Is God in the 'burbs?:
The Broadcast Architecture of the Crystal Cathedral

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INTRODUCTION

At first glance there seems to be a significant difference between architectural space and the space created through broadcasting. Whether on paper or in built form, architecture is commonly understood to be concerned with the three dimensional arrangement of programmed elements contingent on a physical awareness by the body. Broadcast media is typically thought to be principally concerned with the transmission of virtual data and messages over extensive territory so large as to not be bodily understood. Similar to traditional architectural projections, visual broadcast information may include explicit references to the three dimensional space of the built environment. However, it seldom does.

The influence of broadcast media on the space of the built environment is increasingly being recognized as important. Traditionally, two dimensional representation preceded the constructed arrangement of building. Because of the enormous influence of virtual media, architecture is now frequently conceived of as working the other way around: designed to maximize its reading on the flat two dimensional TV screen. Such a reversal posits adjustments to the basic form and purpose of architecture and the public realm it has traditionally helped to define. Characteristics such as materiality, transparency, structural rhetoric, and iconography are subject to reconsideration. Our fundamental understanding of space and place are also changed. This implies that the two terms, space and place, can not be reduced to an "essence" is tied exclusively to an intimate conception of corporeal boundary and limit. Rather, as is suggested by Maurice Merleau-Ponty, space is not absolute nor is place ever permanent.' A product of social conversion, the codependent concepts, of space and place are reasoned to be mobile and in a constant state of transformation.[2]

Philip Johnson's Crystal Cathedral in Garden Grove, California is the site of Dr. Robert H. Schuller's weekly syndicated evangelical television broadcast "Hour of Power." Designed and built in the late 1970's, this building offers an intriguing set of prototypical responses to the transformations in the built environment influenced by television broadcasting. The building's simplified massing, materiality and distorted geometry in plan enhance its role as a broadcast backdrop. The building, and specifically its structure, is widely known because of its popularized reference to at least two American "Grand Narratives": the nation's romantic belief in manifold forms of Pastoralism and its revelatory fascination with technology.' In addition, the paper focuses on the increasingly rationalized and corporate structure of the broadcast industry. Jean-Francois Lyotard argues that overly systematic and bureaucratic processes can create "incredulous relationships with larger, and collectively understood, narratives."[4] Often these organizations at very least transform and at worst undermine the shared mythologies and values they intend to promote. If one accepts this observation, the Crystal Cathedral's "banal" and "sub-aqueous" character has as much to do with the homogenous standards of popular television and its ability to dilute shared narratives as it has to do with the building's relationship to its diffuse exurban context.

THE CHARACTER AND LIMITS OF TELEVISION

Since the middle of the twentieth century television has become the most ubiquitous form of virtual media. Most authorities seem convinced that TV will continue to dominate the media arena for the coming decades. Even with the introduction of the personal computer and the world wide web, TV allows the viewer to observe what appears to be the public realm from the safety of a private one. Its convenience and intimacy, are the primary agents for its mass appeal. The medium is enormously successful despite technical limitations that make it unrefined compared to other electronic media and contribute to its disposition against conveying complex ideas. Contrasted to cinema the proportions of the television screen are squat: 2:3 versus 1:1.3. TV's 72 d.p.i. resolution is significantly inferior to thecontinuous tone of 70 mm film. TV programming is obliged to attract large audiences that also view the advertising which pays for the relatively high cost of their production. This along with the

limitations in format favor messages and images which are intentionally presented in plain, simple, and often emotional terms.[5] Because of this television can rarely afford to be subtle, and as a result has earned a rather crude reputation.

In America, unlike other countries, broadcasting is a private, though a socially regulated, resource.[6] In this way, television is more like the privately held market place of a contemporary shopping mall than the public space of an urban square or even a traditional church. As the mall leases units of space to vendors, so too does the broadcasting network rent units of time to advertisers or independent producers of programming. Television's virtual real estate is similar to physical real estate in that it becomes yet another tool for making profit for those who control the supply.' TV's vast market potential allow it to overcome the disadvantages of high production cost and poor format to be the dominant instrument used to convey messages designed to generate desires to ever more consumptive and larger numbers of viewers.

THE IMPROVISATIONAL NATURE OF AMERICAN REVIVALISM:

Fundamentalist evangelism has been described as the most distinctly American of religious traditions. While many churches claim to be evangelical, or to "reach out" and bring new souls to Christianity, fundamentalism comes from a heritage that characteristically questions the intellectual and cultural traditions of established European religions. Most fundamental evangelists believe that social change is more a function of "experience" of personal redemption than the manipulation of academically determined models of communal life or traditional belief.[8] For fundamentalists, salvation becomes a function of individual choice rather than a predetermined and centrally interpreted form of "God's Will." The movement places emphasis on "The Word" as written in the Scriptures, versus liturgical denominations which stress the institutionally controlled ritual of the Eucharist.

Free from denominational control, American evangelism delivered its revisionist interpretation of scripture in a more populist and optimistic manner. This seemed to appeal to the purposeful and assertive psyche of a young developing nation. In order to attract a restless and pragmatic population, American evangelists have always been willing to experiment aggressively with the setting and format of their services. Often called "revivals," the services were usually less formal, even bordering on improvisational. This enables them to avoid identifying with particular denominations and appeal to broader audiences.

CAMP MEETINGS

The most vivid examples of early American revivalism took the form of frontier revivals. They were most common in Maryland, Tennessee, and the Ohio River Valley. Lasting days, these gatherings were known for their emotionalism, dramatic conversions and communal religious fervor.[9] Set in

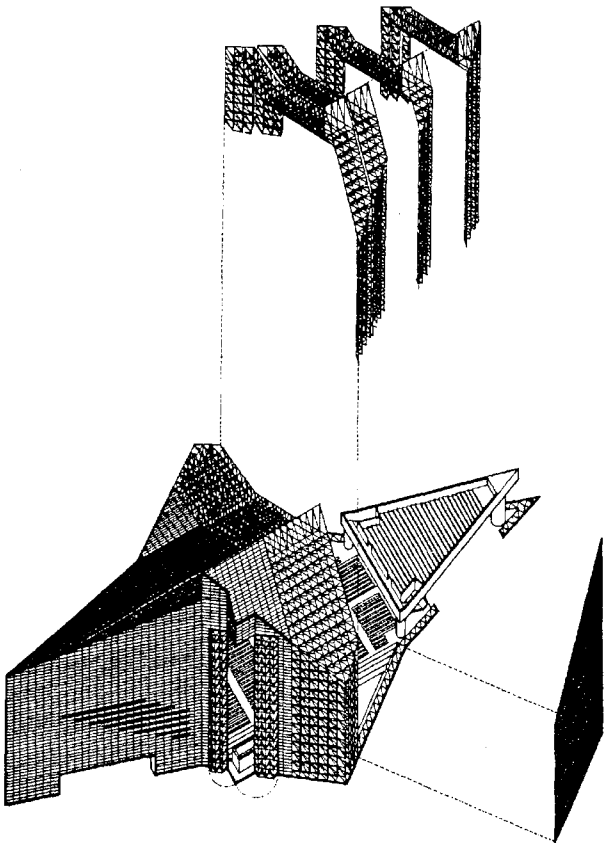

Fig. 1. Axonometric of structural assembly. (illustration by Kistin Simonson)

clearings, the meetings would also provide the largest social gatherings in an often lonely hinterland. Segregated according to sex, participants would camp in hundreds of white canvas tents; crowding haphazardly around the perimeter of the worship area. Separated by gender again, the congregation would frequently meet in the clearing, sitting on split log pews. A makeshift pulpit and alter were usually placed on a timber platform. A white canvas tarp would shield the speaker from the elements. The informality of the tent set within the natural site was considered conducive to healthy and personal reflection needed to commit to the Gospel. Arguing that "The groves were God's first temples" the setting referred directly to the informal and "nomadic" sites of numerous Bible scenes.[10]

URBAN REVIVALISM

Revivalism was quick to follow nineteenthcentury America's industrialization of the economy and growth of it cities. Like frontier revivals, urban revivals offered a type of classless "democratic salvation."[11] As with the rural meetings, preaching was the primary activity. The zealous accessible message was usually delivered in an enthusiastic and emotional tone; often accompanied with music performed by famous entertainers and hymns sung by the congregation. A typical urban revival worship service provided not only personal salvation

but mass entertainment.

Innovative evangelists like Charles Gradison Finney, D.L. Moody, and Billy Sunday would experiment with the revival format, but more importantly establish and refine the bureaucratic and business-like organization needed to stage and finance these elaborate events. Urban revivals were held in large urban auditoriums and vast exhibition halls. Large wooden tabernacles were constructed as symbolic backdrops to the main platform that held speakers, choir, musicians, performers, business patrons and local dignitaries. The hall's openness allowed for the revelrious spectacle to unfold, often in a carnival -like manner.[12] Fabric bunting was hung from the structure and stage; saw dust spread on the floor; and plants arranged around the pulpit and platform. These props not only improved the acoustical properties of the cavernous space they attempted to recall the natural settings of frontier revivals.

THE BIRTH OF TELEVANGELISM

Almost as soon as radio and television were widely available, shortly after the Second World War, evangelical fundamentalists took advantage of the new instrument to reach a larger audience. The adaptable revivalist format and its business-like organization, easily transferred to both radio and TV. The simplified mass appeal of revival services was also well suited for the reductive environment of television. Many submit that over time televised evangelism, or "televangelism," became one of the primary shapers of American cultural expectation. This evangelized consciousness would begin to influence the form of the built environment and the contemporary public realm as well.

Early televangelism was part of a pattern of experimentation in post-war revivalism. In 1949 a young Billy Graham promoted and held his first urban revival in the Hollywood Bowl. He was the first to film and later televise his religious spectacles, taking advantage of the dramatic size and aura of the nation's largest stadiums and arenas.[13] Other pioneers in televangelism included, the faith healer Oral Roberts, Jerry Falwell and Charles E. Fuller. In the mid 1950s Rex Humbard built the first religious structure designed specifically for televised broadcasts. His "Cathedral for Tomorrow" included an auditorium/sanctuary that held an array of cameras, lighting, and sound equipment as well as space for the broadcast crew, chorus, orchestra, and as many as fourteen guests.[14] The popular facility became a tourist center housing educational, marketing, production, and political lobbying facilities.

Like all media programmers, televangelists were forced to raise enormous amounts of money to broadcast their services. Most evangelical programming was not offered the public service air time often given to mainstream religious programming. This along with an increasingly ambitious scope, compelled televangelist to spend more air time making direct appeals for viewer contributions.[15] Donations were often in exchange for the televangelists "personal prayers" and promises of "God's salvation." Many of the campaigns were successful in a large part because television permitted both the request and the donation to occur in the privacy and convenience of the viewer's home.

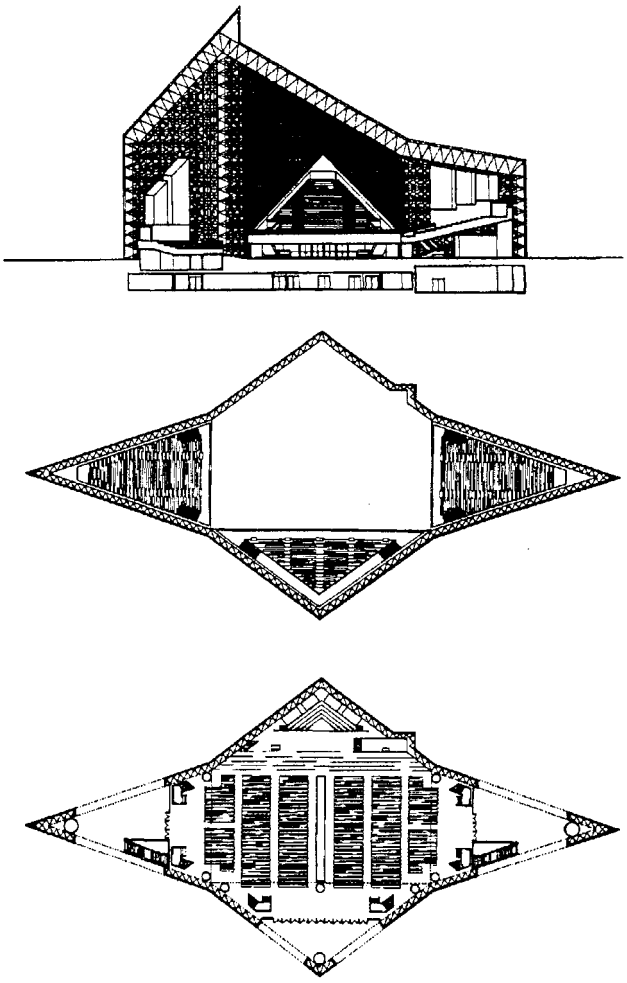

Fig. 2. Section, upper, and lower plans. (Illustration by Kistin Simonson)

THE EVOLUTION OF SCHULLER'S MINISTRY

While privacy and convenience would become principle characteristics in an increasingly consumerist society, Dr. Robert H. Schuller's early evangelical ministry at first embraced these characteristics as they applied to the automobile rather than to broadcasting. Schuller grew up in Iowa, briefly studied architecture, and later graduated from Western Theological Seminary in Holland, Michigan. Soon afterwards he was ordained by the Reform Church of America in 1950. In 1955, after a brief ministry in Chicago, he moved to Southern California and began preaching in adrive-in theater in Orange County, California, renting the facility for $10.00 a session.[16] He preached to people in their cars from the roof of the snack bar using the in-car speakers to transmit the sermon. Legend

maintains that the Orange Drive-in was the only venue Schuller could afford."[17] Evidence suggests that Schuller soon understood the potential of this modest yet innovative setting.

When Schuller moved to his current address, on Lewis Avenue in Garden Grove, he continued to embrace an environment that included the automobile. The first provisional structure on the site had its pulpit facing the congregation seated in cars. The two subsequent sanctuaries, the first designed by Richard Neutra and the second, Johnson's Crystal Cathedral, had significant operable openings adjacent to the pulpit so Schuller could be viewed from the convenience and privacy of parked automobiles.[18] Instead of using in-car speakers, the automotive congregation were asked to tune their car radios to a local AM station to hear the service; thus combining the three spaces of the built environment, the car and airwaves.[19]

Schuller did not televise his services until 1970. Copying the success of more established televangelists, he recognized broadcasting's ability to reach enormous audiences and the ten of thousands of additional dollars they represented. Television had become a necessary tool to stir up religious enthusiasm and fund his cause. What Schuller and others seemed unwilling to admit, is the extent to which the increasingly systematized broadcast industry transformed the process of evangelism and the physical spaces they inhabited. Broadcast media were not merely an efficient instrument to project the Gospel but had become integral to the very nature of contemporary evangelism.[20] The buildings were no longer merely public spaces where people gathered and listened to "the Word" in the physical presence of others. They had become sophisticated studios from which to project highly crafted and self conscious images were projected for visual consumption.

In order to attract larger audiences evangelical broadcasts, like other programmers, had to consider the norms of good taste, attempt to avoid controversy, and employ easily recognized routines and techniques for delivering their message.[21] While televangelism frequently relied on a number of standard television show classifications: talk-interview, news and current events, and episodic series; the variety-entertainment format was by far the most common.[22] The show type's familiar cues and symbols created a recognizable, inoffensive and reassuring frame of reference. This was often achieved through naturalistic and spatially ambiguous backdrops. On one hand, in a quest for appealing to larger audiences, stage sets are frequently careful to be secular. On the other hand, these same backdrops are also symbolically appealing and inspirational, often making nebulous insinuations to ecclesiastic settings.[23]

CRYSTAL CATHEDRAL AS BROADCAST STUDIO

Built in 1979-80, the Crystal Cathedral is just such a broadcast backdrop for Schuller's weekly "Hour of Power." The noncontroversial and ambiguous abstract glass enclosed polyhedral structure alludes to American myths about nature and technology. Its tent-like canopy recalls the provisional structures and open sites of frontier revivals. The building's vast arena-like seating and exposed structure refers to the exhibition halls of industrialized cities of urban revivals of the past. Perhaps the most effective use of the building is its televised airy and majestic images intended to soothe and reassure disoriented souls as well as present a symbol of the material nature of divine presence on Earth.

During a routine broadcast of the "Hour of Power," romantic shots of the building and its setting are combined with close-ups of the speakers, performers and the audience. These are consciously manipulated to create a tranquilized filmic effect. The sequencing of images is accompanied by sedate soundtracks; actor relationships; framing; lighting; zooms; cuts; dissolves; superimposition of text; and camera angles, often looking upward to a smog-free Southern California sky. The choreography of the broadcast becomes a highly systematic construction of effective and identifiable images.[24]

The "Hour of Power" is presented in a variety-entertainment format. Schuller's broadcast features celebrity guest stars who perform and offer inspirational narratives, well-performed choral works as well as an upbeat sermon.[25] Compared to other evangelists his philosophy and preaching are distinctively guilt-free and optimistic. Schuller has often described guilt as a hindrance to human potential. Many religious critics have described his confident, cheerful and reassuring approach as uniquely connected to corporate middle America's self-help. pop psychology culture." At times the show resembles a sedate version of a Las Vegas or Disneyland review. Like other televangelists, Dr. Schuller spends almost *25* percent of each program's air-time making direct appeals for viewer contributions.

In addition to weekly broadcasts, the building supports lavish spectacles at least twice a year during the Christmas and Easter seasons. Actors interpreting Bible scenes; realistic props such as boulders and trees; live animals; and falling fake snow have been brought in to represent figurative elements of a Bible story. The most immediate and theatrical use of the building involves suspending actors, portraying angels, from the white polyhedral structure. The flying spirits glide effortlessly from near invisible guy wires, through lustrous clouds of dry ice, followed by dramatic beams of light.

The Crystal Cathedral does not depart radically from ecclesiastic precedent in its ability to accommodate pageantry. Gothic cathedrals, among others were known to have elaborate processions and events during important church holidays. Compared with traditional cathedrals whose materiality is very tangible if not sober, the Crystal Cathedral does not convey its messages in a physically immediate way. Its transparent, white lattice structure, and lustrous materials seem to blur distinctions between spatial depth and texture. In addition both Gothic cathedrals and the Garden Grove Chapel can be read as texts. The glass and stone surfaces of traditional cathedrals were decorated with highly specific and figurative form. The immense un-interrupted polyhedral surface allows

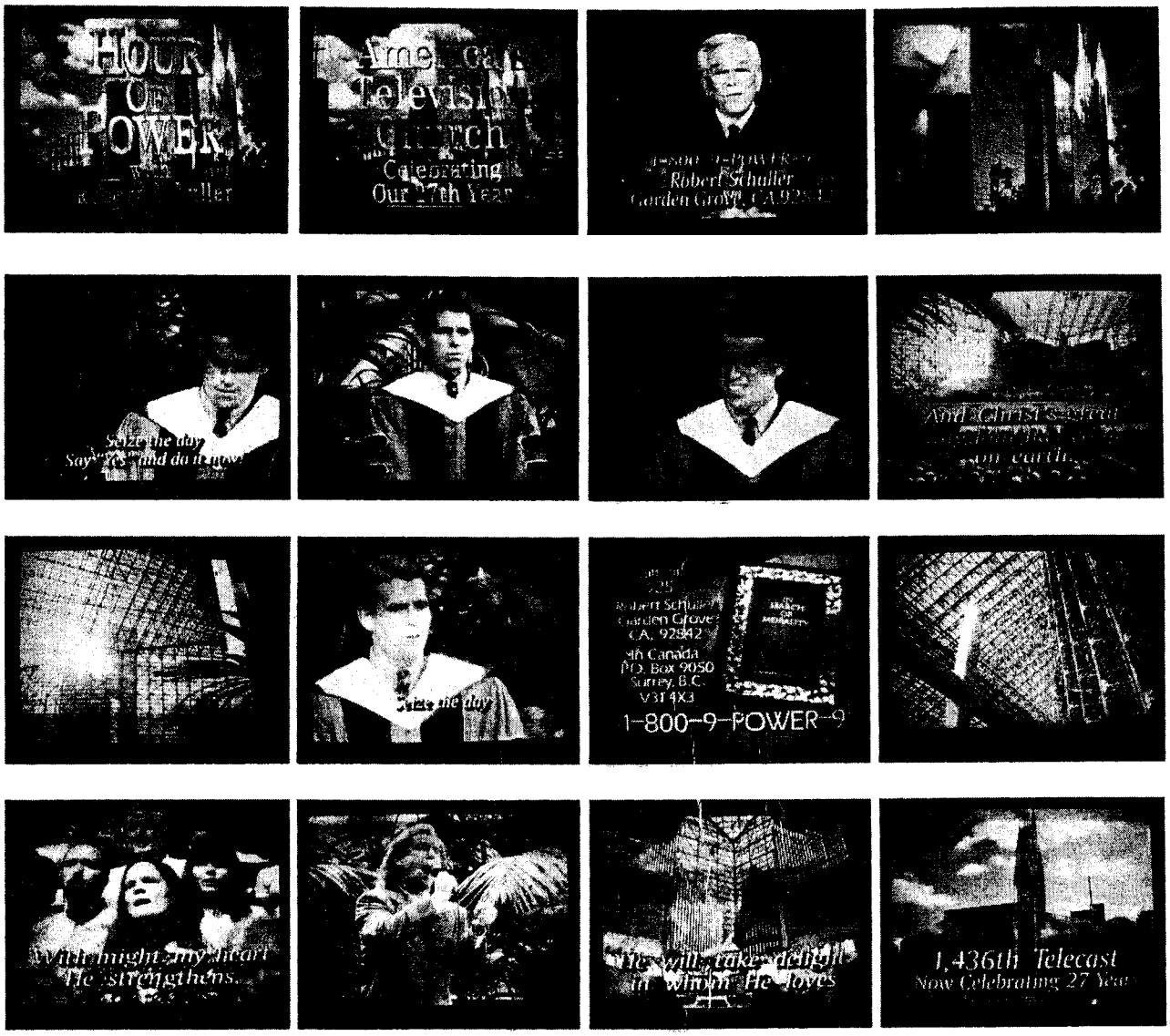

Fig. 3. Selected images from a sequence of filmic shots during a typical "Hour of Power" broadcast, in this case August 10, 1997. In order to pass on the leadership of the Crystal Cathedral to his son, Dr. Robert H. Schuller is increasingly featuring Rev. Robert A. Schuller on the weekly broadcasts. (Photos by author)

the Crystal Cathedral to avoid the use of specific symbols that would refer to particular denominations. Allusion to secular myths such as American pastoralism and the epiphanic potential of technology are used to filter specific religious reference inoffensively. This imparts inspirational empathy from as broad an audience as possible.

THE "GLASARCHITEKTUR" OF PHILIP JOHNSON

Philip Johnson denies ever seeing the building on television or being concerned about its ability to work as a building with the medium.[27] Johnson's primary concern seems to have been accommodating Dr. Schuller's desire for light, openness, and a strong visual connection to the outdoors.[28] Johnson on at least two occasions states that he relied heavily on the crystalline Expressionist of Bruno Taut's Glass Pavilion of 1914 and Mies van der Rohe's early high rise towers for inspiration. Both architects were influenced by the 1914 manifesto Glasarchitektur by Paul Scheerbart. It seems that Johnson also borrowed Taut's pyramidal urban paradigm of "Stadtkrone," or "city crown." In the case of the Crystal Cathedral the distorted geometric glazed form marks a recognizable place and establishes identity in the ubiquitous fields of Orange County tract housing. The polished stainless steel and glass bell tower, designed by Johnson and added in 1990, only reinforces this reading. The Crystal Cathedral becomes part of a network of "city crowns" in the increasingly structured Orange County exurban terrain that stretches from Disneyland'~Matterhorn in Anaheim in the north to the clusters of new office towers in the growing Irvine-South Coast Metro Area.

Johnson's expressive posture explains in part the absence of commonly used platonic geometry to order the composition of its polyhedral structure. He denies that the polyhedral structure was ever intended to be a "space frame," defined frequently as a three dimensional truss in which all the members are equally loaded and exclusively in compression or tension. Stating that he is an "expressionist" and not a "structuralist," Johnson maintains that the structural system, actually is a series of parallel "space trusses," evolved as the most economical means for supporting a transparent long span enclosure without using any "posts or beams" which would block the view of the audience. When assembled the structure sheds the load in a two way behavior called "space effect." It is ironic, that in the final analysis, Johnson's design for the structure shares the essential characteristics of a "space frame."[29]

The building employs a system of off-the-shelf components, in order to stay within the project's modest $10 million budget . This probably contributed to its apparent indifference to building craft. The structural engineer, John Muller of Severud-Perrone-Szegezdy-Strum devised a system of parallel five foot wide "space trusses."[30] Because of the building's irregular plan and section, nearly all the loading conditions are different. Steel detailing consultant George Kent designed the complex castings that positioned as many as eleven pipe members slotted on gusset plates.[31] Although likely only coincidence, the crude level of detail appears compatible with the relatively rough level of resolution attainable on common television screens. Because of the limitations of broadcasting, high levels of tectonic precision are irrelevant.[32]

CONCLUSIONS

It seems that broadcasting, in particular television, makes the theoretically cloudy distinction between "space" and "place" even more ambiguous. Despite the murky definitions of these terms, I am suggesting that some notion of place, however provisional, is important to creating collective and individual identity. Accepting this, the question becomes, how can "place" occur in the limitless range of electronic "space"? The scenographic "place" of electric image seems everywhere. It often seems that architects and theorists feel virtual media too tenuous and threatening to familiar interpretations of architectural "space" and "place" commonly understood through physical containment. What differentiates the Information Age from previous eras, is that the process of satisfying a need for inclusion, through in this case a common spirituality, seems less contingent on corporeal nearness or proximity. This implies that the definitions of "place" and presumably the "public realm," are no longer tied to the idea of a physically identifiable site.[33] The "Hour of Power" cultivates personal identity and collective belonging through the consumption of a particular type of spiritual message.

Place without site is an extreme idea becausa it rejects the traditional relationship of shared identity to a particular and embodied position in human space. One explanation for the acceptance of ephemeral and scenographic architecture is that people, in a mobile service economy appear to be accepting the behavior, though not the identity, of nomad. Corporate Bedouins are not the insurgents attacking the hegemony of central authority and Western Civilization. The fluid populism that flows from the Crystal Cathedral is anything but a guerrilla attack. Rather, the wandering viewers of the "Hour of Power" idealize the roving norm of the frontier sheriff. Like John Wayne, Robert Schuller dwells by moving. A society of benevolent bourgeois nomads threatens conventional ideas of physical habitation. The contemporary American is suited for the Information Age because he or she consciously sees themselves as part of a nation of individuals in a state of un-realization and constant adaptation, "going toward place."[34] This wholesome floating suggests that dwelling no longer has to be a physically settled experience.

The Crystal Cathedral is interesting because it transforms and subordinates the discourse of the spatial and physical tectonic discourse of architecture to that of surface. Represented by both monumental and crystalline transparency as well as its vast field of polyhedral structure. the familiar grand narratives such as American pastoralism and epiphanic technology are re-inscribed in an non-hegemonic fashion. The material integrity of the building is packaged as a commodity, simultaneously symbolizing a sanctuary from the stress and disorder of the present as well as a hope for the future.[35] This allows the character and mythology of its architectonic elements to expand into the immense space of television.[36] The building space and background becomes a domain for televised events. These television events create a provisional "place" and are similar to familiar architectural events such as sequence, seriallity, narrative, and choreography. But, unlike architecture these televised events no lcnger need to be physically understood in space.

If people no longer need physical space to have a place to comprehend and experience occurrences and the concepts that they represent, what is the relevance and fate of enclosed space? Provided that one accepts that architecture appears to be an increasingly scenographic commodity, consumed on virtual media, one is likely to be suspicious of attempts to describe the essence of terms, like space and place. If the meaning of these terms are de-stabilized in an electronic context why do most people have little problem understanding their definition? One answer is that most understand contextual difference. When architects use terms like "space" and "place" they are more concerned with a three-dimensional position and direction. When broadcasters use the terms they think of a period of time. Another answer may come from Maurice Meuleau Ponty's observation that "space is not absolute nor place permanent." Accepting this comment classifies "space" and "place" with concepts like "nuclear family," "private property," and the "public realm," terms which are socially defined and subject to conversion. The most interesting, and arguably relevant architecture accepts and maximizes the processes of collective transfor-

mation. The Crystal Cathedral becomes just such a building because it is both a physical and virtual place. Here the built environment is critical to fabricating a differentiated and televised identity. The building does not do this with containment but by the re-inscription of familiar surfaces and symbols into a setting whose single presence is constructed filmicly on millions of television screens. It is not without some irony that the broadcasting of architecture, exposes the limits of building as merely scenographic backdrop and perhaps explains in part the recent reaction by architects to make building a meaningful implement that oscillates between immediate and virtual experience. One can only speculate as to whether attempts to capture the physical understood space and experience can survive the changing expectations of the Information Age. If they do not, buildings like the Crystal Cathedral will become far more important.

NOTES

[1] Edward S. Casey, *The Fate of Place: a Philosophical History.* (Berkeley: University of California Press, 1997.), p. 297.

[2] "Space" according to *Webster's Collegiate Dictionary* is among other things defined as a : "duration of time" as well as a "limited extent in one, two, or three dimensions. .... a boundless three dimensional extent in which objects and events occur and have relative position and direction." It's etymology includes *Spatium>* interval of space or time which is also close to the Latin root for "SPEED." (whose Latin root is *Spes* =hope.) Using the same source, *"Place"* has a similar definition to "Space." There are intriguing differences however. For instance "place" is also defined as 1.) "A way for admission" (implying perhaps exclusion and empowerment.) 2.) *"aphysical* environment and *physical* surroundings" (author's italics.), 3.) an indefinite region or expanse, a building locality used for special purposes, and 4.) "a particular region or center of population.", and "A step in a sequence." The word's etymology includes the Latin root "planta" =sole of the foot. In general "place" seems more specific than "space."

[3] Lawrence C. Davis, "Philip Johnson's Crystal Cathedral and the Rhetoric of its Freeform Polyhedral Structure," in Gabriel, J. Franqois, editor. *Beyond the Cube: The Architecture of Space Frames and Polyhedra.* (New York: John Wiley & Sons, Inc. 1997). pp. 167-185.

[4] Jean-Franqois Lyotard, *The Postmodem Condition: A Report on Knowledge.* (Minneapolis: University of Minnesota Press. 1984.), p. xxiv.

[5] Quentin J. Schultze. *Televangelism and American Culture: The Business of Popular Religion.* (Grand Rapids, Michigan: Baker Book House, 1991.), pp. 13 & 78.

[6] Razelle Frankle, *Televangelism: The Marketing of Popular Religion.* (Carbondale and Edwardsville: Southern Illinois University Press, 1987.), p. 66.

[7] Frankle, p. 66-68.

[8] Schultze, p. 34.

[9] Frankle, p. 28.

[10] B. Weed Gorham, *Camp Meeting Manual: A Practical Guide for the Camp Ground in Two Parts.* (Boston: H.V. Degen, 1854.), p. 39.

[11] Frankle, p. 30.

[12] Frankle, p. 48.

[13] Frankle, p. 73.

[14] Schultze, p. 55.

[15] Frankle, p. 68.

[16] Carol McGraw and Bruce Strong, "Looking to the Sky." *Orange County Register.* (March 26, 1995), pp. 1&6, Accent Section

[17] Ibid.

[18] Even with the large opening in the Neutra designed sanctuary and the famous large 90-foot operable doors in the Crystal Cathedral, it can be difficult to see the service from the expansive parking lots. In order to cultivate a sense of TV-like intimacy for the worshipers who are often a great distance from the pulpit, Schuller was among the first to use Sony Jumbotron TM technology. He initially used a the large screen on the exterior of the Neutra sanctuary facing the parking lot. Later one was added inside the Crystal Cathedral itself. During the "Hour of Power" broadcast, the large screen is never included in the views of the interior.

[19] Schuller was a part of a media milieu in Southern California and in particular Orange County, that seems to instrumental in early experiments in combining virtual and physical space. In addition to the family oriented broadcasts from places like Anaheim's Disneyland, beginning in the mid 1950's, people such as local radio personality Joe Pyne broadcast the first confrontational call-in talk show from the storefront of an Orange County motorcycle shop. By the 1960's Pyne and his format would be syndicated on national television. Pyne's so called "tasteless" call-in format predates radio and television shows by personalities such as Howard Stem by roughly 25 years.

[20] Frankle, p. 77

[21] Frankle, p. 85.

[22] Frankle, p. 90.

[23] Schultze, p. 40.

[24] Frankle, p. 94.

[25] Schultze, p. 78. Schultze suggests that TV is more real than the printed word. He maintains that, in particular, the human face communicates well on TV. This greatly facilitates the transmission of human emotion because it is usually transmitted through facial expressions.

[26] Pastier, John, "An Evangelist of Unusual Architectural Aspirations," *A.I.A. Journal.* (May 1979), p. 52.

[27] Philip Johnson interview by author (New York: November 13, 1995).

[28] McGraw, Carol and Strong, Bruce, "Looking to the Skys." *Orange County Register,* (March 26, 1995):1 &6 Accent Section. and Philip Johnson *Philip Johnson: In His Own Words.* (New York: Rizzoli International, 1994), p. 98. Dr. Schuller felt the initial proposal too dark and introverted. Schuller's attempt to connect to the common built environment and his fondness for the symbolism of sanctuary open to the sky, may explain the rejection of the first scheme.

[29] John Muller telephone interview by author (Syracuse, New York: November 21, 1995).

[30] Fisher, Robert E. "The Crystal Cathedral: Embodiment of Light and Nature." *Architectural Record,* (November 1980, p. 82.

[31] Ibid.

[32] Despite the crude level of detail tectonic interpretations of the Crystal Cathedral abound: 1.) The structure creates a surface of white polyhedral connections alluding to an infinite expanse of knots; which according to Gottfried Semper were the earliest structural artifacts in nomadic building form; 2.) the transparent glass skin alludes to a the improvisational nature of a tent; a form which refers to the nomads of the Old Testament as well as early American frontier revivals; 3.) the Crystal Cathedral can be connected to a class of contemporary loft-like commercial and office buildings Kenneth Frampton has labeled "Productivist." The structure becomes a tectonic and rhetorical object containing mechanical and electrical systems whose regularized surface dominates the interior. Simultaneously, the frame supports a singular exterior glass wall whose smooth reflective and a-tectonic surface comes from "the world of contemporary industrial production and the glossy veneers of consumer goods." It is

also interesting to note that one has only to see the feature films such as *Bladerunner* and *Batman* to observe that a higher level of architectural detail is required for 70 mm film, a continuous tone medium.

[33] Casey, p. 335. If site is not something immediately physical, using Casey's argument, one suspects the site of the Crystal Cathedral could be anywhere in the *region* of Southern California; a place, or identity, that is projected *everywhere through* the medium of film and television.

[34] Casey, p. 320.

[35] Distinct from other televangelists, Dr. Robert Schuller's message emphasizes what he has termed as "possibility thinking." His aggressively optimistic spiritual position is based on individual responsibility and initiative inspired by "God's Love." Schuller's non-judgmental and apolitical approach has earned him the broad support from the American business community as well as millions of donating viewers on five continents. Critics of Schuller feel his "I'm OK You're OK" styled message indulges in the methods of corporate self-help and pop-psychology.

[36] Casey, p. 315.

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