalem, my holy city, and live there. It will be known as the faithful city... Once again old men and women, so old that they use a stick when they walk, will be sitting in the city squares. And the streets will again be full of boys and girls playing. (Zechariah 8:3-5)

For the New Testament Christians, this imagery informed their vision of the climax to the ages. Following the downfall of the evil city Babylon (quoted above) the paradise lost in the garden would be reclaimed in the coming of a city.

I saw the Holy City, the new Jerusalem, coming down out of heaven from God, prepared and ready, like a bride dressed to meet her husband. I heard a loud voice speaking from the throne: "Now God's home is with mankind! He will live with them... He will wipe away all tears from their eyes. There will be no more death, no more grief or crying or pain. The old things have disappeared." (Revelations 21:2-5)

It should not surprise us to find that the new Jerusalem, as described by the prophet John, is geometric in shape, and that he is given a blueprint of the city which includes its dimensions, the number of gates, their placement, the materials to be used, etc. Nor should it surprise us to find that its splendour and wealth are to outstrip that of fallen Babylon—streets of gold, and an outer wall, 144 cubits thick, made of jasper. Paul, the first Christian theologian, used the word *ekklesia* to describe the Christian congregation gathered for prayer and fellowship—the word used by the Greeks to describe the convened assembly of the people who directed the policy of the city. Paul depicted the early Christians as the *ekklesia* of the New Jerusalem and this *ekklesia* was to manifest the ideals of the utopian city.

This mythology and symbolism of the utopian city—supplied by Christianity—provided the guide for the social reformers who gave birth to the modern town planning movement. Within the overcrowded Victorian slums, and within their own

desires, they could see the decadence and moral corruption of Sodom, Gomorrah and Babylon. At the same time, they could see the possibility of the New Jerusalem. But for this to happen, the Babylon of London, New York, Chicago and Paris would need to be 'destroyed' and replaced with the New Jerusalem of Garden City, Broadacre City, Radiant City or City Beautiful. Hall comments: 'The visions themselves were often utopian, even millenarian: they resembled nothing so much as secular versions of the seventeenth-century Puritans' Celestial City set on Mount Zion, now bought down to earth and made ready for an age that demanded rewards there also' (Hall 1988: 2). While rejecting salvation through bricks and mortar, these utopian visionaries never the less continued the 6000 years of tradition of seeing paradise in terms of revealed plans, replete with geometric shapes. Corbusier went as far as to declare 'The city of today is dying because it is not constructed geometrically' (Hall 1988: 208).

It may be argued, quite validly, that simply proving the existence of a certain mythology and set of symbols, associated with the Christian religion, does not necessarily prove that they were formative in the emergence of the urban planning movement at the turn of the century. The founding fathers *may* have divorced themselves from this cultural milieu and simply created a new set of mythologies and symbols. However, the evidence is to the contrary. Hall's account of the rise of the modern planning movement shows that there was a mass movement in the 1870s and 1880s 'to bring Christian morality and clean habits to the people of the slums' (1988: 40). Of course this does not necessarily mean that people like Howard, Wright or Le Corbusier were part of such a movement, but it seems improbable that their utopian visions would have succeeded in gaining popular attention if they did not tap into a rich vein of cultural thought.

However, Robert Fishman believes that 'the principles of moral duty' that Ebenezer Howard learnt in Sunday School 'played their part' in his reforming zeal (1982: 29). Howard later joined The Radicals who 'devoutly believed in Progress, and... held that mankind was evolving toward a higher stage of social organization—the cooperative commonwealth—in which brotherhood would become the basis of daily life' (Fishman 1982: 31). Fishman gives a hint as to the spiritual side of Howard when he reports that in the 1880s Howard delivered a speech on spiritualism at the Zetetical Society, conjecturing that interplanetary ether waves were the possible physical basis of spiritualist communication (32). When Howard's first wife died, Fishman reports that Howard 'revived another enthusiasm of his youth—spiritualism. He attended seances in order to communicate with her' (80). Howard shares the same strange mixing of Christianity and occultism as some of the founding fathers of modern science, including Newton (Tambiah 1990: 24–31).

Frank Lloyd Wright's grandfather was a Unitarian preacher. His father was a Baptist minister. Wright himself occasionally preached at the Unitarian church. His childhood was composed of 'intellectuality and genteel religion' (Fishman 1982: 98) There is no doubt in Fishman's mind that the formative element in Wright's *Broadacre City* utopia was the influence of Wright's grandfather, 'whose radical Unitarianism had made him an outcast in his native land,' forcing Richard Lloyd Jones to establish the Valley, a secluded farm, 'in order to create an absolute refuge to protect his truth against the world' (100).

Le Corbusier (1887–1965) was not French but Swiss. He was born Charles-Édouard Jeanneret at La Chaux-de-Fonds near Neuchâtel. He had Calvinist mores and came from a family of watchmakers. A religious philosopher, L'Eplattenier took the young Jeanneret under his wing and taught him how 'Rama, Krishna, Hermes, Moses, Orpheus, Pythagoras, and Jesus were all "initiates" who had penetrated the veil of matter and grasped the truth of the Spirit' (Fisher 1982: 168). Corbusier, recalling those days when he went with 'the Master' to sit on some mountain top, describes the experience in deeply mystical terms—'constructing a temple dedicated to nature. We shall leave the city and live in the forest at the foot of the structure... At the four corners of the temple the ceremonial fires shall be lit' (Cited Fisher 1982: 168).

What is telling is that even Patrick Geddes, the social evolutionist, chose the Christian city mythologies and symbols to sell his vision:

Each region and city can learn to manage its own affairs—build its own houses, provide its own scientists artists and teachers. These developing regions are already in business together; can't they make friends and organize a federation as far as need be... May not this be the time prophesied by Isaiah?... 'When it shall come, then I will gather all nations and all tongues and they shall come and there shall be a new heaven and a new earth... and the former shall not be remembered... they shall build houses and inhabit them... and I will direct their work in truth.' (Cited Hall 1988: 145–6)

The childhood mythologies of Howard, Wright and Corbusier shaped the common Christian mythologies and symbols shared by the broader society, giving to each utopia its own distinctive shape. For Howard, concepts of brotherhood shape the physical form of Garden City. He dreamed of 'liberty for our aged poor, now imprisoned in workhouses'; banishing 'despair and awaken hope in the breasts of those that have fallen'; silencing 'the harsh voice of anger'; and awakening 'the soft notes of brotherliness and goodwill' (Hall 1988: 93, 94). For Wright, the need for individual truth to be protected against outside attack makes the individual central in *Broadacre City*. For Corbusier, the watchmaker God requires absolute order in the *Radiant City*, even to the point where all furniture must be standardized according to

the Corbusier formula. While each of these three utopias are diametrically opposed, the common elements are the deep-seated belief that the current city is inherently evil but that a holy city is possible. The designs for these holy cities are as different as those handed down by the priesthood of Ra in Egypt, the mandala handed down by the Harappan priesthood in India, the plans Moses handed to the Israelites at Mt Sinai, or the vision of the New Jerusalem handed by the Apostle John to the Christian church. What is important is not the differences between these plans, but the human desires and aspirations that each faithfully represents.

We conclude this section by considering Nazi thinking about the city. Here, ironically, we find the same mythological symbols provided by Christianity, the paradoxical Babylon and New Jerusalem.

The party's theoretical wing at the end of the 1920s was strongly anti-urban, arguing that the Nordic people were quintessential farmers, never successful in founding cities and nearly destroyed by them. It's newspaper... described the metropolis as 'the melting-pot of all evil.... of prostitution, bars, illness, movies, Marxism, Jews, strippers, Negro dances, and all the disgusting offspring of so-called "modern art"... All of which seems hundreds of miles away, both literally and figuratively, from the plans that Hitler and his *Generalbauinspektor*, Albert Speer (1905–81), were hatching for the reconstruction of Berlin. But running through it all was a perverse logic: Germany's cities, and above all Berlin, were to perform a psychological, a quasi-religious, even magical function as gathering-points for vast public ceremonies... (Hall 1988: 197–8)

Rationalism—and the birth of scientific planning

Between 1953 and 1957 'there occurred an almost instant revolution in human geography and the creation, by Isard, of a new academic discipline uniting the new geography with the German tradition of locational economics'. Planning changed from 'a kind of craft, based on personal knowledge of a rudimentary collection of concepts about the city, into an apparently scientific activity in which vast amounts of precise information were garnered and processed in such a way that the planner could devise very sensitive systems of guidance and control...' (Hall 1988: 326-7). In 1954, Robert Mitchell and Chester Rapkin—colleagues of Isard at the University of Pennsylvania—published a book applying the systems approach to traffic. These methods were first applied in the Detroit Metropolitan Area transportation study of 1955. Two federally funded programmes were prime movers in the push to apply emerging methods of management science, statistics and economic modelling in planning. The Community Renewal Program (CRP) of the US Housing Act of 1959 and the Federal Interstate Highway Act of 1956 and 1962 all mandated that portions

of any capital outlays under these programmes go to planning (Goldberg 1985: 120). It may be thought that this development finally ended the 6000 year connection of urban planning to religious cosmologies; that is until we take a closer look at scientific positivism and rationalism which became the basis of these changes.

In the sixteenth and seventh century, reformation theologians such as Calvin replaced the capricious and moody God of the 'dark ages' with a watchmaker God who put the cogs of the universe in place, wound the clock and left it to tick. In the same period there was a strong interest among intellectuals in occultism, which at that time was exploring 'imaginative cosmologies of universal harmonies and systems of correspondence' (Tambiah 1990: 24-31). From these two religious sources (often mixed together), a belief emerged that the universe was knowable through the application of reason. The challenge for the emerging scientists was to dismantle the clock piece by piece and discover what made it tick. This reasoning process, the scientific method, was based on a number of assumptions; a *mechanistic world-view* in which everything in the universe was seen as operating as a giant machine; a *reductionist world-view*, where, by breaking the universe down into smaller and smaller parts and by understanding how each part of the machine works, it was possible to understand the totality of the machine; and a *materialist world-view* in which ultimate reality is matter, not the relationships that exist between matter or the unfolding events taking place in a time-space dimension of which matter is but a player in the drama. High value was placed on *objectivity*—what Oakeshott (1962: 87) refereed to as 'virginal detachment'. Emotions and irrational beliefs were not to be trusted, for they had only managed to deliver the superstitions and ignorance of the past. (The irony that it was superstition and religious beliefs that gave rise to scientific positivism escaped their attention.) The rational mind could only be trusted if it was emptied of all preconception, beliefs, and values, and disconnected from the emotions. It was believed that it was possible to extract one's self from being a player in the drama and to become an invisible observer, an observer who could move around the stage cross-examining the players about the story line without interrupting or changing the nature of the play. Or to change the metaphor, to understand how the great machine of the universe operated, it was necessary to pretend that one was no longer a cog in that machine.

The scientific method gave birth to *rationalism*. According to the Macquarie Dictionary, rationalism is 'the principle of accepting reason as the supreme authority in matters of opinion, beliefs or conduct'. Something is only legitimate if it is 'rational'. Reason became a 'universal yardstick' (Tambiah 1990: 115). At this point one could be tempted to argue that rationalism is a religion, for it places supreme authority in the reasoning abilities of the human mind. However, on closer

examination we find that rationalism is a blind leap of faith which is no different in character or nature to that undertaken in the belief system of any religion.

For Jon Elster, consistency is the cornerstone of rationality. 'Consistency within the belief system; consistency within the system of desires; and consistency between beliefs and desires on the one hand and the action for which they are reasons on the other hand' (Tambiah 1990: 118). Thus the Harappan priest-astrologer may be acting rationally and consistent within the Brahman belief system. The practices of the modern-day urban planner may also be consistent within the belief systems of scientific positivism. Of course this begs the question as to whether the belief systems for the Harappan priest-astrologer and urban planner are rational or consistent *within themselves*. The answer to this question lies in where one places the frame of reference.

Lets imagine then that the urban planner enlarges his frame of reference. Some new information or insight—say in quantum physics, chaos theory, biology or anthropology—suddenly makes what was previously rational, irrational. This happens on a daily basis in science. Discoveries about the circulation system of the human body make yesterday's rational science of blood-letting a dangerous myth. It is here that we uncover a fundamental flaw in rationalism, for what science has done effectively through its mechanistic and reductionist beliefs is break the frame of reference into smaller and smaller disciplines, thus increasing the chances that the beliefs and actions of that discipline are irrational within a wider frame.

Rationalism's great leap of faith lies in its blind acceptance that the unknown and the unknowable have no connection to that which is already known. Goldberg argues that 'presumption to knowledge is a rather general weakness' in 'narrow analytic objective rationality'.

There is clearly a complex of variables, parameters, and interactions that we have been unable to understand or simulate, despite impressive technical modelling skills and computing machinery. Our level of ignorance about social systems is quite astounding, yet our analytical approaches to rationality assume away this ignorance outright through specification of incomplete models based on incomplete and/or often inaccurate data. Ignorance is not peripheral to our knowledge, it is central. Delimiting the bounds of ignorance is every bit as important as delimiting the bounds of our knowledge. Knowing what we do not know, as the ancient Chinese sage Lao Tzu observed, is the beginning of real knowledge: wisdom (Chan, 1963). One particular form of ignorance is of special importance and represents a special pitfall facing current approaches: uncertainty. A new rationality must therefore make both ignorance and uncertainty explicit and part of the 'knowledge' base. (Goldberg 1985: 129)

Some writers within the planning field are now claiming that the new systems approach is ideological and irrational. 'Rationality, as it is used by major planning theorists, is devoid of content, and its claim to validate knowledge objectively is

therefore ideological (Breheny & Hooper 1985: 3).

Today, however, along the lines of the turbulent gyrations of the physical sciences, it is becoming increasingly fashionable to recognize that what is 'rational' within one dimension of knowledge may be 'irrational' in relationship to others. More importantly, a concept rationality that relies single-mindedly on one or another dimension of knowing is itself *irrational*: it ignores other equally formative aspects of human experience. (Weaver, Jessop & Das 1985: 149)

Other writers see the irrationality in the very act of trying to model a complex world: 'Our discontinuous, nonlinear, stochastic, uncertain and ill-defined world is stretched, shortened, trimmed, compressed and molded until it fits into the procrustean bed of the analytical methods at hand (Goldberg 1985: 125). Goldberg refers to this as 'violence done to ordinary reality'. One aspect of the violence to ordinary reality is the ignoring of the paradoxical nature of much of reality. The reductionist world view sees reality as mono-dimensional. Real life (as opposed to the objectified world of science) is multi-dimensional and consists of paradoxes. Many cultures have recognised the paradoxical nature of life for example, it was expressed poetically 3000 years ago in Jewish books of wisdom:

To every thing there is a season, and a time to every purpose under the heaven: A time to be born, and a time to die; a time to plant, and a time to pluck up that which is planted; A time to kill, and a time to heal; a time to break down, and a time to build up... A time to love, and a time to hate; a time of war, and a time of peace. (Ecclesiastes 3:1-8)

The Chinese also had a world view in which there was a dynamic interplay between opposing forces. The yin-yang symbol depicts all

events and forces in terms of opposing *yin* (passive, female, earth, negative, etc.) and *yang* (active, male, heaven, positive) elements is central to this world outlook. According to this conception, the world, and all that goes on in it, can only be understood in terms of the dynamic interplay of *yin* and *yang* elements. Uncertainty and change are given in such a dynamic system and form the basis for approaching decisions. Since change and uncertainty are at the core of human existence, the Chinese way to treat these dual banes of Western rationality is somehow to get in touch with them directly and become synchronous with them. (Goldberg 1985: 131)

Neil Bohr said 'the opposite of a correct statement is a false statement. But the opposite of a profound truth may be another profound truth' (cited Weaver et. al 1985: 151). Rationalism cannot acknowledge the paradoxical nature of life. It rationalizes the paradox, embracing one side or the other with religious fervour, thus creating a rule or ideology. As Oakeshott observed:

Every moral ideal is potentially an obsession... Too often the excessive pursuit of one ideal leads to the exclusion of others, perhaps all others; in our eagerness to realise justice we come to forget charity, and a passion for righteousness has made many a man hard and merciless... Every admirable ideal has its opposite, no less admirable. Liberty or order, justice or charity, spontaneity or deliberateness, principle or circumstance, self or others,

these are the kinds of dilemma with which this form of moral life is always confronting us, making us see double by directing our attention to abstract extremes, none of which is wholly desirable. (1962: 69)

Rationalism turns one half of a paradox into a whole. It is only to be expected that the resultant universal rule thus created will come under attack from those who have formulated a precept or model around the other half of the paradox. Both sides are then forced to defend their territory, both exaggerating the importance of their precept. Many of the great ideological battles of our time have their genesis in the rationalization of a moral paradox. The battle between liberalism and socialism is a battle between individual rights and individual duties, between the value of individuals and the value of community.

Teitz (1985) shows how planning is torn internally by the individual/rational vs community/nonrational paradox. Rationalism, with its reductionist methodology, led to the invention of the individual and individual rights. Community life is non-reducible and therefore nonrational. Teitz observes that 'communitarian ideology is frequently espoused in conjunction with grand designs for social control...' However, 'we should not expect consistency in urban planning doctrine, because its exponents are imbued to a greater or lesser degree with both sets of views, consciously or otherwise' (142). The ideological battles of the past have created a dualism in which paradoxical truths are split off from each other and pitted against each other. However, as Goldberg observes: 'We are not living in a world which is comprised of 'either-or' dichotomous and mutually exclusive elements. Rather, an expanded rationality must include the analytic and the synthetic; the objective and subjective; the positive and the normative; the theoretical and the practical; change and the status quo; success and failure; and ignorance and knowledge' (Goldberg 1985: 135). Similarly Weaver et. al. argue that:

In the world view of the new rationality there is an acceptance and validation of the different myths and social histories that explain reality. Each is seen as an approximation, but none represents ultimate truth... There is no single cause or set of causes—no linear course of events—that can provide an adequate explanation of social phenomena. From this perspective the duality of natural tendencies coexists within the universal order of things. They may be locked in temporal conflict, but they are also intertwined in a state of mutual dependency and support which one can only be understood in terms of the other. The opposites contain one another and cannot be resolved... With these relational nondualistic attitudes, traditional dichotomies are being replaced with a sense of the intimate relationship between mind and matter, subject and object, order and disorder, the collective and the individual... (Weaver, Jessop & Das 1985: 150)

The difficulty is that once one accepts this world view that reality is paradoxical, the certainty offered by the doctrines of rationalism evaporate. Rationalism can therefore be viewed as having the same seeds as religious fundamentalism—the

need to create a simplified world, a world of order, a world of certainty. Part of the excitement of cities has always been the promise of the spontaneous, the unplanned, the random encounter and exposure to diversity. However, this also constitutes the dark side of the city and its hidden danger.

For the social reformist town planning movement the danger represented by the chaotic was the danger to the moral fabric of society caused by exposure to evils such as prostitution. However, the danger was ultimately to their own sense of self-identity. The random encounter with the 'other-that-is-different' carried the potential of an assault on the carefully constructed sense of identity—the moral, Christian male who was responsible for the spiritual well-being and purity of his family and society. The act of segregation was, in the first instance, an act of self preservation. For the middle class and the new breed of 'scientific' urban planners, it still is.

This reduction and trivializing of the city as a stage of life is no accident... The way cities look reflects a great, unreckoned fear of exposure. "Exposure" more connotes the likelihood of being hurt than of being stimulated... What is characteristic of our city-building is to wall off the differences between people, assuming that these differences are more likely to be mutually threatening than mutually stimulating. (Sennett 1990: xii)

As noted in the literature review, Sennett sees this process as a 'purification ritual' whereby society rids itself of those elements that threaten feelings of communal solidarity and identity (1971: 36). This control is accomplished through two broad strategies; reducing opportunity for the random encounter and segregation of the 'deviant' elements. The drive to plan out chaos is the drive for certainty. However, as Sennett argues in *The Uses of Disorder: Personal Identity and City Life* (1971) this certainty is won at a significant price: cutting one's self off from the possibility of experiences that could produce growth and maturity. In evolutionary terms, this fixation with certainty results in lack of adaptability which may lead to extinction. The certainty gained through planning out all threats to certainty may, in the end, be a grand illusion.

And so little seems to have changed with the elevation of urban planning to rational 'science'.

- There has been a continuity of anti-urban bias from the turn of the century to the present. It is highly likely therefore that the mythology informing that bias has not changed.
- There is still a fundamental belief that through better ordering of space, a version of urban utopia can be reached.
- Utopian outcomes are still tied to access to correct knowledge and the special ordering of that knowledge.

From Saint Simon, through Comte, Marx, Weber, Tugwell, Mannheim, and our contemporaries, social scientists and planners have argued that their special approach to understanding society, their rational method, would bring the powers of 'truth' to the identification and establishment of the common good (Weaver, Jessop & Das 1985: 145).

- That which forms the basis of the urban planning science, rationalism, requires the same leap of faith as any of the previous religious belief systems that formed the basis of urban plans.
- The fundamental drive behind planning is still the ending of uncertainty and the establishment of a purified identity.
- The planning process is still controlled by a 'priesthood' elite who have access to 'secret knowledge and insight' and the general population place their faith in the superior knowledge of this priesthood.

Such rationality is certainly not solely the formal expression of a process of choice and decision. It is, in fact, an expression of a powerful belief that a new and better world can be created, in which superstition and ignorance, subservience to established authority, and the suffering and vice of the old world can be swept away. Thus it is an alliance of utopian belief and scientific power, a formidable combination. I would argue that this faith has been a major element of the idea of planning.... Of course it is an illusion, like all general models of society from Plato to Marx. But, like all such models that embody powerful insights, this version of rationality has enormous capacity to articulate people's desires and make sense of the predicament. On the other hand, predictably, it cannot stand the test of reality. (Teitz 1985: 139, 140)

Conclusion

The evidence presented in this essay seems to support Mumford's thesis in *The Myth of the Machine* (1967) that it is humanity's other-world consciousness that has been the formative force in the development of human culture, not the invention of tools. While the physical needs for security and food cannot be dismissed as formative elements in the construct of the city, the need to create order and meaning were dominant from the beginning. The relationship between individuals and the gods and demons they encountered in their dreams had to be clarified if they were to find their place in the cosmos. The relationships they defined were given concrete form in the cities they built. Mumford reflects:

Man's proneness to mix his fantasies and projections, his desires and designs, his abstractions and his ideologies, with the commonplaces of daily experiences were, we can now see, an important source of his immense creativity. There is no clean dividing line between the irrational and the super-rational... (1967: 11)

Great advances in city planning grew out of 'irrational' religious beliefs. Ironically, current rationalism was also born out the religious search for meaning and

design in the universe. By looking at the emergence of the modern urban planning movement at the turn of the century we see exactly the same processes. When writers such as Hall (1988) and Greed (1994) use religious terminology to describe current planning practice, the connections are literal. Wildavsky was right by concluding that *Planning is not so much a subject for the social scientist as for the theologian* (1973: 153).

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