Wright and Gehry: Biblical Consciousness in American Architecture

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Abstract

The design principles of Frank Lloyd Wright's Guggenheim Museum in New York and Frank Gehry's Guggenheim Museum in Bilbao, Spain, are analyzed in relation to the confluence between biblical consciousness and postmodernism. These two major works of American architecture exemplify the paradigm shift from the Hellenistic to the Hebraic roots of Western culture in the transition from modernism to postmodernism in architecture, art, and art education. The dynamic, vigorous, passionate, multiple perspectives of Hebraic thinking are compared to the static, moderate, harmonious, and single-point perspective of ancient Greek thought revived in Renaissance Europe. Postmodern directions in art education are explored in relation to the biblical definition of artist as including the roles of architect and teacher. The artists' "ability to teach" (Exodus 35:34) integrates the passion and freedom of the individual artist with a collaborative enterprise of creating a shared environment of spiritual power.

The two Guggenheim art museums -- Frank Lloyd Wright's museum in New York and Frank Gehry's museum in Bilbao, Spain. -- exemplify the shift from the Hellenistic to the Hebraic roots of Western culture. The worldview of ancient Greece revived in Renaissance Europe dominated Western art and architecture until the rise of modernism. The transition from modernism to postmodernism in American art and architecture represents a paradigm shift from consciousness rooted in ancient Greece to Hebraic biblical consciousness. Biblical consciousness integrates art and architecture with art education. Bezalel and Oholiav, the artist-architect-teachers responsible for the creation of the mobile, modular Tabernacle in the desert, were "filled with a divine spirit of wisdom, understanding, knowledge, and craft skills to conceptualize and create" (*Exodus 35:31*) and were "given the ability to teach" a community of talented collaborators (*Exodus 35:34*).

Christian theologian Thorleif Bowman (1970) writes in his seminal book *Hebrew Though Compared with Greek*: "If Israelite thinking is to be characterized, it is obvious first to call it dynamic, vigorous, passionate, and sometimes quite explosive in kind; correspondingly Greek thinking is static, peaceful, moderate, and harmonious in kind" (p. 27). Boman notes that biblical passages concerned with the built environment always describe plans for construction without any description of the appearance of the finished structure. Noah's ark is presented as a detailed building plan. How the ark looked when it set sail is never described. The Bible has exquisitely detailed

construction instructions for the Tabernacle without any word picture of the appearance of the completed structure. Indeed, the Tabernacle was made of modular parts, came apart like Lego, was set on a wagon, moved through the desert from site to site, deconstructed and reconstructed each time. Its active life was quite different from the immovable monumental marble temples on the Acropolis.

Architecture that is an expression of a biblical structure of consciousness is about temporal processes of using space by the community rather than about presenting a harmoniously stable image in space. Architectural theorist, Bruno Zevi (1983), compares the Hebraic and Greek attitudes toward architecture in his essay, "Hebraism and Concept of Space-Time in Art."

> For the Greeks a building means a house-object or a temple-object. For the Jews it the object-as-used, a living place or a gathering place. As a result, architecture taking its inspiration from Hellenic thought is based on colonnades, proportions, refined moulding, a composite vision according to which nothing may be added or eliminated, a structure defined once and for all. An architecture taking its inspiration from Hebrew thought is the diametric opposite. It is an organic architecture, fully alive, adapted to the needs of those who dwell within, capable of growth and development, free of formalistic taboo, free of symmetry, alignments, fixed relationships between filled and empty areas, free from the dogmas of perspective, in short, an architecture whose only rule, whose only order is change. (p. 165)

Carter Radcliff (2000) called his book on the reinvention of art, *Out of the Box*. He writes that his task is to show the power and variety of strategies that liberated art from the box as exhibition space and from the box as geometrical object. He acknowledges that Eleanor Antin, one the inventors of performance art, had also given her statement in *Art Gallery* magazine the same title. Antin wrote about the white rectangular box that was the allotment of art-world space – a small box (a gallery) or a big box (a museum). She noted that the limited box shape of exhibition spaces conditions the art put in it. We can experience the radical shift from the Hellenistic box to the Hebraic organic, living environment in the art museums designed by the two great American architects, Frank Lloyd Wright and Frank Gehry.

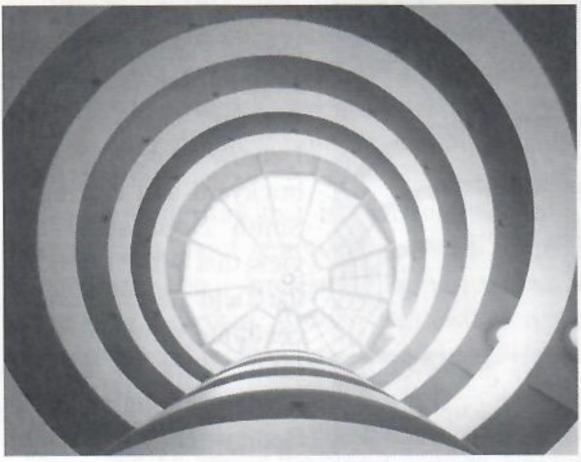
Frank Lloyd Wright's Guggenheim Museum

In *Frank Lloyd Wright: A Study in Architectural Content,* art historian Norris Kelly Smith (1966) explained Wright's originality and genius in terms of Boman's comparison between Hebrew and Greek patterns of thought. Wright was well versed in the Bible as the son of a Unitarian minister who helped his son internalize the biblical message of freeing humani-

ty from enslavement in closed spaces. The Israelites where enslaved in the *malben*, the Hebrew word for both brickyard and rectangle. Smith emphasized the view that Wright imbued the field of architecture conditioned by two thousand years of Greco-Roman thought, with Hebrew thought. Wright disliked Greek architecture both in its content and in its forms. He was critical of the neo-classical rhetoric employed by American architects who studied at the Ecole des Beaux-Arts in Paris. Wright sought to create a new architecture to echo the biblical call inscribed on the Liberty Bell in Philadelphia: "Proclaim liberty throughout all the land unto all the inhabitants thereof"*(Leviticus 25:10)*. He wanted American architecture to assert its cultural independence from Europe.

The connection between the exodus of the Israelites from Egyptian slavery (the biblical Hebrew word for Egypt, *mitzrayim*, literally means "narrow straits") and the American experience as a rebellion against European tyranny was clear to America's founding fathers. On July 4, 1776, the Continental Congress formed a high-powered committee, made up of Thomas Jefferson, Benjamin Franklin, and John Adams, to propose a seal and motto for the newly independent United States of America. They proposed a seal depicting the Israelites escaping to freedom from bondage under Pharaoh through the divided waters of the Red Sea, with Moses standing on the shore extending his hand over the sea, causing it to overwhelm the Egyptians. The proposed motto: "Rebellion to Tyrants is Obedience to God" (Boyd, 1950).

It is significant that the nation founded on the principles of "life, liberty, and the pursuit of happiness" became the center of the shift from the Hellenistic to the Hebraic worldview in the arts. Dynamic forms of art and architecture symbolizing life and liberty blossomed on American soil. Frank Lloyd Wright exemplified this blossoming. His spiral museum invites a living response. When I had asked my children what they remembered most from their visits to the Guggenheim, they enthusiastically talked about running down the ramp and being high up looking over the fence into the center atrium. It is not a box for rectangular pictures set in static space, it a lively



place to be engaged over time. The exhibitions I saw that worked best were shows about movement: Alexander Calder's mobiles were moving around the spiral to create a circus of color. Yaacov Agam's kinetic and dialogic art changed with the movement of the viewers in his *Beyond the Visible* show, and Jenny Holzer's ruby light word messages on a running electronic signboard flashed their way up the spiral ramp. The motorcycle show was right on the mark.

The spiral is one of the major life forms in nature: from DNA, to a nautilus shell, to the growth pattern of palm fronds. It is also one of the major symbols of Hebraic mind. Jews are called *am haSePheR*, usually translated "People of the Book." But *SePheR* is a word written in the Torah scroll itself long before the invention of codex type books. *SePheR* means spiral scroll. It is spelled *SPR*, the root of the word "SPiRal" in numerous languages. Jews, then, are People of the Spiral. In kabbalah, down-to-earth biblical mysticism, the *SePhiRot* are emanations of divine light spiraling down into our everyday life. And the English words "SPiRitual" and "inSPiRation" share the SRP root from the Latin *SPiRare*, to breathe.

In Judaism, form gives shape to content. The medium is an essential part of the message. Rather than the modernist viewpoint of art as "the language of forms," Judaism is confluent with postmodernism's emphasis on "the ideas their forms might disclose" (Wilson, 1992, p. 111). Weekly portions of the first five books of the Bible in the form of a Torah scroll are read in synagogue. The symbolic significance of the spiral form is so strong that if a Torah scroll is not available in synagogue, the Bible is not publicly read at all. The exact text printed in codex book form conveys the wrong message. If the divine message encoded in the Torah is trapped between two rectilinear covers, it loses its life-giving flow. The message of the Torah must not be trapped in the rectangle. It must have the infinite flow of a Mobius strip where the final letter of the Torah, the *lamed* of *yisraeL* (Israel) connects to the first letter, the *bet* of ***B****'reshit* (in the beginning). *Lamed bet* spells the word for heart, *LeV*. The heart of the *Torah* is where the end connects to the beginning in an endless flow. Form and content join together to symbolize the essence of Jewish values. The Bible encoded in a flowing

scroll form provides a clue as to the nature of biblical consciousness as an open-ended, living system.

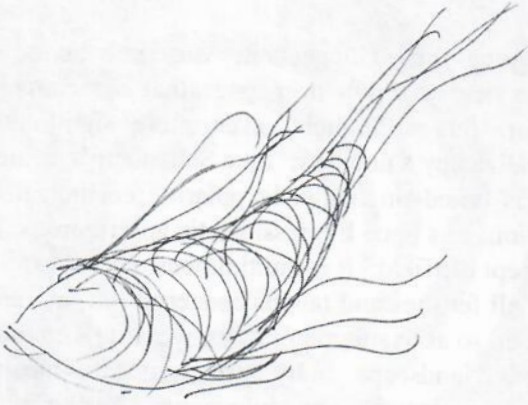
> Wright's helicoidal shaping of the Guggenheim Museum's cavity in New York represent the victory of time over space, that is, the architectural incarnation of Hebrew thought, even more significant because it was fully realized by a non-Jew. Like Schonberg's music, Wright's architecture is based on linguistic polarity, emancipated dissonance, contradiction; it is once Expressionistic and rigorous; it applies Einstein's concept of 'field;' it is multidimensional; it extols space by demolishing all fetishes and taboos concerning it, by rendering it fluid, articulated so as to suit man's ways, weaving a continuum between building and landscape. In linguistic terms, this means a total restructuring of form, denial of any philosophical a priori, any repressive monumentality: action-architecture, aimed at conquering ever more vast areas of freedom for human behavior." (Zevi, p. 165)

Frank Gehry's Guggenheim Museum

In creating the Bilbao Guggenhiem, Frank Gehry moved beyond Wright to a more powerful realization of the Hebraic mindset that Boman describes as "dynamic, vigorous, passionate, and sometimes quite explosive in kind." It started in Canada when little Frank Goldberg (his father changed the family name when they moved to LA) would play with the live carp swimming in his grandmother's bathtub. Every Thursday his grandmother would buy the fish and keep them in the bathtub until Friday when she prepared her gefilte fish for the Sabbath. The vigorous body motions of swimming fish seen from above gave Gehry his vocabulary for the dynamic planning of his museum. Fish are one with their environment. They must stay in constant motion in it to stay alive. Oxygen carrying water must be kept moving over their gills for them to breathe. To stop motion is to die.

Gehry's method of working is creative play with dynamic forms. He starts with spontaneous scribble sketches that become forms that he moves and reshapes in a dynamic interplay between computer-generated 3D CAD graphic models and physical models in real space.

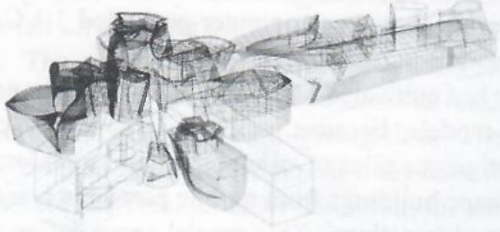
> Over the years, Gehry has cultivated a highly personal studio practice of working with models, because it permits impossibly cantilevered parts and vertiginous piles of volumes in fluid transformation. As he began to shape buildings from mobile parts, his sense of space transcended Cartesian notions. This special sense defies verbal definition, but it might be compared with the sensation of moving bodies in a medium akin to water. To the extent that his buildings arrest volumes in continuous motion (and transformation), time

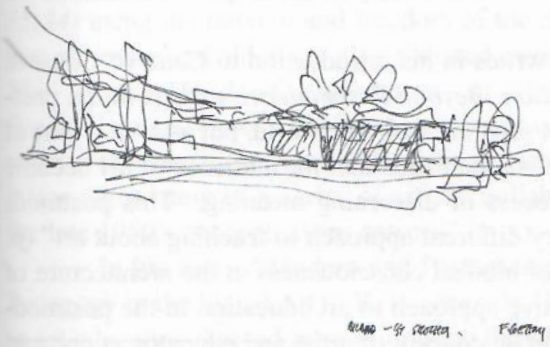


becomes their formative dimension (Dal Co, 1998, p. 29).

As an integral part of education for architecture of time and motion, Gehry takes his students on the ice in full hockey gear to interact with each other and their environment in rapid movement. Like fish in water, skaters standing still on ice are unstable; swift motion creates balance. The same concept of stability in motion is sensed in seeing the "fish-scale" titanium skin on the Bilbao museum that makes it look like a futuristic airplane. Airplanes must move through their air medium in order to fly; stopping motion in midair leads to crashing and death. He sets the bodies of his buildings in motion as a choreographer does with dancers. "One need only observe Gehry's manner of drawing to gain an immediate impression of his way of thinking: the pen does not so much glide across the page as it dances effortlessly though a continuum of space" (Dal Co, 1998, p. 30) His studio practice appears like a performance rehearsal. His knowledge of performance art, his collaborations with artists, and his planning with artists lead to spaces at the Bilbao Guggenheim uniquely suited for the presentation of alternative forms of art.

Gehry creates a dynamic flow between the building and its waterfront site and between the visitor and continually unfolding spaces. While jutting out over the water, the huge flowing fish-like building uses a combination of water-filled pools and the river to create an energetic interplay between building and site. Its full aerodynamic form can be seen from the other side of the river. Crossing the bridge and approaching the building transforms the experience of this monumental sculptural form into a more intimate encounter. Shifting viewpoints confuse the building and its environment as well as interior and exterior





spaces. Movement through and around Gehry's museum always provides fresh encounters and new ways of seeing it.

In contrast with the single-point perspective of Renaissance painting and the decorative facades of European buildings, biblical consciousness evolved to invite multiple perspectives and changing viewpoints. The Talmud teaches us to see seventy faces in every part of the biblical text. Jews traditionally study in dialogue with a learning partner continually seeking new and alternate ways of understanding the text, moving past the surface, beyond the literal meaning of the words, drawing close to the sacred text through creative play. The millennia-old symbol of Judaism is the *menorah*, a tree-like candelabrum opening up into multiple branches. After the biblical text is chanted publicly from a Torah scroll, it is lifted up opened for all to see. The public responds by calling it Tree of Life and singing, "Its ways are ways of pleasantness and all its paths are peace." (*Proverbs 3:17*) Not one way and a single path, but rather many ways and multiple paths that parallel the postmodern values expressed in Gehry's architecture.

The Biblical Artist-Teacher in the Postmodern Era

The contemporary shift from Hellenistic to the Hebraic consciousness in architecture is paralleled by the emergence of new scientific paradigms and postmodern art forms that invite rethinking education in art and architecture. Ilya Prigogione (1984) was awarded the Nobel Prize for his work on the thermodynamics of nonequilibrium systems. He explains in *Order Out of Chaos: Man's New Dialogue with Nature* that the traditional science of the age of the machine tended to emphasize stability, order, uniformity, equilibrium, and closed systems. The transition from an industrial society to a high-technology society in which information and innovation are critical resources, brought forth new scientific world models that characterize today's accelerated social change: disorder, instability, diversity, disequilibrium, nonlinear relationships, open systems, and a heightened sensitivity to the flow of time. This paradigm shift in science is echoed in the arts by Peter Weibel (1999) in *net_condition: Art and Global Media*: "Modern art created the aesthetic object as a closed system as a reaction to the machine-based industrial revolution. Post-modernism created a form of art of open

fields of signs and action as a reaction to the post-industrial revolution of the information society" (p. 19).

Ron Neperud (1995) writes in his introduction to *Context, Content, and Community in Art Education: Beyond Postmodernism*, "Art in the postmodern sense is treated as not separate from the world, but as a vital part of human existence. Postmodernism demands that the audience of art become involved in the discursive process of discerning meaning. This postmodernist view of art means a very different approach to teaching about art" (p. 5). Parallel to the reflection of biblical consciousness in the architecture of Wright and Gehry, an alternative approach to art education in the postmodern era can be derived the Hebraic concept of artist and educator as one and the same person. The Hebrew word for artist is spelled AMN (*alef, mem, nun*). *AMeN*, written with the same three letters, is said after a prayer to confirm its truth. Its feminine form, *eAMuNa*, means faith, and as a verb, *l'AMeN*, means to educate. The Hebrew word for artist is linked to education, truth, and faith.

In contrast, the word for art in European languages is not only different, it is the opposite. *Art* in English and French, *arte* in Spanish, *Kunst* in German and Dutch, and *iskusvo* in Russian are all related to artificial, artifact, imitation, copy, and phony. The Hellenistic view of the artist's role is to imitate the Creation, a finished product in space. The Hebraic view is to imitate the Creator, a continuing process in time. The four-letter biblical word for God is not a noun. It is a verb integrating Was, Is, Will Be. Judaism honors the person "who longs to create to bring into being something new, something original.... The dream of creation is the central idea in halakhic [Jewish cognitive] consciousness – the idea of the importance of man as a partner of the Almighty in the act of creation, man as creator. This longing for creation and the renewal of the cosmos is embodied in all of Judaism's goals." (Soloveitchik, 1983).

The definition of art used by Elfand, Freedman, and Stuhr (1996) for creating a postmodern art education curriculum corresponds to the biblical term for art, *m'lekhet makhshevet*, a feminine term meaning "thoughtful craft." "Art is a form of cultural production whose point and purpose is to construct symbols of shared reality" (p. 72). If we literally translate the full names of the biblical artist-architect-teachers, Bezalel and Oholiav we can discern postmodern sensibility of relating art of individual passion and free expression to the collaborative enterprise of constructing a symbolic structure of an intergenerational shared reality. *Bezalel ben Uri ben Hur* means "In the Divine Shadow son of Fiery Light son of Freedom." *Oholiav ben Akhisamach* means "My Tent of Reliance on Father, Son, and My Brother," integrating the contemporary with its past and future. Bezalel represents the psychological power of the artist-teacher and Oholiav the sociological impact

on community. They come together in their "ability to teach," (*Exodus 35:34)* using the passion and freedom of the artist to nurture the collaboration of young and old in creating a shared environment of spiritual power. In *The Third Hand: Collaboration in Art from Conceptualism to Postmodernism*, Green (2001) proposes "that collaboration was a crucial element in the transition from modernist to postmodernism art and that the trajectory consisting of a series of artistic collaboration emerges clearly from the late 1960's conceptualism onward" (p. x).

In his essay, "Modern and Postmodern: Questioning Contemporary Pedagogy in the Visual Arts," R. L. Jones, Jr. (1997) proposes new directions in art education derived from examining the social context in which students live today. "Terms like *upheaval, transformed, dramatic,* and *global* certainly can be accepted as descriptions of the social climate of our world. For both ourselves and our students, this climate of change, of new world orders, of new hopes and despairs, constantly envelops us through both electronic and print media" (p. 98). Contemporary life invites us to base postmodern art education on Hebraic biblical thinking that is "dynamic, vigorous, passionate, and sometimes quite explosive in kind" rather than on Greek thinking that is "static, peaceful, moderate, and harmonious in kind" (Boman, 1970).

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