

Philip Johnson's Crystal Cathedral

Citing the Loss of Citation

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Abstract

*Is there such a thing as material citation, or, are content and medium fundamentally divorced relegating/lifting architectural materials to an ahistorical ground? When Philip Johnson published a list of citations and sources for his Glass House in *Architectural Review* in 1950 he instantiated a countermove against the purified conception of glass as the Modernist material par excellence. In his Modernist masterpiece Johnson put into question the referential capacity of glass, a material that Walter Benjamin described as without aura and that Siegfried Giedion identified as essential to industrial technologies. But this was not to be the end of the architect's vitreous line. The glass of Philip Johnson's Crystal Cathedral (1980), like the glass of the television sets through which it broadcasted its evangelical message, seemingly disappears as a material presence, yet the iconic glass is all that will be visually maintained following the ministry's recent bankruptcy and the property's subsequent purchase by the Catholic Diocese. This paper examines Johnson's rhetorical use of glass as an extended engagement with Camp sensibilities (Sontag, 1964). Focusing primarily on the Crystal Cathedral, this paper argues that Johnson's deployment of material as a mode of "disciplinary drag" distinguishes the architect from his Modernist and later postmodernist peers who tended to differentiate between the purity of materials and tectonics on the one hand and the rhetoric of images on the other. This lens offers an alternative to our material framing within the contemporary global-digital turn, a framing that often approaches materials as if unmoored from systems of signification.*

“Camp sees everything in quotation marks. It’s not a lamp, but a ‘lamp’...”¹

From 1980 until the summer of 2013 the glass of the Crystal Cathedral provided a glorified stage set for the televised broadcast of the “Hour of Power” led by Reverend Dr. Robert H. Schuller (1926-2015). As such, it has stood as an emblem of uniting privatized, mobile, and distributed social conditions through televisual media rather than as a seminal work of architecture with disciplinary import as it falls between the categorical cracks of late modernism and postmodernism.² Considering that the exterior glass is the only element of the structure that will be preserved following the church’s recent bankruptcy, we might entertain the counterintuitive notion that this structure is architecturally not a church at all but rather a “church” akin to Susan Sontag’s “lamp” of Camp.³ Pairing the “church” with its unlikely decorative turned rhetorical cousin discloses Philip Johnson’s Crystal Cathedral as a move away from postmodernist citation practices that employ extracted historical reference and towards a Camp modality of rhetorical quotation that operates through excessive material display and thinly veiled historical intimations.

There is a tension held within the concept of Camp between its taxonomic operations and its performance as an extended sensibility. Sontag characterizes Camp sensibility as disengaged and apolitical, and she contrasts that sensibility with her own discursive exploration of it, stating, “For no one who wholeheartedly shares in a given sensibility can analyze it, he can only, whatever his intention, exhibit it. To name a sensibility, to draw its contours and to recount its history, requires a deep sympathy modified by revulsion”.⁴ If we return to the provocation of the lamp versus the “lamp”, we find that the quotation marks exist within the discursive field of the text, relying on both the physical fact of a lamp and the ability to rhetorically step outside of the material milieu. The rhetorical move from the somatic to the stylistic distinguishes not only the lamp from the “lamp”, but also Camp from “Camp” and, ultimately, Schuller’s church from Johnson’s “church”.



Figure 1. Crystal Cathedral, exterior.
Image by the author.

The two churches share key qualities of Camp: they both emphasise style over content, display extravagance, and require affluence. However, they are differentiated through their ontological frames, one founded on a unified cosmology mapped onto horizontal networks of capital and media technologies, the other founded on a secular belief in disciplinary identity and the limits of material expression. The radically privatized, mobile, and distributive nature of Schuller’s theology lent itself to an uncontained, and unchecked, Camp sensibility, a sensibility that aspired to abolish all categorical structures in the name of replicating its ostensibly apolitical message ad infinitum through the extensive reach of media technologies. Ultimately the Camp ministry exhausted itself. Johnson’s

structure in turn embraces the Camp qualities of the ministry, drawing its contours in glass with sympathy and revulsion. This act of inscription instantiates the potential of “Camp” to bind itself back to a collective even as it unleashes an excessive material display.

Kings of Pop

Pageantry is a central feature of Camp, and Schuller’s church was little more than an instrument for orchestrating televisual spectacle. The primary elements of the structure’s interior – fountain, pipe organ, and ninety-foot mechanical doors – privileged visual display over spatial composition. These visual components were individually color coded and activated sequentially, but their cohesion was organized through the visual chronology of the screen. The sequence would commence with the turning on of the brightly colored aqua blue water feature, which signaled that Reverend Schuller was about to enter the church. Music from the wood-stained pipe organ would then follow. The ninety-foot motorized doors would open, and Schuller would mechanically ascend from below the adjacent pulpit. Each element visually stands out from the sea of glass above and the wave of light blue upholstery on the seats below. An additional component, a jumbotron screen, visually captured and ordered this opening sequence and the sermon. Sontag asserts that, “To perceive Camp in objects and persons is to understand Being-as-Playing-a-Role. It is the farthest extension, in sensibility, of the metaphor of life as theater”.⁵ In this instance, with the projection of the carefully orchestrated theological spectacle into the domestic interior via the ministry’s television program “Hour of Power”, the distinction between life and theater become increasingly difficult to discern.



Figure 2. Crystal Cathedral, interior view of pipe organ.
Image by the author.

Johnson’s “church” by contrast engages in the pageantry of material. While the external glare of the glass constitutes his primary contribution, there is also an attention within the interior to clearly distinguish the structural elements. The concrete bays that support the balcony seating and define the entry thresholds are both held apart from one another and from the steel structure that supports the glass. Unlike Magritte’s *Treachery of Images* (1928) this *is* a church, and its material dimension is amplified rather than dislocated. The “church” is perhaps better compared to Andy Warhol’s *Gold Marilyn Monroe* (1962), a painting purchased by Johnson and gifted to MoMA. The silk-screened portrait was a cropped publicity photo of Monroe set in the middle of a large canvas hand-painted in gold. The image evoked Byzantine iconography, and rhetorically canonized the actress.

The aqua water fountain and yellow pine organ recall Marilyn’s teal eye shadow and lemon hair, while the California sky seen through mechanical doors echoes the eerie unnaturalness in the pink of Marilyn’s skin. Where the extracted and colored film industry portrait sits in a wash of hand-painted

gold, the extracted and colored elements of the televised ministry rest in a field of architecturally mediated natural light.

Together Schuller's church and Johnson's "church" engage in practices of pageantry, one motivated by a purely visual display and the other by the tension between the visual and the material. The distinction to be made here is one between propaganda and rhetoric, and the function of the glass structure is conceptualized differently depending on which lens you take. Propaganda has its etymological roots in the propagation of the faith. Its concern is not dialogical but unilateral transmission. Under this lens, there is no difference between the windshields arrayed at Schuller's first church, which was a rented out drive-in movie theater, the glass of the television sets transmitting his message to an international audience, or the individual glass panes of the physical church. In each of these iterations there is an effort to obscure the relationship between glass and frame. The panoramic views afforded through the total glass enclosure of the church embody the apotheosis of this desire, even as vision is meticulously directed and framed through the primacy of the televisual image. The covert loss of the frame underpins the difference between Schuller's church and Johnson's "church". Anne Friedberg's assertion that, "...how the world is framed may be as important as what is contained within that frame"⁶ is a useful refrain when considering the difference between these theological and architectural parades. In the age of quantifiable metrics and statistical thinking, rhetoric gets a bad wrap, often being disparaged as cheap theatrics. However, a rhetorical argument must always be framed and directed toward a particular audience. Like Warhol's applied gold paint, Johnson's architectural glass cloaks the unfurling spectacle of Schuller's ministry in a disciplinary garb that rhetorically evokes a history of glass rather than offers a direct citation.



Figure 3 (left). Crystal Cathedral, exterior view of ninety-foot mechanical doors. Image by the author. **Figure 4 (right).** Crystal Cathedral, interior view of ninety-foot mechanical doors. Image by the author.

Material Gloss

In the mid-1970s, as the Bonaventure hotel was being completed in downtown Los Angeles, an eccentric minister from the suburbs of LA approached Philip Johnson to design a mega-church that would seat over 3,000 and provide a stage set for his televised ministry. Johnson's first proposal was a traditional masonry building with a cross plan. But the minister had a different vision; he wanted a big glass tent. The reflective glass of John Portman's contemporaneous Bonaventure hotel figures prominently in Marxist cultural theorist Fredric Jameson's analysis of the building. He reads the glass as further evidence of the dislocation associated with the culture of late capitalism. Schuller's church is just as instrumental to the culture of late capital as Portman's hotel. Indeed, both are so heavily

framed up that the framework becomes invisible while what is within the shored-up frame becomes ersatz reality. The difference is that the Bonaventure operates spatially while the “Hour of Power” functions through a televisual frame. The giving over of spatial control to media loosens the architectural object’s functional and environmental obligations, allowing it to take on a rhetorical position. We see this difference for example in the contrasting relationships between the glass and concrete of the two structures. Where the hotel’s glass cylinders sit like sculptural objects atop a fortified concrete base that distances them from the ground, the glass of the Crystal Cathedral drapes over its concrete piers. As a veil that covers and lifts, meets the ground, and reflects the individuals who approach it, Johnson’s glass teases out a game of rebuke and intimacy.



Figure 5. Crystal Cathedral, interior view.
Image by the author.

The sensual presence of the diaphanous glass belies a citation practice of direct historical reference, but it does not preclude historical allusion. Johnson’s Crystal Cathedral, in name and substance, calls forth in equal measure Joseph Paxton’s Crystal Palace and Bruno Taut’s Crystal Chain. Where the instrumentality of the Bonaventure hotel and Schuller’s televisual church undercut any discursive engagement with glass, Johnson’s gloss on these references dallies between the textual and the cosmetic. In 1950 Johnson published in *Architectural Review* a promiscuous list of disciplinary references for his Glass House that ranged from Schinkel to Boulee. The relegation of historic citation to the discursive field spoke to the condition of glass as both an industrial material better suited for display than reference and as a material of architectural composition situated within the bounds of a disciplinary history. In the Glass House, those two threads were held apart, but in the Crystal Cathedral they intertwine. Here there is no overt discursive trail tied to Johnson’s “church”. Instead, the material itself, in combination with the name of the project, is the reference point. In its late capital context, glass can finally make a rhetorical move, and what it rhetorically references as a “church” is the loss of its own discursive capacity. Paxton’s Crystal Palace categorized, displayed, and ultimately commoditized cultural production. In its encyclopedic plan, there is a belief in man’s capacity to fully map the world. The function of its glass, unlike medieval stained glass, is to reveal the known world rather than to mediate messages from God.

Taut’s Crystal Chain held a similar belief in transcending mediated messages figured through mystical unity. In a letter he writes, “A fixed chain runs from the stable to the star, and one can exchange one end for the other at will...”⁷ Such a message of transferability resonates with disciplinary debates about the value of distinguishing between bicycle sheds and cathedrals. It resonates too with cultural concerns about proliferating content as heard in Johnathan Crary’s commentary on capital effects, “...the continuing rationalization of the entertainment commodity involves intensifying the mobility and

exchangeability of objects and formats maximizing the modalities through which any given property may be consumed".⁸ Pairing industrialized cultural production with a mystical desire for cosmological unity as two sides of a single coin is the key rhetorical move of Johnson's "church". The modernization of glass, which underwrites the constellation of allusions discussed here, mirrors a shift in the meaning of gloss. A textual gloss had been a discursive practice of interpretation, translation, and elaboration. This meaning was largely supplanted by the aesthetic gloss of an applied sheen. Johnson's "church" participates in both. It expounds an architectural theme and provides a unifying external polish to a dissipated social condition, and in this double action does not conflate the cosmological with the cosmetic.

Surface Structures

In a short piece by Karsten Harries, "Untimely Meditations on the Need for Sacred Architecture," the philosopher constructs a genealogy of architectural signification from Nikolaus Pevsner's chestnut about the aesthetic differentiation between Lincoln cathedral and the anonymous bicycle shed, to Robert Venturi's distinction between the eponymous duck and the decorated shed that declares "I am a monument" scribed across its billboard-façade. This genealogy comes to a screeching halt at the site of the Crystal Cathedral. A cultural connection between Modernist architectural aesthetics, corporate capital, and the church did not immediately occur to Johnson, as his first proposal was a traditional masonry structure. However, the moment of Schuller's material request for glass arguably marks an emerging alignment of church, capital, and media. It is this alliance that will fundamentally qualify the church as profane rather than sacred according to Harries' argumentation as he recognizes that, "the Crystal Cathedral certainly presents itself to us as a church, and it does so in a way that speaks of an increasingly important trend in contemporary religion that blurs the boundaries between religion, entertainment, and business,"⁹ Indeed, such an alignment is the structure's primary claim for scholarly attention, but Harries asserts even more gravely that:

The dynamism of religious transcendence, especially when one adds the attribute 'infinite,' carries thus with it the danger of a radicalization of transcendence that threatens to so empty it and God of all definite meaning that mysticism and atheism come to coincide. As Kierkegaard knew, the experience of this empty transcendence does mean a new experience of freedom. But this freedom, acknowledging no measure, must degenerate into caprice.¹⁰

Harries holds up Schuller's church as symptom of the ascension of the power of capital over the sanctity of the sacred and the instrumentality deployed therein. The philosopher makes a claim for locating the sacred in the social practice of religion rather than within the material facts of stone or glass. In this regard, the Crystal Cathedral stands as a suitable fall guy. Its architectural glass, echoed through an array of windshields and television sets, ostensibly precipitates the excessive proliferation of consumable content in a late capital context as media studies scholar Erica Robles-Anderson explains in quoting Schuller, "'Television leaped right over into our living rooms crossing whatever boundary...moral, political, theological, anything you can think of' and therefore provided the infrastructure for mediating eternity in a new aesthetic form".¹¹ When we view the Crystal Cathedral as an artifact of American religious life in the late twentieth century through which a religious message is transmitted and consumed across an array of media saturated glass screens, this is indeed the image that we see, though an image already recently revised by the bankruptcy of the ministry. When we view the Crystal Cathedral as an architectural object that "presents itself to us as a church", we get a different picture; one that asserts the architectural as a category within an otherwise undifferentiated ground overrun by free-flowing consumable content wherein mysticism and atheism circulate in intimate proximity.

Harries calls for architecture to return to the sacred as a way beyond instrumental thinking and aesthetic invention, concluding:

The descent of the transcendent into the visible is a presupposition of successfully dwelling here on earth... Neither instrumental thinking nor aesthetic invention are capable of providing this. That requires a binding back of aesthetic creativity to the sacred. That is why I claimed in the beginning that architecture needs the sacred if it is not to wither.¹²

In his assessment, which reads no distinction between Schuller's church and Johnson's "church," the Crystal Cathedral is the counterpoint of sacred building. Other architectural practices might be read as at least speaking to the problem of the sacred, but Johnson would not be included among them. Louis Kahn's mystical framing of materials and Peter Eisenman's interest in deep linguistic structures take diverging paths into the same problem. Johnson's work, even after his connection to Eisenman, retained a shallow interest in aesthetics. One might even claim that aesthetics holds too much depth for Johnson's taste. In his lecture "The Seven Crutches of Modern Architecture" the architect admits to the usefulness of his identified crutches in education because of the difficulty in criticizing his own disciplinary values such as "extra-aesthetic props".¹³ Nevertheless, in the same talk, Johnson concludes with a question that Harries might well pose, "To get back to earth, what do we do next?" To which Johnson replies, "I'm a traditionalist. I believe in history. I mean by tradition the carrying out, in freedom, the development of a certain basic approach to architecture... I do not believe in perpetual revolution in architecture. I do not strive for originality".¹⁴ In this early talk Johnson makes an argument for the discipline, or architecture defined as a shared knowledge and a cultural activity, as the sacred thread that Harries and others are looking for. As such, the discipline constitutes a bound collective in the face of radicalized transcendence. In Johnson's "church" material signification has migrated to the decorative surface, but the surface condition of the structure does not pose an existential crisis when read as bound to the agency of an architectural identity informed by the social practices of a gay man.

Curtain Wall

The commission for the Crystal Cathedral came at the height of Johnson's comeback in the 1970s, when he partnered with John Burgee and begins building corporate complexes composed of glass skyscrapers for Texas oil tycoons. Scholars have read this moment in Johnson's career in the context of late capital and largely situated the projects as stylistically late modern rather than postmodern.¹⁵ Johnson's place in postmodernism has long been problematic to locate. On one hand scholars have pointed to the citations published alongside the building of the Glass House in identifying Johnson as a proto-postmodernist,¹⁶ while on the other hand it is largely considered that the relatively late AT&T building represents Johnson's formal entry into the practice of utilizing the building façade as a billboard of flattened syntax. The problems of chronology are compounded by the plurality of postmodernism. Nevertheless, the glass curtain wall persists as the principal feature that visually distinguishes late modernism from postmodernism.

While the primacy of glass might qualify Johnson's "church" stylistically as late modern rather than postmodern, and would thus fit the work into a tidy timetable of Johnson's career – built before the AT&T building marked his late arrival to the postmodernist scene – biographer, Franz Schulze identifies smaller projects in those Texas days just preceding the church commission as examples of Johnson dipping his toes in the postmodern water. The key determinant revolves around the degree to which historical reference was overtly or covertly employed. Playing an open game was never Philip Johnson's forte, and his best plays were kept under wraps rather than behind billboards. The Modernist curtain wall was early on an object of play for the architect. In addition to the discursive double of the Glass House there was a material double, the brick Guest House. The opposing twin is all that its other half is not, filled with layers of redundant opacity. Its brick walls are finished with gypsum on the interior, lined with a thin canopy structure, and covered in Fortuny, a luxury Venetian fabric. The choice of how to cloak the masonry walls in fabric was revised from draped curtains to taut panels of fabric hung on the wall in the remodel that followed quickly after the building's completion. In

the alteration from drapery to hung panel Johnson wryly performed an inside-joke on the heroic curtain wall akin to transforming a lamp into a “lamp”.

Disciplinary Drag

When material palette alone prompts us to locate glazed buildings as late modernist we fall into an ideological blind spot that puts faith in a presumed legibility of materials and in the evidentiary quality of glass in particular. Schuller’s church capitalizes on this culturally conditioned presumption, and utilizes the glass of the church to symbolize an infinite immediacy while relying on the glass of windshields and television sets to display a unidirectional message that is tightly framed and carefully curated. This propagandistic approach serves the promotion of a consumerist monoculture, as Mike Davis describes Schuller’s church, “The largely affluent congregation of six thousand just has a wholesome good time and then adjourns to the gift shop to purchase Cathedral-logo coffee mugs, ‘sun catchers,’ refrigerator magnets and other holy knickknacks for the entire family”.¹⁷ A contrary thread runs throughout Johnson’s work no matter how we identify him stylistically, a commitment to the material practice of building coupled with a sustained and developed cultivation of himself as a rhetorician. In short, disciplinary drag as a rhetorical practice performed through material pageantry, positions architecture as a form of counterculture.

While Schuller relied on the ostensible immediacy of glass, he also referenced a historical narrative of architectural monuments that invited his congregation of donors to see their building as a new level of religious accomplishment. Fund-raising mailings located the achievements of his church in metrics of physical quantity and spiritual quality, stating that, “The Cathedral will be longer, higher, and wider than the Cathedral of Notre Dame in Paris,” and asserting that, “I have stood inside the most impressive cathedral in the world, at Cologne, but even that will not compare in emotional impact and spiritual excitement to the Crystal Cathedral”.¹⁸ In his most Hegelian claim, the minister ignored the billowed vaulting of Byzantine church architecture and declares his own church as the first to be a structurally open interior predestined by the development of modern technologies:

From the first pillars of Memphis, through the flying buttresses in the medieval cathedrals and the great domes, the ultimate dream was to build a cathedral without a single pillar or column. For years it looked impossible. But then it finally happened. For the first time in architecture a building stands. It’s a Cathedral, the length of a football field, plus a hundred feet. Yet there is not a single column or pillar to support the ceiling. The building? It’s the Crystal Cathedral. But it was only possible when and after the time was right and we had steel and space frame engineering.¹⁹

The minister’s desire for a visionary structure sailing on the winds of technology was architecturally anachronistic. Despite Schuller’s zeitgeist argument, his technological wonder structure suppressed concerns for bodily comfort in favor of hyper visuality. The building had no HVAC system, which would have disrupted the visual openness of the space. Yet lighting rigs, screens, and film equipment hung from the steel structure, internally heating up a building that was in effect a large green house standing in the Southern California sun. This was not a well-tempered environment, and the local congregation complained of their discomfort. Indeed, the climatization of the structure has been a priority for the Catholic Diocese as they begin their renovations. Johnson too was dismissive of overrating the importance of physical comfort, slyly stating, “I think that comfort is a function of whether you think the chair is good-looking or not”.²⁰ Here comfort is rhetorically cast in relationship to personal taste rather than being deferred to the domestic comfort of viewing from one’s living room or sloughed off in the wake of a virtual reality. With Camp, physical discomfort is accommodated within the heat and the heft of the regalia of disciplinary drag.

The hefty regalia of the Crystal Cathedral was so overt that Mike Davis compared it to a Vegas floor show, stating, “Sundays in the Crystal Cathedral are to storefront revivals what a Vegas headline act

is to unrehearsed burlesque”.²¹ Davis made this assessment in order to also contrast Schuller’s ministry with the earlier socialist bent to Pentecostal congregations in LA that commonly contained a labor and race mission within their ministry. Davis reads the Crystal Cathedral as an evacuation of the collective social aspirations of the earlier Pentecostal assemblies. The dissolving of a radical socio-political agenda into a consumer agenda that Davis points to is not unlike Karsten Harries’ reading of this structure. The loss of a social message or a capacity to facilitate social change is the crisis of postmodernism after all. But Johnson was never interested in language-thirsty theoretical discourse: “If I seem to go into words it’s because there’s no other way to communicate. We have to descend to the world around us if we are to battle it. We have to use words to put the ‘word’ people back where they belong”.²² His glass “church” arguably descends to the world to put the “church” people back where they belong, only it’s a message to fellow architects. Johnson deploys the cosmetics of drag to reset a disciplinary cosmology, one in which our disciplinary obligation is not to design a cure for the world, but the maintenance of subculture.



Figure 6. Crystal Cathedral, exterior.
Image by the author.

The Man Behind the Curtain

If today you find yourself contemplating possible connections between Texas oil money, televised evangelical ministry, and the current American President Donald Trump, then I offer up the glass works of architect Philip Johnson as one glittering link in this dissipative chain. In the mid-1990s Trump was contemplating running for president and Johnson was still detailing glass structures, specifically re-skinning the Gulf and Western Building that was part of Trump’s Central Park West towers. Trump wanted the glass to be gold, but it was to be bronze-tinted glass, nevertheless, Johnson promised his client, “a fin-de-siècle version of the Seagram”.²³ Following the commission architectural critic Herbert Muschamp wrote an article titled, “Trump, His Gilded Taste, and Me”. The article begins with the subtitle “Antiquity Now” and the first lines are “Mr. President” quoted from the cries of people calling out to Donald Trump as he takes his seat on the floor of Madison Square Garden at a Ricky Martin concert. Muschamp quickly jumps from Trump’s political aspirations to the purpose of his article, which is to bring together Trump, Johnson, and Warhol’s Gold Marilyn, because, as the critic puts it, “The domain of high artifice is a good place to see the peculiar weave of fact and illusion that holds Mr. Trump’s world together”.²⁴ For Johnson’s part, the Trump commission pushed his architectural agency to its limits, with the architect noting that his disciplinary expertise was relegated to the scale of the detail.

The Camp qualities of Johnson’s architectural work have largely been considered only within the context of his personal life.²⁵ However, not only is there evidence that a kind of disciplinary drag

continued to inform his practice even as he began to work for clients with more capital, there is also reason to suggest that such an approach matters as much in the face of today's "post-truth" world as it did in the face of mid-century social norms. When we cannot distinguish lamp from "lamp" or church from "church" we only see the world in reals and fakes rather than a spectrum of rhetorical engagement. In such an instance, we may no longer be able to tell who wore it better – Johnson or Trump. For now, our architectural eye still allows us to make that judgment call.

Endnotes

¹ Susan Sontag, "Notes on "Camp"" (1964), in *Against Interpretation and Other Essays* (New York: Farrar, Straus & Giroux, 1966).

² Erica Robles-Anderson, "The Crystal Cathedral: Architecture for Mediated Congregation," *Public Culture* 24, 3, 68 (2012), 577-599 & Franz Schulze, *Philip Johnson: Life and Work* (New York: A.A. Knopf, 1994).

³ Sontag, "Notes on "Camp"", 276.

⁴ Sontag, "Notes on "Camp"", 276.

⁵ Sontag, "Notes on "Camp"", 280.

⁶ Anne Friedberg, *The Virtual Window: From Alberti to Microsoft* (Cambridge, Massachusetts: MIT Press, 2006), 1.

⁷ Quoted in Iain Boyd White, *The Crystal Chain Letters: Architectural Fantasies by Bruno Taut and His Circle* (Cambridge: MIT Press, 1985), 6.

⁸ Jonathan Crary, "Capital Effects," *October* 56 (1991), 122.

⁹ Karsten Harries, "Untimely Meditations on the Need for Sacred Architecture" in Karla Cavarra Britton (ed.), *Constructing the Ineffable, Contemporary Sacred Architecture* (New Haven: Yale School of Architecture, 2010), 55.

¹⁰ Harries, "Untimely Meditations on the Need for Sacred Architecture," 59.

¹¹ Robles-Anderson, "The Crystal Cathedral: Architecture for Mediated Congregation," 597.

¹² Harries, "Untimely Meditations on the Need for Sacred Architecture," 59.

¹³ Philip Johnson, "Seven Crutches of Modern Architecture" (1955) in Joan Ockman and Edward Eigen (eds.), *Architectural Culture 1943-1968: A Documentary Anthology* (New York: Rizzoli, 1993), 137.

¹⁴ Johnson, "Seven Crutches of Modern Architecture," 140.

¹⁵ Franz Schulze, *Philip Johnson: Life and Work*

¹⁶ John McMorrough, "Ru(m)inations: The Haunts of Contemporary Architecture," *Perspecta* 40 (2008), 164-169.

¹⁷ Mike Davis, "L.A.'s Pentecostal Earthquake" *Grand Street* 68 (1999), 100.

¹⁸ Fund-raising mailing, Crystal Cathedral Ministries archive, quoted in Robles-Anderson, "The Crystal Cathedral: Architecture for Mediated Congregation," 595.

¹⁹ Fund-raising mailing, Crystal Cathedral Ministries archive, Robles-Anderson, "The Crystal Cathedral: Architecture for Mediated Congregation," 595-6.

²⁰ Johnson, "Seven Crutches of Modern Architecture," 138.

²¹ Davis, "L.A.'s Pentecostal Earthquake," 100.

²² Johnson, "Seven Crutches of Modern Architecture," 137.

²³ Johnson quoted in Robert Stern, *New York 2000: Architecture and Urbanism Between the Bicentennial and the Millennium* (New York: Monacelli Press, 2006). See also David W. Dunlap "Philip Johnson, the renowned architect, joins the Trump team on the huge Riverside South project," *New York Times*, November 3, 1993.

²⁴ Herbert Muschamp, "Trump, His Gilded Taste, and Me," *New York Times* December 19, 1999.

²⁵ See Alice Freidman, *Women and the Making of the Modern House: A Social and Architectural History* (New York: Harry N. Abrams Inc., 1998).

